

A Literature Review on Stress and Coping Strategies in Higher Education: Their Impact on Student's Mental and Physical Health and Academic Performance

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Abstract: Multiple factors contribute to higher education students' stress levels. It can lead to various physical and mental health complications, including headaches, exhaustion, difficulty concentrating, and depression. As a result, academic performance may be compromised, absenteeism may increase, and motivation may diminish. Numerous stressors have adverse effects on students' mental health, as well as the physiological effects of stress on physical fitness and the cognitive effects of stress on academic performance. This article provides a theoretical overview of these effects. A discussion is also provided regarding the importance of coping strategies in helping students deal with stress. An overview of relevant literature examines these relationships and identifies directions for future research and interventions.

Keywords: stress, coping strategies, mental health, students, academic competence

1. Introduction

With the increasing demand for education at all levels, stress is widespread. It is well known that students can be negatively impacted by stress, the effects include their performance on tests, class participation, and overall well-being. Existing research shows that the prevalence of stress is increasing among students receiving higher education [1]. Stress refers to any changes that cause physiological or psychological strain [2]. Stress is conceptualized as three components: stressors, stress response, and transaction [3]. Stressors are stimuli or changes in the environment, and they can be major life events or daily hassles. Stress response refers to a person's physical or psychological response to stressors. A transaction or a process involves constant interaction and modification between a person and their environment, where each influences the other. Stimuli or reaction does not solely determine stress effects. Instead, the individual can directly affect the magnitude of the stressor's impact by utilizing behavioural, cognitive, and emotional strategies [1]. It has been shown that how students cope with academic-related stress may influence their ability to succeed academically during the study period. It is important to note that the strategies that students choose to cope with stressful situations impact their experience of stress, and if these strategies are ineffective, stress will persist [4]. Therefore, developing an effective stress control strategy is essential for all students. This article will demonstrate an analytical framework to illustrate how stress affects physiological and psychological health and academic performance. The author focuses

on higher education students and examines the relationship between stress, students' health, and academic performance using a comprehensive review of relevant research studies. Also, the effect of coping strategies on stress and students' self-efficacy will be addressed.

Following are the research questions.

What is the relationship between students' mental and physical health and stress?

What are the effects of coping strategies on students? Which strategies are more effective at dealing with stress?

2. Stress Effects on Mental Health

Three stressors contribute to adverse effects on student's mental health: 1) academic stressors, 2) financial stressors, and 3) COVID-19 pandemic-related stressors. Firstly, There is a significant difference in workload between college and high school. To succeed in college, students must manage independently with less assistance from their parents and professors. The extensive demands of college classes, time schedules, testing, and other academic challenges force students to devote considerable time to academic studies. Based on a study by Barbayannis et al., the perceived academic stress of US college students is positively correlated with their mental wellness. They believe students' academic expectations and stressors, such as academic pressures, workloads, and grading, are equally significant to psychological health. As a result of students' high-stress levels, recent studies have demonstrated high levels of psychological disorders, including anxiety and depression [1].

Secondly, in a recent newspaper article, it was noted that many students are financially vulnerable. Students in higher education have faced increasing economic and employment pressures in recent years. Due to the Great Recession, the world economy experienced a slowdown in 2007, increasing job competition worldwide [5]. Many graduates from higher education, at both the undergraduate and graduate levels, are unemployed due to a shortage of high-quality jobs. Consequently, they may be tempted to engage in problematic activities to survive. Over the past decade, several highly profitable online academic writing support services have emerged. Unemployed graduate students may provide academic writing services to support their living expenses. Many students also engage in "sugar baby" relationships, i.e., young female students dating older men who assist them financially. Although it does not reflect the economic activities of all or most students, the examples provided here illustrate how students can cope with economic hardships [5]. There is a relationship between current economic difficulties, financial stress, and anxiety. Tran et al. highlight the importance of mental health costs and the psychological significance of many college students' financial strains. Counselling psychologists, educators, and administrators working with college students should pay particular attention to the financial stress they are experiencing. Counselling psychologists might collaborate with financial aid offices to facilitate mental health referral processes and generate interrelated financial and mental health services [6].

Finally, the negative impact of the COVID-19 shutdown on students' mental health will be discussed. Following the declaration of COVID-19 as a pandemic in March 2020, many measures have been implemented by governments around the world to control the disease's spread, such as maintaining physical distance [7]. During the COVID-19 pandemic, students in higher education lost personal contact with peers and faculty. There is also a potential risk of stress associated with the rapid and often unprepared shift from traditional learning platforms to online learning [7]. With the development of online learning, more and more media applications have been used to support teleconferencing, telecommuting, online learning, and social networking. However, long-term exposure to screens, tablets, and smart devices can cause stress and anxiety [8]. In addition to other stressors associated with quarantine and lockdown, telecommunications-related mental health

stressors can lead to excessive fatigue and burnout. Burnout occurs when an individual experiences continuous stress from persistent interpersonal stressors caused by work-related distress. Burnout is caused by exhaustion, cynicism, and detachment [9].

3. Stress Effects on Physical Health

Several studies have revealed that stress adversely affects students' physical health [1]. Studying a sample of Thai nursing students, a cross-sectional, correlational study confirmed that those with high-stress levels reported worsening physical health, strongly related to psychological tension. An individual's mental health can significantly hinder their ability to function, including their ability to actively participate in daily life and academic studies [10]. Studies have shown that students are also affected indirectly by stress as a result of poor health behaviours [1]. Even though students recognize that it is beneficial to engage in regular exercise, consume a nutritious diet, maintain a balanced weight, get sufficient sleep, and maintain positive relationships, high level of stress reduce their motivation and energy to adopt healthy lifestyle habits into their daily lives. Melnyk et al. found that fewer than one-third of health sciences graduate students consumed the recommended amount of fruits and vegetables daily [10]. It was also found that only 44% of respondents followed guidelines regarding adult physical activity despite firmly believing in the importance of maintaining a healthy lifestyle. In addition, 38 per cent of students reported binge drinking regularly. Student substance abuse has been linked to a weakened physiological response and a compromised ability to cope with stressors [1]. Other students' problematic behaviours, such as disordered eating, have also been linked to stress. Approximately 20% of participants had elevated cholesterol levels, and most students were overweight or obese. Overweight and obesity today cause numerous adverse health outcomes [10].

Moreover, several countries have recognized neck/shoulder pain (NSP) and low back pain (LBP) as health issues. The burden of NSP and LBP falls heavily on the individual and society [11]. According to several studies, NSP and LBP prevalence among adolescents is high [11]. Evidence shows that at least 26% of 14- to 18-year-olds in Finland suffer from NSP at least once a week, and 12% suffer from LBP regularly. Providing adequate guidance and psychological counselling is still relatively complex, although education levels have risen. Shan et al. pointed out that students sometimes sacrifice sleep and activity time to meet specific academic requirements [11]. A lack of physical activity, depression, and skeletal muscle dysfunction are some of the consequences of excessive stress for adolescents. According to their study, a high rate of NSP and LBP has been related to mental stress. Notably, students with greater satisfaction with their educational experiences reported lower levels of NSP and LBP [11].

Additionally, exam stress hurts the physical health of students. A significant increase in somatic symptom scores was observed during an exam period, even after considering the participants' reports of infections, injuries, and preexisting conditions [12]. Stress, depression, and anxiety levels also increased during the exam period.

4. Stress Effects on Academic Performance

In previous research, anxiety states and a lower sense of well-being are associated with self-reported stress [12]. An analysis of 13 studies revealed a relationship between stress and a decline in life quality and well-being in individuals enrolled in higher education. Pascoe et al. concluded that students must be in good physical and mental health to participate in schooling fully. According to the OECD survey, anxiety about schoolwork, homework, and tests negatively impacts students' academic performance. In accordance with the study, high-achieving girls often experience difficulties taking tests due to their concern about failing. Those students who rank in

the bottom quarter of academic achievement report feeling more stressed than their peers in the top quarter. Despite being well prepared, 63% of students in the bottom quarter of science performance express anxiety about tests [12]. The results of this study indicate that greater perceptions of stress are associated with poorer academic performance. This highlights the importance of interventions to help reduce student stress and improve academic performance. A recent literature review suggests that burnout and anxiety can negatively impact academic achievement [13]. The results were particularly pronounced for students who experienced more adverse life events of a more traumatic growth environment and students their parents or family members did not support.

5. Stress and Stress Coping

Stress management requires the ability of coping. Coping can be viewed as a critical process in managing stress. Individuals use cognitive and behavioural strategies to manage internal and external stressors [14]. It has been established that there are two types of coping strategies: approach coping and avoidance coping. Approach coping involves focusing on the problem and controlling or eliminating stressors through cognitive and behavioural strategies. By practising avoidance coping, people tend to avoid thinking about the source and effects of stress and focus on their emotions instead. Coping is a critical factor in reducing, minimizing, or tolerating stress. In addition, it is critical to prevent negative academic results due to stress. Avoidance coping may sometimes be beneficial in the short term. However, long time, it can lead to increased stress, more intense negative emotions, and impairments in academic performance. According to research, cognitive avoidance may adversely affect academic achievement. Evidence shows that students who refuse to address their emotional or psychological problems are more likely to respond to stress maladaptively [14]. There are several ways in which these responses can be manifested, including drug use and diets that are harmful to health. Therefore, knowing both coping strategies and considering which is most effective in a given situation is worthwhile.

Self-efficacy is generally increased when stress is dealt with positively. As a result, the person may feel more motivated and succeed tremendously, resulting in improved quality of life and greater mental and physical well-being [15]. A high level of self-efficacy is significant among college students since self-efficacy is more motivational and is known to increase the achievement of goals. Promoting academic self-efficacy makes students more likely to read textbooks, ask questions in class, and conduct independent study. According to Carnicer et al., students with high self-efficacy are more likely to adopt the coping approach to deal with college challenges effectively. Stress perception and academic self-efficacy also predicted engineering students' cumulative grade-point average (GPA).

Hatunoglu discusses Body-oriented Techniques as an adaptive coping method. Exercise, such as walking, running, biking, and hiking, has become an essential aspect of stress management for people of all ages. It is well known that exercise has powerful biochemical effects. By improving physical condition, the body can destroy chemicals caused by tension, increase energy levels, and regulate metabolism [16]. Exercise has various benefits, including the enhancement of flexibility, the strength and endurance of muscles, the relief of tension, and the enhancement of the body's general physiological condition by improving oxygenation [16].

As Carnicer et al. discovered, strategies such as seeking assistance and finding solutions were positively associated with academic performance, and anxiety was negatively related. This finding suggests that students' academic performance is influenced partly by their interpretation and adaptation to stressful conditions [17]. Studies have shown that students who use approach coping strategies, such as utilizing social support and changing their circumstances to cope with stress, adjust more successfully to their environment. The use of avoidance coping strategies, such as drug

abuse, by students to escape stress is detrimental to their academic performance and health and well-being [18].

6. Practical Implication

This article highlights the essential role of mental health professionals in schools in supporting students of diverse backgrounds and ages experiencing stress. To effectively work with these students, counsellors should understand how stress affects their health. They should also know how to use effective interventions they can implement at school—for example, discussing problems creating stress in their relationships, reframing situations to focus on the positive rather than the negative, or budgeting more carefully to minimize financial stress. Schools should invest more budget in the mindfulness training workshop in the future. There are unique challenges and demands during emerging adulthood, the transitional period between high school and college. Many stress-related psychological conditions are prevalent within this age group, including anxiety, depression, and sleep disturbances [19]. University students have reported a reduction in stress through mindfulness-based programs, according to Greeson et al.. Using a university student sample of emerging adults, Koru, a new mindfulness training program, demonstrated improvements in stress perception, sleep quality, stress management, and self-compassion.

7. Conclusion

Stress has a wide range of adverse effects on students' mental health, physical health and academic success. Numerous studies show that students who experience high-stress levels are more likely to suffer from depression, anxiety, and physical impairments. As a result, their ability to concentrate and focus on their studies is greatly diminished, leading to decreased academic achievement. The available literature indicates that stress experienced by higher education students is explicitly associated with the following factors: academic load, financial difficulties, and negative impacts of the COVID-19 shutdown. College students have been shown to experience significant stress due to their academic load, especially the major of their course. When it comes to stress, paying attention to the students' stress-coping strategies is necessary. As far as coping strategies are concerned, there are two types: avoiding coping and approaching coping. Stress can be avoided, but this is not always the best approach to becoming less stressed. The most effective way to reduce stress is to confront a problem or deal with a stressor. Students must strive for stress regulation rather than avoidance since stress cannot be eliminated. The second method is called approach coping, in which a problem is addressed directly to reduce stress. Some forms of passive coping, however, are not maladaptive. Even though these forms of coping do not necessarily approach the problem now, they contribute to the student's response to it [20]. Even when the techniques do not directly affect the situation, it is healthy for students to practice techniques that help them feel more relaxed when confronted with a difficult situation.

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