

STRESS AND BURNOUT IN HIGHER EDUCATION: A STUDENT-CENTERED STUDY

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Abstract

Stress can have detrimental effects on a student's engagement and effectiveness at school. This study sought to identify undergraduate students' stress and burnout levels and clarify how students cope with stress and burnout. Undergraduate students ($n = 134$) reported their current stress levels, completed the Maslach Burnout Inventory-Student Survey (MBI-SS), and wrote reflections of their stress mitigation strategies. The mean stress level fell in the low range of the MBI-SS, whereas the stress level for engaged and disengaged students fell in the moderate-to-high range. Students also reported using problem-focused, emotion-focused, and avoidance-focused coping mechanisms. The findings suggest students could benefit from university support mechanisms to navigate college stressors.

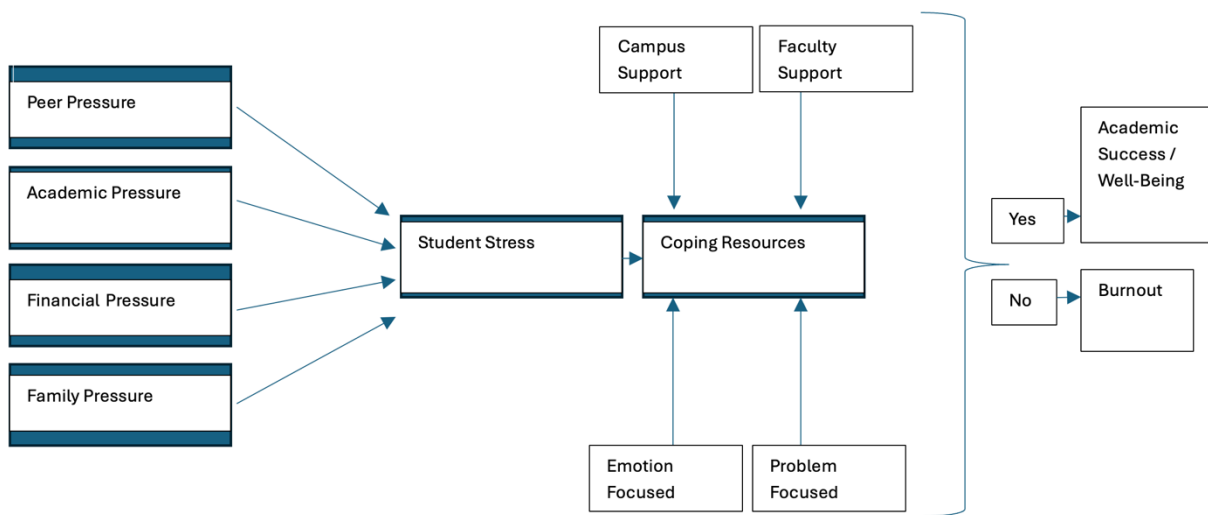
Keywords: student burnout, student stress, academic stressors, university support, student stress coping

Introduction

Student stress levels have continued to increase amid social, academic, and career pressures in the postsecondary setting. Myriad studies have examined student burnout generally, yet a dearth of research has explored the possible link between student stress and student burnout (Cantrell et al., 2023). How students manage stress or recover from burnout is also a current gap in the literature (Garko et al., 2024). This study sought to clarify the extent of student stress and if they are experiencing burnout, which could hinder academic success and well-being. This study had three primary aims: (a) to determine students' current stress levels, (b) to determine if students are burned out, and (c) to explore what interventions students use to manage stress and protect themselves from burnout.

Conceptual Framework

A conceptual framework is an illustration of how concepts, theories, and ideas work together (Jabareen, 2009). Pressures, which include peer, academic, financial, and family pressures require students to respond, which generates stress. Students must then utilize coping resources such as problem-focused coping and emotion-focused coping. Students may also engage the resources of the university to access support mechanisms. If a student chooses to engage their own coping skills or university programs, a student may experience academic success. The inability to use these coping resources may subsequently lead to burnout and hinder academic success and student psychological well-being (see Figure 1).

Figure 1 *Student Stress Conceptual Framework*

Exploring Student Stress and Burnout

Stress is defined as a response to an external change or stimulation (Lazarus & Folkman, 1984). Stress in an academic setting could include factors such as academic requirements, social changes, career demands, and extracurricular or social obligations. Stress requires students to use internal and external resources to meet the challenges of college life.

Student Stress

One of the earliest studies of student stress (Mechanic, 1959) studied the stressors of 614 undergraduate male students in the late 1950s. This study found that a majority of students experienced a high level of stress. Since this time, student stress and burnout studies emerged among the demographic of medical students and determined that medical students are stressed and experience burnout (Linn & Zeppa, 1984).

According to the 2023 American College Health Association's National College Health Assessment (NCHA), several factors contribute to student stress. The NCHA study examined over 78,024 students from 125 U.S. schools, and over 65% of students reported academics causing moderate-to-high distress. Another study completed in 2023, explored the stress level of 525 first year college students. This study utilized the Perceived Stress Scale to measure student stress. One key outcome of this study was that student's stress

was at a moderate to high level of stress. (Bloomfield, 2024) These studies agree with each other and my study. As demonstrated in my conceptual framework, academic pressure leads to a stress response. Additionally, career pressure was reported to cause moderate-to-high distress in 75% of students, and faculty were a cause of stress for over 40% of students. Procrastination, or putting off academic or other work, caused stress in 65% of the responding students, and finances caused stress in 75% of the students. This financial pressure is highlighted in the conceptual framework.

During the COVID-19 global pandemic, student stress reached pinnacle levels due to changes in course delivery, isolation, lack of autonomy, and academic demands (Roche et al., 2024). The 2020 cohort of all university students indicated higher levels of stress than the 2016 cohort (Roche et al., 2024).

Students cope with stress in many ways. Coping is the process wherein an individual navigates an external pressure; it involves appraising stress and using resources to deal with the stress (Lazarus & Folkman, 1984). Lazarus and Folkman (1984) described three main types of coping: (a) emotion-focused coping, which deals with the feelings associated with stress; (b) problem-focused coping, which analyzes the options available to deal with a stressor and then engages in the answer; and (c) avoidance-focused coping, which entails escaping or removing oneself from the stressor. Self-efficacy, defined as individuals' perceived beliefs in their own abilities or capabilities to manage a situation, has also been shown to instill coping abilities in college students (Bandura, 1977; Konaszewski et al., 2021). A student with a high self-efficacy is employing emotion focused coping, as defined by Lazarus and Folkman (1984).

Even though stress can be considered negative, researchers have indicated a positive view of stress can lead to strong academic achievement (Meyer & Stutts, 2024). The positive aspects of academic stress, also known as eustress, can help students remain engaged in their academic life. For example, a course assignment deadline can trigger a stress response, prompting the student to focus on the assignment requirements.

This study aims to build on existing literature by examining each of the five profiles (e.g. disengaged, engaged, ineffective, overextended and burned out) from the Maslach Burnout Inventory and their relationship to student's current stress levels. This study provides a

more in-depth examination of student stress and exactly how students are struggling in their academic lives.

Student Burnout

Stress, if maintained over extended periods of time, can cause burnout, although burnout may also have other causes. Freudenberger (1974) first discovered burnout in an examination of chronic fatigue in healthcare professionals. Freudenberger defined burnout as extreme emotional and physical exhaustion. Burnout was measured in behavioral symptoms such as irritation, anger and crying. Maslach later expanded the burnout research by identifying the three symptoms of burnout, which are cynicism, emotional exhaustion and a lack of professional efficacy (Maslach & Leiter, 2023). As illustrated in the conceptual framework, burnout may occur if students do not utilize coping and campus resources.

The various pressures a colleges student face may create a stress response and place them at risk of burnout. A literature review related to medical students and nursing students (Ishak et al., 2013) indicated almost 50% of medical students are at risk for burnout. Another study (Jagodics & Szabó, 2023) examined burnout levels in Hungarian students ($n = 743$), concluding a high workload contributed to student stress and ultimately burnout. Over half the students in the 2023 NCHA study indicated they felt tired or sleepy during the day, which is a symptom of physical exhaustion (American College Health Association, 2023). From these studies, student stress levels are high and the risk for burnout is prevalent.

According to Leiter and Maslach (2016), six environmental factors may contribute to burnout: lack of community, relentless job or academic demands, a lack of fairness, not being recognized for assigned work, a values mismatch between the organization and the individual, and overall lack of control. Positive or negative environmental factors could exacerbate student burnout but could also lead to poor academic performance (Schaufeli et al., 2009). Burnout could also be caused by ineffective and unsupportive professors and a lack of student resources, which are illustrative of a lack of community and not being recognized for excellent academic work (Sulea et al., 2015).

Burnout Mitigation

Students can prevent burnout using a multitude of approaches. For instance, Raedeke and Smith (2001) studied gratitude by exploring athletes and how they reflected on what was positive in their life and what resources (e.g., interventions) were accessible. Burnout interventions include both individual and organization or university-level interventions (Awa et al., 2010). At the individual level, cognitive behavior therapy, mindfulness, and exercise are considered burnout interventions (Madigan et al., 2023). Organizational interventions could range from student wellness programs to community-based activities and support groups (Madigan et al., 2023). Despite the potential of these resources, scholarly research has remained limited to the efficacy of these interventions at a university level. Most universities offer career counseling, mental health counseling, and other community-based support systems, yet several gaps exist related to the influence of stress and burnout on students' university experiences (Madigan et al., 2023).

Methods

Mixed-methods research with both qualitative and quantitative analysis was selected for this study. The goal of the quantitative portion of the study was to analyze student stress levels (Aim 1) and determine if students were burned out (Aim 2). To achieve these goals, the study used a survey for students to self-appraise their current stress levels as well as the Maslach Burnout Inventory-Student Survey (MBI-SS). The goal of the qualitative portion of the study was to determine what actions students take to renew themselves or manage stress (Aim 3). I asked students to complete a written reflection on their academic stress, including what they do to relieve themselves from stress.

Study Context and Participants

This study spanned the Spring 2024 semester, when I taught three undergraduate project management courses for students enrolled in various degree programs. Considering stress and burnout impacts all university students, I elected to invite all students enrolled in my courses to participate in this study ($n = 134$). Project managers in the corporate environment must manage their own stress and protect themselves from burnout; therefore, this topic was already integrated into the course plan. A memo provided by the

Purdue University Office of the Registrar indicated required coursework may be used for data in research without signed consent forms from students, as long as students' personal information is not identified. Confidentiality was ensured through the use of the secure learning management system, which requires students to sign on with their own username, password, and multi-level authentication. This research protocol was approved by the Purdue University Institutional Review Board. To follow this instruction, demographic data were not collected for this study. This course consisted of 95% non-Hispanic/Caucasian, 3% international students, and 2% Black students. The sample included a mix of freshmen, sophomore, juniors, and seniors. The gender mix was majority male with some female students. In addition, this study comprised a convenience sample, where the assignment was a requirement of the project management course. I received approval from the Institutional Review Board of the university under IRB #2024-267. Data collection took place over a 4-month period (i.e., 1 semester).

Quantitative Data Collection and Analysis

Students were asked to complete an anonymous Qualtrics survey to self-appraise their current stress level using the following scale: 1–2 = *mild stress*, 3–4 = *moderate stress*, 5–6 = *severe stress*, 7–8 = *very severe stress*, and 9–10 = *worst possible stress*. This scale is aligned with the universal pain scale. The 16-question MBI-SS was included in the Qualtrics survey (Schaufeli et al., 2009). Assessing burnout is commonly conducted using 1 of 2 assessments: the Maslach Burnout Inventory (MBI; Leiter & Maslach, 2016) or the Copenhagen Burnout Inventory (Kristensen et al., 2003). The MBI asks participants to discuss their experiences at work. The student version was created to replace questions about work with questions about studies or class (Schaufeli, 2003). For example, questions asked MBI-SS include, "I feel emotionally drained from my study," "I feel used up at the end of the day at the university," and "I feel I am making an effective contribution in class." The MBI-SS was selected due to the ease of administration, reliability of the assessment, applicability to students, and my familiarity with the MBI-SS.

The MBI-SS creates 1 of 5 profiles for each student depending on how the student answers the questions in the survey. These profiles include engaged, ineffective, disengaged, burned

out, and overextended (Leiter & Maslach, 2016). The engaged profile describes a student who participates actively in their studies and academic life (Leiter & Maslach, 2016). A student with an engaged profile would indicate the student scored low on exhaustion or cynicism but high on efficacy. The ineffective profile describes a student who does not perform well in their academic work (Leiter & Maslach, 2016). The disengaged profile occurs as a result of a student scoring high on cynicism and low on exhaustion and efficacy. A burned-out profile would be the result of a student scoring high in both exhaustion and cynicism without any indication of academic efficacy. The overextended profile would indicate a student scored high on exhaustion and low on cynicism and efficacy (Leiter & Maslach, 2016).

Once the survey data were collected, I analyzed the stress scores using descriptive statistics. Additionally, a Pearson correlation was calculated to measure the relationship between stress and the burnout profiles. Skewness and kurtosis calculations were completed to calculate the shape of the data collected from the Qualtrics survey. The MBI-SS was scored, and stress scores were correlated with the MBI-SS results.

Qualitative Data Collection and Analysis

The classes started with lectures and activities on the topic of stress and burnout. Students were then asked to complete a half-page to one-page written reflection. The first question asked, "How do you manage stress?" The second question asked, "What do you do to renew yourself?" The third question asked, "Why is managing stress important for project managers?" Students then submitted their assignment to the learning management system for review. This assignment was graded, but points were based on participation only. Students who completed the assignment received full credit.

The qualitative results included an inductive thematic analysis of the stress reflection assignment (Ravitch & Carl, 2019). First, each student's written assignment was read multiple times, looking for themes. Second, as themes began to emerge, I captured these themes in Microsoft Excel. Third, I completed three cycles of coding. Coding is the method of clustering data and placing a label to portray each theme cluster (Saldana, 2021). I coded each theme and placed them into Microsoft Excel to track the number of times each code

was stated (e.g., Exercise). The second round of coding added to the first by identifying the codes from the theme clusters. Finally, I reread the papers, tracking the number of times each code was stated in the students' reflections and consolidating the themes.

Quantitative Results

Aim 1 of this study was to determine the current stress level of college students. Table 1 displays the mean stress level for students, which fell in the moderate range, or 3.80. I also compared student stress scores with the results of the MBI-SS (see Table 1).

Table 1

Mean for Stress, Cynicism, Exhaustion, and Academic Efficacy

Variable	<i>M</i>	<i>SD</i>
Stress level	3.80	1.99
Cynicism	3.83	1.40
Exhaustion	4.51	1.23
Professional efficacy	5.24	.95

Note. $n = 128$ Stress Level (not every student answered the stress question), $n = 134$ Burnout Profiles

When broken out further (see Table 2), 69% of students perceived they had mild (27%) to moderate (42%) stress levels, with the remaining 31% having *severe* (17%), *very severe* (12%), or *worst possible* (2%) stress. These scores were out of 128 students who self-reported their stress levels in Spring 2024.

Table 2*Stress Level Frequency and Percentage*

Stress level	%	Frequency
Mild	27%	35
Moderate	42%	54
Severe	17%	22
Very severe	12%	15
Worst possible	2%	2

Note. $n = 128$. Not every student answered the stress question.

The average score for the cynicism profile was also elevated ($M = 3.83, SD = 1.40$), reflecting a moderate level of detachment or feelings of negativity toward their academic pursuits. Exhaustion was the most pronounced result ($M = 4.51, SD 1.23$), illustrating students feeling drained by the demands of university life. Professional efficacy was comparatively high, meaning students were performing well in their academics ($M = 5.24, SD = 0.95$).

Aim 2 of the study was to determine if students were burned out. Table 3 provides the results of the MBI-SS. In all, 6% of students in this study were burned out. Of note, a burned-out student scored high on the questions related to emotional exhaustion and cynicism. Additionally, students may have scored low on the questions related to professional efficacy.

Table 3*Individual MBI Profiles and Stress Scores*

Profile type	Frequency	%	Stress
Engaged	55	41	3.59
Ineffective	39	29	3.22
Overextended	27	20	4.42
Disengaged	5	4	4.66
Burnout	8	6	5.00

Note. $n = 134$.

Engaged Profile

The results indicated 41% of students were “engaged” in school, meaning they were actively participating in academic activities (Leiter & Maslach, 2016). Students who scored high on engagement also indicated a moderate to high level of stress.

Ineffective Profile

Additionally, 29% of students indicated they felt ineffective as students, which means these students had a lower sense of personal accomplishment. An ineffective student is not achieving academic success, may have poor study habits, and may lack engagement in class (Leiter & Maslach, 2016). Ineffectiveness was evident if students scored high on the MBI-SS questions pertaining to lack of academic efficacy. The prompts answered most frequently with a higher score on the MBI-SS, which corresponded with ineffectiveness, included, “I’ve accomplished many worthwhile things in my studies” and “I feel exhilarated when I accomplish things in my studies.”

The data in Table 3 illustrate students who felt ineffective had a stress score of 3.22, which fell in the moderate range of stress. Notably, the ineffective profile is associated with a lower level of stress than the engaged students, which could be due to the student not

feeling a sense of accomplishment in their academic pursuits or because they may have withdrawn from their academic pursuit due to a lack of confidence. A student with an ineffective profile would also be tied to the third symptom of burnout, a lack of effectiveness. A lack of effectiveness means students do not feel they are competent or efficacious in their academic life. According to this study, an ineffective profile corresponded with a low-to-moderate level of stress.

Overextended Profile

The results showed 20% of students were overextended. An overextended profile resulted from students answering questions on the MBI-SS that indicated a high level of emotional exhaustion with a moderate level of cynicism (Portoghese et al., 2018). The two prompts from the MBI-SS that scored students' experiences of overextension included, "I feel tired when I get up in the morning" and "I feel used up at the end of the day." Students who fell in the overextended profile answered these statements most frequently with a high score. Students can become overextended by taking on high levels of course work, extracurricular activities, and social engagements. An overextended profile indicates the academic demands are greater than the resources available to the student (Leiter & Maslach, 2016). An example of feeling overwhelmed was indicated by one student reflecting on their stress. Student 3 indicated, "When I have built up so much that I become so overwhelmed and cannot function." Students with an overextended profile scored a 4.42 stress level, which fell within the moderate-to-high level.

The difference in stress level between the ineffective (3.22) and overextended (4.42) profiles was substantial. Students who were "ineffective" had a lower sense of academic accomplishment and may have reduced their focus on academics. Students with the overextended profile reported a higher level of stress, which could be due to a personal emphasis on academics and extracurricular activities.

Disengaged Profile

The second highest level of stress (4.66, moderate to high) included students who scored a disengaged profile. A disengaged student scored high on the cynicism measure for burnout; a cynical student may feel their academic pursuits are not valuable or they have withdrawn

from academic and university life. As the results showed, 4% of students in this study were disengaged. Disengaged was the profile that appeared the least. Students with a cynical profile would view their academics or university with distrust (Leiter & Maslach, 2016) or would feel that academics do not matter.

Burnout Profile

Aim 2 was to determine if students were burned out. The results from the MBI-SS showed burnout was only represented by 6% of the students in the study, with an average stress score of 5.00 (i.e., severe stress).

Skewness and Kurtosis

Table 4 illustrates the skewness and kurtosis statistical analysis of the students' self-reported current stress levels. Additionally, the three statistical measures of the results of the MBI-SS are illustrated in Table 4. The skewness and kurtosis were under +/-2.0; thus, a statistical analysis was all normally distributed, so a parametric analysis was run. A weak relationship between exhaustion and stress was found.

Table 4

Skewness and Kurtosis

Measure	Current stress level	Emotional exhaustion	Professional efficacy	Cynicism
Skewness	.608	-.206	-.556	.335
Std. error of skewness	.214	.211	.211	.211
Kurtosis	.065	-.173	.068	-.636
Std. error of kurtosis	.425	.444	.419	.419

Stress and Exhaustion

A Pearson correlation was calculated to determine if there was a correlation between stress and burnout (see Table 5). From this study, there was a significant moderately weak

relationship between exhaustion and stress and no significant relationship between stress and cynicism or stress and professional efficacy.

Table 5

Pearson Correlation

Variable	Exhaustion	Cynicism	Professional efficacy
Stress	.337**	.153	-.023

$n = 134$.

** Correlation is significant at the 0.01 level (1-tailed)

Qualitative Results

The reflection assignment was completed by 119 students. Some students did not complete the assignment, which is why the participant number in the qualitative study is less than the participant number in the quantitative study. Table 6 outlines results of the student reflection on how they manage stress and burnout. The most frequent stress management technique was exercise, indicated by 28% of students. Exercise included walking or playing a sport. Student 33 indicated, "I try to walk 3 miles to deal with my stress."

Table 6

Student Coping Strategies

Strategy	Frequency	%
Exercise	33	28
Relationships	24	20
Planning	18	13
Accomplishing Tasks	14	12
Sleeping	10	8
Mindfulness	7	6
Video games	7	6
Distancing	5	4
Vacation	3	3

Note. $n = 119$.

The second highest coping strategy was relationships. Student 12 indicated they reached out to family and friends to process through their stress, saying, "I have realized it is helpful for me to speak through my stress. I am an emotional person." This response showed an example of emotion-focused coping.

Stress uses internal resources to manage an external stimulation (Lazarus & Folkman, 1984). Such expenditure of resources leads to fatigue. Over time, students who experience long-term stress could experience a period of exhaustion. An experience of prolonged stress was indicated by Student 6, who shared, "I live in a constant state of stress, so I am just learning how to manage it."

The third most frequently used method of coping with stress was planning, as 13% of students used this approach to cope with stress. Planning could include listing out daily and weekly tasks (e.g., assignments, requirements for extracurricular activities, volunteer work). Student 30 recalled, "making a list to plan [their] day" helped them deal with stress or feeling overwhelmed. Student 42 shared they not only plan their day by writing out their task list, but also begin to engage in the completion of the tasks, describing, "Creating a plan and working through it." This approach was also shared by Student 33, who expressed, "Making a list and accomplishing tasks." The process of planning and accomplishment is an example of problem-focused coping.

Avoidance coping emphasizes ignoring, moving away, and seeking to preserve the status quo versus engaging in the stress through either emotion-focused or problem-focused coping (Vitaliano et al., 1990). Avoidance-coping techniques (e.g., video games, vacations, distancing) were used by 6% of students in this study. Student 5 mentioned distancing and "playing video games such as Minecraft or Skyrim" to cope with stress.

Other students used relationships, planning, and exercise to cope with their stress. These individualized coping mechanisms included both problem-focused and emotion-focused coping techniques. Emotion-focused coping involves exploring and processing the feelings associated with an experience of stress (Lazarus & Folkman, 1984). An example of emotion-focused coping was illustrated by Student 7, who shared, "I typically cry to release my stress." Problem-focused coping involves exploring the various options to deal with a stressor and taking subsequent action (Lazarus & Folkman, 1984). An example of a

problem-focused coping technique was illustrated by Student 5, who said, “I manage stress by first finding the cause of my stress and then figuring out what I can do to fix it.”

Similarly, Student 1 indicated, “I usually try not to avoid the source of stress and try to face it.” In this sample, avoidance-coping techniques (e.g., vacation, distancing, television) were the least-used coping tools. The use of a variety of coping techniques indicated students were stressed and working to manage their stress through a variety of coping techniques.

Discussion

Students face myriad academic pressures leading to stress, requiring students to use resources to manage their stress. From the conceptual framework, students face a myriad of pressures, which lead to stress. Prolonged stress may lead to student burnout and a lack of academic success and overall well-being. Additionally, the conceptual framework suggests that students who use coping skills, and university resources are less likely to burnout. Most students in my study were not burned out but were at risk for burnout based on the disengaged, ineffective, and overextended profiles and their corresponding stress levels. This section examines how this study aligned with, expanded on, and did not align with current literature.

Study Alignment With Current Research

One aim of this study was to determine if students were stressed. Overall, students from the study experienced moderate levels of stress. This result aligned with recent research associated with student stress in a university setting (American College Health Association, 2023).

A second aim of this study was to determine if students were burned out. From this study, only 6% of students were burned out; however, the results of this study indicated many students were ineffective, disengaged, or overextended. The quantitative results did not support Madigan et al.’s (2023) study indicating student burnout is quite prevalent among university students, as a low percentage of students from my study were burned out. Students who were ineffective reported that they had not experienced classroom success, which may have threatened their ability to navigate job success. The students who were

ineffective experienced low levels of stress. Additionally, student participants with an overextended profile experienced moderate-to-severe levels of stress.

Another aim of this study was to explore what interventions students can use to manage stress and protect themselves from burnout. Twenty percent of students in this study were overextended, which may lead to their moderate-to-severe stress levels. The results of this study supported von Keyserlingk's (2021) study, which found heavy coursework and student involvement generates greater stress in university students. Students cited using various methods to cope with stress. Overextension could be caused from heavy course loads, extracurricular activities, and other stressors (American College Health Association, 2023).

Expanding on Current Research

The results of this study expanded on the current research in three ways. First, it quantified the current stress level of students in an undergraduate population with various majors. The majors in this study included computer science, aviation, organizational leadership, human resources, and engineering technology. Current studies on undergraduate stress and burnout have focused on healthcare, engineering, and specific populations versus a broad set of undergraduate majors (Madigan, 2023).

Second, this study expanded on current student burnout literature by clarifying the type and level of stress and burnout students are experiencing. Students from this study were engaged (41%, low stress), ineffective (29%, low academic efficacy), overextended (20%, high emotional exhaustion), and disengaged (4%, high cynicism). Only 6% of students were burned out (all three markers of burnout). Given these results 53% of students may be at risk for burnout, which is cause for concern for university faculty and staff. Current research indicated Hungarian students who were burned out had higher dropout rates and poor academic performance (Jagodics & Szabó, 2023).

Thirdly, this study used qualitative analysis to understand how students cope with stress in a college setting. One study examined (n=8) midwestern college students to determine what coping skills are used by college students, but the sample size limited the impact of the study. The Scribner, Sasso & Puchner study encouraged the examination of other ways

students work with college resources to determine how they cope with stress, and this study is a first step in answering that call. (Scribner, M., Sasso, P. A., & Puchner, L. (2020). More research is needed to determine what campus resources are available, including faculty interventions, along with the utilization and efficacy of these resources.

Misalignment on Current Research

The third aim of this study was to determine what interventions students can implement to manage stress and protect themselves from burnout. The qualitative results did not support Madigan's (2023) study, which indicated students used mindfulness meditation and therapy to manage stress. Students from this study dealt with stress primarily through exercise and relationships. Although Trolan (2020) found professors can be a resource for students dealing with stress, the participants in my study did not indicate if they spoke with their professors to deal with stress.

Researcher Bias and Positionality

Researcher bias focuses on researcher objectivity, positionality, and bias mitigation (Ravitch & Carl, 2021). This study has two bias threats: (a) my role as a faculty and (b) my personal experience with stress and burnout. In this section, I discuss each potential threat and how I mitigated each of these threats.

The first threat to validity is my bias as a researcher, which includes my role as a professor. I believe professors can have a great impact on a student's college experience. My bias regarding my own approach to teaching and student support could influence this study. To mitigate this threat, the Maslach Burnout Inventory was utilized, which is a reliable instrument. Secondly, I chose to play the role of faculty while grading their stress reflection papers. After several weeks, I then played the role of researcher while reading through each of the student's assignments exploring their own stress level (Ravitch & Carl, 2021).

A second bias is my own personal experiences with stress and burnout. Four years ago, I experienced burnout. I am sensitive to the topic of stress and burnout with my students and seek to support them. I mitigated this threat by being aware of my own experiences and sensitivity to the topic of stress and burnout.

Faculty Interventions and Pedagogy

Faculty play a pivotal role in supporting students from an academic and mental health perspective (Cantrell et al., 2023). Professors who perceive their students are heavily stressed can design classroom activities to build coping skills for students. Examples of these activities could include mindfulness and a discussion of coping strategies (Trolan, 2020).

Professors who note their students are overextended can schedule individual time with them in a mentoring role to discuss their academic, social, and extracurricular loads and help students discover boundary-setting activities to remove responsibilities. Each of these topics are examples of problem focused coping (Lazarus & Folkman, 1984).

Professors and staff can also use verbal persuasion, 1 of 6 determinants of self-efficacy, to help students lessen their stress levels (Bandura, 1977). Self-efficacy helps students develop stress-coping capacity. Professors are in a role of authority; offering words of encouragement, advice, and positive reinforcement can build self-efficacy (e.g., a professor publicly encouraging student participation and validating students' contributions in class, a professor sharing the strengths they see in students during individual office-hour meetings with students). A student who shows signs of ineffective academic performance may need words of encouragement or verbal persuasion from their professor (Sumantry & Stewart, 2021). The learning environment consists of the physical, emotional, and pedagogical in-class experience. If professors can engage students during class time in a way that meets student learning needs, stress can be reduced (Rusticus et al., 2023).

Faculty can challenge students to develop a change in mindset regarding their college experience by modeling a growth mindset (Meyer & Stutts, 2024). Mindset describes a student's belief about their ability and learning capacity. A growth mindset exemplifies curiosity and remains open to what is possible, whereas a fixed mindset views learning and potential as predetermined, where failure is unacceptable and focuses on one's limitations (Dweck & Yeager, 2019). This type of intervention can assist students' abilities to cope with stress. Focusing on a fixed mindset can generate stress, which could lead to burnout (Dweck & Yeager, 2019).

Study Limitations

This study has two limitations. First, the lack of complete demographic data hindered the ability to draw conclusions based on age, years in college, and ethnicity. Although this limited sub-group analysis, the aim of this study was to determine student stress levels and if students are burned out. Demographics are not needed to draw general conclusions about student stress levels. Second, the study used a non-randomized convenience sample, which could create selection bias. In qualitative analysis, focusing on the aim of your study is essential, which means that a large sample size is not critical for a valid study (Ravitch and Carl, 2019). The sample size of over 100 students helped mitigate this risk.

Implications

This research presented two key implications. First, students have the self-direction to appraise their own stress level and decide what they will do with this awareness. Students may choose to cope using problem-focused coping or emotion-focused coping. These methods include seeking out a relationship, taking a nature walk, or developing an action plan. Other students may choose an avoidance-coping strategy by viewing television or running away from the issue. This self-direction toward 1 of the 3 coping efforts explored in this study may ultimately lead to thriving at school or struggling.

A second implication of this study came from the finding that most students were not burned out, but many were ineffective (29%) and overextended (20%) with heightened stress levels. In addition, 4% of students were disengaged, with a corresponding moderate-to-high level of stress. The implication of this finding should inform institutional retention strategies beyond the classroom. Strategies should include enhanced student programs such as mental health support and stress and burnout educational awareness programs within student life. University-wide organizations should consider adding clubs focused on mindfulness meditation and burnout recovery. In addition, student support services such as a health clinic could sponsor a burnout mitigation or stress coping week to enhance campus awareness and professional development for advising and career staff could focus on identifying student burnout warning signs.

Recommendations for Future Studies

Future studies on stress and burnout should be longitudinal, examining students from the beginning of a semester to the end of the semester, the beginning of a school year to the end of the school year, or from their 1st year to their last year. Researchers could explore the students' factors, stress levels, and burnout at various times in their academic careers. Another suggestion for future study is to examine how faculty, academic advising and student support services are assisting students who are stressed or burned out. Faculty and staff play a key role in supporting students; examining the techniques and approaches faculty can take to support students beyond a lecture is critical. Student services such as student affairs, campus health departments, academic and tutoring support ought to be studied to determine their efficacy in helping students manage stress and mitigate burnout. Examining what professors are providing in class, from course organization to in-class activities and out-of-office support, can help determine if these approaches can help students manage their stress.

Conclusion

Students face myriad stressors during their university experience. Most students with moderate levels of stress are either engaged, overextended, or ineffective, with overextended students experiencing higher levels of stress. With even higher levels of stress, students may become disengaged or burned out, although burnout happens less frequently. University officials, in partnership with faculty, can provide interventions, support mechanisms, and classroom enhancements to ensure students continue to manage their stress and protect themselves from burnout, thereby increasing the likelihood of academic success and well-being.

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