

2021

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**College as a Pressure Cooker: Relationships Between the Pressure to
Succeed, Mental Health Distress, and Coping in College Students**

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A Thesis Submitted to Fulfill the Requirements of the
Honors Program at Assumption College

Spring 2021

College as a Pressure Cooker: Relationships Between the Pressure to Succeed, Mental Health Distress, and Coping in College Students

College is a stressful time in one's life when anxiety and depression are prevalent. Anxiety is known as an emotional state plagued by both physical and emotional feelings of tension and worry (American Psychological Association, 2020). Depression, on the other hand, is defined as a mental illness that can have a deleterious influence on one's feelings, thoughts, and behavior and can cause a plethora of concerns, both emotional and physical (American Psychiatric Association, 2017). Anxiety and depression have a comorbidity rate, or in other words they occur at the same time, of about 60% (Salcedo, 2018). The two variables are further linked by the fact that the Center for Collegiate Mental Health (2017) found that while other stressors (i.e. substance abuse) have stagnated, depression and anxiety are the two that are still gradually on the rise and have been for the past 6 years.

There is increasing concern for the rates of anxiety and depression in college students. A survey by the American College Health Association (2014) indicated that anxiety was the most cited mental health issue in college students. Relatedly, Gallagher (2015) found that 89% of directors at college counseling centers reported an increase in anxiety disorders. There is a trend of rising depression rates as well, with diagnosed college students in 2000 to 2006 raising from 10% to 15% (Mahmoud, 2012). For one university, their counseling center clients doubled from 2008 to 2013 (Beiter et al., 2015). Sliwa (2019) also reports that, in those aged 18-25, the rate of people reporting major depression symptoms increased 63% from 2009 to 2017. The Anxiety and Depression Association of America (2013) found that 85% of college students reported that they were overwhelmed by their perceived responsibilities and duties over the past 12 months. It

is important to take a step back and look at the reasons why anxiety and depression are so prevalent in this young adult population.

While some studies have approached this question, it has mostly been examined by analyzing variables that cause anxiety and depression in college students, or which variables cause anxiety and depression more than the others (Beiter et al., 2015; Pisarik et al., 2017). However, they often do not look at the compounded effect of such variables. In other words, studies address single variables, such as only academics or only career plans, but do not look at how all of these variables in conjunction create an overall feeling of a “pressure to succeed” in which one may feel overwhelmed with the pressure to do well in so many different aspects of their life. This is important because, in addressing these issues, it is different to treat anxiety and/or depression for a single variable than to treat the overall feeling of being overwhelmed by a plethora of variables.

While there has been extensive research on different variables that affect the life of a student in college, studies often fail to elucidate the concept of the pressure to succeed. College student pressure to succeed is affected by many college environment stressors—including academic achievement, career anxiety, extracurricular activities, and social relationships. Further explanation demonstrates how the pressure to succeed is the accumulation of previously mentioned variables. The source of the stress, anxiety, and depression is not simply derived from a variable in itself (i.e., stress about a desire to academically achieve), but from how it connects to the overall perception that the student has failed at reaching that perception of success that they have set for his or herself.

College Environment Stressors and the Pressure to Succeed

To best understand the rise in rates of depression and anxiety, it is important to recognize the different variables of which the college environment is composed. There is a plethora of stressors that a college student faces all at once. Through the use of surveys, Beiter et al. (2015) identified the top 10 sources of stress for college students: academic performance, pressure to succeed, post-graduation plans, financial concerns, quality of sleep, relationships with friends, relationships with family, overall health, body image, and self-esteem. Overall, college students appear to be experiencing several stressors across multiple facets of life. It is important to note that Beiter et al. (2015) were surprised to find that, in their attempt to narrow their list of 19 stressors, all had a significant positive correlation with depression, anxiety, and stress. Instead of prioritizing these areas of concern, such that some call for more stress than others, students are finding equal amounts of high stress in various aspects of their lives. However, while these stressors all certainly hold weight, the pressure to succeed variable that Beiter et al. (2015) highlights can be seen as an umbrella under which many of the other variables of the college environment may fall.

Earlier research has echoed Beiter et al.'s (2015) findings. For example, Dusselier et al. (2005) found that academic workload positively correlated with stress. Flatt (2013) also cited six sources affecting the prevalence of mental illness in college today: academic pressure, financial concerns, inaccessibility to higher education and mental health services on campus, the changing male-to-female ratio (i.e., females are more likely to seek help so an increasing number of women on campus leads to increased rates of mental illness), technology (i.e., internet addiction and problematic internet use has increased), and lifestyle (i.e., the transition into

college life can introduce risky behavior, such as alcohol use, that is linked to adverse mental health in college students).

With college being an institution of higher education, academics often come to mind first as the most anxiety and depression inducing variable. Attending college includes an increase in academic demands that students often cite as a principal factor in their stress levels (Beiter et al., 2015). Flatt (2013) explains that higher education is a much more competitive environment to succeed in than in previous generations. More specifically, it has been affected by the economy becoming more difficult to navigate in regard to employment opportunities due to the competitiveness that increased with the downturn of the economy in the late 2000s (Guo et al., 2011). Flatt (2013) found that students feel an increase in competition because they may think the only way to assure a successful future is to do better than their peers, which can contribute to feelings of anxiety and depression. Flatt (2013) also explains how using success as a measure of achievement, combined with an inability to cope, can lead to increased mental health concerns.

Academic Achievement

Academic achievement is a key factor for pressure to succeed. While previous studies have shown that academic achievement is a stressor for college students, it can take a different form under the variable of the pressure to succeed. Grades are not stressful because the student wants good scores, but because students feel that if they do not perform well on one test or project then they are doomed to fail in life. For example, while one test might seem minute to an outside observer, it is a major point of concern for the student. That concern stems from the perceived pressure that each grade will affect one's life outcome—their overall success. It is more than just a test when it comes to the anxiety the student feels—it is a measure of how well they will do in the future. This is connected to the previously mentioned research of how the

economic downturn has created a more competitive environment in which students feel success, rather than grades, are the goal. When a student is lacking in their academic achievement, they feel as if they have failed to live up to the expectation of success that has been laid out for them, leading to anxiety and depression (Flatt, 2013). Therefore, under pressure to succeed, anxiety is heightened as the focus does not become about the grades themselves, but the way that those grades symbolize success.

Post-Graduation Expectations

People often feel that how well they perform in academics can predict their future, which leads to students citing post-graduation expectations as another source of stress (Beiter et al., 2015). Most often, students' main post-graduation concern involves career anxiety, or anxiety that stems from progressing toward and evolving one's career (Pisarik et al., 2017). Pisarik et al. (2017) found that many students reported fear of never finding employment as well as concern about not finding something that they would enjoy doing for the rest of their lives. Relatedly, students also reported pressure related to choosing jobs that would make enough money so that they would not feel that they have "settled" for a job after all the work that they had completed (Pisarik et al., 2017). Overall, these concerns were heavily intertwined with anxiety stemming from pressure—either from expectations that their parents, colleges, or they themselves had established.

Career anxiety is also a key construct that is a college environment stressor that is transformed under the pressure to succeed. As discussed earlier, students feel that they need to be the best academically to ensure their future career. As mentioned by Pisark et al. (2017), this is supplemented with anxiety related to choosing a job in which one can be both happy and monetarily satisfied. In other words, students feel the pressure, while still at the beginning of

their life, to choose a career that provides for them in a way such that they can afford luxuries and necessities, but also feel that their career satisfies them from a personal lens as well. This personal lens can entail simple happiness in their job as well as meaning in their work. The goal is not only to achieve, but to be happy with what one has achieved. They experience this pressure to make the perfect choice at a time in their life where they are often unsure. This choice can leave one with the palpable feeling that they are choosing wrong—which can then lead to the perception that they are choosing a path that may lead them to failure instead of success. Therefore, just as in academics, career anxiety is more than just stress about how one will navigate the future. Under the pressure to succeed, it transforms into a perception of how that future reflects their success in both their career and personal lives.

Extracurricular Activities

Another factor that has been found to increase anxiety is extracurricular activities. Melman et al. (2007) found in a population of adolescents that as the number of activities, and the amount of time spent in these activities, increased (i.e., overscheduling), so did anxiety. However, there was no relationship found with depression. While other studies have found positive correlations between extracurriculars and academic achievement or social self-concept, it is important to note the negative effect it has on mental health in conjunction with such benefits (Camp, 1990; Marsh, 1992; Melman et al., 2007).

While an overload of extracurricular activities has been implicated, at least for adolescents, in increasing anxiety, it can be transformed into a different source of stress when seen under the variable of the pressure to succeed (Melman et al., 2007). Under the pressure to succeed, extracurriculars no longer represent doing something the student enjoys or excels. While background research is unclear, college students appear to take on an overwhelming

amount of extracurriculars because they see that as helping their success. This could especially apply to college students whose extracurriculars may include clubs as well as more specific career advancement opportunities, such as internships. Interestingly, extracurriculars allow for success in two aspects. Students may engage in them because it looks good on a resume and therefore plays into their actual, physical achievement. A second perspective is that it allows students to make social connections that cause them to perceive that they have a successful social life. Whether one, or both, aspects are true, there is no doubt that anxiety has been shown to increase when activities become overwhelming. However, with an increasing perception that there is a pressure to succeed, students may also perceive an increasing pressure to participate in activities that they do not actually want to take part in to reach this idea of success—making the chances of overscheduling higher when under the pressure to succeed.

Relationships with Friends and Family

Outside of college related concerns, students also face stressors related to relationships with their friends and family. Priest (2013) studied the relationship between anxiety disorders and quality of friendships and relationships with relatives and romantic partners. In individuals who had never been married, quality of relationships with family was correlated with symptoms of generalized anxiety disorder, panic attacks, and panic disorder (Priest, 2013). In other words, college students with poor family relationships may be more prone to experience significantly distressing anxiety disorders than those with good family relationships. Similarly, Priest (2013) found a similar pattern with friendship quality. More specifically, college students with poor friendship quality may be more prone to experience social phobia than those with good friendship quality. As college is a time where students are meant to become independent adults, especially in moving into the dorm environment and away from the family, it is plausible that

there is an added strain to the family dynamic as the student becomes less dependent. Similarly, as students move away from their previous friends that they used to see daily and begin to develop new friendships, there is even more potential for strain. Overall, trying to balance personal relationships, along with academic and career life, is another added layer of student stress.

In examining how students' social life can affect their perceived pressure to succeed, one's relationships with friends and family must be considered. For anyone, relationships in general can take a toll on their mental health. However, in the midst of the pressure to succeed academically and career wise, students also seek to be successful in their social lives. When the drive for these other academic and career-based successes overtakes a student's social life, it is plausible to consider that students may feel like they are failing in some way by not having perfect relationships. If they perceive that their personal relationships, whether with friends, family, or romantic partners are lacking quality, they think that they have failed their personal selves and others. Importantly, this lack of quality comes from the students' own perception of their lives and relationships. This plays into the pressure to succeed because they have failed to successfully balance their personal lives and work lives, which can increase symptoms of anxiety and depression. This is a facet of pressure to succeed over and beyond the variable in itself, as described in the previous section, because it considers more than just anxiety and depression linked to a perceived relationship quality. Now, it is the additional stress that the person is somehow falling short of their perception of what success is in the pressure to succeed.

Mental and Physical Health

Generally, students are also concerned with mental and physical health. Seventy-five percent of people with mental health disorders had developed the disorder before 25 years old.

For example, the average age at diagnosis for general anxiety disorder is 20 (Pedrelli et. al, 2015). Therefore, many of those suffering from mental illness are learning to do so for the first time in college. On the other hand, physical repercussions of students under stress include substance use, issues with sleep, and risky sexual behavior (Pedrelli et. al, 2015; Pedersen et. al, 2017). Pedrelli et. al (2015) states that 44% of college students reported binge drinking and 22-40% reported nicotine use, though importantly adolescents were also included in the nicotine study in addition to young adults. These are interconnected, as Jao et. al (2019) found that symptoms of poor mental health, such as actual diagnoses of mental health disorders, suicidal and/or self-injurious behavior, and self-reported psychological symptoms, increased when there was an increase of health-related behavioral issues such as high substance use or physical inactivity. It is important to recognize how mental and physical health can exacerbate each other, creating more stress for students suffering from these concerns.

A student's mental and physical health is of utmost importance under the pressure to succeed. Pedersen et. al (2017) explains this when they discuss the spillover effect. Spillover occurs when the stress, or in this case, pressure, from a part of one's life begin to affect, or "spillover," into another aspect of the person's life. Thus, the stress that they find in one part of their life permeates into the emotions and behaviors they display in other parts of life. Pederson et. al (2017) found that increased school spillover, or the pressure associated with grades, was associated with increased feelings of nervousness, restlessness, worthlessness, depression, hopelessness, troubled sleep, and risky sexual behavior. The study also states that spillover can occur with relationships, living independently, and various other stressors. It is similar to the concept of pressure to succeed as it is representative of how increased stress permeates across several domains and can affect one's health. In turn, the compromised mental and/or physical

health makes it more difficult to achieve—it is yet another added stressor that makes people feel as if they are falling short of their idea of successful (Pedersen et. al, 2017).

University Stress Scale

The “pressure to succeed” construct is one that has not necessarily been researched before as a whole. Thus, the scale that has been developed for this study is new and unvalidated. To increase convergent validity the study will also use the University Stress Scale (USS). This will aid in corroborating our results. Stallman and Hurst (2016) discuss how students face chronic stress in college and note that there needs to be a way to differentiate between productive levels of stress and harmful levels of stress. They felt that universities needed to be able to broadly assess various stressors, rather than assessing symptoms and/or specific triggers. Stallman and Hurst (2016) therefore developed the USS to measure severity of stress and the breadth of stressors, among other objectives. The survey is written in broad categories so the student’s experience with stressors is not restricted by specific events. Students were provided the USS, the DASS-21, the Social Support Scale (SSS; i.e., perceived social support), the University Connectedness Scale (UCS; i.e., measures sense of belonging to the university), the Patient Health Questionnaire (PHQ; i.e., common mental disorders), and the Kessler 10 (i.e., non-specific psychological distress).

The results of this study showed that some of the categories causing the most stress were academic demands, the balance between academic work load and life, procrastination, and financial concerns. The scale had good internal consistency ($\alpha = .83$). There were significant positive correlations with the DASS-21 and the PHQ, and a significant, negative correlation with the SSS and UCS. Overall, the USS has 6 themes (academic, equity, relationships, parenting, practical, and health). The USS positively correlated with physical and psychological well-being

and demonstrated that a majority of students had clinical stress levels (Stallman & Hurst, 2016). While stress and pressure are distinct constructs, they are inherently related. Similar to the point made by Stallman and Hurst (2016) with stress, pressure can be considered positive unless there is too much of it and it becomes overwhelming. Since the constructs are so naturally similar, this study will expect to find that the scales positively correlate, thus demonstrating convergent validity for the accuracy of the Pressure to Succeed Scale.

Coping Style

Importantly, while almost every college student will endure the pressure to succeed, not every student will develop anxiety or depression. The actual response of students depends on their perception of the stressor (e.g., threat or challenge) and what styles of coping (e.g., adaptive coping [e.g., acceptance] or maladaptive coping [e.g., self-blame]) they use when solving a problem (Mahmoud et al., 2017). Mahmoud et al. (2017) explains that there are two forms of coping: adaptive and maladaptive. Individuals that are adaptive copers will analyze the threat or challenge they are presented with in order to problem solve and rectify the situation such that any resolutions are positive (Mahmoud et al., 2017). An example of adaptive coping could be, upon receiving a bad grade, seeing it as a chance to learn for the next project and using it to improve, rather than letting it contribute to negative feelings that the student has for their future success. However, maladaptive coping involves any actions that allow the individual to withdraw or avoid the difficult circumstances that their stressors present (Mahmoud et al., 2017). An example of maladaptive coping would be if, upon receiving a bad grade, the student internalized this as an example of how they cannot succeed, therefore increasing their anxiety and depression instead of using it to learn better for the next project. Whereas adaptive coping leads to positive adjustment, maladaptive coping can lead to anxiety and depression (Mahmoud et al., 2017).

Mahmoud et al. (2017) compared coping strategies to depression, anxiety, and life satisfaction using the Brief COPE Inventory (BCI), the DASS-21, and the Brief Students' Multidimensional Life Satisfaction Scale (BSMLSS). Mahmoud et al. (2017) found that maladaptive coping was the most powerful influence in the development of depression, anxiety, and stress. They also found that adaptive coping did not present as a significant correlate of depression, anxiety, or stress (Mahmoud et al., 2017).

For academic achievement, Flatt (2013) found that an inability to cope played a role in students with declining mental health. More specifically, while Flatt does not outline the exact subsets of coping (i.e., if it was adaptive or maladaptive), he does explain that students struggle to achieve the same grades in college that they had achieved in high school. Students could become overwhelmed by this perception that they are not as successful as they once thought themselves to be. Some students may even have an identity crisis stemming from their inability to live up to the perception they have of success (i.e., in terms of achieving the grades that they equate to success). In other words, students who use maladaptive coping, such as self-blame or denial, can develop anxiety or depression because of their failure to positively deal with the challenge in front of them. This failure crushes their sense of success rather than driving them to perform better later, as it would if they used adaptive coping. Students who grew up with the pressure to succeed struggle to cope with this perceived sense of egregious failure as they have been raised in an environment that stresses the importance of success in every aspect (Flatt, 2013).

Present Study

This study examined the relationship between college student pressure to succeed, mental health (i.e., depression, anxiety, stress), and coping style (i.e., adaptive, maladaptive). How

coping style moderates the relationship between pressure to succeed and mental health was also examined. This study used a self-made Pressure to Succeed Scale (PSS) based on the previously noted research identifying commonly student reported college environment stressors. In order to validate this scale, as it is newly developed, the USS was used to provide support for the PSS via convergent validity. The hypotheses were:

- H1: There will be a positive relationship between pressure to succeed (total score and subscales) and the USS.
- H2a: There will be a positive relationship between pressure to succeed (total score and subscales) and depression.
- H2b: There will be a positive relationship between pressure to succeed (total score and subscales) and anxiety.
- H2c: There will be a positive relationship between pressure to succeed (total score and subscales) and stress.
- H3: There will be a positive relationship between pressure to succeed (total score and subscales) and maladaptive coping.
- H4: There will be a negative relationship between pressure to succeed (total score and subscales) and adaptive coping.
- H5a: Pressure to succeed (total score and subscales) and depression will be moderated by coping style, where adaptive coping will reduce levels of depression and maladaptive coping will increase levels of depression.
- H5b: Pressure to succeed (total score and subscales) and anxiety will be moderated by coping style, where adaptive coping will reduce levels of anxiety and maladaptive coping will increase levels of anxiety.

- H5c: Pressure to succeed (total score and subscales) and stress will be moderated by coping style, where adaptive coping will reduce levels of stress and maladaptive coping will increase levels of stress.

Method

Participants and Procedure

Data were collected from 88 undergraduate college students from a small liberal arts college in the Northeast ($M_{age} = 19.45$). Seventy-six of the participants were female (77.6%) and 71 were White (72.4%; 3.1% Black or African American, 4.1% Hispanic or Latino/a, 5.1% Asian, 2% two or more, and 3.1% preferred not to answer). Majority of the participants were juniors (30.6%; first-years 27.6%, sophomores 19.4%, and seniors 12.2%). Participants were recruited from undergraduate psychology classes and data was collected across the fall and spring semesters for a total of four months. Students were guided to an online recruiting system by their course instructors. This system directed the students to the current study which they were able to take online at their convenience. Depending on the course they were in, their instructor may have offered extra credit in exchange for completing this study. Participation was voluntary and students were able to withdraw at any point. This study was approved by the University's Institutional Review Board and complied to all measures outlined by it.

Measures

Pressure to Succeed

The Pressure to Succeed Scale is a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). A high score on this scale denotes that the individual attributes intense feelings of distress with multiple variables on the scale, such as academic achievement, post-graduation expectations, extracurricular activities, friend relationships, family relationships, mental/physical

health, and total score. This distress would be largely connected to the perception that these variables are linked to the concept of having an overall “successful” image and life. A low score indicates that the individual does not associate these individual variables with their overall image of themselves as successful. The following were the Cronbach’s alpha for this study: academic achievement (0.69), post-graduate expectations (0.73), extracurricular activities (0.72), friend relationships (0.86), family relationships (0.78), mental/physical health (0.74), total score (0.86). See Appendix A.

Depression Anxiety Stress Scale-21 (DASS-21)

The DASS-21 contains 21 items designed to measure the emotional states of depression, anxiety, and stress (Lovibond & Lovibond, 1995). Each of the three subscales contains 7 items with similar content. The depression subscale evaluates, “dysphoria, hopelessness, devaluation of life, self-deprecation, lack of interest/involvement, anhedonia and inertia.” The anxiety subscale measures, “autonomic arousal, skeletal muscle effects, situational anxiety, and subjective experience of anxious affect.” Lastly, the stress subscale addresses “difficulty relaxing, nervous arousal, and being easily upset/agitated, irritable/over-reactive and impatient.” Each item is based on a 4-point Likert scale (0 = did not apply to me at all, 3 = applied to me very much or most of the time). The scores for each subscale can be calculated by adding the scores for the relevant 7 items. Severity of the individual’s depression, anxiety, or stress can range from “normal” to “extremely severe.” The DASS-21 has been shown to have a Cronbach’s alpha value ranging from 0.76 to 0.91 (Le et al., 2017). The following were Cronbach’s alpha for this study: depression (0.90), anxiety (0.86), stress (0.83), and total (0.94). See Appendix B.

University Stress Scale

The University Stress Scale contains 21 items designed to measure students' perception of stress around certain aspects of life. Some examples are academics, work, and relationships. To calculate the participant's "problem score," the researcher would calculate how many items in total were endorsed as causing stress at all. To find the "extent score," all the scores for each item are added. If the score is greater than or equal to 13, then this may indicate significant distress. Each item is based on a 4-point Likert scale (0 = not at all, 3 = constantly). The scale has been shown to have a Cronbach's alpha of 0.83 (Stallman, 2008; Stallman & Hurst, 2016). Cronbach's alpha in study was 0.84. See Appendix C.

Brief COPE Scale

The Brief COPE Scale contains 28 items pertaining to 14 subtypes of coping methods: active coping, planning, positive reframing, acceptance, humor, religion, using emotional support, using instrumental support, self-distraction, denial, venting, substance use, behavioral disengagement, and self-blame (Carver, 1997). Individuals rate how well they identified with a statement on a 4-point Likert scale (0 = I haven't been doing this at all, 3 = I have been doing this a lot). The scores for each statement are matched with either adaptive (active coping, planning, positive reframing, acceptance, humor, religion, using emotion support, using instrumental support, self-distraction) or maladaptive coping (denial, venting, substance use, behavioral disengagement, and self-blame). Higher scores in either adaptive or maladaptive coping represent that the individual uses the specified coping style more often. The Brief COPE Scale has been shown to have a Cronbach's alpha value of .88 for the adaptive coping scale and .81 for the maladaptive coping scale (Mahmoud et al., 2017). Cronbach's alphas in this study for adaptive coping was 0.84 and maladaptive coping was 0.66. See Appendix D.

Results

The mean scores and standard deviations for all measures, including subscales, are provided in Table 1.

Relationships Between Pressure to Succeed, Mental Health Distress, and Coping

In order to test the relationships between pressure to succeed, mental health distress, and coping, this study calculated Pearson correlation coefficients. The results of these calculations can be seen in Table 2. The PSS had a significant positive relationship with the DASS-21 (as well as its subscales: depression, anxiety, and stress), the USS, and maladaptive coping. The subscales of the PSS also had a significant positive relationship with depression, anxiety, stress, the USS, and maladaptive coping, with the exception of family relationships with anxiety and extracurricular activities with maladaptive coping. As the PSS and the USS both measure stressors in students' lives, but in different nuances, their significant positive correlation provides convergent validity for the newly developed PSS. There was no significant relationship found between the PSS and adaptive coping.

Coping as a Moderator Between Pressure to Succeed and Mental Health Distress

Stepwise multiple regression moderator analyses were conducted to determine the impact of coping on the relationship between the pressure to succeed and mental health distress as measured through the PSS and DASS-21. Tables 3 shows each of these models with PSS as the predictor variable, maladaptive coping used as a moderator, and the mental health distress variables as the criterion variables. (Adaptive coping was not included in the moderator analyses because correlations did not show any initial relationship with the other variables.) Although all of the models were statistically significant, maladaptive coping did not have a significant moderator effect on mental health distress. Post hoc analyses were also done with the PSS

subscales and DASS-21 total score, which did not yield moderator effects with the exception of maladaptive coping having a moderator effect on stress and the DASS-21 total when the PSS subscale post-graduation expectations was used as the predictor variable.

Discussion

The current study was conducted with the aim of finding support for a relationship between the pressure to succeed, mental health distress, and coping. Hypothesis one, that there will be a positive relationship between the Pressure to Succeed Scale (PSS; total score and subscales) and the University Stress Scale (USS), is supported. The second hypothesis had several parts. Hypothesis 2a, that there will be a positive relationship between pressure to succeed (total score and subscales) with depression, was supported. Hypothesis 2b, that there will be a positive relationship between pressure to succeed (total score and subscales) with anxiety, was supported, with the exception of the family relationships subscale and anxiety. Hypothesis 2c, that there will be a positive relationship between pressure to succeed (total score and subscales) with stress, was supported. Hypothesis three, that there will be a positive relationship between pressure to succeed (total score and subscales) and maladaptive coping, was supported. Hypothesis four, that there will be a negative relationship between pressure to succeed (total score and subscales) with adaptive coping was not supported. Lastly, hypotheses 5a, 5b, and 5c, that the pressure to succeed (total score and subscales) and depression, anxiety, and stress, respectively, would be moderated by coping style where adaptive coping will reduce levels of anxiety and maladaptive coping will increase levels of anxiety, was not supported.

A central component to this study is the PSS. This scale was developed for the purposes of this study. While the phenomenon of the pressure to succeed is well known in sociology, it is not necessarily well known in the field of psychology and thus did not have an existing scale

available. With intensive research, this scale was developed to bring a psychological perspective to this construct. However, the scale is unvalidated. To support our findings, we also incorporated the USS. The USS is a scale that measures a students' perception of stress around certain aspects of life. It is similar to the PSS as it measures the amount of stress a student feels as well as highlights areas where this stress is most potent. While the PSS is different as it measures each of these high stress items in the frame of current and future perceptions of success (not just individually the task itself), the concepts are similar enough that a high correlation would provide convergent validity for the PSS. As hypothesis one shows, this positive relationship was supported. Not only this, but it had a correlation coefficient of .71, showing that there is strong convergent validity, supporting the results of the PSS. Similarly, though, the correlation coefficient is not too high, showing that the scales, while related, are independent and discriminate to their own constructs.

As hypotheses 2a, 2b, and 2c were supported, it is clear that the pressure to succeed, and its various subscales, are related to anxiety, depression, and stress. Since these are correlations, we are not able to determine if it necessarily causes mental distress, but it does show support that the environment itself exists and some aspect of it, or related to it, is negatively associated with mental health. Beiter et al. (2015) described how the pressure to succeed, and other issues that this study used for subscales of the pressure to succeed (e.g., academic performance, post-graduation plans, relationships with friends and family, and overall health), were named as stressors by students and how each had a significant positive correlation with depression, anxiety, and stress. The current study confirms these results with each PSS subscale, as well as the total, significantly correlating with the DASS-21 total. The results also support more specific studies that found individual variables (i.e. the Pressure to Succeed subscales) could lead to

mental distress. Flatt (2013) found that grades correlated to distress, especially as students felt that the competitive environment they were in led them to feeling as if they have fallen short of success. Pisarik et al. (2017) discovered students felt pressure from multiple outputs to succeed quickly after graduation. Melman et al. (2007) found that overscheduling extracurriculars correlated with increased rates of anxiety. Priest (2013) found that perceived poor quality relationships with friends and family could also cause mental distress. Lastly, Pedrelli et al. (2015) and Jao et al. (2019) explain how mental health most often develops before 25 (i.e. around the age an individual would be attending college) and how mental and physical health issues can exacerbate one another. Pederson et al. (2017) further explains how when stress from one aspect of an individual's life becomes overwhelming, it "spills" into other aspects, including mental and physical health. All of these studies use terminology that is often representative of a larger concept. While measured individually, these variables, in today's environment, can be connected back to these perceptions of success and idealized images of how students should be. The current study took the results of these studies and demonstrated how they can be connected to a broader theme—the pressure to succeed.

As hypothesis three demonstrates, it is also clear that maladaptive coping seems to relate to the pressure to succeed variables, with the exception of extracurricular activities. Thus, maladaptive coping seems to be common in environments where individuals face pressure to succeed variables. This could further contribute to anxiety, depression, and stress, as hypothesis one shows us that there is a relationship between this distress and the pressure to succeed variables. The current study aligns well with the findings of Mahmoud et al. (2017) who found that, when measuring life satisfaction, anxiety, depression, and stress (using the same scale: DASS-21), and coping (using the same scale: Brief COPE), maladaptive coping was the most

powerful influence in the development of depression, anxiety, and stress. While the current study found no moderating effects and therefore cannot say that maladaptive coping was an exacerbating influence, it is clear maladaptive coping contributes to mental distress in anxiety inducing situations.

Hypothesis four was not supported which states that the pressure to succeed will have a negative relationship with adaptive coping. There was found to be no significant relationship with adaptive coping with the exception of friend relationships. Even for this variable though, the relationship is very weak with a correlation coefficient of .23. Thus, while, overall, adaptive coping may not alleviate the pressure to succeed variable, it also does not contribute to it as maladaptive coping does. Interestingly, Mahmoud et al. (2017) also found that adaptive coping was not a significant correlate of depression, anxiety, or stress. It is plausible that the pressure to succeed construct is so pervasive that there are stronger interventions needed than just adaptive coping. Since the pressure to succeed construct has not been researched much in the psychological field, there would need to be more data to support any further hypotheses of why this relationship was unsupported and what other interventions may alleviate the variables.

Hypothesis 5a, 5b, and 5c were not supported. As adaptive coping was not found to have a significant relationship with the pressure to succeed, it cannot act as a moderator for the relationship between the pressure to succeed and depression, anxiety, and stress. As maladaptive coping was also not supported as a moderator between the pressure to succeed and depression, anxiety, and stress, maladaptive coping is not found to further exacerbate the mental distress, with the exception of the moderator effect it has on post-graduation expectations with stress and the DASS-21 total. It is possible that, similar to hypothesis four, the pressure to succeed environment is so strong that maladaptive coping is not necessarily influencing the relationship

enough for there to be a significant difference. It is also possible that the sample size was too small. This could explain why some of the results did not present moderation—because with a larger sample size there may have been more substantial evidence of moderation. It could also possibly explain the exceptions—with such a small sample size, it is possible that these were idiosyncrasies that may be changed with a larger sample size. Overall, coping did not have a significant moderator effect on the pressure to succeed variables’ relationship to mental distress.

Limitations

As this study uses correlational analyses, it is not within the confines of this study to predict causality. Therefore, it could be that anxious, depressed, and stressed individuals are less able to prioritize and place more pressure on themselves to do well across many categories. Or it could be that the pressure to do well at so many aspects of life at once contributes to feelings of anxiety, depression, and stress. It also could be other variables not present in the study. For example, it is possible that a person who has “helicopter” parents feels more pressure and more stress—so they correlate but in and of themselves are unrelated in causality. This could be studied in a future replication of this research. Generalizability of the results is limited to liberal arts colleges students, who are primarily white, middle-class females from the New England area. Thus, the study could be repeated in future to see if there are cultural differences in correlations of anxiety, depression, stress, coping, and the pressure to succeed. Lastly, the PSS used in this research is not validated. Due to limited resources, there was not a way to conduct a pilot study. However, to better validate the scale, we also included the USS, which is validated. These two scales did have a strong positive correlation, which supports the convergent validity for the PSS.

Research Implications

The construct of “pressure to succeed” is one that has not been explicitly defined and examined in previous literature. While other studies have researched different facets of the construct, the overarching pressure that college students experience has not been studied in depth. Thus, with such little research available, the study should be replicated for validity. It would also be beneficial to run further tests confirming the PSS itself, as the current study used convergent validity with the USS. While the results are reliable, further research may modify the scale to be even more accurate.

More so, the study could be expanded to examine how pressure to succeed correlates with other disorders. The current study examines how pressure to succeed relates to depression, anxiety, and stress in a general sense. Future studies could delve more specifically into different anxiety disorders, such as generalized anxiety disorder, panic disorder, and social anxiety disorder. Building on these studies, the results could be compared to see which disorders yield the most severe results which may be important for clinical implications. It also may be helpful to delve into other disorders that are common with college students, such as eating disorders. By doing so, researchers can better understand how pressure manifests in young adults.

As noted in the limitations of the current study, most of the participants were white, American females. Therefore, it may be valuable to replicate the study with more diverse populations. Cultural differences may affect the rates and severity of depression, anxiety, and stress. It also may affect the success of adaptive coping and/or the impact of maladaptive coping. For example, Hoffmann et al. (2010) found that the prevalence rate of social anxiety disorder in a U.S. sample was much higher than in samples drawn from Asian countries. In other studies, it is clear that depressive symptoms are more prevalent in African American and Hispanic adults than

in Whites (Dunlop et al., 2003). Thus, since prevalence rates of certain disorders can vary by culture, it is important to capture the differences of such cultures in order to understand the elements of the environment that most exacerbate symptoms of distress. The study could also expand to study this intergenerationally. For example, are adults who have graduated college also being affected by this in their job environments, even if it manifests differently as they are not in school?

Lastly, while maladaptive coping seemed to play some role in the pressure to succeed due to the strong significant positive relationship, adaptive coping did not have a significant role. Therefore, while it did not contribute to the pressure to succeed, it also did not alleviate it. It would be interesting to research if certain therapies or other such interventions would better serve to alleviate mental distress caused by the pressure to succeed.

Clinical Implications

The current study enables universities to provide proactive prevention programming for their students to reduce the rates and severity of depression, anxiety, and stress. Universities can commit to early intervention for their students by building mental health programs into orientation, part of which would be to teach proper coping skills. Freshmen often enter college unsure of what to expect. Even worse, some enter with an idealized image of college that does not match the reality that they come to understand. Overall, they are underprepared to deal with the pressures of the college environment. While this has always been the case, with the growing “pressure to succeed” phenomenon, the ability to cope with this experience may be increasingly more difficult. By informing students of the coming pressures and giving them specific skills by which they can improve their college experience and mental health, colleges can help students become more self-sufficient in their ability to cope with their stressors. While adaptive coping

did not show to have a significant negative relationship with the pressure to succeed, it also did not seem to contribute to the pressure to succeed environment as maladaptive coping does. More so, should the environment be addressed, it may be easier to identify those struggling and have them come in for counseling. Should further studies find good moderators for the mental distress caused by the pressure to succeed, this could also augment the program.

By researching pressure to succeed as an overarching concept, counselors can better address the concerns of their clients. If a counselor believes that a client is concerned about just academics or just social relationships, but is unable to connect it to the overall anxiety of meeting an unreachable perception of success, their work in therapy will be incomplete. Thus, this research and further research into the topic may help counselors specify target areas and help them connect it to the bigger picture of the client's problem.

Overall, there also needs to be change on a societal level. When institutions are constantly pushing the idea that students must excel at everything to succeed at anything, then of course perceptions of success will overwhelm the growing brains in these young adults. The pressure that has been building since the economic crisis in the 2000s is not imaginary, but an environment that continues to grow. There needs to be a fundamental shift in cultural expectations of success for young adults in the United States. One way to begin this shift is to bring to light that the environment itself exists as a phenomenon.

Conclusion

This study set out with the intent of examining the relationships between pressure to succeed, depression, anxiety, stress, and coping. While previous studies have not really begun to explore the pressure to succeed, many have found support for individual variables of stress. By compiling commonly cited stressors and possible reasons for why they cause stress, we created

the pressure to succeed scale, transforming these variables into a larger construct. Through multiple surveys including the newly constructed PSS, the USS (used for convergent validity), the DASS-21, and the Brief COPE survey, this study found support for this new phenomenon. Specifically, positive relationships were supported between the pressure to succeed with the USS, with depression, anxiety, and stress, and with maladaptive coping. However, we did not find support for any relationship between pressure to succeed and adaptive coping nor for coping as a moderator between the pressure to succeed and depression, anxiety, and stress. While this study has provided support for the pressure to succeed environment, the new phenomenon is understudied, and thus future studies could further attend to the newly created scale or replicate the study with different disorders, such as eating disorders, among other topics. With rising anxiety and depression rates in college students, it would be beneficial to incorporate education about proper coping skills, as maladaptive coping was found to positively correlate with the pressure to succeed and with the DASS-21. Importantly, as this is the new environment as well, there should be awareness brought to this phenomenon in hopes for societal change to reduce the effects of the environments on college students.

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Table 1.

Range and Mean Scores for all Study Measures

	Range	Mean (SD)
Pressure to Succeed Scale		
PSS Academic Achievement	11	15.39 (2.661)
PSS Post Graduation Expectations	12	11.22 (2.522)
PSS Extracurricular Activities	16	12.25 (3.241)
PSS Friend Relationships	16	13.51 (3.653)
PSS Family Relationships	11	8.45 (2.880)
PSS Mental and Physical Health	16	13.29 (3.736)
PSS Total	69	74.11 (12.038)
DASS-21 Scale		
Stress	20	15.78 (4.760)
Anxiety	21	12.80 (4.871)
Depression	21	13.91 (5.225)
DASS-21 Total	55	42.49 (13.238)
Cope Positive	43	41.47 (10.195)
Cope Negative	23	18.13 (5.105)
USS Total	37	41.14 (9.321)

Table 2.

Pearson Correlation Coefficients of the Pressure to Succeed Scale with the DASS-21, the USS, and coping

	Pressure to Succeed Scales						Total
	Academic Achievement	Friend Relationships	Post-Graduation Expectations	Extracurricular Activities	Family Relationships	Mental/Physical Health	
Depression	0.333**	0.388**	0.458**	0.362**	0.392**	0.655**	0.681**
Anxiety	0.300**	0.311**	0.336**	0.351**	.188	0.536**	0.536**
Stress	0.389**	0.373**	0.341**	0.304**	0.373**	0.505**	0.598**
DASS-21	0.382**	0.402**	0.427**	0.381**	0.358**	0.638**	0.681**
Total							
USS	0.433**	0.425**	0.409**	0.367**	0.519**	0.564**	0.707**
Maladaptive coping	0.253*	0.329**	0.367**	0.207	0.345**	0.517**	0.529**
Adaptive coping	-0.002	0.233*	0.058	0.168	0.113	0.092	0.183

*Note. * denotes significance at .05 level*

*** denotes significance at .01 level*

Table 3

Maladaptive coping as Moderator between PSS Total (IV) and DASS-21(DV)

	R^2	F	B	t	p
Model 1 (Depression)	0.56	37.86**			
PSS total			2.63	5.70	0.00
Maladaptive coping			1.82	3.89	0.00
PSS total x maladaptive coping			0.52	1.45	0.15
Model 2 (Anxiety)	0.40	20.05**			
PSS total			0.13	3.08	0.03
Maladaptive coping			0.39	3.89	0.00
PSS total x maladaptive coping			0.30	0.76	0.45
Model 3 (Stress)	0.50	30.08**			
PSS total			0.15	4.01	0.00
Maladaptive coping			0.41	4.56	0.01
PSS total x maladaptive coping			0.30	0.86	0.39
Model 4 (Total)	0.62	47.99**			
PSS total			0.50	5.50	0.00
Maladaptive coping			1.16	5.33	0.00
PSS total x maladaptive coping			1.11	1.32	0.19

Note. ** $p < 0.01$

Appendix A

Pressure to Succeed Scale

Below are a series of statements that refer to a person's feelings about different aspects of their life in relation to their perception of success. Please indicate how much the statement applies to you using the provided scale [1(strongly disagree) to 5(strongly agree)].

Academic Achievement

1. I feel that a bad course grade may ruin my future chances at career success.

Strongly Disagree Disagree Neutral Agree Strongly Agree

2. I feel high levels of stress and anxiety when I receive a bad course grade.

Strongly Disagree Disagree Neutral Agree Strongly Agree

3. I feel as though I need to get an A in my courses in order to be successful.

Strongly Disagree Disagree Neutral Agree Strongly Agree

4. I find it difficult to prioritize my work and social life because of the emphasis I place on succeeding in every course.

Strongly Disagree Disagree Neutral Agree Strongly Agree

Post-Graduation Expectations

5. I worry that I will not have a career that is both monetarily successful and that makes me feel happy and fulfilled.

Strongly Disagree Disagree Neutral Agree Strongly Agree

6. I am concerned that I am not doing enough to achieve my post-graduation plans.

Strongly Disagree Disagree Neutral Agree Strongly Agree

7. I worry that I will not be able to achieve the career goals that I have set for myself.

Strongly Disagree Disagree Neutral Agree Strongly Agree

Extracurricular Activities

8. I participate in extracurriculars for resume building rather than enjoyment.

Strongly Disagree Disagree Neutral Agree Strongly Agree

9. I participate in extracurriculars because it makes me feel as if I have a successful social life.

Strongly Disagree Disagree Neutral Agree Strongly Agree

10. I feel as if I must participate in extracurriculars in order to succeed in my future post-graduate/career plans.

Strongly Disagree Disagree Neutral Agree Strongly Agree

11. I feel that I must participate in extracurriculars in order to not “miss out” on possible social interactions.

Strongly Disagree Disagree Neutral Agree Strongly Agree

Friend Relationships

12. I feel as if I am failing to give enough attention to my friendships.

Strongly Disagree Disagree Neutral Agree Strongly Agree

13. I feel that my social life falls short of what I would like it to be.

Strongly Disagree Disagree Neutral Agree Strongly Agree

14. I feel as if I should be socializing more.

Strongly Disagree Disagree Neutral Agree Strongly Agree

15. I feel as if I should have more friends than I do.

Strongly Disagree Disagree Neutral Agree Strongly Agree

Family Relationships

16. I feel as if I am failing to give enough attention to my family.

Strongly Disagree Disagree Neutral Agree Strongly Agree

17. I feel that I am letting my family down if I am too busy to spend time with them.

Strongly Disagree Disagree Neutral Agree Strongly Agree

18. I worry that my relationship with my family is not strong enough.

Strongly Disagree Disagree Neutral Agree Strongly Agree

Mental/Physical Health

19. I feel that I often experience symptoms of depression (e.g., feeling sad, no longer enjoying pleasurable activities, low energy, feeling guilty or worthless).

Strongly Disagree Disagree Neutral Agree Strongly Agree

20. I feel that I often experience symptoms of anxiety (e.g., frequent worrying, difficulty concentrating, irritability, muscle tension).

Strongly Disagree Disagree Neutral Agree Strongly Agree

21. I feel that I often have trouble sleeping.

Strongly Disagree Disagree Neutral Agree Strongly Agree

22. I engage in risky behavior, such as substance use (including alcohol), activities that put me at risk for physical harm, and/or risky sexual behavior.

Strongly Disagree Disagree Neutral Agree Strongly Agree

Appendix B

DASS21

Please read each statement and circle a number 0, 1, 2 or 3 which indicates how much the statement applied to you over the past week. There are no right or wrong answers. Do not spend too much time on any statement.

The rating scale is as follows:

- 0 Did not apply to me at all
- 1 Applied to me to some degree, or some of the time
- 2 Applied to me a considerable degree or a good part of time
- 3 Applied to me very much or most of the time

1(s)	I found it hard to wind down	0	1	2	3
2(a)	I was aware of dryness of my mouth	0	1	2	3
3(d)	I couldn't seem to experience any positive feeling at all	0	1	2	3
4(a)	I experienced breathing difficult (e.g. excessively rapid breathing, breathlessness in the absence of physical exertion)	0	1	2	3
5(d)	I found it difficult to work up the initiative to do things	0	1	2	3
6(s)	I tended to over-react to situations	0	1	2	3
7(a)	I experienced trembling (e.g. in the hands)	0	1	2	3
8(s)	I felt that I was using a lot of nervous energy	0	1	2	3
9(a)	I was worried about situations in which I might panic and make a fool of myself	0	1	2	3
10(d)	I felt that I had nothing to look forward to	0	1	2	3
11(s)	I found myself getting agitated	0	1	2	3
12(s)	I found it difficult to relax	0	1	2	3
13(d)	I felt down-hearted and blue	0	1	2	3
14(s)	I was tolerant of anything that kept me from getting on with what I was doing	0	1	2	3

15(a)	I felt that I was close to panic	0	1	2	3
16(d)	I was unable to become enthusiastic about anything	0	1	2	3
17(d)	I felt that I wasn't worth much as a person	0	1	2	3
18(s)	I felt that I was rather touchy	0	1	2	3
19(a)	I was aware of the action of my heart in the absence of physical exertion (e.g. sense of heart rate increase, heart missing a beat)	0	1	2	3
20(a)	I felt scared without any good reason	0	1	2	3
21(d)	I felt that life was meaningless	0	1	2	3

Appendix C

University Stress Scale

How often have each of the following caused you stress over the past month? If any are not applicable to you, tick *Not at all*.

	Not at all 0	Sometimes 1	Frequently 2	Constantly 3
1. Academic/coursework demands				
2. Procrastination				
3. University/college environments				
4. Finances and money problems				
5. Housing/accommodation				
6. Transport				
7. Mental health problems				
8. Physical health problems				
9. Parenting issues				
10. Childcare				
11. Family relationships				
12. Friendships				
13. Romantic relationships				
14. Relationship break-down				
15. Work				
16. Parental expectations				
17. Study/life balance				
18. Discrimination				
19. Sexual orientation issues				
20. Language/cultural issues				
21. Other demands				

Appendix D

The Brief COPE

Circle the response that applies to you most (0 = *I haven't been doing this at all*, 1 = *I haven't done this often*, 2 = *I have been doing this a little*, 3 = *I have been doing this a lot*):

- | | |
|--|---------|
| 1. Active Coping | |
| I've been concentrating my efforts on doing something about the situation I'm in. | 0 1 2 3 |
| I've been taking action to try to make the situation better. | 0 1 2 3 |
| 2. Planning | |
| I've been trying to come up with a strategy about what to do. | 0 1 2 3 |
| I've been thinking hard about what steps to take. | 0 1 2 3 |
| 3. Positive Reframing | |
| I've been trying to see it in a different light, to make it seem more positive. | 0 1 2 3 |
| I've been looking for something good in what is happening. | 0 1 2 3 |
| 4. Acceptance | |
| I've been accepting the reality of the fact that it has happened. | 0 1 2 3 |
| I've been learning to live with it. | 0 1 2 3 |
| 5. Humor | |
| I've been making jokes about it. | 0 1 2 3 |
| I've been making fun of the situation. | 0 1 2 3 |
| 6. Religion | |
| I've been trying to find comfort in my religion or spiritual beliefs. | 0 1 2 3 |
| I've been praying or meditating. | 0 1 2 3 |
| 7. Using Emotional Support | |
| I've been getting emotional support from others. | 0 1 2 3 |
| I've been getting comfort and understanding from someone. | 0 1 2 3 |
| 8. Using Instrumental Support | |
| I've been trying to get advice or help from other people about what to do. | 0 1 2 3 |
| I've been getting help and advice from other people. | 0 1 2 3 |
| 9. Self-Distraction | |
| I've been turning to work or other activities to take my mind off things. | 0 1 2 3 |
| I've been doing something to think about it less, such as going to the movies, watching TV, reading, daydreaming, sleeping, or shopping. | 0 1 2 3 |
| 10. Denial | |
| I've been saying to myself "this isn't real." | 0 1 2 3 |
| I've been refusing to believe that it has happened. | 0 1 2 3 |
| 11. Venting | |
| I've been saying things to let my unpleasant feelings escape. | 0 1 2 3 |
| I've been expressing my negative feelings. | 0 1 2 3 |
| 12. Substance Use | |
| I've been using alcohol or other drugs to make myself feel better. | 0 1 2 3 |
| I've been using alcohol or other drugs to help me get through it. | 0 1 2 3 |

13. Behavioral Disengagement

I've been giving up trying to deal with it.

0 1 2 3

I've been giving up the attempt to cope.

0 1 2 3

14. Self-Blame

I've been criticizing myself.

0 1 2 3

I've been blaming myself for things that happened.

0 1 2 3