How Can We Help?: Strategies for Instructors to Alleviate Undergraduate Student Stress



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Abstract

Stress is becoming synonymous with the undergraduate student experience. Low amounts of short-term stress can be a motivator for students, but unhealthy levels can create distress, which can cause students to experience burnout and health issues. In this study, students were enrolled in a course and asked to provide feedback on levels of stress to instructors while undergoing the COVID-19 pandemic. Analysis of qualitative student reflections identified stressinducing areas that were categorized into themes that contributed to student distress including academic stress, financial/work stress, personal stress, university-related stress, family-related stress, and interpersonal stress. Undergraduate students reported their highest levels of distress related to academic stress. While some students did not believe faculty should be responsible for reducing their stress, others provided tangible strategies for reducing distress. Research indicates that some strategies for reducing students' distress include being more flexible with due dates and assignments, reducing student's unnecessary workload, and coordinating due dates with other faculty in their programs.

Keywords: student stress, COVID-19

Managing levels of stress have become an expectation for nearly all college students. Selve (1976) explained "all living beings are constantly under stress and anything, pleasant or unpleasant, that speeds up the intensity of life, causes a temporary increase in stress" (p. 137). The phenomenon of stress is explained as one's perceptions of imbalance between expectations and reality that exceed coping abilities (Lazarus & Folkman, 1984). For many undergraduate students, it is the first time they are living away from home, managing budgeting and loan management, balancing a part-time job, and unfiltered freedom among other novel life factors that generate stress. While stress is portrayed negatively as something that needs to be addressed or "fixed," there are types of stress that have differing impacts on individuals (Rudland et. al, 2019; Ganesan et. al, 2018).

Eustress is defined as, "a beneficial or healthy response to a stress, associated with positive feelings" and is noted as an "optimal amount of stress" (Selye, 1974, p. 192). Eustress has been associated with high performance in work (Mukherjee, 2008). It has also been associated with enhanced motivation and working harder (Kaiseler, 2009). Eustress, as a concept, is less explored as a phenomenon

(Kupriyanov & Zhadanov, 2014). Some researchers also indicate that the concept of eustress may be misleading as too much eustress can create distress (Kupriyanov & Zhadanov, 2014). Distress is the negative affect as a result of stress (Rudland et. al, 2019). Distress, particularly in high levels, has been associated with lower academic ability and narrowing attention (Kaiseler, 2009).

Students who are experiencing eustress and distress can be experiencing the same stressors. Each individual responds differently to stressors which result in levels of mild to severe stress (Rudland et. al, 2019). Factors that impact students' ability to determine if stress is beneficial or challenging are the appraisal of the stressor, motivation, complexity of the situation, mindset, personality, and coping strategies (Rudland et. al, 2019). Undergraduate students are facing a breadth of stressors that positively and negatively impact their academic and personal productivity.

Levels of stress in undergraduate students have increased and have become more common over the last decade (Yusufov et. al, 2019; Laidlaw et. al, 2016). A study of over 2,000 undergraduate students across the US reported 87% of students experience stress or anxiety (Active Minds, 2020). It is important to note that all forms of stress do not come from the same triggers, and all students do not have similar types of stress. Undergraduate stress has been noted to fall into seven categories of stressors: academic, finances/work, personal, family-related, university, interpersonal, and environmental stress (Pitt et. al, 2018).

While types of stressors and frequency is reported in the literature, the responsibility and strategies of reducing stress in students is less explored. Programs surrounding the idea of reducing student stress are focused on reducing stress levels after stressful events rather than shifting the culture that creates the triggers (Regehr et. al, 2013). It should be noted that often stress is measured through actions causing stress versus the actual physiological response. The literature indicates when preparing students to handle distress the focus of universities is on increasing therapeutic measures or preparing students to brace for inevitable stress and anxiety (Manning, 2013). Many studies looking into decreasing stress levels explore the efficacy of programs like study groups, aromatherapy, counseling, and mindfulness (Regehr et. al, 2013; Rose et. al, 2015). These programs are effective yet do not confront or explore the stimuli that is causing the need for the programs.

Little research exists on how other people, whether it be peers, family members, or faculty members, impact student distress. Active Minds (2020) explored how higher education administrators could support programming or policies aimed towards reducing student distress. Analysis of the student data shows a desire for increased academic support, more mental health resources, a focus on professional skills, increased opportunities for social connection, and long-term planning. While academic pressures have been noted as a cause of student stress, there is a lack of understanding of how faculty can independently impact and reduce student distress (Pitt et. al, 2018).

The onset of the COVID-19 pandemic in March 2020 quickly transformed nearly every aspect of the undergraduate

student experience. Between virtual learning modalities, lack of face-to-face connection and a tumultuous job market, students were experiencing compounding factors in addition to the expected stressors faced in college. Many of the effects of the pandemic were still happening in spring 2021 as virtual learning continued and most institutions cancelled a formalized spring break to mitigate the spread of COVID-19.

Conceptual Framework

Previous research has identified seven categories of undergraduate stress (Pitt et. al, 2018). Within this framework, the courses in this study taught stress through the lens of eustress and distress. Students engage with the findings of the Pitt et. al (2018) article as a point of discussion focused on highlighting the ways people's reactions to these seven stressors can positively and negatively impact them. Each category of stressors included multiple factors that could contribute to stress (Table 1).

Once a stressor is introduced to a student's life above a point of equilibrium, it creates stress. If the stress is something that positively impacts the student, for example under the realm of financial/work stress applying for a scholarship, this results in eustress for the student which motivates them to put effort in. An interpersonal stressor of ending a relationship with a significant other creates stress which negatively impacts the student creating distress which causes sadness and lack of motivation. For the purposes of this study, the seven categories of stress were used to categorize what the contributors were that were considered distress.

Figure 1.

Undergraduate student stress factors and process adapted from Pitt et. al, 2018



Table 1.

Undergraduate Student Stress Themes and Contributing Factors to Distress

Stress Theme	Factors Contributing to the Stress Theme
Academic	Assessments Workload Examinations Time management Being behind Difficulty of university-level work Waiting for results
Finances/Work	Finances Work University/work balance
Personal	Health General personal stress
University	Starting at a university Organization/club stress University/family balance
Interpersonal	Partner stress Friend/roommate stress General interpersonal stress
Environment	Transportation Stressors external to the university (political, social, etc.)

Purpose

The purpose of this study was to examine the distress reduction strategies recommended by undergraduate students familiar with stress. As levels of distress continue to increase, it is critical to understand how faculty can play a role in reducing these levels among college students. To accomplish the purpose of this study, two objectives were established:

- 1. Describe the stressors undergraduate students experienced in spring 2021.
- 2. Identify strategies of how instructors can reduce levels of undergraduate students' distress.

Methodology

This was a qualitative study where undergraduate students participated in a weekly reflection exercise related to their distress. In their reflective activities, students were asked to indicate if they experienced distress. If a level of distress was indicated, students were asked to identify the types of stressors that resulted in their distress as categorized by Pitt et.al (2018). At the end of the semester, as a part of the comprehensive reflection, students were asked to explain the stress, both eustress and distress, that they had been experiencing during the spring semester through open-ended responses (Fenwick & Parsons, 2000). The questions used in this study were:

- 1. Describe your changes in stress over the spring semester.
- 2. Looking back on the spring semester, what could instructors have done to reduce your levels of unproductive stress this semester?

Undergraduate students enrolled in agricultural leadership courses that teach the concepts of productive and unproductive stress at the University of Florida participated in the study as part of their course material. A purposive sample was used. Students had to be enrolled in one of two courses that taught the concepts of stress and eustress through the lens of Pitt et al. (2018). A total of 90 students were invited to participate and 58 students completed the reflection activity in its entirety. Each student was assigned a numerical code included in each point of data collection to allow the researcher to compare levels of distress over time.

Demographic data was collected for each participant, but identifying characteristics were removed before data analysis. While the students represented ten of the 11 undergraduate colleges at the University of Florida, the course was taught in a College of Agricultural and Life Sciences and heavily contextualized in agriculture and natural resources. In the sample, 60% of participants identified as female (n=35) and 40% identified as male (n=24).

The students' qualitative responses were analyzed for common themes. Thematic analysis is a method used to identify, analyze, and report patterns within data (Braun & Clarke, 2006). For the first research question, a deductive approach was used to start with codes pre-determined through the course content related to stress which was framed around Pitt et al. (2018) (Braun & Clarke, 2006). For the deductive themes, Pitt et. al (2018)'s seven categories of student stressors were used to understand the elements identified through the students' reflection. For the second research question pertaining to instructors' role in reducing stress, an inductive approach was used due to the lack of prior knowledge existing in the literature.

Codes were identified then collapsed into themes and later categories to explain the phenomenon. Data analysis began once the semesters were completed to allow the entire data set to be analyzed at one time. To mitigate bias due to the primary's researcher proximity to the subject, investigator triangulation was used by the research team to ensure different perspectives by adding breadth to the phenomenon (Denzin, 1978). Two additional researchers were brought in, both of whom were unrelated to the course, to complete the data analysis separately to triangulate findings. Internal validity was supported due to the primary researcher's long-term observation of her students (Merriam, 1998). To enhance reliability, the audit trail of raw data allows other researchers to understand how the data was collected and decisions were made (Merriam, 1998).

The students' familiarity with distress and eustress exists as a limitation. Rather than discuss their stress

holistically, students were asked to focus on elements of distress that were viewed as unproductive to their success which may have created gaps for students to discuss eustress, if any was experienced. This may have informed students to view stress through a different lens than students who are unfamiliar with the benefits of stress. Additionally, exposure to the Pitt et al. (2018) stressors, as introduced in a lecture and discussion, may have influenced the student's perspectives during their self-evaluation.

Results

Types of Stress

Analysis of the data indicated that six of the seven stressors identified by Pitt et. al (2018) were reported by the students. From the 58 students who reported their stress changing over the semester, 65 stressors (N=65) were identified. In order of frequency, 38 students reported academic stress, nine students reported financial/work stress, nine students reported personal stress, five students reported university-related stress, two students reported family-related stress and two students reported interpersonal stress. No student reported environmental stressors as a contributor to their overall stress in the semester.

Academic stressors were identified most frequently including stress related to deadlines, workload, and exams. For example, student 1 said, "I get more stressed as deadlines approach." Student 8 said, "All of my classes were on the same exam schedule so every couple weeks I would get slammed with 3-5 exams/quizzes within days of each other." Student 25 mentioned, "My changes in stress primarily came from the workload and difficulty of work getting worse and worse as the semester progressed." Student 28 reported, "Depending on the week, my stress levels definitely changed. Some weeks I would have multiple exams and a ton of work while others would be more relaxed." Student 23 said, "[I have] a lot of stuff going on but I have it under control. Its just when exams hit I wanna [sic] curl up and die." Student 37 stated, "I became more stressed as the semester progressed. Trying my best and still failing exams and changing the way I study for each class to ensure I don't fail it."

The same number of students (n=9) reported financial or work-related stress and personal stress. Students reporting financial or work-related stress reported stressors related to their current employment or the uncertainty of employment post-graduation.

> Over the course of the semester my stressors changed from being academic and grades focused to being career and future focused. I was less and less worried about what my exam grade would be and more concerned about how I was going to find a job. (Student 7)

Student 5 also mentioned similar experiences: "Relearning how to adjust to being a full-time college student while working full time again, also while adjusting to mostly online courses. Over the semester I formed habits that made it easier." Student 17 reported numerous stressors including some related to both current and future employment, "My level of stress this semester has been higher than in all of my previous semesters - some of this has been due to the asynchronous courses/ not having a spring break/working more than part time/graduation stress."

Personal stressors were represented through physical and mental health challenges. Student 9 disclosed personal health challenges relating to time away from school contributing to stress, "I am usually on top of my work and able to control my stress levels. However, after needing surgery and falling behind in work/exam/etc. I found my stress levels increased immensely." Student 24 had a similar experience, "Over the semester my stress level gradually increased as I dealt with personal health issues in addition to my schoolwork." Student 12 attributed their stress to mental health challenges, "My levels of stress increased as the semester progressed. Some was due to personal changes (interpersonal and health) but some was due to general burnout without a break in school." Student 30 attributed their stress to the general climate of health related to COVID-19, "This semester was a normal amount of stress. I think most of my stress [was] generated from covid."

University-related stress was not frequently reported (n=5) but attributed to COVID-19-related changes including asynchronous course offerings and the elimination of spring break. Family-related stress was reported twice (n=2) related to a family members' illness and passing during the semester. Interpersonal stress was mentioned twice (n=2) and described as issues with friends.

Faculty's Role in Stress Reduction

Students also reported things elements of the semester that were helpful in reducing their stress. Student 42 reported, "It gradually got more stressful overall with the exception of this course." As patterns indicated academic stress being the most prominent stressor, students were asked to identify how faculty could reduce student levels of distress. Student responses were reduced into five categories: instructors cannot help in reducing student stress, instructors should reduce student workload, instructors should be more flexible, due dates should be scheduled holistically by program, and instructors should provide space for students to reflect.

Students reported that it was not the faculty's responsibility to alleviate student stress. Eight students reported that there was nothing that faculty could do to reduce student stress. Student 10 reported, "I don't believe it's the professor's job to help an individual student deal with stress, since I do believe they have enough going on themselves." Student 19 agreed and cited curriculum as the reason, "I don't think there was really much the professors could do to reduce stress because of the curriculum and schedule they had to follow." Student 43 thought that faculty were doing all they could due to the unusual nature of the semester, "This semester I felt as though professors did the best they could to manage our stress levels given the situation we are in."

Having increased flexibility in the course was reported as a suggested way to reduce student stress. Student 9

said, "I wish they gave us a chance to redo things we may not have done well on." Student 12 agreed by saying, "Other professors could have been more understanding about late assignments and conflicts that come out throughout the year." Student 33 was seeking more flexibility on deadlines, "I would have preferred more laid back or longer deadlines for assignments to have more time to get them done and manage time better." Student 6 reported gratitude towards flexible faculty, "Most of my professors were pretty cooperative with me and have been lenient with deadlines and assignments."

Another strategy related to scheduling was scheduling due dates holistically by program or department. Student 7 suggested, "Maybe speak to students more in order to get a good idea when assignments for other classes are due for them and assign accordingly, especially at the end of the semester." Day of the week deadlines was an issue that student 52 reported, "It's hard to coordinate this but a lot of my assignments were set to be due on the same day and it's a little less stressful to me when they are spread out to different days of the week."

Some students struggled with the scheduling of assignments,

A lot of my classes had a bunch of assignment all due on the same days, it would be nice to spread it out. Especially on assignments they don't let you see early if they could open those so we could get ahead. (Student 19)

Other students noticed due date issues particularly at the end of the semester,

I'm noticing there is a big push towards the end of the semester to get done early which is great. But it also means all of my assignments are due within a three-day period which is hard to manage time wise. (Student 44)

Student 59 had suggestions to assist with disciplinespecific deadlines, "Instructors could possibly have worked to spread out big projects with an awareness to when other classes in the same specialization had big assignments and projects due."

Workload was a contributor to academic stress that students thought faculty could assist with. Student 28 attributed challenges due to the virtual classroom due to COVID-19, "I had a lot of busy work that had to be done that wouldn't have been their if we had been in person." The additional strain of group work on workload was a challenge for student 32, "I would recommend limiting group projects because meeting up to work on them is nearly impossible and communicating via zoom is difficult."

The space to discuss stress was noted by students as a way that instructors reduced their stress the semester that they were enrolled in the course used for this study. Student 21 said, "I'm honestly thankful for my instructors this semester." Student 2 stated, "I believe this class did more than any of my other classes in reducing my unproductive stress levels." One student went on to explain how participating in this study assisted in decreasing their levels of distress,

This class was by far the most enjoyable one I took this semester. I know this sounds like sucking

up – but for real – this class was the only one this semester I enjoyed. The fact that you guys made a survey to check in on our wellbeing is above and beyond the level of empathy and compassion exhibited by every professor I've had during the pandemic (spring 2020- now). Thank you both!! (Student 63)

Discussion and Recommendations

Students experienced high levels of distress while enrolled in the undergraduate experience. Students can name where their stress is coming from and identify tangible solutions to fix it. According to students, the highest contributor to distress is academic stress which aligns closely to other studies on undergraduate students (Laidlaw et. al, 2016). Other factors students face that contribute to their stress in order of prevalence are financial/work stress, personal stress, university-related stress, family-related stress, and interpersonal stress which have been reported previously by undergraduate students (Pitt et. al, 2018). While academic stress was the primary driver of distress in students, some undergraduate students believed that their stress was is their own problem. Students (n=13)in our study reported that they did not believe an instructor could reduce their levels of stress. The students that did believe others could be helpful gave tangible solutions for faculty to consider including reducing workload, being flexible, spreading out deadlines, and holding space for students to reflect and share their stress.

Faculty trying to reduce academic stress of their students should holistically reexamine their courses through the lens of the student recommendations. Reducing workload while balancing learning goals is challenging to navigate. Typical solutions like high-stakes exams and group work were also indicated in this study, and previous literature, as triggers to academic stress (Banks & Smyth, 2014). Students' issues with workload were focused on the concept of busy work – particularly virtual work that would not be included in a face-to-face course. A good habit as educators is to checkin with students to see which assignments and projects were effective and those that may not have aligned with the intended learning outcomes as needed. As instructors, we should consider what steps we can take that help both the instructor and student reduce distress.

Increasing flexibility as instructors is a solution proposed to reduce student's distress. Students particularly mentioned adjusting due dates and allowing for resubmission when assignments did not result in a grade that reflected the student's ability (Posner, 2011; Holland-Minkley & Lombardi, 2016). The most practical way to implement this in courses is to have a reactive syllabus. While faculty are often required to be proactive in scheduling assignment deadlines, unforeseen challenges arrive that impact the planned course schedule. Being reactive rather than sticking to the syllabus is a solution students would like as an option if issues are present. Another solution would be considering a policy to allow students to resubmit assignments. If the intended outcome is student learning, resubmissions may be a feasible way to reduce student distress and increase

student learning.

Students discussed similarity of deadlines as a cause of their academic distress. If you teach in a program that has students taking similar coursework at similar times or a cohort-based program, instructors should plan with colleagues in advance when large assignments and projects are due to reduce student distress. This could look like staggering of exams or project deadlines throughout the semester. Students discussed the trend of faculty not using university exam schedules in lieu of making the semester end earlier which results in large stakes assignments being completed in a short-term. Redistributing exams and projects to expand into the exam times could help students feel less distress due to stacked deadlines.

The suggestion of holding space for students to reflect and share their stress was an unintentional positive consequence of this study. The courses that the study was completed in does discuss stress as a concept, but beyond that module in the course the topic is not widely discussed. Students completing a weekly anonymous survey to check in on their well-being was accepted positively by the course. The graduate assistant who assisted with the courses checked in on the average scores throughout the semester to see if there were any peaks or valleys of stress. While the stress remained consistent, it allowed the instructor team to be responsive to student needs throughout the semester. Instructors should consider having a check-in throughout the semester to assess the effectiveness of the course and student well-being which is commonly used in health-related professional fields (Cox-Davenport, 2017; Fernandes et al., 2020). This can happen in conjunction with a mid-semester course evaluation. The check-in could be as simple as "Rate your stress levels on a scale of 0-10" or "How are you doing - not in the class but as a person?" This can create an environment for renewed student interest in the course when they feel that their suggestions are being implemented to improve their learning environment rather than the course for future students. Additionally, discussing mental health resources available through your institution sporadically throughout the semester can create a culture where students understand that there are support systems available to them on campus. As this study suggests, academic stress may peak when large assignments or exams are due. These high-stakes assignments could be used as an indicator for the discussion to happen. Mental health resources should be highlighted throughout the semester beyond a required syllabus statement.

Distress will continue to be a part of the collegiate landscape. As faculty balance increasing demands of their time, it is important to consider the challenges students are facing. Stress is omnipresent in undergraduate education and distress will continue to be an increasing demand for students' attention, especially in the pandemic and postpandemic era. Consider discussing student distress with colleagues and across campus to help understand how to navigate this collegiate endemic.

- Active Minds (2020). *Student Mental Health Survey*. https:// www.activeminds.org/wp-content/uploads/2020/10/ Student-Mental-Health-Data-Sheet-Fall-2020-1.pdf
- Banks, J., & Smyth, E. (2015). 'Your whole life depends on it': Academic stress and high-stakes testing in Ireland. *Journal of Youth Studies*, *18*(5), 598-616.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*, 77-101.
- Cox-Davenport, R. A. (2017). "The five-minute check-in" intervention to ease the transition into professional education: A descriptive analysis. *Nurse education today*, *50*, 25-28.
- Denzin, N.K. (1978). Sociological methods: A sourcebook. McGraw-Hill.
- Ganesan, Y., Talwar, P., Norsiah, F. and Oon Y.B. (2018) A study on stress level and coping strategies among undergraduate students. *Journal of Cognitive Sciences and Human Development*. *3*(2), 37-47.
- Fernandes, H. V., Richard, C., Bynkoski, K., Ewan, B., & Houle, S. K. (2020). Check-In: An educational activity to address well-being and burnout among pharmacy students. *Pharmacy*, 8(4), 184.
- Holland-Minkley, A. M., & Lombardi, T. (2016). Improving engagement in introductory courses with homework resubmission. In *Proceedings of the 47th ACM Technical Symposium on ComputingScience Education*, 534-539.
- Kaiseler, M., Polman, R., Nicholls, A. (2009) Mental toughness, stress, stress appraisal, coping and coping effectiveness in sport. *Personal Individual Differences*, 47(7), 728-733.
- Kupriyanov, R., & Zhdanov, R. (2014). The eustress concept: problems and outlooks. World Journal of Medical Sciences, 11(2), 179-185.
- Laidlaw, A., McLellan, J., & Gozde, O. (2016). Understanding undergraduate student perceptions of mental health, mental well-being and help-seeking behaviour, *Studies in Higher Education*, *41*(12), 2156-2168. http://dx.doi. org/10.1080/03075079.2015.1026890
- Lazarus, R. S., & Folkman, S. (1984). Stress, appraisal and coping. Springer.
- Manning, P.J. (2013). Understanding the impact of inadequate feedback: A means to reduce law student psychological distress, increase motivation, and improve learning outcomes, *Cumberland Law Review* (43)225. http:// dx.doi.org/10.2139/ssrn.1967280
- Moon, J. A. (2013). Reflection in learning and professional development: Theory and practice. Routledge Falmer.

- Mukherjee, D., Singh, P. (2008) Converting of occupational stress to eustress: role of official hierarchy. *International Journal of Psychology*, *43*(3), 726-744.
- Pitt, A., Oprescu, F., Tapia, G., & Gray, M. (2018). An exploratory study of students' weekly stress levels and sources of stress during the semester. *Active Learning in Higher Education*, *19*(1), 61–75. https://doi. org/10.1177/1469787417731194
- Posner, M. A. (2007). Evaluating pedagogical techniques in introductory statistics: Proficiency grading and assignment resubmission. In *Proceedings from The International Association of Statistics Education Conference on Assessment*.
- Regehr, C., Glancy, D., & Pitts, A. (2013). Interventions to reduce stress in university students: a review and metaanalysis. *Journal of affective disorders*, *148*(1), 1–11. https://doi.org/10.1016/j.jad.2012.11.026
- Rose, C., Godfrey, K., & Rose, K. (2015). Supporting student wellness: De-stressing initiatives at memorial university libraries. *The Canadian Journal of Library and Information Practice and Research*, *10*(2), 1-21.
- Selye, H. (1974). *Stress without Distress*. JB Lippincott. https://doi.org/10.1007/978-1-4684-2238-2_9
- Yusufov, M., Nicoloro-Santa Barbara, J., Grey, N. E., Moyer, A., & Lobel, M. (2019). Meta-analytic evaluation of stress reduction interventions for undergraduate and graduate students. *International Journal of Stress Management*, 26(2), 132-145. http://dx.doi.org/10.1037/str0000099