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Contemplative Pedagogy in the College Classroom: Theory, Research, and Practice for Holistic Student Development

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Abstract: Across the U.S., college campuses are witnessing escalating numbers of undergraduates experiencing emotional challenges. Students face an increasingly unstable and uncertain world due to rising political discord, terrorism, tensions between world powers, and more. Additional factors are further impacting college students' emotional health. Research shows excessive engagement with digital technology –such as the high frequency of electronic messaging– negatively affects users' sense of well-being. The extreme volumes of texts and tweets sent and received prevent people from feeling "unplugged" and present during any given situation; multitasking has become the normative behavior for professionals and students alike. Over time, these stresses weaken students' cognitive, emotional, and physical health, and contribute to the record numbers of undergraduates seeking services for mental health issues.

In response, many U.S. colleges are adopting pedagogical techniques that target students' mental health. Dubbed "Contemplative Pedagogy," these simple yet highly effective methods aim to decrease stress levels, improve a sense of well-being, and increase "mindfulness" so that students feel more present in the classroom and beyond. By adopting these pedagogical methods, students' emotional and cognitive development is strengthened. This paper aims to provide educators with an awareness of the rising emotional challenges experienced by college students today. This paper also provides educators with practical methods for incorporating contemplative pedagogy techniques into their classrooms for students' academic and personal success.

Keywords: contemplative pedagogy - student development - pedagogy - teaching and learning - wellness - stress management.

[Abstracts in spanish and portuguese on pages 181-182]

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Introduction

> The growing prevalence of anxiety and depression [among students] represents a substantial challenge for colleges and universities. Institutions and counseling centers will need to work together to develop and offer a continuum of options to educate and support both students seeking counseling services as well as the general student body (e.g., prevention, education, self-help, and expanded treatment capacity).
> —Center for Collegiate Mental Health

The recent phenomena of increasing numbers of U.S. college students experiencing emotional challenges –such as stress, anxiety, and depression– is alarming many of the nation's institutions of higher education. These statistics are leading many college educators and administrators to examine the possible factors affecting undergraduates' emotional health and academic performance. Their goal is to address these issues for their students' successes both in college and beyond.
The possible factors are vast given the complexities of contemporary culture and society. College students –and the broader U.S. population– face a progressively unstable, tenuous, and stressful world. A national survey conducted by the American Psychological Association (2017) identified the leading causes of the sudden spike in Americans' stress levels. They include the nation's tumultuous political climate, escalating terrorism and gun violence, tensions between world powers, rising police aggression, and general concerns over personal safety and the nation's future (American Psychological Association [APA], 2017). These events are sensationalized by the constant stream of negative news that is aired across media platforms, thus permeating diverse communities and elevating stress levels on the national level. Collectively, these factors are contributing to the record numbers of undergraduates experiencing emotional challenges (Brown, 2016).

Additional cultural factors are further compromising college students' emotional health. The ubiquitous nature of smartphones, electronic messaging, and social media are dominating most Americans' lives –particularly those of college students who cite electronic messaging as their preferred form of communication (Straumsheim, 2016). While these technologies can be beneficial to our lives, research indicates excessive engagement with digital technology negatively affects the users' overall sense of well-being (Turkle, 2015). For example, the extreme volumes of text messages sent and received have a particularly detrimental effect on users' emotional health; the constant influx of messages fosters a state of anxiety and urgency to respond, no matter the recipient's present situation and activity (Krauss Whitbourne, 2013). Consequently, multitasking has become normative behavior for many professionals and students alike, thus elevating stress levels that weaken cognitive, emotional, and physical health (Levitin, 2015). This widely practiced behavior –and its associated detriment to well-being– contributes to the increasing numbers of college students seeking services for mental health issues on U.S. campuses today (Center for Collegiate Mental Health [CCMH], 2017).

The growing numbers of students experiencing emotional challenges is alarming many colleges and universities. At Boston University alone, there was a 40 percent increase in students seeking mental health services between the academic years of 2014-2015 and 2015-2016 (Brown, 2016). Across the U.S., anxiety is the leading mental health issue facing college students, with 62 percent visiting campus health clinics listing it as a concern (CCMH, 2017). The American College Health Association's (ACHA) annual survey of 93 national institutions and nearly 48,000 undergraduates revealed one in five respondents (20.9 percent) had been diagnosed with, or treated for, anxiety –an increase of 122 percent since 2009 (9.4 percent) (ACHA, 2010; ACHA, 2017). The subsequent impact anxiety has on learning is also widespread: more than one in four respondents (26.2 percent) cited anxiety as a factor that impacted their individual academic performance (ACHA, 2017). The pronounced rise of anxiety levels among college students is especially alarming given, "anxiety and depression have shown year-over-year increases in their frequency whereas other concerns are either flat or decreasing" (CCMH, 2017, p. 9).

In response to these rising statistics, many institutions are incorporating pedagogical techniques that target students' mental health. Termed "contemplative pedagogy," the simple yet highly effective methods aim to alleviate anxiety, decrease stress levels, improve a sense of well-being, and increase "mindfulness" so that students feel more present in the classroom and beyond. Research suggests that by adopting these pedagogical methods, students' emotional and cognitive development is strengthened (Center for Teaching at Vanderbilt University, 2018). Through sustained practice, these techniques learned during the college years can continue well into adulthood for a more mindful and emotionally satisfying life.

This paper aims to provide educators, program directors, and administrators with an awareness of the rising emotional challenges experienced by college students. While there are numerous and extended factors that contribute to emotional health, the scope of this paper will address key topics that have gained increased attention and subsequent research in recent years. These topics include the unprecedented political tumult caused by the U.S. 2016 election, widespread unease about the nation's future, growing concerns for personal

safety, increasing engagement with social media and negative news, decreasing socialization among college students, excessive use of digital technology that prevents users from feeling "unplugged", and the harmful effects of multitasking on mental health. This paper will then focus on the recent key factors in the university context that are impairing undergraduates' emotional health. In conclusion, this paper will provide educators with select practical methods for incorporating contemplative pedagogy techniques into their classrooms for students' academic and personal success. These methods include journaling, "beholding", meditation, and silent sittings.

Rising Stress Levels in the U.S. and Key Contributors

Since its inception in 2007, the annual "Stress in America" survey conducted by the American Psychological Association (APA) has revealed Americans' stress levels –consistently led by the factors of money, work, and the economy– gradually declined over the years (APA, 2017a). However, this changed in January 2017 when the survey showed a statistically significant increase in reported stress among respondents since the previous report's findings just five months earlier (APA, 2017a). This sudden rise in stress levels coincided with a particularly capricious event: the recent political tumult caused by the nation's 2016 presidential election. Caroline Vaile Wright, Director of Research and Special Projects at the Association, notes:

> Americans' stress levels in January were worse than in August, in the middle of the angriest, most personal campaign in recent memory, when some believed the anxiety would abate after the election. At 57 percent, more than half of respondents said the current political climate was a very or somewhat significant source of stress (as cited in Shanker, 2017, n.p.).

The political discord has widened social divides and contributes to Americans' uncertainties about their nation's future; a full two-thirds of respondents (66 percent) reported the nation's future is a very or somewhat significant source of stress (APA, 2017a). The survey also revealed the new leading cause of stress among Americans is the nation's future (63 percent), followed by money (62 percent), work (61 percent), the current political climate (57 percent), and violence and crime (51 percent) (APA, 2017b). Stress levels are so peaked that more than half of Americans (59 percent) reported the time period to be the lowest point in the nation's history they can remember –"a feeling that spans generations, including individuals who have lived through World War II and Vietnam, the Cuban Missile Crisis, the September 11 terrorist attacks, and high-profile mass shootings" (APA, 2017b, p. 1). Personal safety is another leading concern contributing to the sudden spike in stress levels; 34 percent of respondents –the highest level since 2008 (31 percent)– are worried about personal safety (APA, 2017a). Terrorism is an especially high and widespread concern, with 60 percent of respondents listing it as their top worry in the category of personal safety (APA, 2017b). This data is particularly salient when compared to the previous year's findings of Americans concerned over terrorism (51 percent) and the ten-year average (34

percent) (APA, 2017a). Additional areas of personal safety concerns chosen by respondents include police violence against minorities (50 percent), gun violence (55 percent), and hate crimes (52 percent). (APA, 2017b). Across the nation's communities, these widely-experienced fears are growing, elevating anxiety and stress levels, and affecting well-being. Americans' high consumption of news sources that profile these events with increased regularity and explicit content are aggravating their stress levels (Hampton, et al., 2015). Virtually all Americans (95 percent) follow the news regularly, with approximately one in ten checking the news every hour (APA, 2017b). Social media contributes to this high exposure, with one in five Americans (20 percent) stating they check their social media accounts regularly –an increase from 17 percent in 2016 (APA, 2017b). Lynn Bufka, APA's Associate Executive Director for Practice Research and Policy, underscores the extreme volume of news consumption in today's world by asserting, "It's everywhere –newspapers, social media, even elevators have screens now that push news at you. As consumers, it can be really difficult to know when we have enough information about our world" (as cited in Boddy, 2017, n.p.).

The impact of news and social media on viewers' lives has been widely studied in recent decades. However, the rapidly increasing volume of negative news that emotionalizes and sensationalizes stories for higher ratings is gaining increased attention due to its harmful effect on viewers' mental health (Davey, 2012). Doctor Graham C.L. Davey, Professor of Psychology at The University of Sussex, asserts long-term viewing of negative news not only makes the viewer sadder and more anxious, it is also likely to exaggerate and exacerbate the viewer's *personal* anxieties through persistent worry (Davey, 2012). Further, in a study of media exposure to the 2013 Boston Marathon bombings, "researchers found that extensive, repeated engagement with media coverage of the bombings was associated with *even more* acute stress than actually witnessing the event in person" (Holman, Garfin, & Silver, 2014).

This high exposure to negative news can also foster a decreased ability to cope with stress. Research suggests the increasing amounts of time devoted to news consumption (via televisions, computers, smartphones, and other technologies) is preventing Americans from "unplugging," thus decreasing time spent in face-to-face communication and socialization (Turkle, 2015; Brody, 2017). Doctor Harsh Trivedi, President and Chief Executive Office of Sheppard Pratt Health System, notes:

> In the past, you may go out and meet with your friends and talk about something, but when you got home you'd go to sleep. The difficulty now is you can't really turn things off. We don't necessarily have downtimes to recharge and get our bearings straight again (Thompson, 2017, n.p.).

Yet, for decades, medical science research has shown positive social interaction promotes and strengthens physical and emotional health (Brody, 2017). In one longitudinal study, researchers found that people who lacked adequate social engagement were nearly three times more likely to die during the nine-year study than people with strong social ties (Berkman & Syme, 1979). Conversely, strong social connections promote physical health. Emma Seppälä, Science Director of Stanford University's Center for Compassion and Al-

truism Research and Education and author of *The Happiness Track* (2016), states strong social connection leads to a 50 percent increase in longevity, strengthens the body's immune system, and speeds recovery from disease (Seppälä, 2014). Social engagement also contributes to emotional health and general sense of well-being. Seppälä (2014) asserts:

> People who feel more connected to others have lower levels of anxiety and depression. Moreover, studies show they also have higher self-esteem**,** greater empathy for others, are more trusting and cooperative and, as a consequence, others are more open to trusting and cooperating with them. In other words, social connectedness generates a positive feedback loop of social, emotional and physical well-being.
> Unfortunately, the opposite is also true for those who lack social connectedness. Low levels of social connection are associated with declines in physical and psychological health as well as a higher likelihood for antisocial behavior that leads to further isolation. (n.p.)

The value and benefits of socialization that alleviate stress and improve well-being are highly germane to undergraduates who experience significant emotional challenges during their adjustment to college life. However, research shows socialization among college students has decreased rather than increased. The annual survey conducted by the University of California, Los Angeles' Higher Education Research Institute found that incoming students at four-year colleges and universities, "devoted half as many hours to hanging out with friends during their final year of high school as students who entered college in 1987" (Eagan, Stolzenberg, Ramirez, Aragon, Suchard, & Hurtado, 2014). Research findings also revealed a 74 percent decrease of students spending six or more hours "partying" each week since 1987 (Eagan, et al., 2014).

These, and other recent phenomena, are contributing to the ever-rising stress levels among Americans. According to APA's survey, stress levels rose from 4.8 (August 2016) to 5.1 (January 2017) on a 10-point scale (APA, 2017a). The survey's data also reveals a 33 percent increase in the number of adults who experienced "extreme stress" in the five-month period (Welch, 2016). Statistics among college students echo these findings. When students were asked to rank their emotional health in comparison with their peers, "Nearly twelve percent rated their emotional well-being as below average, a figure that stood at three-and-a-half percent in 1985" (Eagan, et al., 2014).

The widespread increase in stress levels –and resultant decrease in well-being– is producing dire situations for many Americans. According to the National Institute for Occupational Safety and Health, stress-related ailments cost companies about $200 billion USD per year in increased absenteeism, tardiness, and the loss of talented workers (Der Hovanesian, 2003). In certain instances, sustained levels of extreme stress can lead to debilitating anxiety, depression, mental illness, and self-harm. The nation's rising suicide rate is particularly alarming; suicide is the second leading cause of death in the U.S. for those between the ages of fifteen and thirty-four and doubled for teen girls between 2007 and 2015 alone (National Center for Injury Prevention and Control, 2017; Lewis, 2017). Between 1975 and 2015, suicides increased 26 percent for those between the ages of fif-

teen and nineteen, with approximately 1,100 suicides per year on college campuses today (Morbidity and Mortality Weekly Report, 2017; Beresin, Schlozman, & Abdu-Glass, 2017). Despite these alarming statistics and critical need for support systems, access to mental healthcare is worsening partly due to the national shortage of mental health professionals (Thompson, 2017). As these national statistics grow, *particularly* among young adults, it is incumbent upon colleges and universities to increase campus support services that aggressively target students' emotional health and well-being.

The Rise of Digital Technology and Attendant Stressors

> It makes sense to wonder if the use of digital technology creates stress. There is more information flowing into people's lives now than ever –much of it distressing and challenging. There are more possibilities for interruptions and distractions. It is easier now to track what friends, frenemies, and foes are doing and to monitor raises and falls in status on a near-constant basis. […] These technologies are said to takeover people's lives, creating time and social pressures that put people at risk for the negative physical and psychological health effects that can result from stress.
> —Hampton, Rainie, Lu, Shin, & Purcell

Digital technology is a dominant part of daily life in contemporary society and culture (Turkle, 2015). One of the most pervasive forms of technology to emerge in recent decades has been the cell phone. "Like the television in the 1950s and Internet in the 1990s, mobile telephony has emerged as one of the defining technologies of our time" (Campbell & Park, 2008, p. 371). The ubiquitous presence of cell phones in the U.S. is suggested by the 95 percent of Americans who own the device today, up from just 62 percent in 2002 (Anderson, 2015). Specifically, the adoption of "smartphones" by Americans has more than doubled in just five years, from 35 percent in 2011 to 77 percent in 2016 (Anderson, 2015).
The increase of cell phone ownership coincides with the spiked increase in their usage, particularly with smartphones due to these devices' advanced functionalities. Neuroscientist Daniel Levitin (2015) notes:

> Our smartphones have become Swiss army knife–like appliances that include a dictionary, calculator, web browser, email, Game Boy, appointment calendar, voice recorder, guitar tuner, weather forecaster, GPS, texter, tweeter, Facebook updater, and flashlight. They're more powerful and do more things than the most advanced computer at IBM corporate headquarters 30 years ago (n.p.).

The technology offered in smartphones enable users to access the internet with great mobility, and thus serve as an access point for a wide array of important life events. For example, recent surveys among smartphone owners show 62 percent have used their phones to manage finances and receive information about health concerns, while another 18 percent have used their smartphones to submit job applications (Rainie & Perrin, 2017).

These, and other convenient services offered by smartphones, has led to extreme usage and subsequent dependency. A recent poll found most users check their smartphone 150 times per day –or, every six minutes– in a sixteen-hour day (Brody, 2017). Smartphone usage is especially high among teenagers; 80 percent sleep with their phones and 25 percent check their smartphone within five minutes of waking up (Turkle, 2015). Given these statistics, it is unsurprising that approximately 50 percent of adults believe their smartphone is something they can't live without (Rainie & Perrin, 2017). Industries are responding with a range of services that include hotels and resorts that offer "tech-free" vacations for greater relaxation, and psychologists who provide treatment for cell phone addiction.
Another primary reason for extreme smartphone usage in the past decade has been its technology that enables users to communicate easily and efficiently through short message service (SMS: text messaging). Between 2007 and 2017 there has been a 200 percent increase in the number of text messages sent by the average user (Statistic Brain, 2017). The volume of text messaging is notably high among young adults between the ages of eighteen and twenty-four who view email messaging as "outdated" and exchange an average of 110 text messages per day, totaling 3,200 texts per month (Levitin, 2015; Smith, 2011). Teens and young adults use text messaging more than any other age group –and use their cell phones for voice-to-voice communication less frequently than any other age group (Rainie & Keeter, 2006; Reid & Reid, 2007). In a recent survey of 315 students conducted by Bowling Green State University, respondents listed their primary methods of communication as texting (50.2 percent), social media (35.2 percent), email (12.1 percent), and phone calls (2.2 percent) (Straumsheim, 2016). Text messaging has become such a ubiquitously preferred method of communication among teens and young adults that Crisis hotlines have begun accepting calls from at-risk youth via texting (Levitin, 2015).
In addition to text messaging, advanced digital technology has also contributed to the excessive volume of electronic messaging (email) sent and received via computer and smartphones. According to the Radicati Group (2017), the quantity of emails sent globally in 2017 averaged 269 billion per day, an increase of 9 percent in eight years. The volume of emails experienced on a daily basis has risen dramatically in the professional sectors; in 2012, the typical business user sent and received approximately one-hundred electronic messages daily, and by the end of 2018 that number is expected to increase to 140 (Radicati, 2011; Radicati, 2014).
The excessive and constant volume of text messages and emails has led many users to feel compelled to respond no matter the situation or context. Levitin (2015) postulates:

> Text messages magically appear on the screen of your phone and demand immediate attention from you. Add to that the social expectation that an unanswered text feels insulting to the sender, and you've got a recipe for addiction: you receive a text, and that activates your novelty centres. You respond and feel rewarded for having completed a task (even though that task was entirely unknown to you 15 seconds earlier) (n.p.).

According to research performed at University of California, Irvine, the average worker checks his or her email seventy-four times a day –or nine times per hour in a typical eight-

hour workday (Evans, 2014). This inability to "turn-off" from email and text messaging is affecting nearly every facet of daily life for most Americans, as shown in a recent survey commissioned by Adobe Systems Inc. (Orlofsky, 2016). The online survey, comprised of four-hundred U.S. "white-collar" workers, found that:

- Nearly 80 percent of respondents said they look at emails before going into the office;
- Forty-five percent of eighteen to thirty-four-year-olds open emails upon waking up;
- An average of 6.3 hours is spent each workday checking emails;
- Eighty-seven percent looked at business emails outside of working hours;
- Half of the respondents monitored emails during their vacations.

Many scholars and researchers speculate the reason people aren't "unplugging" from email and text messaging and contributing to these escalating statistics is because human multitasking –dealing with more than one task at the same time– is the expected, normative behavior in the workplace, the home, and the classroom. The majority of Americans believe engagement in multiple activities in one timespan will increase productivity and allow more free-time (Cherry, 2017). This behavior is encouraged through advertising and social media that promote performing multiple activities at one time is better. For example, a recent advertorial article published in *The Guardian* for a new automobile featured the headline claim that "drivetime is no longer downtime" since the car's smart technology enables drivers to check their calendars and use other software applications while driving. Audiences are pressured to adopt such normative multitasking behaviors through these advertising themes since, as author Cal Newport (2016) asserts, "what makes social media insidious is that the companies that profit from your attention have succeeded with a masterful marketing coup: convincing our culture that if you don't use their products you might miss out" (n.p.).
The proclivity to multitask is also attributable to the neurochemical high it produces. Research suggests that performing multiple activities in one timespan causes the brain to release dopamine –a neurotransmitter that helps control the brain's reward and pleasure centers (Halonen, 2014). When multitasking is performed with consistency over time, a connection between the activity and pleasure is sustained to produce habitual behavior. As furthered by Levitin (2015):

> Multitasking creates a dopamine-addiction feedback loop, effectively rewarding the brain for losing focus and for constantly searching for external stimulation. To make matters worse, the prefrontal cortex has a novelty bias, meaning that its attention can be easily hijacked by something new –the proverbial shiny objects we use to entice infants, puppies, and kittens. The irony here for those of us who are trying to focus amid competing activities is clear: the very brain region we need to rely on for staying on task is easily distracted. We answer the phone, look up something on the internet, check our email, send an SMS, and each of these things tweaks the novelty- seeking, reward-seeking centres of the brain, causing a burst of endogenous opioids (no wonder it feels so good!), all to the detriment of our staying on task. It is the ultimate empty-caloried brain

> candy. Instead of reaping the big rewards that come from sustained, focused effort, we instead reap empty rewards from completing a thousand little sugar-coated tasks (n.p.).

Despite these pleasurable sensations, research shows our brains are not well-suited for multitasking. Earl Miller, neuroscientist at the Massachusetts Institute of Technology (MIT) and internationally recognized expert on divided attention states the human brain is not wired to multitask well. Miller posits, "When people think they're multitasking, they're actually just switching from one task to another very rapidly. And every time they do, there's a cognitive cost in doing so" (as cited in Levitin, 2015, n.p.). The impairment of cognition during multitasking was shown in one study conducted by former professor of communication at Stanford University Clifford Nass, whose research examined the individual differences associated with multitasking. Nass' findings revealed heavy multitaskers were worse at sorting out relevant information from irrelevant details and switching from one task to another was exceedingly difficult (Ophir, Nass, & Wagner, 2009). Furthermore, contrary to widely held beliefs, multitasking can actually *reduce* productivity by as much as 40 percent (Cherry, 2016).

Multitasking behavior is highly prevalent amongst undergraduates who have grown up with digital technology, particularly texting which "was a landmark in the unfolding of the multitasked life" (Turkle, 2016). As Professor of the Social Studies of Science and Technology at MIT, Sherry Turkle (2015) notes in her book *Reclaiming Conversation: The Power of Talk in the Digital Age*, "By 2012, nine in ten college students said that they text in class" (p. 213). It is not uncommon, then, for college students to text friends while studying, making a meal, listening to music, and searching the internet. When the student's attention is spread across multiple tasks –rather than "unitasking" on the homework itself– there are significant pitfalls. Assignments take longer to complete, thus leading to less socialization and rest; the students experience mental fatigue due to dropping in and out of the material and having to recall what was reviewed; memory is impaired due to the divided attention; and consequently, as shown in numerous studies, grades decline (Paul, 2013).

The impact multitasking can have on cognitive functioning –and students' academic success– is pronounced. Research conducted by renowned neuroscientist Russ Poldrack at Stanford University shows that "…learning information while multitasking causes the new information to go to the wrong part of the brain" (as cited in Levitin, 2015). For example, if a student studies while watching television or texting, the information from the coursework enters the striatum (a region for storing new procedures and skills and not facts and ideas) rather than the hippocampus (where it is organized in ways that make it easier to retrieve) (Levitin, 2015). Moreover, there is mounting evidence that suggests simply *having* the opportunity to multitask is harmful to cognitive performance. In one scenario, the distraction caused by an unread email in an inbox while trying to study can reduce a student's intelligence quotient (IQ) by ten points (Levitin, 2015). Further, studies also reveal that the cognitive losses from multitasking are even greater than those from smoking marijuana (Levitin, 2015).

Multitasking diminishes our abilities to stay mentally organized, focused, productive, and mindful. Researchers and scholars agree that if peak performance is to be achieved in and

outside the classroom, one must work for extended periods of time on a single task free from distraction. The high level of concentration required on "unitasking" builds focus skills over time; this cultivates a deeper engagement in the work and associated tasks, thus enabling higher levels of quality in outcomes (Levitin, 2015).

The University Context: College Students and Emotional Health

For most undergraduates, the college experience is a profoundly transformative experience. This period of young adulthood requires them to grapple with personal, social, academic, and developmental challenges during a relatively short time span (Deckro, et al., 2002; Towbes & Cohen, 1996). As undergraduates, they are required to learn new and complex material, manage increased academic workload, navigate unfamiliar social settings, and make enduring decisions for their personal and professional futures. The college experience can be volatile and filled with uncertainty as young adults also must grapple with emotional and physical maturation, increasing independence and self-reliance, and the formation of their own identities.

The stress experienced during this routine development is exponentially compounded by factors that were absent just a decade ago. Today's young adults must operate in a world that is infinitely more complex, competitive, and arduous than it was ten years ago. Statistics show the sheer quantity of students choosing to enter undergraduate programs has increase by 5.1 million since 2000 to 20.4 million in 2017 (National Center for Education Statistics, 2017). Correspondingly, acceptance rates have plummeted in the past ten years. For example, between 2007 and 2017 acceptance rates at the University of Chicago dropped 75 percent, Northwestern University 66.4 percent, Vanderbilt University 68.6 percent, the University of Pennsylvania 55.6 percent, the University of Michigan 52.2 percent, and Swarthmore College 57.5 percent (IvyWise, 2018). To gain entrance to leading schools, students must over-achieve in their high school academic performance, extracurricular activities, volunteer work, and other credentials required by college admissions committees. Consequently, students' emotional health, stress levels, and general sense of well-being are often compromised as they try to out-perform their peers in order to enter the college of their choice. A recent study published by the journal *Pediatrics* (2016) found a 37 percent increase in teenagers reporting a major depressive episode between 2005 and 2014 (Mojtabai, Olfson, & Han, 2016).

Once enrolled, students face college tuition costs that have risen over 1,200 percent in just thirty-eight years (Jamrisko & Kolet, 2014). To pay such exorbitant fees, student loan debt has reached an all-time high, with the average undergrad owing $35,000 U.S. dollars upon graduation, thus contributing to the $1.3 trillion U.S. dollars in national student loan debt (Sparshott, 2015; Kane, 2016). As a result, 70 to 80 percent of all U.S. college students are working jobs while enrolled, with 40 percent working at least thirty hours per week (Carnevale, Smith, Melton, & Price, 2005). Moreover, approximately 25 percent of working learners are simultaneously employed full-time and enrolled in school full-time (Carnevale, Smith, Melton, & Price, 2015). The plight of affording college in the 21st century is particularly poignant when comparing generations. As Carnevale, et al. (2015) assert:

> You can't work your way through college anymore. A generation ago, students commonly saved for tuition by working summer jobs. But the cost of college now makes that impossible. A student working full-time at the federal minimum wage would earn $15,080 annually before taxes. That isn't enough to pay tuition at most colleges, much less room and board and other expenses (p. 11).

The necessity of employment while fulfilling rigorous academic requirements contributes to the national average of students taking five years to complete their bachelor's degree rather than the traditional four (Shapiro, Dundar, Wakhungu, Yuan, & Hwang, 2016).

These factors, and a host of other increasing stressors facing undergraduates today, cause an array of debilitating physical, behavioral, and emotional effects. Physical symptoms commonly include sweating, headaches, irregular shaking or twitching, chest pain, increased blood pressure, nausea, and/or frequent sickness; behavioral symptoms may include poor work performance, changes in eating habits, irregular sleeping patterns, abnormal failures or delays in responsibilities, decreased sociability, argumentative behavior, self-harm, and/or excessive drug or alcohol usage; and emotional symptoms are often evidenced by reduced patience, restlessness, increased pessimism, anxiety, sadness, and depression (Cohen, 2018). The onslaught of these symptoms alarm undergraduates who are adjusting to a more independent and autonomous lifestyle away from parental protection and guidance, thus exacerbating the emotional challenge.

The sudden decline in college students' mental health can be seen in universities across the U.S. Research findings from the University of California, Los Angeles revealed the emotional health of its incoming students was at its lowest point in thirty years, with nearly one in ten students stating they felt frequently depressed (Eagan et al., 2014). At Boston University, the number of students seeking services for stress related issues increased sharply by 40 percent from 647 in the 2014-2015 academic year to 906 the following academic year (Brown, 2016). Unfortunately, these statistics are not an anomaly; in a recent study of 139 national institutions, the number of students seeking mental health support increased 30 percent between the academic years of 2009-10 and 2014-15, even though student enrollment grew by only 5 percent during that time (Winerman, 2017; CCMH, 2016). The majority of these students seek counseling for anxiety (61 percent), depression (49 percent), and stress (45 percent) (Winerman, 2017; CCMH, 2016).

Despite the increase of undergraduates receiving mental health support, many feel the emotional challenges are too great. Of the 31 percent of students in the U.S. that drop out of college each year, 64 percent report doing so due to mental health related reasons (Shapiro, Dundar, Huie, Wakhungu, Yuan, & Bhimdiwali, 2017; National Alliance on Mental Illness [NAMI], 2016). The critical nature of providing these students with emotional support during an important stage of their lives is especially salient when considering 75 percent of all mental health conditions begin before the age of twenty-four, and as many as one in five students experiences a mental health issue while in college (NAMI, 2016).

Not all stress is negative, however. Research has documented well the beneficial effects moderate stress levels can have on brain performance (Sanders, 2013). As Associate Professor Daniella Kaufer of the University of California, Berkley notes in her studies of the biology of stress, these levels can heighten alertness, improve performance, and boost

memory (as cited in Jaret, 2015). However, extreme levels of stress adversely impact neurological performance and can impair judgement, concentration, and memory (Shapiro, Brown, & Astin, 2008; Anderson, Birnie, Koblesky, Romig-Martin, & Radley, 2014). In one study, college students volunteered to receive injections that raised their cortisol levels (the "stress hormone") before memorizing select information. In mild to moderate levels, the cortisol helped them remember the information when tested on it two days later. However, extreme cortisol levels impaired the students' memory (Goleman, 2006). Heightened, chronic stress elevates the glucocorticoid stress hormones that suppress the production of new neurons in the hippocampus where memory and emotions are associated (Sanders, 2013). This results in impaired memory and over time, particularly with excessive stress caused by life events, hippocampal shrinkage (Greenberg, 2012).

The rising levels of stress among college students –caused by factors that include the increasingly unstable world, the inability to "unplug" from technology and social media, and ongoing multitasking behavior– are compromising college students' emotional, physical, and cognitive development. As a result, unprecedented numbers of U.S. college students are seeking mental health services for depression, anxiety, burnout, and more. As these numbers continue to grow annually and overwhelm staffing and campus resources, colleges are examining new forms of emotional support they may offer their students, including those situated in the classroom setting that target students more broadly.

Contemplative Pedagogy: Aims and Benefits

> If we knew that particular and readily available activities would increase concentration, learning, wellbeing, and social and emotional growth and catalyze transformative learning, we would be cheating our students to exclude it.
> —Tobin Hart

The high levels of acute stress increasingly experienced by undergraduates is leading many U.S. colleges and universities to develop supportive initiatives that can be broadly and easily accessed by students. One of these initiatives, termed "contemplative pedagogy," promotes well-being within the classroom and beyond. As denoted by its Latin root *contemplari* (to observe, consider, or gaze attentively), contemplative pedagogy fosters a deeper sense of mindfulness and presence that complements traditional education. Tobin Hart (2004), professor of psychology at the University of West Georgia and author of *The Secret Spiritual World of Children* (2003), notes:

> Inviting the contemplative simply includes the natural human capacity for knowing through silence, looking inward, pondering deeply, beholding, witnessing the contents of our consciousness, and so forth. These approaches cultivate an inner technology of knowing and thereby a technology of learning and pedagogy… (pp. 29-30).

Contemplative pedagogy is "designed to quiet and shift the habitual chatter of the mind to [enable] a capacity for deepened awareness, concentration, and insight" (Hart, 2004, p. 29). The pedagogy acts as an antidote to our hyper-accelerated, fragmented, and multitasking world in which students operate moments before entering the classroom. When teachers and students engage with these contemplative practices –such as guided meditation, journaling, silent sittings, deep listening, exercises with the body, and freewriting– the body is "quieted," the mind becomes more focused, and a greater sense of the "here and now" develops in the student. Deeper learning ensues since:

> What we know of effective learning is that the predominant factor is not merely time on task; it is the quality of attention brought to that task. If our attention is somewhere else, we may have little capacity to be present. Paradoxically, we may need to not do for a few minutes to be more available for doing the task at hand (Hart, 2004, p. 35).

Contemplative practices –particularly when performed before and/or during class sessions– grant students this mental pause to refocus their attention for better learning.
Research suggests a wide array of mental and physical health benefits result from contemplative practice; these range from those that are experienced suddenly and temporally, to those that build and strengthen over time. Hart (2004) posits:

> Among the main state effects (immediate changes) of meditation are physiological relaxation and slowed metabolism, a heightened self-awareness, and feeling of calm. Among the main trait effects (changes that endure over time) are improved concentration, empathy, perceptual acuity, a drop in anxiety and stress symptoms, and more effective performance in a broad range of domains from sports and academic test taking to creativity (p. 31).

Whether their subsequent effects are short- or long-term, contemplative practices have been proven to significantly lower anxiety and stress levels. Thus, students maintain focus and orient attention, and process information more quickly and accurately (Shapiro, Brown, & Astin, 2008). When practiced and sustained over time, these methods improve the student's overall college experience through cognitive and academic performance, management of academic stress, and a greater sense of well-being (Shapiro, Brown, & Astin, 2008; Hart, 2004).
Across research studies, students who engaged in contemplative pedagogy frequently commented on the personal benefits they received, including improved academic performance and reduced stress levels. These practices also improve the community at large and the relationships between its members. As Hayes (2004) notes:

> My students over the past two years have talked about the way these mindfulness exercises help to foster an atmosphere of respect. They often note how these practices have effectively brought the class together as a whole. When courses actively create a respectful environment, students learn to listen, write,

> and argue persuasively from a position of civility, which helps them to become principled citizens. Perhaps most significantly, contemplative practice fosters development of what Martin Buber called "I-Thou" relationships, where other people, events, and things are treated as subjects and not merely as objects for use or enjoyment. Jon Kabat-Zinn remarked during the conference that most of us live, most of the time, in a narrow band of being where we are surrounded by "I," "me," and "mine." We suffer from this narrow focus. How, he asked, can we get more real? As teachers, how can we ignite passion in our students for this kind of presence, this "be-ing" in their own lives? This is precisely the work of contemplative pedagogy: it is about waking up and being present to our lives –here and now (p. 9).

Teachers also receive significant benefits through contemplative pedagogy. The practice takes them out of their specialties and research activities, and allows them to refocus their attention on their students and teaching practice. This mental pause provides a critical reflective period during which the educator may question the implications of their research, what they're studying, and their teaching. When the practice is sustained by the teacher, contemplative pedagogy promotes compassion, empathy, and deeper connections with his or her students. The role of the educator becomes enhanced, not merely as a "content provider" but as a mentor who can provide academic content in a more personal and impactful manner.

Due to these benefits, contemplative pedagogy is gaining nationwide attention. A growing number of leading colleges and universities –including Bowdoin College, the University of Virginia, the University of Michigan, and Bryn Mawr College– have adopted contemplative pedagogy to support their undergraduates' and faculty members' academic and personal success. In addition to college-led initiatives, several national organizations promote contemplative practices by offering online literature, training sessions, and additional forms of support for educators. For example, since 1997 the Center for Contemplative Mind in Society, in collaboration with the American Council of Learned Societies, has awarded approximately 150 fellowships to professors in 100 institutions so they may develop curricula that integrates contemplative practices into classroom teaching (The Center for Contemplative Mind in Society [CCMS], 2015).

Contemplative Pedagogy: Select Practices

The following are examples of ways of incorporating mindfulness and contemplative practice into the classroom.

Journaling

Journaling can occur at any point during a class session. When performed before the session begins, students empty their minds of distracting thoughts. They may also use the time to develop questions and insights before class begins. If journaling is performed as a brief pause during the session, students may reflect on the class thus far, list questions

and contributions they wish to give, and/or write any personal thoughts that are causing stress or anxiety. When performed at end of class, journaling prompts students to reflect on the class session, summarize key points, and create a schedule for their upcoming week. To begin this activity, students are asked to sit upright and take a series of slow, deep breaths for three minutes. They are told to relax their bodies, close their eyes, and feel the gentle pull of gravity in their seated position. This process centers the individual. Once they feel centered, students spend five minutes writing down whatever is on their minds in a "stream of consciousness." The teacher may suggest questions or topics: What happened during your commute to class? What was said last night between you and your partner or friend? How are you feeling about an upcoming exam?

The goal is to empty the mind of these stressors by releasing them onto paper. As students empty their minds of these worries and *see* their stress on paper, they will more fully understand what really matters and where they are emotionally. Journaling visualizes one's stress rather than keeping it as an abstract, fearful concept. It's not uncommon for a mind full of abstract ideas to waste emotional energy trying to organize them throughout the day, and this creates unnecessary distraction, confusion, anxiety, and stress.

Beholding

Beholding exercises enhance –and may even alter– one of the primary ways through which we engage with the world: sight (CCMS, 2015). In its most basic form, beholding asks participants to prolong their attentiveness on a single object. For students, this slow and deliberate concentration hones the ability to focus during extended periods, elevates awareness and perception, increases sensitivity, and instills a greater feeling of presence. Beholding illustrates the idea that our immediate, hurried perceptions can be superficial – and possibly erroneous. In taking the necessary time to carefully and thoroughly examine a subject, students are able to fully comprehend the subject at hand and develop advanced insights and ideas, thus achieving optimal learning.

To perform this exercise, students stand in front of an artwork, a plant, or anything else that is visually calming and appealing for them. They are asked to look at it directly, confront it "face-to-face," and if possible, hold it in their hands and try to really gauge and feel its grand scale or be drawn into the intimacy of its smallness. The teacher guides the students by asking them to pay attention to every detail and let their eyes "caress" the shape and surface. Students are posed questions to heighten observation and a sense of wonder: What do you see? What do you notice as you linger with the object? What moves you? How are you feeling right now, as you deepen your observation? Beholding works in direct contrast to the usual two-second walk-by experience that characterizes our daily lives (CCMS 2015). Beholding asks participants to dissect and analyze what they're seeing. It creates a deeper form of encounter while teaching the skills of mindfulness and focus in our multitasking, distracted, stressed-out world.

It is important that students refrain from performing research on the chosen object before or during the activity. This allows them to form their own, unbiased observations and associations with the object –and a more sensitive understanding of themselves through their own thoughts and feelings. Beholding can lead to particularly rewarding results if students return to the same object each week; through repeated viewing, the students'

wandering attention is brought back to the same object again and again. Their initial expression of apathy for the object may suddenly turn into feelings of reverence and love. Although the object does not change, the participants frequently notice changes in themselves (CCMS, 2015).

Guided Meditation on a Raisin

Though seemingly outlandish, this exercise is one of the most effective to develop a more focused, mindful, and less stressed self. In a quiet space, the student silently contemplates a single raisin (or other fruit) for a full five minutes. Each student holds one in his or her hand and looks at it.

To guide the contemplation, the facilitator poses a series of questions and actions: "What do you notice?", "Take a closer look to see, touch, and smell the unique form, texture, and aroma", and "Form your ideas slowly and gradually." Finally, each student is asked to taste, chew, and swallow their raisin. During this slow, deliberate process, the facilitator encourages students to, "Focus on this one simple act, moment-by-moment" and "The greater attention you give, the more your focus will strengthen over time for a deeper self-awareness and enhanced learning experience." This meditation exercise, when performed with regularity, allows students to become more accustomed to slowing down and focusing on details, thereby elevating their quality of life while decreasing their stress. The resultant improvement of the student's academic performance is direct; the ability to sustain focus and closely examine subject matter aids comprehension and strengthens cognitive development.

Another form of this exercise asks students to look at a familiar place or person as if it were the very first time. They mindfully note ever detail they see so that their consciousness, attention span, and ability to focus on one element strengthens. Paired with journaling, this can be an intense and powerful exercise.

Silent Sittings Before and After Work

Gurleen Grenwal, associate professor and teacher of mindfulness in the University of South Florida describes this contemplative practice well. She states:

> In each class we have silent sittings, quieting the mind via the breath, with basic instructions to observe the flow of thoughts/reactions from a nonjudgmental space - a practice crucial in developing acceptance, tolerance, and compassion for oneself and others. I like to begin class with five to ten minutes of mindfulness that very gradually increases as the semester proceeds (as cited in Barbezat & Bush, 2014).

To perform this meditation, students simply sit in their chairs with their spines erect and their bodies relaxed. Eyes are then closed. Using a Tibetan singing bowl or similar sound –which can easily be found through various phone apps– students follow the ebbing of the sound as it dies out into a prolonged silence. The facilitator tells students, "As you rest in that silence, thoughts may enter your mind. Simply observe them, along with any bodily sensations that occur. If your mind returns to distracting thoughts, deliberately and mind-

fully focus on your breath and let go of the thoughts, as if they were clouds floating by on a sunny day." The participants' slow, deep breathing is their anchor during the period of silent rest. The meditation ends when the student's breathing and heart rate are decreased, and his or her body feels fully relaxed. Once this state is reached, the student may open his or her eyes slowly, and take one final deep inhale and exhale.

Conclusion

Across the U.S., college campuses are witnessing escalating numbers of undergraduates experiencing emotional challenges. Students face an increasingly unstable and uncertain world due to rising political discord, terrorism, tensions between world powers, and more. Additional factors are impacting college students' emotional health. Research shows excessive engagement with digital technology –such as the high frequency of electronic messaging– negatively affects users' sense of well-being. Over time, these stresses weaken students' cognitive, emotional, and physical health, and contribute to the record numbers of undergraduates seeking services for mental health issues. It is incumbent upon U.S. higher education to increase support systems that target this growing crisis.

Contemplative pedagogy is one form of support that is being adopted by U.S. higher education. This is due in part to its practical approach that can be easily and effectively provided to all students. Through sustained practice, these pedagogical methods focus attention, diminish stress and anxiety, improve mental and physical health, strengthen memory, and increase creativity. These, in turn, can improve cognitive development while elevating one's quality of life. As Haynes (2004) notes, when people perform such exercises they "develop new techniques of awareness; they learn to refine their perceptual and observational skills; and they are encouraged to take chances and to foster attitudes such as curiosity and wonder rather than cynicism about the world in which we live" (pp. 8-9). Our hyper-accelerated and all-consuming world requires us to relearn how to slow down and become more present. In doing so, we will have a significantly better quality of life, feel more connected with those around us, and gain a deeper understanding for what truly matters most in our lives.

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Resumen: En los EE. UU., los campus universitarios son testigos de un número cada vez mayor de graduados con problemas emocionales. Los estudiantes se enfrentan a un mundo cada vez más inestable e incierto debido a la creciente discordia política, el terrorismo, las tensiones entre las potencias mundiales, y más. Factores adicionales están afectando aún más la salud emocional de los estudiantes universitarios. Las investigaciones muestran que el compromiso excesivo con la tecnología digital –como la alta frecuencia de los mensajes electrónicos– afecta negativamente la sensación de bienestar de los usuarios. Los volúmenes extremos de textos y tweets enviados y recibidos evitan que la gente se sienta "desconectada" y presente durante cualquier situación dada; la multitarea se ha convertido en un comportamiento normativo, tanto para profesionales como para estudiantes. Con el tiempo, estas tensiones debilitan el pensamiento cognitivo y emocional, así como la salud física, y contribuyen al número récord de estudiantes de pregrado que buscan servicios por problemas de salud mental. En respuesta a toda esta problemática, muchas universidades de EE. UU. están adoptando técnicas pedagógicas dirigidas a la salud mental de los estudiantes. Conocida como "Pedagogía Contemplativa", estos métodos simples pero altamente efectivos apuntan a disminuir los niveles de estrés, mejorar la sensación de bienestar y aumentar la "atención plena" para que los estudiantes se sientan más presentes en el aula. Al adoptar estos métodos pedagógicos, el desarrollo emocional y cognitivo de los estudiantes se fortalece. Este documento tiene como objetivo proporcionar a los educadores una conciencia de los crecientes desafíos emocionales experimentado por estudiantes universitarios y también proporciona a los educadores métodos prácticos para incorporar técnicas de pedagogía contemplativa en sus aulas para el éxito académico y personal de los estudiantes.