

Impact of Students' Health on Academic Performance

1. Proposal

My project focuses on how health affects school performance. This problem is a common issue that more and more people are becoming aware of, making it an increasingly important issue of concern in research. Many students are contending with increased stress, burnout, and other health issues (Johnson & Lester, 2022). This can have a significant impact on their academic performance. That considered, my project aims to research the effect of mental and physical health on students' academic performance. This will help gather more insight that will provide a better understanding of the problem.

In this light, my primary research question is: How does mental and physical health affect student academic performance?

To respond to this research question, I will read research resources from both the psychology and education fields. Through this, I intend to learn how school performance relates to health outcomes such as stress, anxiety, sleep habits, and exercise. I will also look into how these health factors affect different groups of students, such as class year, or background. I plan to do this by putting previous research data, and students stories together from online surveys and structured interviews. I will then present this on a website to share helpful information about how health and learning relate. Therefore, another goal is to learn how to translate the research into various formats such as writing and images, then design a website people will enjoy. Through this project, I also hope to improve my skills in filtering information and presenting concepts to communicate my findings to people with different levels of knowledge. The project is designed for students, teachers, advisors, and school leaders; some of whom are already advocates for student health. I intend to reach these audiences through the website which will be clear and easy to use, and will factor in helpful charts and simple and understandable language.

2. Researcher Profile

I have always been interested in understanding student health and wellbeing and how it might affect their academic performance. Part of this interest stems from my experience as a student in high school, which was characterized by periods of intense anxiety and low confidence. During this period, I used to overwhelm myself with long study hours but still struggled to attain the results I desired during tests. Although I did not give much thought to my experience then, as I progressed in my studies, I became interested in understanding the dynamics in which I found myself. In most cases, educators cannot recognize students' mental and physical health as a potential determinant of their learning outcomes. This aspect could be attributed to ignorance, or lack of skills to identify students struggling with these health issues.

In hindsight, I can now attempt to find links between the cases of my peers who had similar challenges to mine and their overall health and well-being. Physical health issues were easily noticeable and understood since most of them were symptomatic. However, the majority of the cases involved mental health issues that were not easily recognizable, yet they were devastating. That given, I discovered that academic pressure and family issues might have triggered stress and contributed to the poor academic outcomes that I experienced. If these issues had been recognized early, perhaps I would have received counselling, which would have helped improve my academic performance. Therefore, based on this background, I strongly advocate prioritizing student health as much as academic work. However, the relationship between student health and academic performance is nuanced and complex. Students' physical and mental health determinants are diverse, with varying levels of influence. I, therefore, aspire to undertake more profound research to improve my understanding of the relationship between student health and academic performance.

3. A Literature Review

The emerging trend among educators, researchers, and policymakers lately is on how student health impacts their performance; studies have shown that the very aspect of physical and mental well-being affects learning results. The contemporary student is under a barrage of health disorders that include stress, anxiety, sleep deprivation, and burnout, but to mention a few. These have a very huge burden on academic success as these can contribute directly or indirectly towards poor performance by many students. This literature review will examine how mental and physical health affect academic performance from an interdisciplinary perspective on psychology and education. The review will be guided by the main question of the inquiry how mental and physical health affect student academic performance. The literature review will therefore look into the evidence collected regarding effects of stress, physical activity, emotional well-being, and socioeconomic status, while also considering how these health factors can be affecting different cohorts among students as well. This review is based on personal experience, which inspired a greater interest in the intricate links between student health and academic outcomes. Most of the research would focus on just isolated variables while an integrated approach should be taken as it must be multidimensional since it is a phenomenon in students' lives. This will set the stage for creating a multimodal approachable website that communicates important findings and practical insights to students, teachers as well as school leadership.

The relationship between students' health and their academic performance has been extensively researched. Some studies view physical fitness or participation in physical activity as a physical and mental health determinant. For instance, through a systematic review, Teferi (2020) found that physical fitness is associated with higher academic achievement. The study indicate that physical activity and sports participation positively impact academic performance by enhancing cognitive skills like memory, attention, and problem-

solving. These benefits stem from the physiological effects of exercise on the brain, such as increased blood flow and neurotransmitter release. The statement correctly summarizes findings that link higher physical fitness with improved academic outcomes, suggesting a positive association between regular physical activity and better performance in various subjects, including math, science, and language. The review indicates that physical activity is positively related to academic performance in children.

Teferi (2020) makes findings similar to those of Barbosa et al. (2020), who revealed a positive correlation between physical activity and academic achievement. Through systematic reviews, Barbosa et al. (2020) report small or mixed positive correlations between physical activity and academic achievement. The scholar finds that persistent physical activity has medium positive effects on academic achievement, but severe physical activity does not benefit academic achievement. They explain that physical activity improves executive functioning, which is vital to academic achievement. Essentially, this means that such activity boosts flexible thinking, task initiation, organization, emotional control and self-monitoring.

Measures such as scores in various subjects can clarify the impact of physical health on academic performance. In addition, the studies could have considered other factors that mediate the relationship between physical activity and academic performance, such as intrinsic motivation and pedagogical quality. This consideration can help to develop a thorough understanding of the impact of student health and academic performance.

Bailey (2017) similarly finds that physical activity improves cognitive functioning, psychosocial development, and school engagement; all critical elements of academic performance. The scholar elaborately explains that engaging in physical activities stimulates musculoskeletal

development, mental processing, and motor skill development, improving cognitive function. However, unlike the aforementioned studies, Bailey (2017) incorporates various variables that might be impacted by physical activity with subsequent effects on academic achievement. These factors include self-efficacy, self-esteem, and peer relationships. This perspective is critical because these factors impact students' physical and mental health and academic performance. Focusing on broader factors that characterize a student's life helps to have a multidimensional perspective of their health and its impact on their educational achievement. Further, Bailey (2017) highlights the impact of socioeconomic conditions on student health and wellbeing and the associated effects on academic achievement. For instance, students from socioeconomically disadvantaged families are likely to be exposed to more stressors compared to those from socioeconomically privileged families. This differential in stressors could emanate from disparities in quality of life. This links to the fact that students from poorer families experience greater deprivation that can trigger anxiety, depression and other negative mental health challenges compared to children from wealthier families. There is therefore likely to be differences in the level of risk of mental and physical health challenges between these classes of students which will also be reflected in their academic outcomes. Still, Bailey (2017) overlooks the differential aspects of physical activity and physical health and the subsequent impacts on students' academic performance the way Barbosa et al. (2020) does. Indeed, different levels of physical activity are likely to have differentiated impacts on physical health with subsequently differentiated effects on academic achievement. For instance, students who undertake regular physical activity are likely have more significant positive physical health outcomes than those who do not. It would have therefore been imperative to examine this aspect and its impacts on health outcomes.

studies attempt to examine the relationship between mental health and academic performance. Generally, students experience a range of stressors within the school, home, or community settings that undermine their abilities to achieve optimal academic outcomes. Consistent with this perspective, through a narrative review, Pascoe et al. (2020) indicate that adolescent students who self-reported more intense anxiety and depression symptoms experienced challenges concentrating in class and completing academic tasks. In most cases, these students showed poorer social relationships and academic performance. However, Pascoe et al. (2020) concentrate on academic- related stress while overlooking other sources of stress that could also adversely affect students' academic outcomes. For instance, constrained family relationships, unhealthy sexual relationships, and substance use, among other factors beyond the school set up could be potential sources of stress with a significant impact on learning outcomes.

Even so, in contrast to Barbosa et al. (2020), Bailey (2017), and Teferi (2020), Pascoe et al. (2020) explore the broader consequences of stress and their multiple impacts on students' academic achievement. Stress can lead to substance abuse and school dropout, which adversely affect educational outcomes not only during schooling years but also limit learning in adulthood. Pascoe et al.'s (2020) focus on the multiple effects of stress on physical health is critical since this may lead to a cumulative decline in educational performance.

In addition, Evans et al. (2019) examine bullying as a significant stressor that significantly impacts students' mental health and academic achievement. They found that cumulative bullying is associated with aggressive behavior, low future optimism, and low educational attainment. Aggressive behavior may trigger conflicts and anti- social behavior, undermining smooth and practical learning. Low future optimism results from stress and anxiety, which may reduce students' motivation to learn. This study's isolation of bullying as a significant stressor is critical

because it enables a comprehensive understanding of the impacts of various individual stressors on students' health and academic achievement. The above studies are systematic or narrative reviews or meta-analyses, which may not clarify these aspects due to methodological variations and weaknesses. However, Evans et al. (2019) overlook salient factors that may alter the relationship between bullying, mental health, and academic achievement, such as differences in student household income. Other studies reviewed in this report also overlook some these factors, making the findings inconclusive. A holistic examination of multidimensional factors that may impact student's health and academic achievement is therefore imperative to achieve more conclusive findings.

In conclusion, this literature review reveals an interwoven relationship between student health-centered and student academic performance. It is found through the studies that attributes like physical activity, mental health challenges like anxiety and depression, and socioeconomic status might significantly influence a student's cognitive ability and concentration along with overall academic life. Whereas some research has indicated a significant positive relationship between physical fitness and academic achievement, others point out the destructive influence of stressors in mental health like bullying and family dynamics on student performance. Thus, it is important to pursue a comprehensive multidimensional approach toward understanding these factors for creating interventions that address the cognitive and well-being needs of the student.

4. A Multimodal Public-Facing Translation of Academic Research

From the above review, it is evident that students' health significantly impacts their academic performance. It is important to note that health affects people's performance in various mental or physical activities (Bevan & Cooper, 2021). For instance, almost everyone who has ever experienced an illness can confess that they are not as enthusiastic at work as they are when they

are healthy. Predictably, their performance also dwindles when they are sick. This example also applies to students and their learning. When their health and well-being is compromised, their ability to perform optimally in their academic work reduces. One would expect these realities to be common knowledge. However, the dynamics of student's health and the impacts on educational achievement are more complex and multifaceted than they would be perceived. In looking at an example of a high school student who has a learning disability and comes from an abusive home with parents who work as casual laborers, the risk factors for adverse mental health for such a student are complex. Such a student is inclined to be deprived of basic needs, leading to high stress, and the resulting potential for low academic achievement is high (Denovan & Macaskill, 2017). The learning disability could cause anxiety, low sense of confidence, and low motivation to learn, leading to poor academic outcomes. In addition, exposure to abuse and socioeconomic disadvantage could also trigger anxiety, depression, and stress that reduce the student's motivation to learn. There is evidence that adverse mental health causes adverse physical health outcomes through the weakening of the body's immunity (Baldwin et al., 2021). Therefore, a student at a high risk of mental health has a high risk of developing illnesses that can diminish their ability to learn. However, the impacts of stressors on psychological and physical health may vary based on factors such as the student's coping abilities and the severity of the stressors, among other

From these perspectives, therefore, it can be deduced that physical and mental health improvement can advance students' academic achievement. There is evidence showing that physical activity improves memory and cognitive ability and reduces stress, which enhances academic performance (Evans et al., 2019; Pascoe et al., 2020). This aspect calls for greater involvement of students in physical activities to boost their health and educational achievement.

However, it should be noted that achieving positive academic outcomes requires consideration of the complex factors that might impact a student's health (Denovan & Macaskill, 2017).

5. A Journal

The experience of completing this project has been insightful since I have had the opportunity to examine knowledge concerning students' health and academic achievement critically. Two points in the project that are particularly insightful are the literature review and making the public engage with my research. Literature reviews are eye-opening and provide a researcher with a theoretical basis for their research.

Although I was interested in student health and academic achievement, I had a very basic understanding of the underlying relationships between these variables. For Instance, I knew that physical and mental health challenges adversely affect students' abilities to undertake school work. However, I did not have empirical understanding of this perspective which is more valid because it is subject to scientific, methodological procedures. I sought to find out what research had revealed on the subject to build my knowledge on it.

Examining a few extant studies showed that multiple factors determine student physical and mental health, and the impacts on their academic achievement are also multiple and varied (Evans et al., 2019; Pascoe et al., 2020). In other words, the relationship between student health and academic achievement is non-linear. Several factors mediate the relationship, leading to varied health and academic achievement outcomes.

This aspect is critical because any intervention to improve students' health and academic achievement can only be effective when considering multiple contextual factors. In addition, the lack of focus on empirical evidence concerning the impact of student health and academic performance could be the cause of ignorance of student health implications within education

settings. After examining empirical literature, I now understand the value of prioritizing student health and wellbeing as a way of optimizing their learning outcomes and preparing them for future academic success. However, more studies are needed to expand evidence and clarify the cumulative effects of students' health and academic achievement throughout the educational journey.

My audience consists of students, teachers, advisors, and school leaders. I preferred this audience because they are directly affected by student health issues and their implications on academic achievement. It is essential to share research with people who are likely to benefit more from it and possibly apply it to practical situations. Important to note, however, is that public engagement is required to get the audience to read the research (Walmsley, 2021). I publicized the research on social media groups where the aforementioned audience members have a presence. I translated the research using clear, simple, understandable language to enhance understanding and meaningful reading. Further, I had to give real-life examples of scenarios in which students experience multifaceted factors that adversely affect their health and academic achievement. These real-life examples helped to provide a more relatable context that would enable the audience to understand the complexity of student health and its impacts on academic performance. I chose a webpage to present my research because it is easily accessible and in an attractive format that would enhance the audience's interest in reading the research. That considered, I had to create a user-friendly webpage with captivating graphics.

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