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APPROVAL OF HONORS PROGRAM SENIOR PROJECT

Candidate

Kayla Leigh Collins

Project Title

"Take my Hand": Exploring the Relationship between Stress, Mental Wellbeing, and Sleep in University Students

This Senior Project is approved as acceptable

Project Director

Dr. Meredith Gringle

Committee Member

Dr. Shannon Crowley

Committee Member

Dr. Amy Karnehm Willis

Committee Member

Dr. Emily Weber

Honors Program Co-Director

Dr. Bill Yankosky

Honors Program Co-Director

Dr. Fred Sanborn

February 10, 2026

“Take my Hand”: Exploring the Relationship between Stress, Mental Wellbeing, and Sleep in University Students

Kayla Leigh Collins

Honors Thesis

Spring 2026

Abstract

In the last ten years, research has suggested an increased prevalence of mental health issues, such as depression and anxiety disorders, in college students. It has been found that students are hesitant to seek the mental health support they need due primarily to social stigma, decreased public awareness, lack of knowledge, lack of time, and lack of resources available to them. A study was conducted at a small liberal arts university to explore the relationship perceived stress has with mental wellbeing and sleep outcomes for college students. The study was composed of an analysis of existing quantitative data from an online survey inquiring about the mental health and wellness status and sleep hygiene of the university student athlete population and semi-structured interviews inquiring about the mental health and wellness status and sleep hygiene of the university senior student population. A positive correlation was identified between higher levels of perceived stress among students and increased presence of depressive symptoms, increased presence of anxious symptoms, and poorer sleep hygiene among students. Common themes relating to stress, mental wellbeing, and sleep identified in the interviews supported the presence of a positive correlation between perceived stress and depressive symptoms, anxious symptoms, and poor sleep hygiene. Improving the student-faculty relationship, as well as using it to introduce information and support for stress, mental wellbeing, and sleep to students was discussed as a potential method of prevention and intervention.

Background & Introduction

Mental Health Amongst University Students

Research conducted over the past ten years has shown that university students are reporting high levels of stress, which may contribute to the high prevalence of stress-related

mental health disorders found in current student populations (Baik et al. 2019). High levels of stress are determined by student perception of stressful situations, development of psychological symptoms, and the presence of physiological responses to stress (Dorsey et al. 2022). Stress can be measured in several ways, including via self-report, observations of stress-related behaviors, and/or physiological measures. Chronic stress has been linked to increased risk for the development of adverse mental health outcomes. These have become increasingly important topics on college campuses because of the observed increased rates of stress-related mental health disorders, such as depression and anxiety, in college student populations (Ban et al. 2023). Approximately 35% of college students reported experiencing depressive symptoms and approximately 40% of college students reported experiencing symptoms of anxiety in 2025 (Paiva et al. 2025). Other types of mental health issues experienced by students include substance use disorders, eating disorders, and self-esteem/self-confidence issues (Hubbard et al. 2018). Similarly, many college students report related deleterious behaviors like insufficient sleep and insufficient physical activity levels, which can exacerbate the impact of stress on mental health, during the transition into college and throughout their college careers (Fruewirth et al. 2023).

Additionally, the majority of students who struggle with stress-induced mental health issues in college do not seek help or treatment even though existing stigma surrounding the topic has been reduced and many low-cost resources are offered to the affected population (Hubbard et al. 2018). There is a high number of students who report experiencing mental health issues but also report that they do not seek professional help because of a lack of time, lack of access to resources, potential impact on future career opportunities, and social normalization of high student stress levels (Ban et al. 2023; Bourdon et al. 2020; Bulan et al. 2025; Hubbard et al.

2018). Evidence suggests that student hesitancy to seek help may also be due to students having misconceptions and misperceptions about mental health, which may persist within student populations if not addressed (Hubbard et al. 2018).

Sources of Stress Among University Students

There are several stressors that students face during their college careers, including academic load, lack of financial stability, introduction to adult-like responsibilities, development of personal relationships, and social life and environment challenges and changes (Pedrelli et al. 2015). For student athletes, specific additional stressors include potential injury, pressure to perform well during games, and pressure to increase fitness and optimize training strategies (Madrigal and Robbins, 2020). Stress caused by academics has an important role in the lives of college students, possibly being the most prominent stressor that a student will experience during this time (Barbayannis et al. 2022). This type of stress includes pressure to achieve high grades, anxiety about potentially receiving poor grades, worrying about the difficulty level of tests, and feeling tense while studying (Pascoe et al. 2020). Other academic stressors often include heavy course load, excessive studying, time management challenges, classroom competition, and performance expectations (Kristensen et al. 2023). Academic stress adversely affects levels of motivation experienced by college students and, therefore, can increase college dropout rates and affect academic performance (Barbayannis et al. 2022).

Experiencing high levels of academic stress has detrimental impacts on student mental health, which research has shown is connected to low levels of happiness, amount of satisfaction with life, effectiveness of stress management skills, and overall psychological functioning (Barbayannis et al. 2022; Kristensen et al. 2023; Reddy et al. 2018). Particularly of concern for educators, prolonged psychological distress interrupts student ability to learn and participate in

academics by impairing ability to process information, pay attention, retain memories, make decisions, possess motivation, and control impulses (Baik et al. 2019). Even positive stress, that acts as a performance motivator and can increase student well-being, can become negative stress that has adverse psychological effects when there is an absence of coping mechanisms and stress management resources provided institutionally (Kristensen et al. 2023). Due to this, a variety of strategies have been implemented in college and universities with intent to combat the issue of adverse student mental health outcomes due to stress (Brioney et al. 2020). These strategies include improving the quality of treatment provided by university health and wellness services, increasing the availability and accessibility of university health and wellness services, adding leniency to university education policies, providing more opportunities for campus engagement, and introducing campaigns and course curricula that encourage self-care (Hsu and Goldsmith 2021; Juniar et al. 2025; Puspitasari 2025).

Additional Health Consequences of Stress

Stress has previously been identified as a major contributor to mental health problems due to the physiological consequences of prolonged exposure to elevated stress levels, which result in the release of several stress-related hormones, like cortisol and adrenaline (Russell and Lightman 2019). The extended release of these hormones can have negative long-term impacts on regulatory physiological processes, and this dysregulation can manifest as anxiety, depression, irritability, mood swings, and disrupted sleep patterns (Bremner et al. 2020). Cognitive impairment is often associated with these conditions, which interrupts the ability to concentrate and make decisions, thereby negatively impacting academic performance and engagement in academic life (Bremner et al. 2020). There are many methods that can be used to assess levels of stress, anxiety, and depression that individuals experience, commonly in the form

of questionnaires that inquire about emotions, thoughts, and behaviors that one exhibits (Heinen et al. 2017). These tools can be used to assess mental health trends within populations, like that of college students, and also used to evaluate the effectiveness of intervention approaches to issues like student mental health, depression, and anxiety, in addition to unhealthy sleeping and eating patterns (Downer et al. 2015; Siegel et al. 2022; Woloshyn et al. 2019).

A direct link has been established between stress and sleep patterns, quality, and hygiene (Manzar et al. 2021). This is in part due to the stress-induced extended release of adrenaline and cortisol within the body, which overrides biological signals for exhaustion and fatigue with signals that demand alertness and restlessness (Nollet et al. 2020). Additionally, stress symptoms like overthinking, racing thoughts, physical tension, and hindered emotional processing abilities can lead to trouble falling asleep, staying asleep, achieving ideal sleep quality, and maintaining a regular sleep schedule (Manzar et al. 2021). These are key components of good sleep quality, which can be disrupted by experiencing increased levels of stress, anxiety, and depression (Baranwal et al. 2023). Additionally, chronic stress and the utilization of improper stress management coping mechanisms, like avoidance, substance abuse, unhealthy eating patterns, and self-deprecating thoughts, can have a negative impact on sleep (Gallagher et al. 2019). Moreover, poor sleep hygiene practices are also common amongst college students, which can further exacerbate existing sleep problems. Sleep hygiene includes purposeful practices aimed at promoting sleep, such as maintaining a comfortable sleep environment, avoiding unhealthy food consumption prior to bedtime, avoiding the use of stimulants prior to bedtime, avoiding strenuous or heartrate-increasing activities prior to bedtime, and reducing distractions before and during sleep time (Manzar et al. 2021).

College and University Intervention Strategies

Colleges and universities are ideal environments for providing early intervention for student mental health promotion because transitioning to a college/university setting exposes students to unfamiliar sources of stress, placing them at higher risk of developing mental health problems (Brioney et al. 2020). These institutions can provide students with integrated and centralized mental resource and services that are accessible and convenient for student use (Harris et al. 2022). Previous studies have shown mixed results on the effectiveness of institution-based intervention programs. There is little evidence that the programs are effective in preventing student anxiety and depression, however, there is some evidence that they are effective in reducing elevated levels of student anxiety and depression after they have been established (Brioney et al. 2020). These findings suggest that increasing dedication to implementing, adopting, and sustaining institution-based intervention programs could be pivotal for future efforts pertaining to that method.

There have been considerable efforts to implement on-campus mental health services, with emphasis placed on providing tuition-funded counseling centers (Cohen et al. 2022; Priestley et al. 2021). However, there is concern that counseling centers are not able to meet the increasing need and demand for their services (Cohen et al. 2022). Lack of access to mental health services has affected students who are meant to be targeted and benefited by those services (Horwitz et al. 2020). Specific barriers to face-to-face campus mental health services have been identified and include increased wait time, limited operating hours, and inconvenient/unknown locations (Hughes et al. 2024). Research has found that barriers, like the persistence of stigma, negative attitudes being perceived from peers and staff, and perceived lack of dedication to providing high quality care, may negatively impact student plans to use face-to-face and telehealth services (Broglia et al. 2021; Rosenthal et al. 2022).

Attempts to develop and implement evaluation and feedback processes that allow students to provide input on how instructors can support student academic success and stress outcomes have also been made (Downer et al. 2015). Existing evaluation strategies may lack precise methods for measuring different aspects of instructor-student interactions, including that of emotional support and classroom atmosphere, classroom organization and management, and instructional support and strategies (Downer et al. 2015). More thorough exploration about how instructor interaction and classroom processes can beneficially or detrimentally impact student perceptions of academic ability and performance are needed.

Faculty and staff have been identified as potentially ideal candidates for directing students who struggle with mental health issues to resources that offer support and care, due to having a high frequency of interactions with students, but some findings suggest that faculty and staff report feeling underprepared and undertrained for such a job (Halladay et al. 2022). Mental health literacy programs have been developed to help maneuver this obstacle in environments that support K-12 students, with aims to educate staff and faculty in order to increase their understanding of mental health/disorders, decrease the stigma surrounding the topic, and train them to encourage help-seeking behavior among students (Bulan et al. 2025; Halladay et al. 2022). These programs have been shown to be useful for combatting student mental health struggles, but they typically are not designed to encompass use for older students, like young adults and university students, lacking preparation for addressing more developed student mental health, emotional health, psychological wellbeing, and social wellbeing (Halladay et al. 2022; Constantinou et al. 2022; Perez 2019).

Student-Faculty Relationships

In previous studies, students have suggested that adjustments to curriculum delivery, social life expectations, quality of student services, and the fostered university environment would increase their overall health and sense of well-being (Ban et al. 2023; Cage et al. 2020; Slavin et al. 2014). Subsequently, students have expressed that faculty plays an important role in reducing stressors in the learning environment through their teaching skills and practices, attitudes towards teaching, and attitudes towards their students. Previous studies have found that faculty-student relationships have a strong influence on student outcomes in university settings, with higher motivation and self-confidence in their academic abilities being reported when these relationships are strong (Ban et al. 2023). Additionally, faculty responsiveness has proven to be central to building positive student-faculty relationships (Aldrup et al. 2022). This responsiveness can be characterized by faculty member social and emotional attributes, such as willingness to build relationships with students, reflection of statements and actions posed to students, being openminded and respectful towards student differences and opinions, and being mindful of verbal and body language, which appear to directly affect student psychosocial outcomes (Curzer and Gottlieb, 2020; Ingraham et al. 2018; Linderman et al. 2025; Turgay 2023).

Student-faculty interactions have an impactful role in student mental health (Bulan et al. 2025). Perceptions of supportive relationships increase student engagement and resilience, while perceptions of negative interactions increase stress and disengagement (Bulan et al. 2025). Supportive faculty relationships feature faculty approachability, mentorship, and constructive feedback, while faculty relationships that often lead to negative interactions, often including hostility and conflict, are defined by inaccessibility and poor communication (Bulan et al. 2025). Negative interactions with faculty can contribute to student experience of psychological

vulnerability, lack of motivation, doubt, alienation, nervousness, anxiety, and stress (Bulan et al. 2025).

Because student mental health is easily influenced by interactions with faculty members, there exists literature that relays the potential of professors, advisors, and other highly trusted faculty members to provide effective means of delivering information about mental health topics (Coleman 2022). Providing information to students about mental health and wellbeing may impact student reports of mental health symptoms, but more research is needed to explore how to support student mental wellbeing on college and university campuses. Stress, sleep hygiene, and mental wellbeing are factors of student mental health that can be influenced by the types of information and support that students receive from university faculty and staff. This study was designed to establish and explore the relationship that perceived stress and sleep hygiene has with mental wellbeing for college students attending a small liberal arts university, as well as to gather information about how students receive information about sleep and mental health from university faculty and staff members. Results of this study will contribute to understanding the kind of efforts that should be made to support students that struggle with mental health, as well as how to improve the efforts that are already being made to address the issue of declining student mental health.

Methods

Quantitative Data Collection

Initially, data previously collected via an online survey in a university student athlete population was analyzed. The survey investigated student perceptions of stress, reports of depression and anxiety symptoms, and sleep hygiene practices, with responses being recorded

using the Perceived Stress Scale (PSS), Center for Epidemiological Studies Depression Scale (CES-D), Spielberger Trait Anxiety Inventory (STAI-Y2), and Sleep Hygiene Index (SHI). The sum total score for each scale was determined for analysis.

The PSS is a self-report assessment tool used to measure an individual's perceived stress levels. There are 14 items on the original PSS, with response options 0-4 (where 0 = Never, 1 = Almost never, 2 = Sometimes, 3 = Fairly often, and 4 = Very often), inquiring about how the participant felt in the last month (Cohen 1983). Scores on this questionnaire range from 0-40, with higher scores indicating higher perceived stress (Reis et al. 2010). The PSS assessment tool may be found in Appendix A.

The CES-D scale is a self-report scale used to measure depressive symptomatology among individuals of the general population. There are 20 items on the CES-D, with response options 0-3 (where 0 = Rarely or none of the time, 1 = Some or little of the time, 2 = Moderately or much of the time, and 3 = Most or almost all of the time), pertaining to how the participant felt in the last week (Radloff 1977). Scores on this questionnaire range from 0 to 60, with a score of 16 or higher often indicating a risk for clinical depression (Vilagut et al. 2016). The CES-D scale may be found in Appendix B.

The STAI-Y2 is a self-report inventory used to measure trait anxiety among individuals of the general population. There are 20 items on the STAI-Y2, with response options 1-4 (where 1 = Not at all, 2 = A little, 3 = Somewhat, and 4 = Very much so), pertaining to how a participant feels they relate to the suggested statements (Julian 2011). Scores on this questionnaire range from 20 to 80, with a score of 39 or higher commonly being used to detect clinically significant anxiety levels (Julian 2011). The STAI-Y2 inventory may be found in Appendix C.

The SHI is a self-report questionnaire used to assess sleep hygiene behaviors possessed by individuals. There are 13 items on the SHI, with response options 0-4 (where 0 = Never, 1 = Rarely, 2 = Sometimes, 3 = Frequently, and 4 = Always), pertaining to how often participants engage in specific behaviors (Cho et al. 2013). Scores on this questionnaire range from 0 to 52, with a higher score representing poorer sleep hygiene (Cho et al. 2013). The SHI questionnaire may be found in Appendix D.

Student-perceived communication from professors about sleep hygiene and stress management was also assessed, with response options of 0-4 which coincide with the number of times participants reported receiving communication from their professor(s) about each topic in the last month. One hundred and fifty-two student athletes responded to the study and 112 students with complete study data for the SHI variable were included in the quantitative analysis. Survey data was exported to Microsoft Excel (2024) and then analyzed using SAS statistical software, version 9.4, Cary, NC.

Quantitative Data Reduction and Analysis

The sum total score was used when analyzing the PSS, CES-D, STAI-Y2, and SHI scores. The variable pertaining to student-perceived communication from professors had response options collapsed into two categories: (1) students received communication from professors about sleep hygiene or stress management zero times in the last month, or (2) students received communication from professors about sleep hygiene or stress management at least once in the last month. Pearson Correlations were used to test for associations among PSS, CES-D, STAI-Y2, and SHI responses, with intention of determining associations among perceived stress and symptoms of depression, symptoms of anxiety, and sleep hygiene among students. Independent t-tests were used to test for mean differences in sleep hygiene practices between

those who reported having zero communication from professors about sleep hygiene in the last month and those who reported receiving communication from professors about sleep hygiene at least once in the last month.

Qualitative Interview Data Collection

Semi-structured interviews were conducted with 7 senior-level students, all above 18 years of age, and all who attended a small liberal arts university. Participants were asked about their experiences with stress, mental health, and sleep, as well as the perceived impact that those had on their university experiences. The students were also asked about the type of information and support provided to them by professors, advisors, coaches, and athletic trainers during their time at their university. The interview guide may be found in Appendix E. Students were recruited for the interviews using convenience, purposive, and snowball sampling techniques, with recruitment announcements being made in upper-level courses by their instructors over Jenzabar Learning Management System. Students who were interested in participating completed a Qualtrics screening survey. Those who met inclusion criteria were contacted to schedule an interview. Participants provided written consent, using university consent forms, when they arrived for their interviews. Interviews between 20 minutes to 1 hour were recorded and transcribed using Otter.ai transcription software. Any corrections to transcriptions were completed by the project supervisor. This study received IRB approval from the university IRB Committee: approval letter appears in Appendix F.

Qualitative Interview Data Processing and Analysis

Deidentified transcripts were added as a file on Microsoft Teams then used to conduct a thematic analysis that explored common themes among interviewee responses. Thematic analysis is a method of data analysis used to portray results of qualitative studies that identifies

common themes (e.g.,thoughts, opinions, emotions, or topics) that appear within the set of data (Kiger and Varpio 2020). Thematic analyses are effectively used in social science, health, and medical research (Braun and Clarke 2014; Kiger and Varpio 2020; Haan and Venema 2025). Using this method, data was repeatedly assessed to increase initial comprehension, coded, grouped into categories that shared common themes, and then categorically defined to identify the themes that were present. These findings were used to create a thematic map that reported and discussed common themes within the data.

Results

Quantitative Results

Participant characteristics are listed in Table 1. One hundred and fifty-two participants were included in the analysis of the PSS, CES-D, and SPAI-Y2 variables, and 112 participants were included in the analysis of the SHI variable. The mean age of participants was 19.6 ± 1.5 years. Fifty-eight percent of participants identified as male and 42% identified as female. Fifty-seven percent of participants identified as white/Caucasian, 32% identified as black/African American, and 11% identified as other. Thirty-seven percent of participants identified as being a freshman undergraduate student, 22% as a sophomore undergraduate student, 17% as a junior undergraduate student, 21% as a senior undergraduate student, and 3% as a graduate student.

Table 1. Participant Characteristics

Participants, n	152
Age, years (mean ± SD)	19.6 ± 1.5
Sex	
Male, n (%)	88 (58%)
Female, n (%)	65 (42%)
Race	
White/Caucasian, n (%)	87 (57%)
Black/African American, n (%)	48 (32%)
Other, n (%)	17 (11%)
Year in School	
Freshman, n (%)	56 (37%)
Sophomore, n (%)	33 (22%)
Junior, n (%)	26 (17%)
Senior, n (%)	32 (21%)
Graduate Student, n (%)	5 (3%)

Results indicated a positive correlation between perceived levels of stress and reported depressive ($r = 0.67$) and anxious symptoms ($r = 0.76$), with significant association ($p < 0.0001$) between them, as displayed by Figures 1 and 2. A negative correlation between sleep hygiene and levels of depressive symptoms ($r = 0.41$), as well as sleep hygiene and levels of anxious symptoms ($r = 0.38$) was found, with significant association ($p < 0.0001$) between them as well, as displayed by Figures 3 and 4. Students that reported receiving information about sleep hygiene from professors at least one time in the last month reported better sleep hygiene than students that reported never receiving any communication from professors about sleep hygiene in the last month ($t = 1.72$; $p < 0.09$; trend), as displayed by Figure 5. There were no significant associations between students receiving information from professors about stress management and levels of depressive symptoms or levels of anxious symptoms.

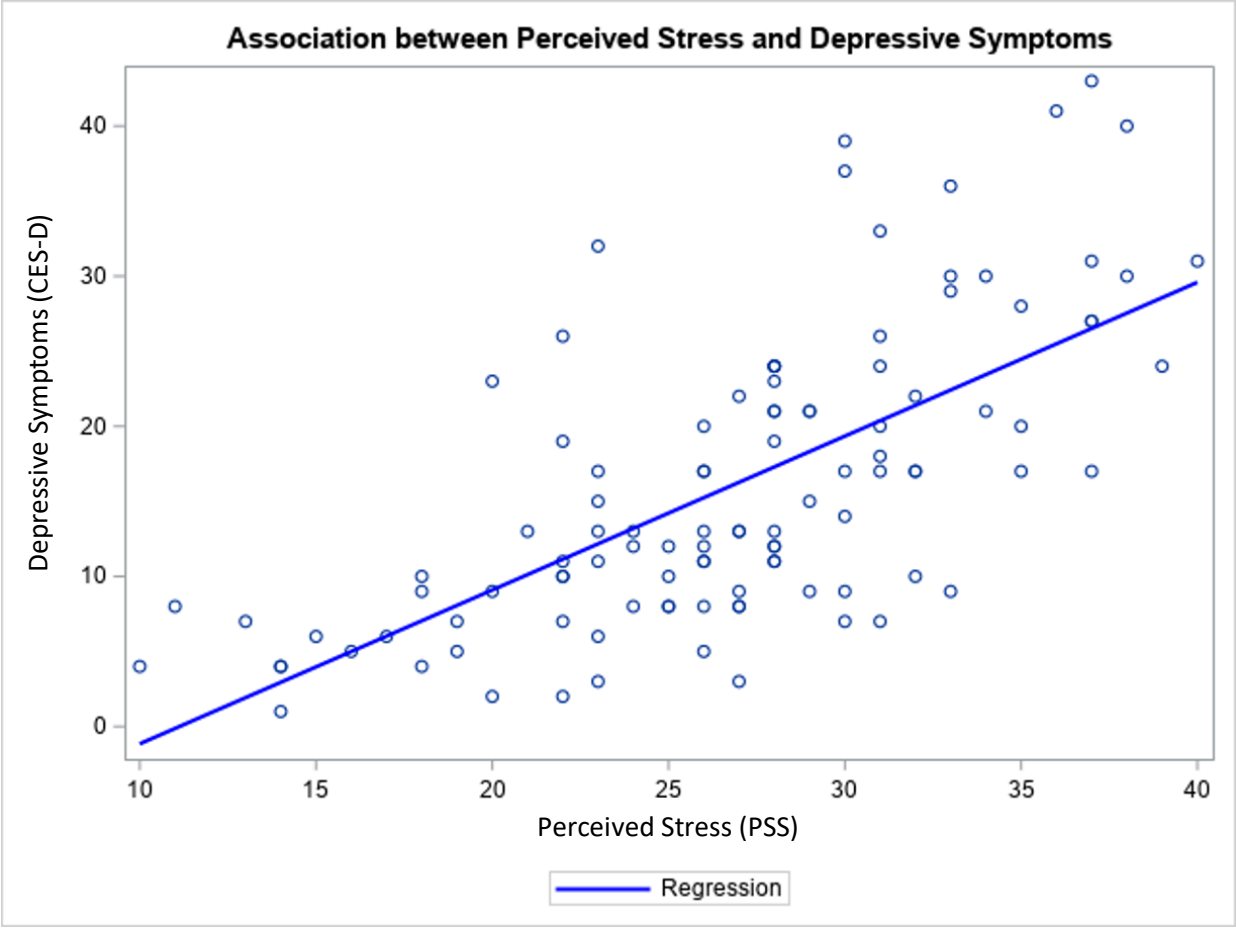


Figure 1. Pearson Correlation depicting the association between perceived stress measured with the PSS and depressive symptoms measured with the CES-D.

$r = 0.67$, $p < 0.001$

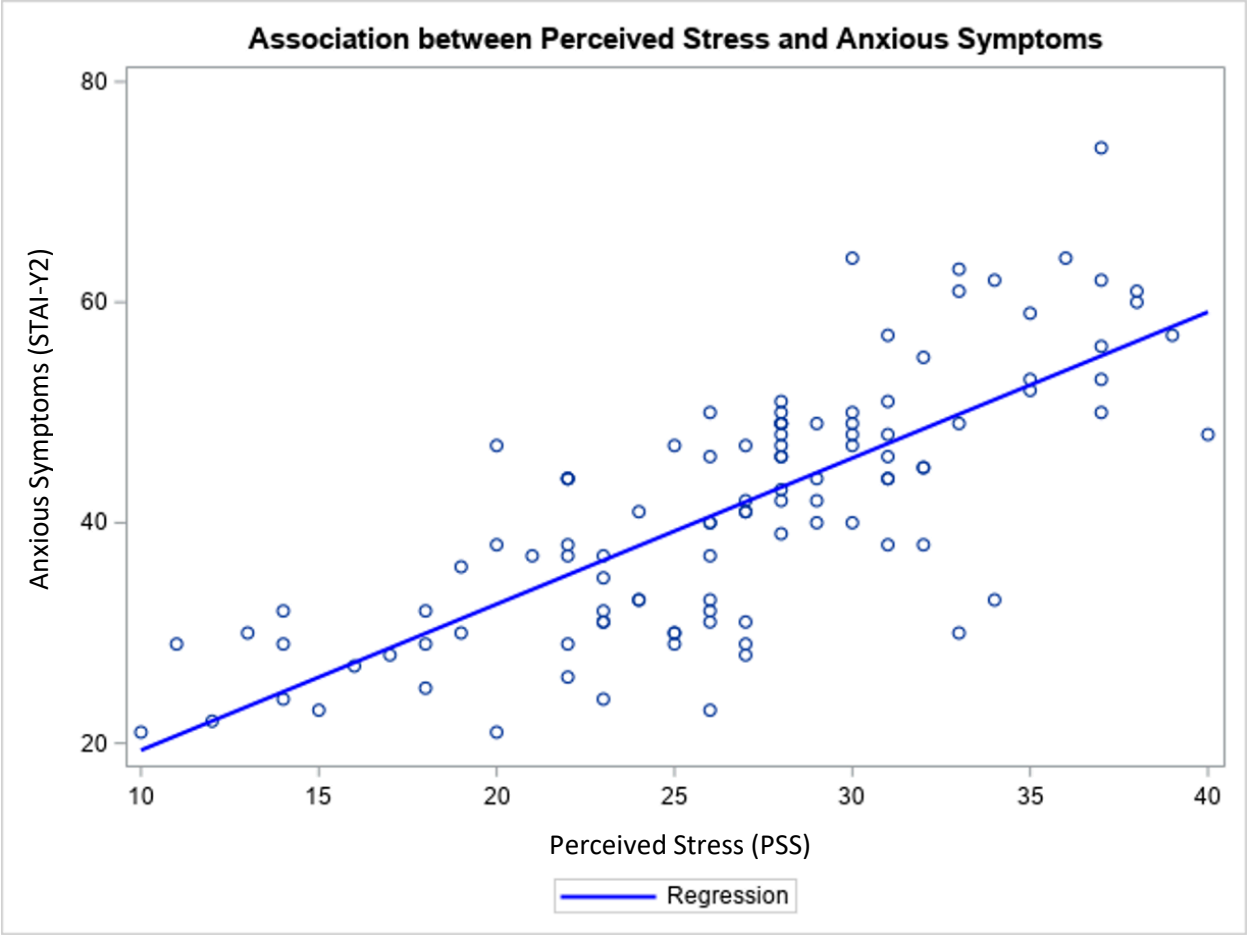


Figure 2. Pearson Correlation depicting the association between perceived stress measured with the PSS and anxious symptoms measured with the STAI-Y2.

$r = 0.76$, $p < 0.0001$

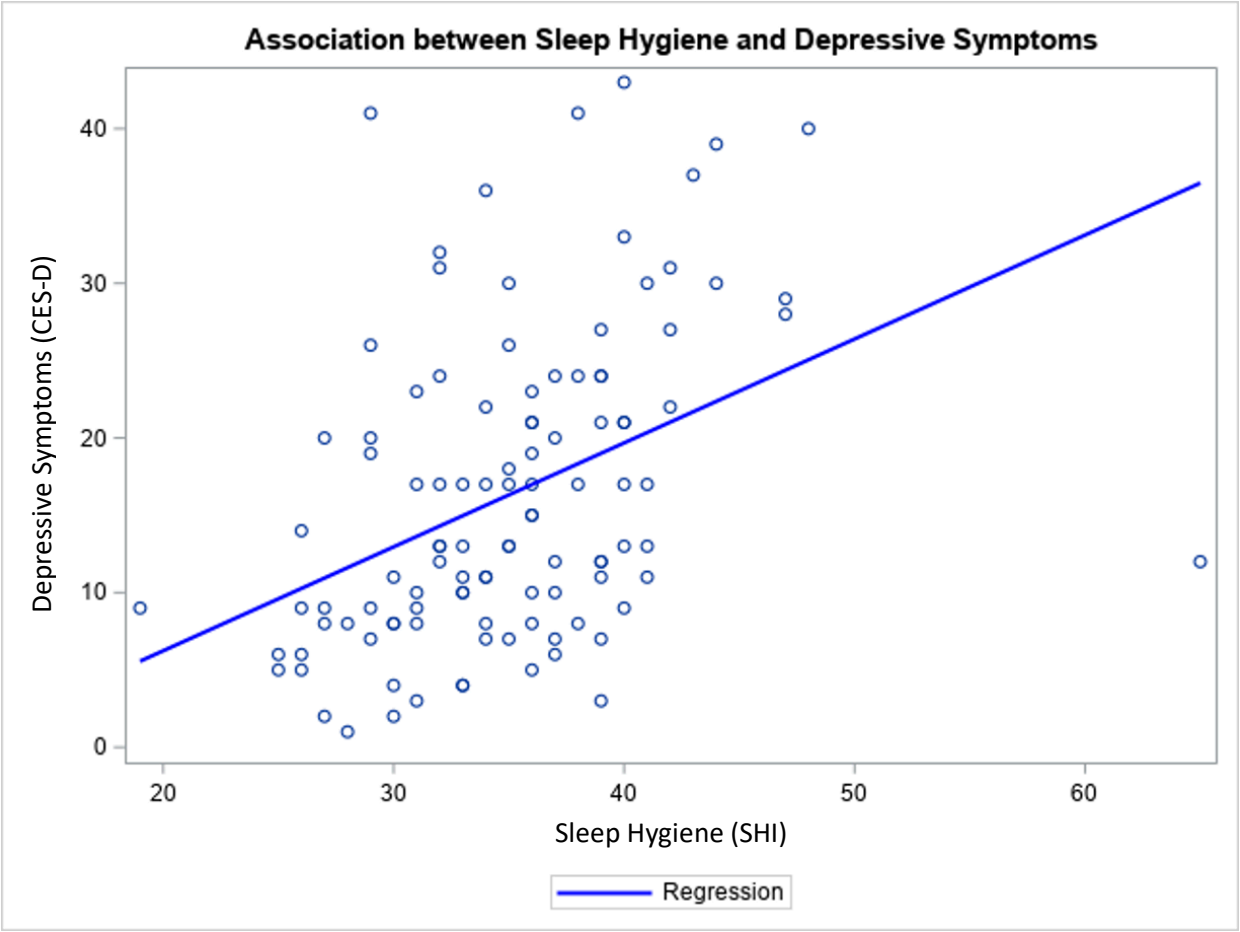


Figure 3. Pearson Correlation depicting the association between sleep hygiene measured with the SHI and depressive symptoms measured with the CES-D.

$r = 0.41$, $p < 0.0001$

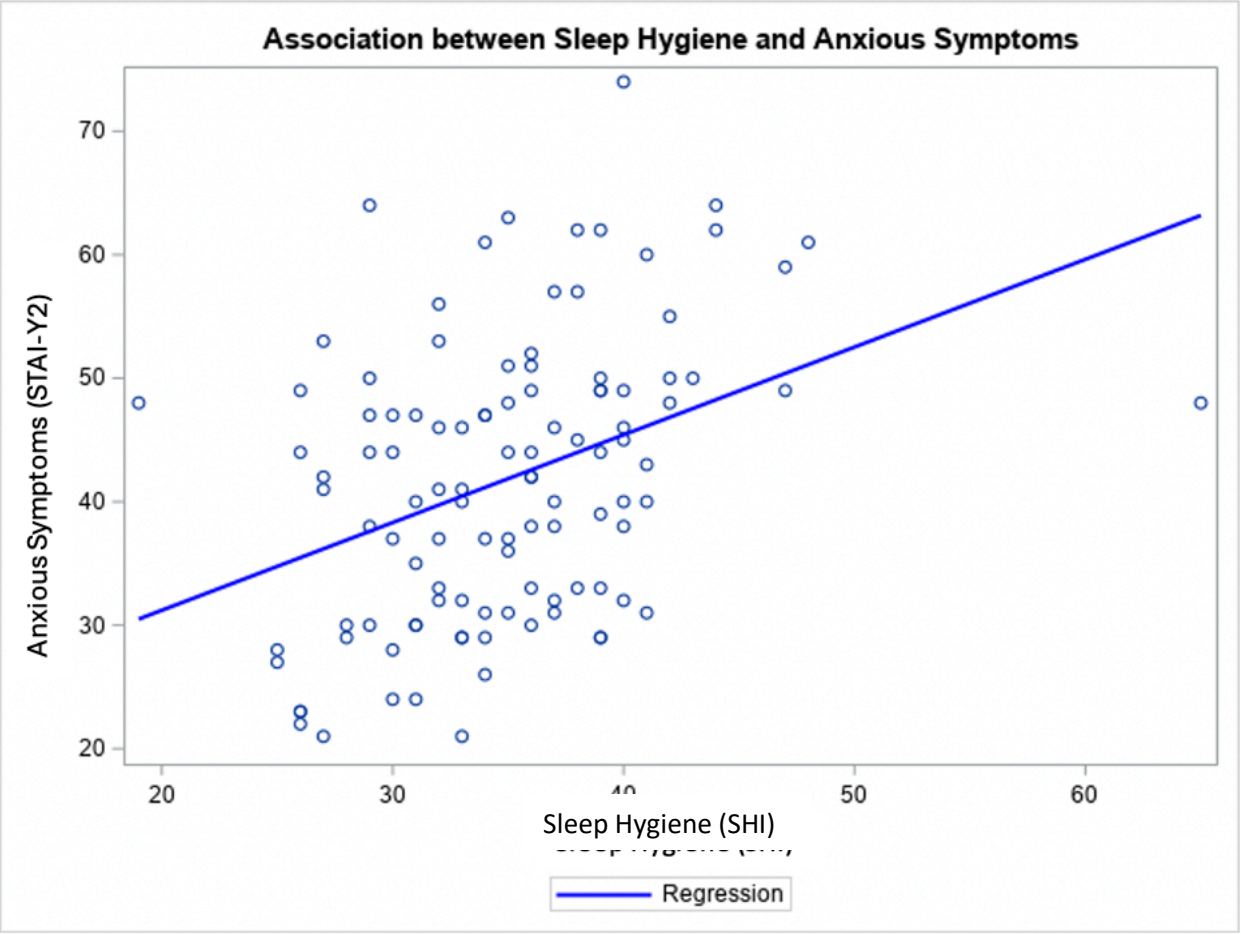


Figure 4. Pearson Correlation depicting the association between sleep hygiene measured with the SHI and anxious symptoms measured with the STAI-Y2.

$r = 0.38$, $p < 0.0001$

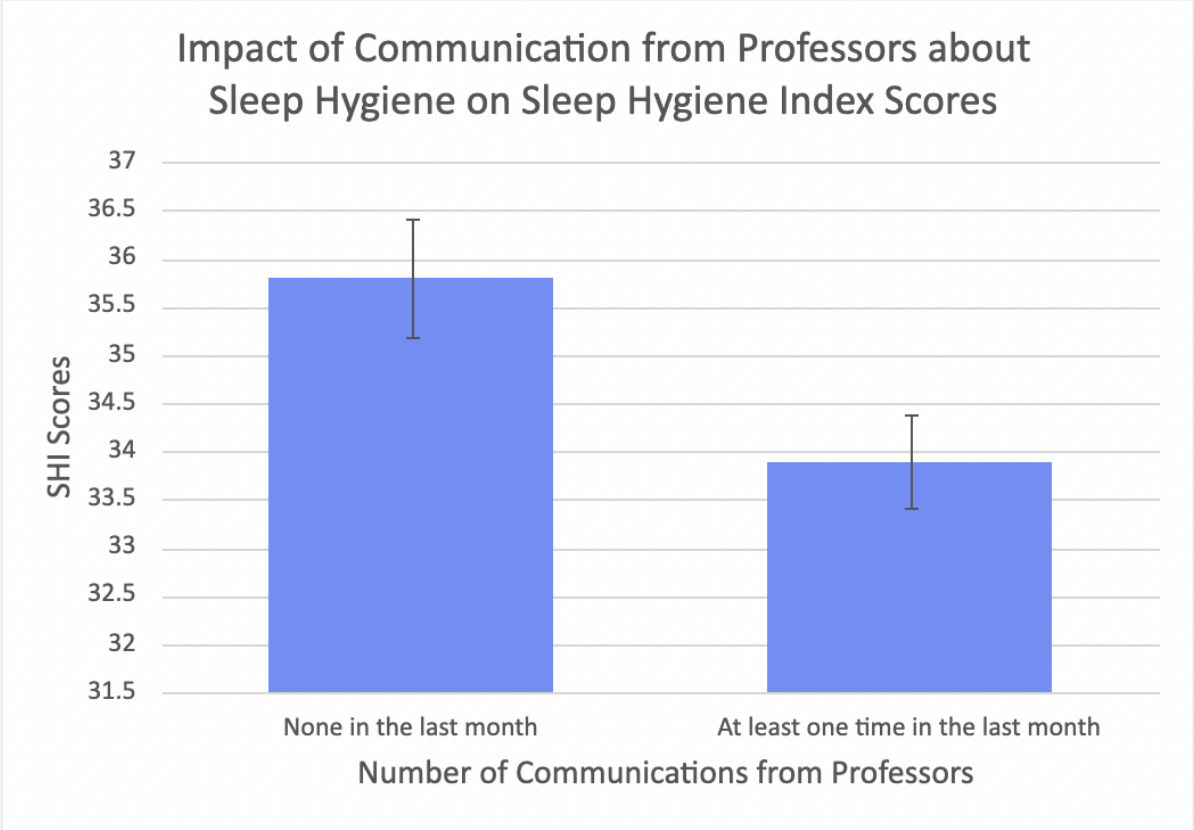


Figure 5. Difference in average SHI scores between students who reported receiving no communication from professors about sleep hygiene (last month) and those who reported receiving communication about sleep hygiene at least once in the last month.

$t = 1.72$, $p = 0.09$, trend

Qualitative Results

All interview transcripts were read three times. A memo of about 400 words was written for each interview summarizing and describing the information. Quotes were identified that were representative of main points from the interviews. A synthesis memo that described similarities among the interviews was written. The synthesis memo was used to create a list of common themes found across the interviews. Themes were then used to code the data. Each theme was assigned a color. Interviews were then color-coded, with excerpts that represented each theme

being identified and highlighted to match the corresponding theme color. A comment was written for each highlighted excerpt explaining how it related to its assigned theme. A table was created to compile excerpts from all interviews into each theme category, which were then reviewed and assessed to create descriptions, identify examples, and determine occurrence across interviews for each theme. A single excerpt from the interviews was highlighted to represent each theme. Table 2 contains the results of the thematic analysis, which includes identified themes, descriptions, examples, interview excerpts, and number occurrences across interviews.

Table 2. Thematic Analysis Results

Theme	Description	Example	Interview Excerpt	Occurrence across interviews (n = 7)
Social environment as a stressor	Students identify interactions with peers on campus as a stressor.	Students describe interpersonal situations on campus in which they felt slandered, bullied, discriminated against, and inappropriately harassed.	"I, I just really wasn't involved on campus, because I just thought, like, everybody had this negative perception of me, and I was just like… so, like… like, it would just be so… it would cause me so much anxiety."	6/7
Campus administration as a stressor	Students identify interactions with campus administration as a stressor.	Students identify interactions with campus administration that resulted in feelings of being ignored, disrespected, and misled.	"Um, so, the administration, probably a big one, big number one, that is a multi-faceted issue full of many trials and tribulations, if you will."	4/7
Academics as a stressor	Students identify challenging courses as a stressor.	Students mention feeling overwhelmed by course rigor and load, with induced feelings of anxiety.	"I do think it made me not want to come to class sometimes, because I knew that the amount of stress associated with that class, which, was	4/7

			going to be a lot when I got in that room."	
No perceived outlets for stress on campus	Students describe a lack of stress-relief activities on campus.	Students describe feeing trapped on campus, with no means of transportation and limited recreational activities being available to them.	"It's been kind of dull, like, I mean, it's like I said, there's nothing to do, like, when you're stressed, and then there's nothing to do outside of, like, schoolwork or going to your dorm. It's like, really depressing when you start really thinking about it."	5/7
Stress-induced mood changes	Students describe changes in mood due to stress.	Students mention feelings of depression, anxiety, anger, distress, and panic arising in stressful situations and circumstances on campus.	"Um, sad, depressed, um, well, so I've had depression and anxiety for like, a long time, but I think within my four years at [university], it has only gotten worse."	6/7
Sleep deprivation	Students mention experiencing sleep deprivation.	Students claim they frequently stay awake through the night and take daytime naps.	"Sleep has been seen as optional, especially these last few semesters."	7/7
Feeling overwhelmed	Students describe feeling overwhelmed.	Students mention having breakdowns, excessively crying, feeling burnt out, feeling in need	"And I really wish… I really… I really need a break. I really wish that I could just have two weeks where I	5/7

		of a break, and feeling like stressors are piling up being present.	just don't do anything, just two weeks where I can finally, like, can breathe, and I don't have to think about anything else, and I can enjoy myself and enjoy being in my own company, or at least work to enjoying my own company. But I don't feel like that break is coming."	
Social withdrawal behaviors	Students mention behaviors indicative of social withdrawal.	Students describe being closed off from peers, wanting to be alone, hiding away, not wanting to talk to anyone, and being inactive in the campus community.	"I would get very closed-off from people, and I would try to hide away for, like, days at a time, just hiding in my room and not doing anything."	5/7
Negative interactions with professors	Students mention specific negative interactions with faculty members.	Students mention feeling disregarded, belittled, ignored, and disrespected after interacting with faculty members.	"And [professor] literally told them, 'If you could not pass this exam, why are you even in science? Why are you taking this class?' Yes, it was like so... it was like… like, why would you say that to somebody?"	3/7

Negative interactions with staff members	Students mention specific negative interactions with staff members.	Students mention feeling ignored, disrespected, and misled after interacting with staff members.	And like, I tried to come talk to [staff member] like I wasn't even gonna, like… I don't know if [staff member] thought I was gonna come in there and ask [staff member] to, like, try to, like, excuse a bunch of stuff for me, but […] As soon as I came in the room and shut the door [staff member] was, like, interrogating me and asking me, like, why I haven't been going to class."	3/7
Negative interactions with coaches	Students mention specific negative interactions with coaches.	Students mention experiencing increased levels of stress and feeling ignored, disrespected, and impersonalized after interacting with coaches.	"Feels like, they're just, like, you're another number that they're pushing through their system. And, I mean, it really does take an effect on you, […] and you're not playing, it takes a mental, mental bearing on you, especially when you come from high school being the best on your team, and you come here and it's like you're the worst. They make you feel like that."	2/7

Negative interactions with athletic trainers	Students mention specific negative interactions with several athletic trainers.	Students mention experiencing increased levels of stress and feeling ignored, disrespected, and invalidated after interacting with athletic trainers.	"And I was like, 'my ankle like,' I was like, 'I, my [redacted] ankle has hurt for three weeks.' Like, and [staff member] is like, 'Why? Why haven't you gone to the trainer?' And I was like, 'trainers aren't gonna [redacted] do anything."	1/7
Feeling unsafe on campus or safer away from campus	Students express that they are unhappy/anxious on campus.	Students mention feeling unwelcome, uncomfortable, watched, and judged as per their arrival and residence on campus.	"Like, I don't feel comfortable on campus, I don't feel safe on campus. I definitely don't feel welcomed around campus for a multitude of reasons."	3/7
Distrust in campus mental health resources	Students express feeling hesitancy to reach out to and utilize campus mental health resources.	Students describe negative experiences of their own or of their peers resulting in hesitancy to utilize campus mental health resources.	"And it was the same [staff member] that had wronged me, and I anticipated to see what [staff member] spoke on about mental health and see how [staff member] could inform us of what to do when [staff member] didn't know what to do [themselves], and [staff member] was completely different to how [staff member] had interacted with	4/7

			me the first time. Don't know if that was because of the presence of other staff members, but it was not the same."	
Indirectly receiving information about stress and mental wellbeing from course curriculum	Students perceive that the only information they have received about stress and mental wellbeing has come incidentally from course content.	Students claim little to nothing about stress and mental wellbeing was told to them directly and individually by professors, advisors, coaches, and athletic trainers.	"Um, well, I'm in psychology, so probably a bit more than the average person, but I guess more so like… as curriculum, like… as we're being taught, like, you know, about, like, mental illness and things like that, and like… you know, stress and like… lots of stuff."	2/7
Indirectly receiving information about sleep from course curriculum	Students perceive that the only information they have received about sleep has come	Students claim little to nothing about sleep was told to them directly and individually by professors, advisors, coaches, and athletic trainers.	"This was mainly in an adolescent development course that I received a lot of information about how much sleep we need at night."	4/7

	incidentally from course content.			
No information about stress or mental wellbeing received from professors	Students perceive that they have received no information about stress or mental wellbeing from professors.	Students mention receiving no information about stress or mental wellbeing from professors.	"I never… don't think I ever really received much directly about stress and wellbeing that I can think of right now."	5/7
No information about sleep received from professors	Students perceive that they have received no information about sleep from professors.	Students mention receiving no information about sleep from professors.	"Just besides just them telling me to go to sleep, they really didn't say much about that."	4/7
No information about stress or mental	Students perceive that they have	Students mention receiving no information about stress or mental wellbeing from advisors.	"So yeah, I think only one of them has really been there to talk about it, and it's literally only talking, none of	6/7

wellbeing received from advisors	received no information about stress or mental wellbeing from advisors.		them have ever like sent out resources."	
No information about sleep received from advisors	Students perceive that they have received no information about sleep from advisors.	Students mention receiving no information about sleep from advisors.	"Advisors I don't think gave any for that."	6/7
Perceptions that professors are not or should not be responsible for providing mental health support to students	Students express that they do not believe it is the responsibility of professors to provide mental health support to them.	Students frequently use phrases like, "there's only so much they can do," "they don't have time," and "it's not their job."	"And like, they shouldn't, you know, they're professors or whatever, and they shouldn't have to bear the problems of other… students, I guess you can say."	5/7

Support received from professors	Students perceive receiving support for stress and mental wellbeing from professors.	Students mention instances where professors encouraged help-seeking behaviors, had open and available communication, as well as provided leniency in course schedule and assignment grading.	"I will go into a professor's office very easily. Most of them have couches. That is where I've cried my eyeballs out. In their offices."	6/7
Desire for professors to be more considerate of student mental wellbeing	Students express that they would like for professors to be more sensitive to support student mental wellbeing.	Students describe a desire for professors to be more sympathetic, empathetic, open to communication, and available for conversation when it comes to supporting student mental wellbeing.	"Sometimes, there have been professors that have asked, 'Who's giving out these mental health days,' blatantly to a student that was in the middle of a mental health crisis, that had just returned from a mental health day, and had no understanding about it. So, I think a little more, like, sympathy would be nice."	7/7
Desire for advisors to be more considerate of	Students express that they would like for advisors to be more sensitive to	Students describe a desire for advisors to be more sympathetic, empathetic, open to communication, and available for conversation when it comes to	"Creating a safe space where a student really feels that they can come talk to you about stress, mental wellbeing, or sleep, those sorts of things, I feel like are vital to the	7/7

student mental wellbeing	support student mental wellbeing.	supporting student mental wellbeing.	college experience and learning that you don't have to put yourself through the ringer in order to be the best version of yourself."	
Desire for coaches to be more considerate of student mental wellbeing	Students express that they would like for coaches to be more considerate of student mental wellbeing.	Students express that they would like for coaches to be more aware, empathetic, and open to communication when it comes to supporting student mental wellbeing.	"Just like being able to, like, communicate better, or like feeling comfortable communicating with my coaches. Like, I didn't a lot of the time."	2/7
Desire for professors to inquire about student mental wellbeing	Students express a desire for professors to inquire about student mental wellbeing.	Students express a desire for professors to inquire about student mental wellbeing through direct means that include initiating a conversation, sending emails to check-in, or communicating concerns they have about student mental health status.	"I guess like an email here and there, checking in on how you're doing, instead of just, like, looking at the gradebook and emailing you like 'you suck.' Best way of putting it."	3/7
Desire for advisors to inquire about	Students express a desire for advisors to	Students express a desire for advisors to inquire about student mental wellbeing through direct	"They just might loosely talk about it with you only if you bring it up. You	3/7

student mental wellbeing	inquire about student mental wellbeing.	means that include initiating a conversation, sending emails to check-in, or communicating concerns they have about student mental health status.	shouldn't have to be the only one to provoke it."	
Desire for coaches to inquire about student mental wellbeing	Students express a desire for coaches to inquire about student mental wellbeing through direct means.	Students express a desire for coaches to inquire about student mental wellbeing through direct means that include initiating a conversation, sending emails to check-in, or communicating concerns they have about student mental health status.	"Just…just them checking in on you?"	1/7
Desire to communicate about mental wellbeing with professors	Students express a desire to have more opportunities to communicate about their mental wellbeing with professors.	Students mention that being able to talk with professors about their mental wellbeing helps alleviate stress and deter anxious thoughts.	"Just having more time to like, be there for students, like, have genuine conversations with them, build relationships."	6/7

Desire to communicate about mental wellbeing with advisors	Students express a desire to have more opportunities to communicate about their mental wellbeing with advisors.	Students mention feeling distant and impersonal with their advisors making it difficult to openly communicate about their mental wellbeing.	"And [advisor] is similar to my professors in the sense that [advisor] [themselves] has provided a lot of conversation, because just simply being able to talk about things would alleviate stress and support mental wellbeing."	3/7
Desire for professors to receive training for informing about and supporting student mental health and sleep	Students endorse professors receiving training about student mental health and sleep.	Students specify that they would like professors to be able to effectively identify when someone is experiencing a mental health crisis, as well as know how to respond to the situation.	"From a public health perspective, I think professors need more training. I think all of our professors should have mental health first-aid certifications. I think they should all be able to identify when somebody is experiencing a mental health crisis."	3/7
Desire for advisors to receive training for informing about and	Students endorse advisors receiving training about	Students specify that they perceive a lack of awareness and knowledge about mental health and sleep possessed by their advisors.	"I think they should be able to adequately communicate health, like, resources and just be able to identify mental health, like… like problems… or, not problems, but like… you	2/7

supporting student mental health and sleep	student mental health and sleep.		know like, if somebody's in crisis and like, what to say, what to do, stuff like that."	
Desire for coaches to receive training for informing about and supporting student mental health and sleep	Students endorse coaches receive basic training for informing about and supporting student mental health and sleep.	Students mention feeling as if it should be required that coaches receive certification for being able to inform about and support student mental health and sleep.	"I honestly think like… I don't think like… I feel like they should have at least said the basic [redacted]. Like, I think that is like… you're in an athletic setting… like, the NCAA don't even got some [redacted] for you to say?"	1/7
Desire for athletic trainers to receive training for informing about and supporting student mental health and sleep	Students endorse athletic trainers receive basic training for informing about and supporting student mental health and sleep.	Students mention feeling as if it should be a job requirement that athletic trainers are able to inform about and support student mental health and sleep.	"Um, I think a big one would have been, um, just like nutrition information. We never saw that [redacted], holy [redacted], um, and I think that contributed to eating disorders."	1/7
Desire for more campus	Students express a desire that there be more	Students mention a desire for more available campus resources, more campus provided information	"I do think having more resources like that would definitely be more beneficial to every student here,	3/7

provided resources	campus mental health resources.	about mental health resources, more encouragement to seek menta health help outside of campus resources, and more information on how to seek mental health help outside of campus resources.	because, I mean, every college student has their struggles with stress and mental health, but it's harder to take those steps to kind of deal with it."	

Discussion

Results collected from the survey referenced for quantitative data analysis demonstrated a positive correlation between the PSS and CES-D scores, indicating that higher levels of perceived stress were associated with increased levels of depressive symptoms among college student athletes. Similarly, a positive correlation was identified between the PSS and SPAI-Y2 scores, indicating that higher levels of perceived stress were associated with increased anxious symptoms among college student athletes. A positive correlation was also identified between the SHI and CES-D scores, as well as between the SHI and STAI-Y2 scores, indicating that poorer sleep hygiene was associated with higher depressive and anxious symptoms among college student athletes. These findings suggest that students are experiencing elevated levels of depressive symptoms and anxious symptoms due to an increased presence of perceived stress, and that poor sleep hygiene is likely contributing to increased depressive and anxious symptoms in college students due to the negative impact poor sleep hygiene has on sleep quality.

Themes identified within the qualitative thematic analysis data support the the quantitative findings, with students describing increased presence of depression and anxiety linked to stress, as well as poor sleep quality, most prominently appearing as chronic sleep deprivation. Additionally, students identified multiple stressors encountered during their university experience, including from the social environment, academics, campus administration, and negative interactions with professors, staff members, coaches, and athletic trainers. Students described a lack of perceived stress management resources on campus, feelings of being unsafe on or safer away from campus, feelings of being overwhelmed, and distrust in campus resources as exacerbators of negative mood and increased stress during their university experiences. These findings suggest that students encounter a variety of stressors during their college experiences

that could increase student perceived stress, which could increase their risk for adverse psychological symptoms and mental health disorders (Bulan et al. 2025; Horwitz et al. 2020; Pedrelli et al. 2015).

Stressors that are influenced by university-level policies, such as academics, campus administration, and perceived negative interactions with professors, staff members, coaches, and athletic trainers could be diminished through efforts made on an institutional level. For example, the stress of social environment on campus is largely influenced by campus community guidelines, which can be addressed through integrating community involvement and opinion while creating and implementing campus community guidelines. The stress of academics is impacted by university curriculum expectations, which could be improved through development and testing of mental-health sensitive teaching methods. Stress induced by perceived negative interactions with staff and faculty members could be identified and repaired through clear reporting and resolution processes. These areas warrant further inquiry with administrators, faculty and staff, and students.

Students indicated that most of the information they have received on campus about stress, mental wellbeing, and sleep was delivered incidentally via course content or casual interactions, frequently stating that they did not receive any direct specific information pertaining to those topics from their professors or advisors. Students frequently identified personal support from professors as being their only or most beneficial form of received support or information. These findings indicate that students receive the most information and support for mental health struggles like depression and anxiety from fostered student-faculty relationships, with minimal information or support being delivered through other means, such as interventive programs and campus mental health resources. These findings suggest that a potential target for mental health

promotion in students could be communication from professors. Quantitative findings from this study suggested that students who received information about sleep hygiene from coaches or athletic trainers reported better sleep hygiene practices. This lends support to the idea that campus authority figures such as coaches, athletic trainers, and professors could play an influential role in student mental wellbeing. Although students reported feeling highly supported by faculty, many interview participants also suggested that it is not the responsibility of professors to provide information or support for stress, mental wellbeing, or sleep. These findings suggest that students are open to receiving information and support for stress, mental wellbeing, and sleep from faculty. Previous studies have highlighted the importance and impact of fostering positive student-faculty relationships, which significantly influence student mental health and wellbeing (Aldrup et al. 2022). Research has indicated that faculty has the potential to decrease feelings of stress and increase student performance and productivity in the academic setting (Ban et al. 2023). Faculty members have frequent and close contact with students, offering an ideal pathway into student lives through which information and support for stress, mental wellbeing, and sleep can be accessibly communicated and received (Bulan et al. 2025).

Student desire for professors, advisors, and coaches to be more considerate of student mental wellbeing was identified as a theme, with students describing a want for more sympathy, empathy, and awareness. Students also expressed a desire for open communication between themselves and their professors and advisors, with several students wanting professors, advisors, and coaches to take initiative and inquire about student mental wellbeing as well. Additionally, students expressed a desire for professors, advisors, coaches, and athletic trainers to receive training for informing about and supporting student mental wellbeing and sleep. Lastly, students expressed a desire for more campus provided resources and information about how and where to

seek mental health help. These findings suggest that students have perceived a lack in the support systems available to them on campus, which might explain student hesitation to utilize available mental health services.

Student hesitation to utilize available mental health services could be addressed by increasing the amount of health resources on campus, providing more information to students about external mental health support options, and further encouraging faculty and staff to be aware and considerate of student mental wellbeing and the struggles students may face in that regard during their college experience. These changes could be made through the development of more thorough training regimens for faculty and staff encountering student mental health symptoms or crises, encouragement for faculty and staff to provide open communication to students, encouragement of faculty and staff to inquire about student mental wellness status, and through updating university regulations on how faculty and staff are expected to respond to students who are experiencing mental health struggles. Additionally, universities could provide information to faculty about referring students to mental health resources, including what resources are available, the accessibility of those resources, and recommendations about when mental health help should be sought. For this strategy to be effective, universities should ensure the presence of effective mental health resources that can be accessed and utilized by students.

The quantitative survey data for this study was collected from a small liberal arts school with the majority percentage (58%) of the assessed population identifying as male, the majority percentage of the assessed population identifying as white (57%), and only student athletes being assessed, which may reduce generalizability. The qualitative data was collected from a sample size of seven participants, which were recruited using convenience, purposive, and snowball sampling techniques. This potentially led to more honest, thorough, and unfiltered interview

responses from students while also potentially introducing sampling bias into the study and limiting result generalizability, credibility, and accuracy.

The results obtained from this study could be used to begin analyzing the complex relationship between students and faculty, as well as how faculty members can offer positive mental health support to students to help reduce stress and anxiety. Further research on this topic offers an opportunity to uncover trends that may explain the recently observed and widespread declining mental health status of students (Baik et al. 2019), what information and support the students are lacking, and what information or support they need to receive so they can thrive in their college careers. After gaining that information, solutions to combat the issue of declining student mental health in the college setting can be proposed and tested.

Researcher Statement

Through experiencing my own mental health struggles as my time at university has proceeded, I began to question if there were influencers within the university setting, that were outside of my control, that contributed to my declining mental health status. I further questioned if there was a possibility that I was not the only person in my campus community that felt this way. This thought deeply disturbed me, as I have never been one that has been able to sit idle while I think individuals around me might be suffering. After much deliberation, I decided to dedicate my thesis to conducting a study that would tell me, and those around me, if my small questions held any deeper meaning in my community. I thought that, if they did, we may be able to pursue a solution that would increase our quality of life and promote our mental wellbeing in a stressful environment like that which can be found in a university setting.

To embark on this journey, I dove into current and available research surrounding a variety of questions and possibilities about what students are experiencing, the depth of what they are experiencing, and the mental health outcomes it causes for them. After finding information that instigated several more questions from me about the topic, I began looking into the current solutions that research reflected as being available and previously used. I found several different approaches to the issue, some of which seemed to be less than ideally effective in the communities they were tested in. This led to me designing a study that was meant to encompass corners of the topics of stress, mental wellbeing, and sleep hygiene that seemed to be less explored, while also making a point to let the students speak openly about their experiences with no stigma, expectations, or restrictions for what I wanted to hear from them. Being able to conduct this research among my peers was an emotional rollercoaster, with emotions producing responses ranging from tears to laughter, all of which were shared between us during the interviews. In this community that held me up when I felt I could not stand on my own anymore, I held the hands of those who have felt and still do feel the same way as I did, and I listened to their stories. The information they shared with me is something that I deem as priceless, and I will likely never forget what it was like to be able to glimpse into their hearts for the small time that they allowed me in. I appreciate every one of them, the effort they put forth to assist my research, and the unfiltered honesty with which they shared their stories.

After gathering and analyzing all the data I collected during my research, I am proud to present the results to my community and to further communicate with them about working towards a better future. I have found that a lot of people will try to hide away or ignore their struggles, hoping that being strong and silent will make the problems less heavy. The reality is that we are not Atlas. We cannot hold the entire sky on our back and expect it not to break. As a

scientific community, I hope we can move forward with goals to discover what our students are experiencing, why they are experiencing it, and how it influences their mental health. It is time to let them speak and to listen. In summation, what I learned from this study is that I am not the only person struggling. What I gained from this study is the mindset that even just two sets of shoulders to hold up the sky, mine and yours, are a lot better than one.

APPENDIX A

Perceived Stress Scale

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate how often you felt or thought a certain way. Although some of the questions are similar, there are differences between them and you should treat each one as a separate question. The best approach is to answer each question fairly quickly. That is, don't try to count up the number of times you felt a particular way, but rather indicate the alternative that seems like a reasonable estimate. For each question choose from the following alternatives:

0	1	2	3	4
Never	Almost never	Sometimes	Fairly often	Very often

_____1. In the last month, how often have you been upset because of something that happened unexpectedly?

_____2. In the last month, how often have you felt that you were unable to control the important things in your life?

_____3. In the last month, how often have you felt nervous and "stressed"?

_____ 4. In the last month, how often have you dealt successfully with irritating life hassles?

_____5. In the last month, how often have you felt that you were effectively coping with important changes that were occurring in your life?

_____6. In the last month, how often have you felt confident about your ability to handle your personal problems?

_____7. In the last month, how often have you felt that things were going your way?

_____8. In the last month, how often have you found that you could not cope with all the things that you had to do?

_____9. In the last month, how often have you been able to control irritations in your life? 10.a In the last month, how often have you felt that you were on top of things?

_____10. In the last month, how often have you felt that you were on top of things?

_____11. In the last month, how often have you been angered because of things that happened that were outside of your control?

_____12. In the last month, how often have you found yourself thinking about things that you have to accomplish?

_____13. In the last month, how often have you been able to control the way you spend your time?

_____14. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

#4, 5, 6, 7, 9, 10, 13 Scored in the reverse direction.

The total score is calculated by finding the sum of 20 items. Scores range from 0-60. A score equal to or above 16 indicates a person at risk for clinical depression.

Meets criteria for Major depressive episode: Anhedonia or dysphoria nearly every day for the past two weeks, and symptoms in an additional 4 DSM symptom groups noted as occurring nearly every day for the past two weeks;

Probable major depressive episode: Anhedonia or dysphoria nearly every day for the past two weeks, and symptoms in an additional 3 DSM symptom groups reported as occurring either nearly every day for the past two weeks, or 5-7 days in the past week;

Possible major depressive episode: Anhedonia or dysphoria nearly every day for the past two weeks, and symptoms in an additional 2 other DSM symptom groups reported as occurring either nearly every day for the past two weeks, or 5-7 days in the past week;

Subthreshhold depression symptoms: People who have a CESD-style score of at least 16 but do not meet above criteria;

No clinical significance: People who have a total CESD-style score less than 16 across all 20 questions.

References:

Radloff, L. S. (1977). The CES-D scale: A self report depression scale for research in the general population. *Applied Psychological Measurements,* 1, 385-401.

Center for Epidemiologic Studies Depression Scale (CESD)

Below is a list of the ways you might have felt or behaved. Please tell me how often you have felt this way during the past week.

1 = Rarely or None of the Time (Less than 1 Day)
2 = Some or a Little of the Time (1-2 Days)
3 = Occasionally or a Moderate Amount of Time (3-4 Days)
4 = Most or All of the Time (5-7 Days)

During the past week:

	Rarely or none of the time (less than 1 day)	**Some or a little of the time** (1-2 days)	**Occasionally or a moderate amount of time** (3-4 days)	**Most or all of the time** (5-7 days)
1. I was bothered by things that usually don't bother me.	□	□	□	□
2. I did not feel like eating; my appetite was poor.	□	□	□	□
3. I felt that I could not shake off the blues even with help from my family or friends.	□	□	□	□
4. I felt that I was just as good as other people.	□	□	□	□
5. I had trouble keeping my mind on what I was doing.	□	□	□	□
6. I felt depressed.	□	□	□	□
7. I felt that everything I did was an effort.	□	□	□	□
8. I felt hopeful about the future.	□	□	□	□
9. I thought my life had been a failure.	□	□	□	□
10. I felt fearful.	□	□	□	□
11. My sleep was restless.	□	□	□	□
12. I was happy.	□	□	□	□
13. I talked less than usual.	□	□	□	□
14. I felt lonely.	□	□	□	□
15. People were unfriendly.	□	□	□	□
16. I enjoyed life.	□	□	□	□
17. I had crying spells.	□	□	□	□
18. I felt sad.	□	□	□	□
19. I felt that people dislike me.	□	□	□	□
20. I could not get "going".	□	□	□	□

Center for Epidemiologic Studies Depression Scale Revised (CESD-R-20)

About: This scale is a self-report measure of depression. Questions measure 8 different subscales, including:

Sadness (Dysphoria): (Q. 2, 4, 6), *Loss of Interest (Anhedonia):* (Q. 8, 10), *Appetite:* (Q. 1, 18), *Sleep:* (Q. 5, 11, 19), *Thinking / concentration:* (Q. 3, 20), *Guilt (Worthlessness):* (Q. 9, 17), *Tired (Fatigue):* (Q. 7, 16), *Movement (Agitation):* (Q. 12, 13), *Suicidal Ideation*: (Q. 14, 15)

Items: 20

Reliability:
Internal consistency for the CES-D-20 = (Cronbach's α=0.85 – 0.90)
Test-retest reliability for the CES-D-20 = (0.45 - 0.70).

Validity: The CES-D was moderately correlated to the Hamilton Clinician's Rating scale and the Raskin Rating scale (.44 to .54).

Scoring:

	Not at all or less than one day = 0	**1-2 days = 1**	**3-4 days = 2**	**5-7 days = 3**	**Nearly every day for 2 weeks = 4**
Questions 4, 8, 12, & 16	**4**	**3**	**2**	**1**	**0**
All other questions	**0**	**1**	**2**	**3**	**4**

APPENDIX C

VRPA

ID:_____ Date:_____Time:_____ Enrollment Visit

SELF-EVALUATION QUESTIONNAIRE

STAI Form Y-2

DIRECTIONS

A number of statements which people have used to describe themselves are given below. Read each statement and then circle the appropriate number to the right of the statement to indicate how you *generally* feel. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe how you generally feel.

	ALMOST NEVER	SOMETIMES	OFTEN	ALMOST ALWAYS
21. I feel pleasant	1	2	3	4
22. I feel nervous and restless	1	2	3	4
23. I feel satisfied with myself	1	2	3	4
24. I wish I could be as happy as others seem to be	1	2	3	4
25. I feel like a failure	1	2	3	4
26. I feel rested	1	2	3	4
27. I am "calm, cool, and collected"	1	2	3	4
28. I feel that difficulties are piling up so that I cannot overcome them	1	2	3	4
29. I worry too much over something that really doesn't matter	1	2	3	4
30. I am happy	1	2	3	4
31. I have disturbing thoughts	1	2	3	4
32. I lack self-confidence	1	2	3	4
33. I feel secure	1	2	3	4
34. I make decisions easily	1	2	3	4
35. I feel inadequate	1	2	3	4
36. I am content	1	2	3	4
37. Some unimportant thought runs through my mind and bothers me	1	2	3	4
38. I take disappointments so keenly that I can't put them out of my mind	1	2	3	4
39. I am a steady person	1	2	3	4
40. I get in a state of tension or turmoil as I think over my recent concerns and interests	1	2	3	4

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Published by Mind Garden, Inc., 1690 Woodside Rd, Suite 202, Redwood City, CA 94061

STAIP-AD Test Form Y
www.mindgarden.com

APPENDIX D

Sleep Hygiene Index

DIRECTIONS: A number of statements which people use to describe their sleeping habits are given below. Read each statement and then put a √ in the appropriate box (one √ per row) to the right of the statements to indicate how you **generally feel**. There are no right or wrong answers. Do not spend too much time on any one.

	Always	Frequently	Sometimes	Rarely	Always
1. I take daytime naps lasting two or more hours.	❒	❒	❒	❒	❒
2. I go to bed at different times from day to day.	❒	❒	❒	❒	❒
3. I get out of bed at different time from day to day.	❒	❒	❒	❒	❒
4. I exercise to the point of sweating within 1 hour of going to bed.	❒	❒	❒	❒	❒
5. I stay in bed longer than I should two or three times a week.	❒	❒	❒	❒	❒
6. I use alcohol, tobacco, or caffeine within 4 hours of going to bed or after going to bed.	❒	❒	❒	❒	❒
7. I do something that may wake me up before bedtime (for example: play video games, use the internet, or clean).	❒	❒	❒	❒	❒
8. I go to bed feeling stressed, angry, upset, or nervous.	❒	❒	❒	❒	❒

9. I use my bed for things other than sleeping or sex (for example: watch television, read, eat, or study).	❒	❒	❒	❒	❒
10. I sleep on an uncomfortable bed (for example: poor mattress or pillow, too much or not enough blankets).	❒	❒	❒	❒	❒
11. I sleep in an uncomfortable bedroom (for example: too bright, too stuffy, too hot, too cold, or too noisy)	❒	❒	❒	❒	❒
12. I do important work before bedtime (for example: pay bills, schedule, or study).	❒	❒	❒	❒	❒
13. I think, plan, or worry when I am in bed.	❒	❒	❒	❒	❒

APPENDIX E

October 3, 2025

Dear Dr. Gringle and Ms. Collins,

The North Carolina Wesleyan University Institutional Review Board and Institutional Animal Care and Use Committee (IRB-IACUC) has reviewed your study, titled "Stress, mental health, resources, and academic experience among NCWU seniors: An honors project", and has found that the proposed methodology for this study adheres to the ethical standards in human research regulations of the Department of Health and Human Services policy 45CFR 46. Therefore, it is approved to move forward.

Please notify the NCWU IRB-IACUC in writing if adverse events occur, if there is a change in research methodology, or whether new subjects are recruited who do not meet the description of subjects in the proposal. If the study should extend beyond December 31, 2025, please send a letter to the IRB-IACUC chair informing them of the status of the project and whether any changes have been made to the protocol.

Sincerely,



Ayra D. Sundbom, Ed.D.
IRB-IACUC Chair
Assistant Professor of Education and Director of Instructional Design and Technology
North Carolina Wesleyan University
Phone: 252-985-5143
Email: asundbom@ncwu.edu

North Carolina Wesleyan University
3400 N Wesleyan Blvd.
Rocky Mount, NC 27804

October 26, 2025

Dear Dr. Gringle and Ms. Collins,

The North Carolina Wesleyan University Institutional Review Board and Institutional Animal Care and Use Committee (IRB-IACUC) has reviewed the modification of your study, titled "Stress, mental health, resources, and academic experience among NCWU seniors: An honors project", and has found that the proposed methodology for this study adheres to the ethical standards in human research regulations of the Department of Health and Human Services policy 45CFR 46. Therefore, it is approved to move forward.

Please notify the NCWU IRB-IACUC in writing if adverse events occur, if there is a change in research methodology, or whether new subjects are recruited who do not meet the description of subjects in the proposal. If the study should extend beyond December 31, 2025, please send a letter to the IRB-IACUC chair informing them of the status of the project and whether any changes have been made to the protocol.

Sincerely,



Ayra D. Sundbom, Ed.D.
IRB-IACUC Chair
Assistant Professor of Education and Director of Instructional Design and Technology
North Carolina Wesleyan University
Phone: 252-985-5143
Email: asundbom@ncwu.edu

North Carolina Wesleyan University
3400 N Wesleyan Blvd.
Rocky Mount, NC 27804

APPENDIX F

Interview Guide

First, as you think about your time here at Wesleyan, what is one of your favorite memories about being a student?

What have been some sources of stress during your college experience at NCWU?

What types of things or experiences would you say caused you the most stress?

How did the stress you experienced during your time at NCWU make you feel?

- PROMPT: How might the amount of stress you experienced have affected your overall mood?
- PROMPT: How might the amount of stress you experienced affected your sleep?

Over the course of your college career, how did stress impact your experience at NCWU?

How would you say the amount of stress you experienced affect your academic performance?

What sort of information from your professors did you receive pertaining to stress and mental wellbeing?

What sort of information from your professors did you receive about sleep?

What kinds of support around stress, mental wellbeing, and / or sleep did you receive from your professors?

What sort of information did you receive pertaining to stress and mental wellbeing from your advisers?

What kinds of support around stress, mental wellbeing, and / or sleep did you receive from your advisors?

Are you a student athlete?

- PROMPT IF YES:
- What sort of information did you receive pertaining to stress and mental wellbeing did you receive from your coaches?

- What sort of information from your coaches did you receive about sleep?

- What kinds of support around stress, mental wellbeing, and or sleep did you receive from your coaches?

- What kinds of information around stress, mental wellbeing, and / or sleep did you receive from your athletic trainers?

- What kinds of support around stress, mental wellbeing, and / or sleep you receive from your athletic trainers?

What kinds of information about stress, mental wellbeing, and / or sleep would you liked to have received from your professors?

What kinds of information about stress, mental wellbeing, and / or sleep would you liked to have received from your advisers?

What kinds of support about stress, mental wellbeing, and / or sleep would you liked to have received from your professors?

What kinds of support about stress, mental wellbeing, and / or sleep would you liked to have received from your advisers?

ONLY IF ATHLETE

What kinds of information about stress, mental wellbeing, and / or sleep would you liked to have received from your coaches?

What kinds of support about stress, mental wellbeing, and / or sleep would you liked to have received from your coaches?

What kinds of information about stress, mental wellbeing, and / or sleep would you liked to have received from your athletic trainers?

What kinds of support about stress, mental wellbeing, and / or sleep would you liked to have received from your athletic trainers?

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