

Stress Management in College Students: Why Journaling is the Most Effective Technique for  
this Demographic

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### **Abstract**

Stress is a major health problem that faces college students today. There are many stress management techniques that get attention in the media or become popular in the form of “fads,” but journaling is one technique that goes underappreciated. This thesis will be an in-depth literature review that aims to show the effectiveness of journaling as a stress management technique among college students. Journaling will be comprehensively analyzed in order to determine the factors that make it more effective than other techniques. Other techniques that will be examined in comparison to journaling include meditation, exercise and therapy. Some factors that will be used in the examination of these techniques are cost, accessibility, convenience and overall effectiveness. The implications of this research will be applicable to all college campuses in implementing stress reduction initiatives, and in promoting overall positive well-being for their students.

Keywords: Communication Studies, Stress Management, Journaling

College students are especially vulnerable to high levels of stress when compared to the rest of the population as college life grows more stressful than ever before (Gross, 2019). There are various academic, interpersonal, and environmental stressors that college students face on a daily basis. The near-constant state of stress that students live in is detrimental to their health and requires conscious efforts to change. So, how can college students effectively manage all of this stress?

In this paper, it is proposed that the most effective form of stress management for college students is journaling. Journaling is a broad category, which can take many different forms, but the three kinds of journaling that will be examined in this paper are expressive writing, gratitude journaling, and visual journaling. In order to comprehensively analyze journaling, factors such as cost, accessibility and convenience will be taken into account. Other stress management techniques like exercise, yoga and mediation will be examined as well to ensure that journaling is not only effective, but the most effective of all the techniques when it comes to the demographic of college students.

### **Stressors that College Students Face**

Why are college students so stressed? First, they have to worry about their academics (Villanova & Bownas, 1983). Most universities require 120 credits to graduate at the undergraduate level, which evens out to roughly 15 credits per semester. Most students around this course-load end up with roughly 37.5 to 50 hours of outside work plus contact time a week (SUNY New Paltz. n.d.). That's more of a time commitment than some full-time jobs. Additionally, the pressure coming from parents, faculty (and even peers) to perform well can be

overwhelming (Villanova & Bownas, 1983). This pressure is especially prevalent for individuals who need to maintain a certain GPA to keep their scholarships, campus jobs, and/or their place in certain programs. Academic stressors can also be more severe for individuals who have learning disabilities that require extra time or resources to stay on track (Heiman, 2006). Additional anxiety can stem from a fear of failing to perform up to the standards students set for themselves.

Though it may be the first that comes to mind, academic stress is not the only kind of stress that students face—many students also face the added pressure of having a job. According to a report from the Georgetown University Center on Education and the Workforce in 2015, 14 million students are working while they are enrolled in college. From the sample population in this report, that was 70% of college students. The report also found that nearly 40% of college students worked 30 hours a week or more, making them full-time employees (PRWeb Newswire, 2015). And the part time workers can still average out around 20 hours a week, which is a considerable time commitment. Purely from a time standpoint, student workers often face burnout and exhaustion. For these students it can feel like there aren't enough hours in the day to get everything done.

In addition to the stressors of academics and work, interpersonal stressors also contribute to the stress experienced by college students (Villanova & Bownas, 1983). Whether it's roommates, romantic partners, friends, or family, the stress that can come from these relationships is overwhelming. Tensions can rise, fights can erupt, and the toll that conflicts take can weigh heavily on students' minds. Stressors can come from situations that don't involve conflict too. When a loved one gets sick or goes through a traumatic event like the loss of a job, the stability that the student once had is pulled out from under them. They have to channel their

time and energy into helping their loved one, and providing care and comfort that can come at great cost to their own physical and emotional well-being.

Environmental stressors should not be overlooked either when it comes to understanding the full nature of stress in college students. Living away from home for the first time and navigating life as an independent adult has its challenges (Villanova & Bownas, 1983). Learning how to coexist with roommates who have drastically different habits, living in dorm style buildings where noise and disruption are constant, and eventually having to find off-campus housing are all situations that cause stress. For students whose housing proves to be unreliable (or unaffordable), searching for a new place to live mid-year is an unpleasant reality. In times such as the one we find ourselves in today, the disruption to normal scheduling can also play a large role in the lives of college students.

As described above, academics, work, interpersonal relationships and the college environment can cause stress for college students today. Even for people with the healthiest relationships and most stable living conditions, problems are inevitable. This means that even in seemingly ideal conditions nobody is immune to the likelihood of stressful scenarios arising. Therefore, it's crucial that effective stress management techniques are made known to this demographic of people in order to protect them from the adverse effects of stress.

In order to fully understand why stress management techniques are needed, it is important to understand how stress affects the body. One central aspect of the body's response to stress comes down to the nervous system. The sympathetic and parasympathetic nervous systems work in conjunction under normal conditions (Brannon, Feist & Updegraff, 2014). There is a balance between the two that helps us function properly. However, under stressful situations, they act

differently. The sympathetic nervous system, which controls how our body reacts to threats or perceived danger, takes over. This activates a “fight-or-flight” response and shuts down the “rest-and-digest” functions of the body. These conditions served an evolutionary purpose in the past to help homo-sapiens effectively escape from the threat of danger, but in the modern world, it is often problematic.

For individuals who experience chronic stress, the parasympathetic nervous system has a hard time reactivating and returning the body to its normal resting state. This means they go about their days with their body in “flight-or-flight” mode. The chemicals secreted by the adrenal glands during this time -- cortisol, epinephrine, norepinephrine -- all continue to be secreted. When the body produces these chemicals for too long it can be damaging. As discussed by Sapolsky (1996), prolonged exposure to glucocorticoids, adrenal steroid hormones, have been found to negatively affect the hippocampal area of the brain. High levels of stress have also been linked with hippocampal atrophy and decreased hippocampal functioning (Lupien & Lepage, 2001). This decreased function can lead to significant impairment of memory and cognition. This type of brain matter and brain function alteration is especially dangerous to adolescents and young adults, whose brains are not yet fully matured (Arain et al., 2013). This is why we need to make sure that students have the coping mechanisms they need to process their stressors and manage the effects of their stress.

### **Stress Management**

Given what is known about the negative effects of stress on the body, it's paradoxical that our society doesn't give enough attention to it. Despite the abundance of research on stress management, people are still encouraged to "push through it." Mental and physical health are

pushed to the wayside in an effort to avoid seeming weak or needing help. This is something that can be fixed. There are countless stress management techniques available, more than enough to find one that works for every individual.

In an article by Varvogli and Darviri (2011), ten different techniques were selected and outlined including (but not limited to) progressive muscle relaxation, guided imagery, mindfulness-based stress reduction, and diaphragmatic breathing, cognitive behavioral therapy, and transcendental meditation. It is important to note that these techniques do not have to be utilized as a last resort once stress gets out of hand. Stress management techniques can be extremely effective when incorporated into the daily lives of average, healthy people. When incorporated in this way, stress management techniques can be a valuable intervention that contributes to health enhancement and protection over the life span (Varvogli & Darviri, 2011).

Similarly, Almen et al. (2019) studied the effects of behavioral stress recovery management intervention on individuals who perceived themselves to be under large amounts of stress and found that they were effective in stress management. Conceptualized by Almen et al. as the psychophysiological deactivation, which occurs after an individual expends effort in stress scenarios, stress recovery functions to replenish the resources which were depleted during the time of high stress (2019). In this study, individuals were given therapy sessions with a psychologist trained in cognitive behavioral therapy and asked to keep a journal of their recovery behaviors. Some examples of the categories of recovery behavior which were discussed in this study included physical activity, relaxation, social interaction, reading, and playing games. Almen et al. (2019) hypothesized that engaging in recovery behaviors would be related to a decrease in stress, tension and burnout. Their results showed that these techniques were effective

in managing stress, and demonstrated that there was a basis for future research stress management research.

### **Journaling as an Effective Stress Management Technique for College Students**

The stress management technique that this paper proposes as most effective for college students is journaling. There are many approaches to journaling, but this paper will focus on three types, which I propose are particularly effective for college students: expressive writing, gratitude journaling, and visual journaling. A large body of research supports the effectiveness of these techniques and they will be outlined in detail below. In addition to the effectiveness of these techniques, they are also low effort, require no cost, and require no training to do correctly. The accessible and effective nature of journaling is what makes it such an attractive option for college students. They can bring a journal with them on the go, write for however long they would like to, and choose to journal in any format they prefer.

#### **Expressive Journaling**

The first type of journaling that this paper will focus on is expressive writing. This type of journaling involves the act of emotional disclosure through uncensored, unscripted, and unedited writing. The act of expressive writing can be very helpful in working through stressful situations because it allows the individual to explore the topic and delve deeper into what is bothering them. This type of journaling can come with some form of direction, which prompts the writer to think about deep and emotional experiences. There are no worries about writing the “right” thing, only a focus on writing what comes naturally. This can be done for any length of time, however long feels right for that individual.

There is much existing research that looks to study expressive writing and its positive effects. James Pennebaker was one psychologist in particular who was interested in studying writing as a therapeutic process. Pennebaker looked specifically into the effects of writing about emotional experiences. In writing about the act of disclosure through writing, Pennebaker refers to it as “a powerful therapeutic agent that may account for a substantial percentage of the variance in the healing process” (Pennebaker, 1997). As discussed in many of his writings, the significance of disclosure can not be understated when it comes to the healing process. After going through a traumatic event, the act of disclosing that experience through writing has been linked to better health outcomes than keeping the trauma a secret (Pennebaker & Susman, 1988).

Expressive writing can be especially beneficial for college students. First year students, in particular, may benefit from expressive writing because they are generally more vulnerable to intense feelings of stress, anxiety and loneliness after entering a new environment. Their physical and psychological health can suffer as a result, and they need a method of coping that can help them overcome these negative effects. Expressive writing provides them a healthy outlet to do so.

Pennebaker, Colder and Sharp (1990) investigated this phenomenon by studying how writing affected the coping process for first-semester freshmen who had just entered college. In this study, the one hundred and thirty participants were all in their first-semester of college. Each participant was assigned to either the control group or the experimental group. The control group was asked to write about superficial topics while the experimental group was asked to write about their deepest thoughts and feelings regarding their experience coming to college. The participants were also split into four waves, each wave participating at a different time period

during that first semester. Both groups were instructed to continuously write for 20 minutes per day in a three-day period. Results of this study showed that participants in the experimental condition had fewer visits to the health center for illness than those in the control condition in the 4 to 5 months following their journaling wave. Moreover, participants in the experimental condition reported understanding themselves better in terms of their thoughts, moods and behaviors (Pennebaker et. al, 1990). These results show that there is a significant relationship between emotional disclosure and promoted health.

Expressive writing, such as the kind discussed above, is a form of journaling well-suited for college students. With all the stress they have in their daily lives, it's only natural that students should become overwhelmed and emotional. Having an outlet for the expression of these deep emotions is something that could be very beneficial to them. Engaging in this type of journaling had been found to be related to positive health outcomes, as discussed by Pennebaker (1997) and Pennebaker et al. (1990). This method of journaling could also be especially helpful to college students who feel like nobody else would understand -- or properly respond to -- their trauma or emotion. This applies to students who don't like talking to others about their problems, students who don't feel they have adequate social support, or students who haven't fully processed their emotions yet.

### **Gratitude Journaling**

Another kind of journaling that can be beneficial to college students is gratitude journaling. This kind of journaling is very different from the expressive journaling discussed above. Gratitude is the feeling of appreciation and thankfulness—a positive and social emotion (Ackerman, 2020). Gratitude journaling involves writing things for which you are grateful. It can

be as structured or unstructured as the writer desires and can be used as frequently as the writer desires. An example of one format that the journal could take is writing three things you are thankful for at the end of every day. Each thing could be discussed in depth, or they could be listed in a short, bullet-point fashion. The choice is entirely up to the writer. One purpose of keeping this kind of journal is to gain the positive benefits that come along with experiencing the feeling of gratitude.

O'Connell, O'Shea and Gallagher (2017) conducted a study to examine the relationship that exists between gratitude journaling, wellbeing and depression. The study involved splitting 192 participants into three groups: the reflective-only condition, the reflective-behavioral condition, and the control condition. All participants were told that they needed to journal three times a week for three weeks, each ending with 9 journal entries.

Participants were given a set of instructions based on the condition to which they were assigned. In the control condition, the participants were simply instructed to write about things that happened during their day. In the reflective-only condition, the instructions were "reflect back on your day and think of the people you met and interacted with and are grateful for. Please write down in the space provided a number of positive social interactions over the day or friendships/relationships you are grateful" (O'Connell, O'Shea & Gallagher, 2017, p. 1284).

The same instructions were given to the reflective-behavioral condition, with one additional line of direction. The line read, "At the end of each week, express this gratitude to a person of your choice face-to-face or through e-mail, facebook, a kind note, tell him/her how much you appreciate something specific that he/she does and reflect on their reaction and how

you feel" (O' Connell, O' Shea & Gallagher, 2017, p. 1284). The difference here was that this group had to act on the gratitude they felt.

All participants had three posttest check-ins during which they filled out assessments. These were done immediately after the study, one month after the study, and three months after the study. Results showed that participants in the reflective-behavioral condition had decreased levels of depressive symptoms and increased overall well-being at the immediate posttest. While no other condition had these results at the immediate posttest, at the 1-month posttests both the reflective-behavioral and reflective-only conditions had decreased levels of negative affect and showed improvements in overall affect balance. By the 3-month posttest participant levels were closer to baseline (O' Connell, O' Shea & Gallagher, 2017). These findings are significant because they show how deeply gratitude journaling can affect mood and wellbeing, and they highlight the importance of staying consistent with journaling.

In another study, Flinchbaugh, Moore, Chang and May (2012) looked to see how gratitude journaling and stress management techniques affected overall student well-being in the classroom. Participants in this study were either assigned to the gratitude journal condition, the stress management condition, or the stress management and gratitude journaling combined condition. The researchers looked to see which, if any, of these conditions would lead to the highest levels of student engagement, well-being, and life satisfaction.

The participants in the gratitude journaling condition were asked to keep a journal for twelve weeks, each week writing down 5 things that they were thankful to have in their lives. Participants in the stress management technique condition were taught a new technique (other than journaling) every 3 weeks by a trained stress management facilitator. They were then asked

to practice that technique at home on their own. The participants in the combined condition were asked to complete the gratitude journal, in addition to being exposed to the stress management training.

There were positive results associated with all three of these conditions at the end of the study, but the condition which had the most significant results was the combined condition. Keeping a gratitude journal and practicing other stress management techniques in conjunction lead to heightened student levels of meaningfulness, engagement in the classroom, and overall well-being. As discussed in the study findings, gratitude journaling was an important factor because it helped students identify and make meaning of what was most important to them (Flinchbaugh, Moore, Chang, et al., 2012). These results are relevant to the present research because it shows that gratitude journaling can help improve college students both inside the classroom and out in life.

One of the main reasons gratitude journaling is an effective form of journaling for college students is because of the prosocial outcomes that can be derived from it. This is especially true when keeping a behavioral gratitude journal, as discussed in the O'Connell et al. (2017) study above. College students are a demographic which suffer greatly from anxiety and depression -- two of the biggest side effects that stress has as it suppresses the body's immune system (NYU, n.d.). Since college students are more vulnerable to anxiety and depression when they are under stress, they need to find ways to manage that stress.

Gratitude journals have been shown to decrease levels of negative affect and levels of depression, so they would seem to be well suited for college students (O'Connell, O'Shea & Gallagher, 2017). An increase in overall well-being is something that college students could

benefit from greatly. College students also derive much of their stress from academics, so a form of journaling that helps improve meaningfulness and engagement in the classroom could only serve to help them. If their performance in the classroom improves, then academic stress should be alleviated (at least to some degree) as well.

### **Visual Journaling**

The last kind of journaling technique covered in this paper is visual journaling. Visual journaling combines aspects of both written narration and the creation of art. The written component of this type of journal can come in any form, such as free writing, poetry, or bulleted thoughts. The art can also come in any form, such as doodles, sketches, or in depth art creations. The main point of the journal is to combine both components when doing entries. The written component and the art component should be related to each other. This kind of mixed-media journaling allows for a different kind of experience when exploring topics which the person chooses to journal about. Visual journaling can be well-suited to college students who like to engage with creative arts and who like to process their emotions in a visual manner. It can also be well-suited to those who want to journal, but don't enjoy the process of formal writing.

Mercer, Warson, and Zhao (2010) looked to study the effects of visual journaling on stress, anxiety, and affect levels of medical students. Mercer et. al (2012) chose to study medical students because they are a demographic of students who are known for being under intense amounts of stress and anxiety. They chose 10 students and staff at Eastern Virginia Medical School and asked each of them to keep a visual journal. Prior to starting their journal entries they took State-Trait Anxiety Inventory (STAI-Y) and Positive and Negative Affect Schedule

(PANAS) tests. The STAI test assesses long-term trait anxiety and state-induced anxiety, while the PANAS test measures mood through positive and negative affect levels.

The participants went through two sessions of guided visual journaling, which were focused on the idea of healing through art. In these guided sessions the participants were asked to visualize their stressors and then draw them. After doing this they were given periods of reflection and self-exploration -- the goal of this being that they would better understand their stressors once they were done. Then the exercise was repeated with the goal of helping participants visualize their stressors in a less stressful way. After the full session concluded participants were given journals and art supplies of their own and told to use them as they wished for two weeks. The findings showed that almost all of the participants had a decrease in both anxiety and negative affect after the two weeks were finished (Mercer, Warson, & Zhao, 2010).

Due to the small-scale nature of this study, with only 10 participants, the results of this study should be interpreted with caution. However, the notable change in the participants is striking. Nine of the ten participants said they found the study to be useful, and most of them said they would be willing to continue the journaling on their own (Mercer, Warson, & Zhao, 2010).

In a study done in 2017, Todd-Adekanye sought to evaluate the impact that visual journaling had on high school students in the classroom. Similar to the study discussed above, these students were given visual journals and participated in semi-structured interviews. The difference in this case is that the study focused specifically on how visual journaling affected student's self confidence, self-awareness, and self-healing. The results showed that both self-confidence and self-awareness were raised as a result of the visual journaling, and that students were able to identify areas in which they could grow (Todd-Adekanye, 2017). Although

this study doesn't directly relate to a reduction of stress, self-confidence and self-awareness are both key skills that can help a person manage stress. Therefore, the positive emotional and mental outcomes that are derived from visual journaling can preemptively help reduce the negative impact that stress will have when it does come.

### **Journaling Compared to Other Stress Management Techniques**

In order to undertake a comprehensive analysis of why journaling is the most effective stress management technique for college students, it is important to look at alternative stress management techniques and highlight their limitations. Three alternative management techniques will be examined in the following section of this paper: exercise, therapy and meditation. For each technique, the limitations (e.g., cost, accessibility, and time constraints) will be noted.

#### **Exercise**

Exercise is a frequently cited method of stress relief because of its ability to produce positive physical and psychological results. Anaerobic activity, a form of exercise which involves cardiovascular conditioning also known as "cardio," in particular has been credited with having positive health outcomes. Engaging in anaerobic activity on a regular basis has been linked to stress and anxiety relief, as well as increased mood (Chertoff, 2018). An article published by Harvard Health concisely explains this relationship. The benefits are derived from two main functions, one being neurochemical influence and the other being behavioral influence.

When you engage in anaerobic activities such as running, swimming, cycling, dancing, etc., your body relies on oxygen as its main source of energy. During this time there is a reduction in the amount of stress hormones the body produces, such as cortisol and adrenaline. There is also an increase in production of endorphins, which are hormones responsible for

elevating mood and acting as a painkiller (Harvard Health Publications, 2011). The combination of these two functions often result in a feeling of great optimism, happiness and relaxation that come along with anaerobic exercise.

The other half of what makes physical exercise a good stress reliever is the behavioral conditioning that occurs. It is often hard to start exercising but once the act becomes routine, engaging in the activity becomes much easier. The results gained from regular exercise also have a significant impact on emotional and mental health. There is a sense of pride and accomplishment that comes along with creating and sticking to a routine. Positive physical results of exercise such as muscle gain or weight loss are also accompanied by improved self-esteem and self-image (Harvard Health Publications, 2011). These emotional results in turn make you want to adhere to the routine, making a positive cyclical effect.

While exercise has been proven to be a good outlet for stress, it is not always a practical option for college students. The dedication of time, money and energy that is required to regularly exercise is simply not feasible for all students. According to an article published by CNBC, the average cost of a gym membership is around \$40 - \$50 a month. Taking into account the fees associated with joining, this can add up to almost \$800 a year (Dellaverson, 2010). Many college students aren't able to afford these high fees for gym membership. But even if they are able to pay the membership fees, there is still the issue of time. There is a lengthy time commitment required when it comes to going to the gym. The American Heart Association guidelines recommend that an adult should get at least 5 hours of physical activity per week (American Heart Association, 2018). If you add that to a weekday schedule it's a minimum of one hour per day. When you add in the time it takes to commute to the gym it's more. Many

college students don't have the time to carve out to commit to a regular gym schedule. That's not to mention the apprehension and anxiety that can come from going to a gym when you are out of shape or insecure in your physical appearance.

Overall, while exercise has been proven to be an effective means of stress reduction (and should be engaged in when possible) it is not always a practical option for college students. Their busy schedule and lack of disposable funds prove to be barriers to this method of stress management that counteract the positive effects it may have.

### **Therapy**

Another stress management technique that has been proven to have positive effects on health is therapy. According to the American Psychological Association, therapy is a collaborative treatment which is aimed at helping the client live a more meaningful, productive and happy life. The therapist and client work together to help build an individual treatment plan that is suited to the client's needs (American Psychological Association, n.d.).

There are a variety of reasons why one might start going to therapy. Some people go because they struggle with anxiety and depression, others go because they need help processing their emotions. Therapy can be helpful for those who experience hardships, such as death, illness, loss of a job, or other life-altering events. Therapy can help treat long-term as well as short-term problems (American Psychological Association, n.d.). Most relevant to this paper, is the fact that therapy can be used as a tool for developing healthy coping mechanisms to deal with situational or chronic stress.

One kind of therapy that is best suited to helping someone who struggles to manage their stress is Cognitive Behavioral Therapy. Cognitive Behavioral Therapy (CBT) rests on the

principles that a client's problems are: a) based in part on faulty thinking, b) based in part on unhelpful behavior, and c) can be managed by changing the faulty thinking and unhelpful behavior to relieve distress. CBT is more focused on building positive coping tools for the future than delving into the client's past. Some techniques that can be applied in CBT are reevaluating thought processes, learning ways to calm or relax the body and mind, and using role-play to practice/prepare for when stressful situations arise (American Psychological Association, n.d.).

Although therapy can be very effective for helping people manage their stress, it is not a stress management technique that is best suited to college students. There is a lot of effort that is required up front to find a therapist that is a good fit for the client. Whether it's a matter of finding the right personal connection, finding a therapist that takes your insurance, or both, it takes time. Sometimes you need to see several therapists before finding one that is a good fit for you. This is not conducive to a college environment where therapists are not always readily available. Even if there are many therapists working near the college, the cost is often too great for college students to afford. On average, the cost of a one-hour therapy session ranges from \$65 to \$250, with most prices laying between \$100 and \$200 (FAQs, 2019). That is far more than most college students are able to afford, especially when weekly or bi-weekly sessions are needed.

Therefore, while therapy can be very effective in treating and coping with stress, it is not the most suitable stress management option for college students. The intensive time and effort required to find the right therapist, and the large cost that is associated with each session prevents it from being a practical option for many college students.

### **Meditation**

One last stress management technique that has been proven to be successful is meditation. As defined by an article published by Mayo Clinic, meditation is “a type of mind-body complementary medicine. [It] can produce a deep state of relaxation and a tranquil mind” (Mayo Clinic, 2020). There are many different forms of meditation but most of them involve focusing attention on specific thoughts, and clearing the mind of thoughts that are not related.

One type of meditation that has garnered a lot of attention in recent years is Transcendental Meditation. Transcendental Meditation (TM) is a practice that “allows your active mind to easily settle inward, through quieter levels of thought, until you experience the most silent and peaceful level of your own awareness — pure consciousness.” (Transcendental Meditation, n.d.). TM can only be learned through taking private lessons with a certified TM instructor. In the lessons, the instructor teaches each beginner how to practice this form of meditation and assigns them an individual mantra. This form of mediation involves the repetition of an assigned mantra while letting your thoughts settle until you reach peace, and is most effective when practiced twice daily for 20 minutes (Transcendental Meditation, n.d.).

Transcendental Meditation has gained attention due to its popularity with celebrities and its health outcomes. Oprah, Ellen Degeneres, Clint Eastwood, and Hugh Jackman are among the many celebrities who have promoted TM. There are many studies that show TM to be effective in reducing stress and anxiety among other negative health risks (Barnes, Bauza & Treiber, 2003; Anderson, Liu & Kryscio, 2008). One study in particular showed that an experimental group practicing TM experienced a 67% decrease in psychological stress in the first two weeks

of the study. Further stress reduction occurred as the following months that the study was conducted (Broome, Orme-Johnson D & Schmidt-Wilk, 2005).

However, despite the studies that show Transcendental Meditation to be effective and the long list of celebrities who sing its praises, the price of taking the required TM beginners course is much higher than any other form of learned meditation. Fees are determined on a sliding scale based on annual household income, but the prices range from \$500 to \$960. There was a recently added price for full time students, totaling at \$380 (Transcendental Meditation, n.d.). Although the student fee is significantly lower than the average price, it is still much more than most college students can afford.

That being said, the structure of Transcendental Meditation is not representative of the form that all meditation classes take. Many forms of meditation are less expensive, with classes ranging between \$17 and \$150 per hour depending on location and qualifications of the teacher. On average, classes cost around \$63 per hour (Meditation Lessons, n.d.). And while some people may prefer to take classes because they have an instructor and clear set of directions, there are also apps and resources online that teach simple meditation techniques for free. Calm is one app that has gained popularity in recent years, and is known to be a good starting point for people new to meditation. It gives you a 7-day free trial in which you learn the basics of mindfulness meditation, and then you can pay \$60 a year if you want to continue using their services (Calm, n.d).

While there are many positive outcomes that can be derived from meditation practices, it is not a method that is always feasible for college students. There are some free resources online which could prove to be useful to some, but if formal training is what is desired,

there is a fee attached. The commitment required for formal training and the cost associated with these training sessions are not manageable for most college students. And the most popular and well known types of meditation, which promise stellar results (like Transcendental Meditation), are far outside the price range of a typical college student. For these reasons, meditation is not the stress management technique most suited to all college students.

### **Conclusion**

College students are under large amounts of stress in their daily lives. Their academics, interpersonal relationships and college environment all serve as triggers, and leave them vulnerable to the detrimental effects of stress. Stress has been shown to decrease brain function, impairing memory and cognition (Lupien & Lepage, 2001), and alter brains which are not yet fully matured (Arain et. al, 2013). Establishing healthy coping mechanisms is, therefore, vital to ensuring the health and well-being of these students.

There is an abundance of stress management techniques available, some of the most common being exercise, therapy, and mediation. While each of these techniques have proven to be effective (and should be engaged in whenever possible), none of them are as well-suited to the specific demographic of college students as journaling is.

Journaling is better suited to college students than its counterparts because of the financial and time constraints they are under. While students may derive benefits from the alternatives mentioned, they are often not feasible. Journaling, on the other hand, is nearly always feasible. It is a stress management method that is accessible, free, convenient, and extremely effective. Journaling can be done in any place, at any time, with no restrictions.

Additionally, there are various different types of journaling (each with their own associated benefits) so each person can find the one best suited to them.

One form of journaling which has been proven to be effective for college students is expressive journaling. This form of journaling, which involves writing about deep and personal experiences, has been linked to better health outcomes and a deeper understanding of the self (Pennebaker et. al, 1990). Gratitude journaling, a form of journaling where one expresses the things in their life for which they are grateful, has been shown to positively affect mood and increase well-being (O'Connell, O' Shea & Gallagher, 2017). Visual journaling, which combines written narration and the creation of art, has been proven to be effective as well. This form of journaling has been linked to decreases in anxiety and negative affect (Mercer, Warson, & Zhao, 2010) as well as an increase in self confidence, self-awareness, and self-healing (Todd-Adekanye, 2017).

The implications of this research are significant because they outline viable options for stress management available to college students. Despite the tendency many students have to “push through” the stress, this action jeopardizes their health. It is imperative that awareness is raised about stress management techniques so that students start utilizing them. If college students were able to manage their stress in a healthy way their health and well-being would improve, and they would live more fulfilled lives.

The implications of this research are also applicable to college campuses across the country. This paper analyzed journaling specifically because it was most effective for a college-aged demographic. Colleges should be implementing stress reduction initiatives in order to support their students, and it should include an education session where journaling is the focus.

It is time that college students start prioritizing their health by managing their stress. It is time for colleges to invest in their students and help them achieve this goal. By providing appropriate resources and education, colleges can promote the positive health and well-being of their students.

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