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From Critical to CALM: The Development and Implementation of a Brief Unified Mindfulness Workshop for College Students

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From Critical to CALM: The Development and Implementation of a Brief Unified Mindfulness Workshop for College Students

Mandi Eggenberger Quay

A dissertation submitted to the Graduate Faculty of
JAMES MADISON UNIVERSITY
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Dedication

You listened through all the headaches. You held me through all the tears.

Through all the changes, you never let me go it alone.

To the love of my life.

To Noah.
Acknowledgements

I cannot possibly fit my gratitude into one paragraph. You all have become a second family to me, and my appreciation for every minute you spent with me crying, laughing, and celebrating is beyond words. Gregg, thank you for opening my eyes to the world and for showing me what it means to love myself with compassion and kindness. Craig, thank you for sharing your authenticity, contagious passion for the world, and for believing so fiercely in me (I finally believe in me now too). Ken, thank you for teaching me what it means to be truly thoughtful and guiding me outside the conventional box of ideas. You all have made my life journey so much deeper and more meaningful—I would never change the last four years for the world. My mother asked me just the other day, “Would you do it again?” And my reply without a pause was, “Hell, yes.”
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Abstract

Dramatic rises in levels of anxiety, stress, and depression in college students have been observed over the past decade and is so pervasive that it has been deemed the College Student Mental Health Crisis (CSMHC). A number of experts have argued that much of this crisis can be attributed to students’ overall lack of basic knowledge of emotions and adaptive emotional processing. To address this problem, this study sought out to develop a brief mindfulness workshop as an intervention for college students to help increase student well-being, decrease anxious and depressive symptomology, and allow for material to be easily internalized. In this study, 67 total participants, all of whom were college students at James Madison University, completed a mindfulness workshop entitled, From Critical to CALM: A Guided Mindfulness Workshop. Stages of this study included the following: 1) Participant recruitment; 2) Conduct the pre-intervention assessment of participants using the Henriques-10 Well-Being Questionnaire (H10WB), the CORE Outcome Measure (CORE-OM), and the Generalized Anxiety Disorder 7-item (GAD-7) scale; 3) Conduct the workshop; 4) directly after each workshop, administer a brief “Quiz” to assess the knowledge participants obtained as well as a satisfaction survey; and 5) Conduct the post-intervention assessment of all remaining participants using the same pre-intervention measures along with one qualitative question asking participants to indicate what concept(s)/idea(s) from the workshop they remember learning. Students’ satisfaction of the workshop overall was high and the vast majority of them reported that they would likely use the workshop’s strategies in the future. Two to three weeks after the workshop, students also retained at least some of the key knowledge elements from the workshop. Test-retest results for this
study found statistically significant change in students’ well-being, as indicated by the H10WB. A positive trend on the GAD was also found, but there was no change found on the CORE-OM. Due to the limitations of this study, the results are not able to be effectively interpreted to determine causation. However, given the nature and brief time of the intervention, these results were deemed as encouraging. Further development of the workshop and adjustments to the study will need to be performed to determine if, indeed, the workshop may have succeeded in initiating improvement in well-being, potentially through facilitating mindful awareness of intrapsychic process.
Chapter One:
Introduction and Overview

The purpose of this project was to develop and implement a new approach to mindfulness for college students in the form of a brief workshop. The work is grounded in and motivated by three intersecting developments. First, interventions fostering college student mental health are needed because there has been an upsurge in mental illness among this population over the years, so much so that it has been termed, the “College Student Mental Health Crisis” or CSMHC (Henriques, 2014). For example, a recent 2015 analysis done by the American College Health Association (2017) found that 17% of college students experience clinically significant levels of depression and 21% experience clinically significant levels of anxiety in a 12-month period, levels that are significantly higher than they were a decade ago. Some more recent analyses point to a trend toward even higher levels of anxiety in the years to come (Twenge, 2017).

The movement toward mindfulness also grounds the current work. Mindfulness as a psychological intervention has become increasingly more popular in recent decades. Over the years, scholars have discovered the benefits of mindfulness practices, originally stemming from Buddhist philosophies and evolving into explicit mental health interventions. John Kabat-Zinn’s Mindfulness-Based Stress Reduction (MBSR) set the stage for many more scholars, researchers, and practitioners to build off of this and also launch mindfulness interventions based from their own perspectives.

The third line that is driving the current project is Gregg Henriques’ (2011) unified framework for psychology and psychotherapy. The system is currently described
by Henriques as the “UTUA Framework”, in which the “UT” stands for the unified theory of psychology and the “UA” stands for a unified approach to psychotherapy. The UTUA Framework offers a novel way to approach mindfulness because it is grounded in a unified theory of human psychology, which gives rise to a more unified approach to psychotherapy.

The UTUA approach to mindfulness is derived from how the framework characterizes emotions, emotional processing, and relationships and the domains of human consciousness more generally. The framework specifies why certain individuals develop avoidant emotional coping strategies that lead to emotional vulnerability and poor resilience in times of stress. The goal of the workshop was to teach students to understand both emotional functioning and the key domains of human consciousness as a catalyst to fostering a greater understanding of how to process distressing experiences and conflict in a healthy and productive way. A central focus of the workshop was aimed to facilitate intrapsychic awareness and acceptance of human conscious experiences using a conceptual map called the Tripartite Map of Human Consciousness that explicates the interwoven domains of experiential, justifying, and interpersonal ways of being in conjunction with psychological defenses and filters (Henriques, 2011). Understanding the Tripartite Map allows individuals to understand why they do not accept and may often avoid distressing feelings. It also highlights how such strategies can cause disharmony between the systems, resulting in vulnerabilities to problematic patterns of anxiety and depression.

Once this understanding is achieved, students are instructed on a healthier and more mature way to deal with stress, distress, and conflict via the CALM approach. The
goal of the CALM approach is to develop and facilitate intrapsychic and interpersonal harmony among emotional, deliberative, and interpersonal domains. One engages in the CALM approach by cultivating a “C.A.L.M. M.O.” This is an acronym that captures the key features of the approach. The “M.O.” portion stands both for a “Meta-cognitive Observer” and for “Modus Operandi”. The message here is to activate a meta-cognitive stance as a mode of being when one is perturbed. The C.A.L.M. refers to the attitude of the meta-cognitive observer. It specifically references a stance of Curiosity, Acceptance, Loving/compassion, and Motivation to learn and grow toward valued states of being.

The goal of the research project was to determine the utility and feasibility of a workshop based on this framework as well as to offer preliminary analyses on whether the intervention might be internalized, might increase the participants’ well-being, and might decrease anxious and depressive symptomology. This project involved completing a one-time 1.75 hour workshop, which was conducted on five separate occasions and contained approximately 13 – 15 participants each of varying ages and years in college.

The workshop material was separated into four parts. The first part of the workshop was dedicated to exploring and facilitating comprehensive physical, emotional, cognitive, and interpersonal awareness informed by Gregg Henriques’ (2011) Tripartite Map of Human Consciousness and included an experiential element to engage students with each aspect of their consciousness system. The second part brought this knowledge together using the mindfulness acronym, C.A.L.M. M.O., as students learned explicitly how to use each part of the acronym when exploring their own experiences of emotions, thoughts, and relationships. The third part incorporated a group discussion where students reflected on the use of the Tripartite Map and C.A.L.M. M.O. in their own lives. Finally,
the fourth part of this workshop was reserved for a brief “quiz” to test participants’ knowledge of the material discussed as well as qualitative and quantitative feedback about the workshop itself. Pre- and post-test measures were given to assess students’ general levels of well-being (via the Henriques-10 Well-being [H10WB] Quesitonnaire), socio-emotional difficulties (via the outcome measure, CORE-OM), and the degree of symptomology for anxiety (via the Generalized Anxiety Disorder-7 [GAD-7]); post-test measures also assessed qualitative feedback regarding what material participants internalized from the workshop; and post-intervention qualitative surveys assessed students’ subjective experience of outcomes and knowledge retained.

The researcher set out to explore the impact of this intervention and wondered how (if at all) the workshop might be influential to participants. Some potential impacts that were explored were to what degree participants might: 1) show a decrease in their anxious and depressive symptomology (as demonstrated by the CORE-OM and GAD-7); 2) show an increase in their overall subjective well-being (via the H10WB); and 3) internalize the information by explaining elements of the theory and referencing the material discussed (via qualitative and quantitative feedback as well as in the post-assessment). Results of this study indicated that student’s overall satisfaction of the workshop was quite high. In particular, they indicated that the workshop helped them develop insight and awareness of their own affective experiences as well as helped them gain a better understanding of emotions. Students also appeared to retain important knowledge of material from the workshop two to three weeks post-intervention. Not only did they reference the major frameworks discussed, such as the Tripartite Map and C.A.L.M. M.O., but they also alluded to some emotional awareness. Finally, results also
indicated that while global symptomology, including anxiety and depression, did not change from pre- to post-testing, some significant positive changes were found to occur in students’ well-being scores.

Overall, this workshop was easy to implement, and the material appeared to be accessible for students to comprehend and retain. However, for future delivery, a few adjustments would be important to consider, such as having the workshop occur over two to three meetings, each lasting no less than an hour. Another suggestion, which would become more feasible if this workshop was spread over multiple meetings, would be to include interactive activities for students to engage more in the C.A.L.M. M.O. framework as a means of developing a meaningful practice of it. Finally, for the purpose of reaching large numbers of students, this workshop may be conducive to implementing as a form of outreach for college counseling centers, who are overwhelmed by students seeking mental health services. Due to the nature of the material (i.e., helping facilitate intrapsychic and interpersonal harmony), this workshop not only has the potential to be a valuable resource for students who may be experiencing mild emotional distress, but it also can function as an alternative mental health service for these types of students, which may help free up college counseling centers.
Chapter Two:

Literature Review

Overview

The following grounds the justification for the development of this mindfulness group. First, the “College Student Mental Health Crisis” (or CSMHC) is discussed, including the evidence behind its occurrence, as well as its many potential contributing factors. Following this discussion is a broad review of mindfulness approaches, which includes the evolution of mindfulness from its buddhist origins and practices to its current focus of intrapsychic awareness as well as researchers’ and scholars’ efforts in defining mindfulness as a construct and their inclusion of human consciousness as an important aspect of mindfulness. Next, specific mindfulness interventions spanning major paradigms are covered. This is followed by the observation that a clear map of human consciousness is missing from the literature on mindfulness. Subsequently, the evolution of the Tripartite Map of Human Consciousness embedded in Gregg Henrique’s (2017b) Unified TheoryUnified Approach (UTUA) is outlined. Following this is a discussion on the development of internal conflict and disharmony and how C.A.L.M. M.O. provides a framework for adaptive emotional processing. Finally, this section ends with a description and rationale of a change in the execution of this study’s original mindfulness intervention—from an 11-week mindfulness group curriculum to a one-time mindfulness workshop.

A Review of the College Student Mental Health Crisis

Over recent years, college student mental health has become an increasing area of concern, as statistics and research have shown a dramatic upsurge in mental illness
among this population from year to year. In fact, this increase is so much a concern that it has been termed, the “College Student Mental Health Crisis” or CSMHC (Henriques, 2014). As previously mentioned, as much as 17% of college students experience clinically significant levels of depression and 21% experience clinically significant levels of anxiety in a 12-month period, levels that are significantly higher than they were only a decade ago (American College Health Association, 2017). Even more alarming, recent analyses point to a trend toward even higher levels of anxiety in the years to come, especially with the advent of smartphones, social media, and other technology that has potentially negatively influenced childhood social development (Twenge, 2017).

Researchers and scholars have tried to conceptualize the CSMHC and have wondered about its etiology. There are many possible factors and it seems likely that the CSMHC is what is called a “wicked problem”—a complex problem with a vast array of interrelated generational, social, and university-specific contributing factors (Henriques, 2014). Watkins et al. (2011) proposed a few hypotheses that may contribute to the CSMHC. For example, they suggest that the general decrease in mental health stigma may be causing an increase in demand for mental health services. They also discuss how increased parental involvement in college may not allow for students to develop their own autonomy and resilience in the face of obstacles or perceived failures. Finally, and similarly to Twenge’s (2017) analyses, they contend that overuse and overreliance of technology may facilitate poor coping skill development and demand for instant gratification, thus resulting in students wanting an immediate “fix” to their mental health struggles.
Other notable contributing factors to the CSMHC were outlined by Gregg Henriques (2014), where he proposed upwards of 17 important considerations impacting student mental health among societal, generational, and university-specific domains. Of these, he noted how financial pressures of today’s college student population may result in a great deal of anxiety, as they are responsible for colleges’ continually increasing tuition, the prospect of paying for their student loans after graduation, and the pressure of finding employment in the current job and employment crisis. Henriques also noted the current societal influence of the biomedical model of mental illness (i.e., the disease-pill model), which argues for a reductionistic view that mental illness (including negative affect states like anxiety and depression) is a disease that needs treatment or a cure via psychotropic medication. Potentially, this results in individuals struggling with negative feelings believing the idea that their emotions are a disease rather than an ordinary process or a natural response to their environment. From a more generational perspective, Henriques describes the current over-cultivation of self-esteem and the rise of “Generation Me.” Here, similar to Watkins et al. (2011), he outlines the impact of over-involved parents, who prevent their children from experiencing hardships, mistakes, or failures. This kind of parental “protection” results in children who grow up without any resilience and may even begin to see themselves as victims without any internal locus of control. For instance, once these children reach college, where they are finally independent from their parents and begin to experience hardships on their own for the first time, they experience adversity as devastating or unfair rather than as a learning opportunity or area for growth. In terms of university-specific influences on the CSMHC, Henriques describes how the transition from high school to college may be dramatic for
many students, especially if they are experiencing independence from potentially over-involved parents for the first time. Another important factor to consider is how much more accessible college is nowadays for students who might not have otherwise gone to college. Some of these students may even be first generation college students, which come with its own societal challenges and familial pressures.

While the cause of the CSMHC is complex and multifaceted, what is clear is that college students are in need of mental health interventions. In particular, it appears that students need help taking ownership over their thoughts and emotions in a deep, meaningful way that helps them normalize their experiences as natural and even needed (versus as a “disease” that is unwanted). This is one of the key reasons that mindfulness is proposed here as an intervention for college students, as it directly facilitates intrapsychic and interpersonal harmony through approach rather than avoidance.

**A Review of Mindfulness Approaches**

Modern day mindfulness practices in the West have their roots in the Buddhist traditions. It began primarily as a spiritual practice with the use of meditation as a means of coping with suffering (Bishop, Lau, Shapiro, Carlson, Anderson, Carmody, … Devins, 2004). Specifically, two practitioners, Nyanaponika Thera and Thich Nhat Hanh, were the first to integrate the practice of Buddhist mindfulness meditation in modern society through the principles of the four noble truths: “Life is suffering; causes of suffering, cessation of suffering, and the path to the cessation of suffering” (Geller & Greenberg, 2012, p. 179; Plum Village, 2008; Brown & Ryan, 2003). These early practitioners asserted that to be mindful meant being in the present, which includes the degree to which one is actively paying attention to the sensations and perceptions of the present
moment and to what extent one is presently aware of these experiential stimuli (Brown & Ryan, 2003). The first noble truth that “life is suffering” is the foundation for mindfulness from this perspective. The idea is that while it may seem logical to escape or avoid suffering, one must embrace it by being fully aware of it in the present. Additionally, by understanding and accepting one’s own suffering, one can be motivated to learn and grow from it (Plum Village, 2008).

John Kabat-Zinn was the first to develop a psychological intervention using mindfulness (Mindfulness-Based Stress Reduction or MBSR, discussed in more detail later). He was heavily influenced by Buddhist dharma and wanted to bring the essence of Buddhist mindful meditative practices to Western culture to bring relief to people in chronic pain. In doing so, he wanted to use language more in line with western culture to implement mindfulness (e.g., using scientific terminology such as “stress reduction” and MBSR “laboratories,” etc.) as opposed to Buddhist language in order to ease the integration of these practices into the culture (Kabat-Zinn, 2011). As a result of this shift, he conceptualized mindfulness as “paying attention in a particular way: on purpose, in the present moment, and nonjudgmentally” (Kabat-Zinn, 2001, p. 23). His definition of mindfulness has been cited countless times in the literature (Baer, Smith, Hopkins, Krietemeyer, and Toney, 2006; Bishop et al., 2004; Hayes, 2004, to name a few) and has influenced the direction of its evolution throughout the years.

As the concept of mindfulness has developed in present-day society, mindfulness as it relates to psychology has evolved away from Buddhist meditative practices and more toward present-moment awareness and intra-psychic processes (Bishop et al., 2004). Much of this shift could potentially be owed to emergence of the 3rd wave of
behavioral and cognitive therapy. Briefly, the 1st wave of behavioral and cognitive therapy involved a focus on the basics of behavior therapy (i.e., associative and operant learning, environmental changes, and skill development), where analysis of thoughts was considered unnecessary. The 2nd wave began to emphasize the role that cognition and language played in behavior, and more focus was put on methods of reducing cognitive errors and challenging thought content to emphasize rationality. Finally, and most relevant to this discussion, is the 3rd wave, which implemented mindfulness and the concept of acceptance and change. More specifically, it began to explore what thoughts, behaviors, and emotions mean and function as for the individual. Additionally, it explored the relationship between the context and the behaviors being displayed (in other words, what about the context is creating the space for these behaviors to occur?). This wave also produced interventions that taught metacognition (emphasizing the self-reflective focus on here-and-now experiences of the individual) and were more skills-based in their approach (Hayes, 2004). These interventions will be further discussed in detail in the next section.

Since Kabat-Zinn, many researchers, authors, and scholars have explored mindfulness as a construct and have attempted to operationally define it. For instance, Bishop and colleagues (2004) explicitly set out to propose an operational definition of mindfulness, which emphasized two dimensions: 1) the ability to self-regulate one’s attention to internal and external processes and 2) one’s ability to do so in the here-and-now (specifically, by being curious, open, and accepting). These scholars also asserted that the practice of mindfulness must involve metacognitive awareness, or one’s ability to think and reflect on one’s own cognitive and affective experiences. This definition has
been widely used in the mindfulness literature (Feldman, Hayes, Kumar, Greeson, & Laurenceau, 2007; Ciarrochi, Kashdan, & Harris, 2013; Lutz et al., 2015, to name a few) and in fact has been used in the development of mindfulness measures—specifically, the Cognitive and Affective Mindfulness Scale-Revised (CAMS-R). The developers of this measure deduced that mindfulness as a whole construct could be assessed by dividing Bishop et al.’s (2004) operational definition into four broad dimensions: “1) the ability to regulate attention, 2) an orientation to present or immediate experience, 3) awareness of experience, and 4) an attitude of acceptance or nonjudgment towards experience” (Feldman et al., 2007, p. 178). Still, other mindfulness researchers, such as Baer et al. (2006), argued that scholars who have tried to define mindfulness thus far each have similar but separate and varying definitions, some defining mindfulness as involving multiple facets and some unidimensional.

Baer et al. (2006) set out to empirically explore the facets of mindfulness by gathering data from several mindfulness self-assessment measures, which were given to undergraduate college students. These measures included five mindfulness questionnaires (the Mindful Attention Awareness Scale, the Freiburg Mindfulness Inventory, the Kentucky Inventory of Mindfulness Skills, the Cognitive and Affective Mindfulness Scale, and the Mindfulness Questionnaire). Using exploratory and confirmatory factor analysis they discovered five distinct facets that exist among these questionnaires that appear to be characteristic of mindfulness: observe (i.e., noticing experiences and being with them versus avoiding them), describe (i.e., one’s linguistic representations of internal experiences), act with awareness (versus distracting oneself), nonjudgment (i.e., acceptance of one’s experiences rather than reproach or blame), and non-reactivity (i.e.,
sitting with emotions rather than reacting as though they were threatening). While the construct of mindfulness has been heavily researched, even more so has mindfulness as an intervention. Explored next are the more prominent mindfulness interventions developed throughout the past 40 years.

**Interventions from Major Paradigms**

Mindfulness interventions have evolved significantly over the years, and while similarities exist among the programs and approaches, each one developed through a particular lens and school of thought that informed the practice. Thus, differences exist in terms of the emphasis of mindfulness (i.e., whether toward meditation or intrapsychic processes), methods, and target goals. Below is a review of the more well-known interventions involving mindfulness practices.

*John Kabat-Zinn’s Mindfulness-Based Stress Reduction (MBSR)*

As mentioned previously, Kabat-Zinn originally developed the Stress Reduction and Relaxation Program (SR-RP) in 1979, which later evolved into Mindfulness-Based Stress Reduction (MBSR) in the early 1990’s (Kabat-Zinn, 2011). During its initial development, his target population was chronic pain patients in a hospital setting. As a whole, MBSR takes the perspective of achieving acceptance through non-judgmental awareness (i.e., “…coming to terms with things as they are in full awareness.” [p. 292]). Further, this approach is heavily psychoeducational in nature (Segal, Williams, & Teasdale, 2002), and it employs meditation as a vector for mindfulness in order to cope with the suffering of chronic pain rather than being confined to a life of “learn[ing] to live with [it]” (Kabat-Zinn, 1982, p. 34).
Kabat-Zinn’s emphasis on mindfulness meditation was influenced by Theravada Buddhism as a method of consciously attending to moments of the present as they come and go, rather than fixating on one stimuli (which is termed “concentration meditation”). He justified the use of this kind of meditation for chronic pain patients because meditation in Buddhist tradition can be literally painful, and as such, practitioners used it to bring attention to that pain rather than mentally trying to avoid or escape it. He asserted that with meditation, one learns to put direct focus on the raw pain sensation rather than what the pain means (i.e., miserable life, threat to existence, etc.). This makes the actual pain a separate entity from one’s thoughts and feelings and thus makes the thoughts and feelings about the pain less threatening. Additionally, this results in the raw pain sensations being less “alarming” (although still present) because it is not coupled with the maladaptive thoughts that exacerbate the pain. Over time with practice, this is thought to become second-nature. As such, he transferred this principle to his work with bringing pain relief to chronic pain patients through mindfulness meditation practices. (Kabat-Zinn, 1982).

In the initial launching of Kabat-Zinn’s (1982) intervention, SR-RP became a 10-week program, where 51 patients in a hospital setting participated in a group once a week for two hours. Participants were first taught the basics of mindful meditation, where one learns “sweeping” (i.e., a body scan and concentration on breathing while lying flat on the ground), how to intentionally focus on breathing mindfully (while in the sitting position), and Hatha Yoga postures (emphasizing mindful movement and promotion of healthy exercise). During the first four weeks of the program, sweeping was given as homework via an audiotape to practice at home every day for 45 minutes per session.
When the participants were at the hospital in their groups during this time, they were gradually introduced to using the tape for about five minutes at a time while sitting, as opposed to lying down. During the fifth and sixth week, Hatha Yoga postures were integrated into the daily sweeping practice, again for 45 minutes a session. Over the course of the seventh and eighth weeks, participants were to continue with the Hatha Yoga postures and sweeping but were encouraged not to use the audio tape. Finally, by the ninth and tenth weeks, patients are free to decide what mindfulness practice they want to employ for the day (whether sweeping or yoga postures), as well as whether they wanted to use the audio tape. During their two-hour hospital sessions, psychoeducation was provided regarding the implications of experiential and autonomic avoidance (i.e., the “suppression of the Flight or Fight Response” p. 37).

At the commencement of this intervention in 1982, Kabat-Zinn (1982) found that not only was there a reduction in the physical experience of pain but patients also showed decreases in emotional experiences of pain as well (i.e., reduction in medical symptom reports, negative mood states, and psychiatric symptomology [especially related to depression, anxiety, OCD, and somatization]), demonstrating this to be a promising intervention not only for physical pain for emotional pain as well.

Meditative practices are central to MBSR, whereas, as the discussion will evolve in this section, readers will notice that most scholars (apart from Mark Epstein and Dan Siegel, who will be discussed later) quickly began to veer from its use in their interventions. However, while mindfulness meditation may be disappearing from mindfulness-based interventions, it is still important to note its physical and psychological implications. In particular, noteworthy affective neuroscience researchers
such as Davidson, Kabat-Zinn, Schumacher, Rosenkranz, Muller, Sanotrelli,… and Sheridan (2003) set out to explore the neuropsychological effects of mindfulness meditation. In their 2003 study, they specifically wanted to explore plastic changes in the brain that may result from mindfulness meditation using 8 weeks of MBSR. They also wanted to determine if mindfulness meditation would make an impact on immune functioning. These researchers pointed out that regions in the frontal lobe have been associated with positive and negative affect. The left anterior lobe has been shown to be active when experiencing some positive affect, as well as in those who have dispositional positive affect. This brain region has also been shown to be associated with immune function (the more active this region is, the better the immune function of the individual). Consequently, they hypothesized that because meditation is known to assuage anxiety and enhance positive emotions, then brain activity levels in the participants who go through the mindfulness meditation training should be more active in these brain regions. Additionally, they predicted that with increased activity in the left anterior brain regions (presumably enhanced by the MBSR training) individual’s immune functions would increase as well.

Using an EEG, they measured brain activity of 25 participants before the MBSR training (Time 1), directly after the 8 weeks of training (Time 2), and 4 months after the end of the training (Time 3). Additionally, at the end of the 8 weeks, they injected participants with the influenza vaccine and later took blood samples to measure participants’ antibody count in response to the vaccine. The control group of this study were 16 “wait-listed” participants. At the conclusion of this study, the researchers found that participants who underwent MBSR training showed increased left-anterior brain
activity as well as decreases in anxiety from Time 1 to Time 2 and decreases in trait negative affect at both Times 2 and 3 (measured by the Spielberger State-Trait Anxiety Inventory). They also discovered a significant enhancement of immune function (i.e., increased antibody count) between the participants and controls. While this study used mindfulness meditation explicitly as the target intervention, the researchers’ findings make it worth wondering about the neurophysiological processes and implications of allowing the space for one’s system to slow down and take notice to internal experiences without judgment or reactivity. This process in general is reflected in numerous ways and without the meditative component in the following review of mindfulness-based interventions.

Marsha Linehan’s Dialectical Behavior Therapy (DBT)

Another noteworthy scholar and researcher in the field of mindfulness is Marsha Linehan, who developed what is called Dialectical Behavior Therapy, or DBT. DBT’s perspective and methods falls within the “3rd wave” of cognitive and behavior therapy described earlier. DBT was originally developed to treat high-risk patients as an intervention separate from individual therapy and was aimed to teach patients how to “build a ‘life worth living’” (Linehan & Wilks, 2015, p. 97). This intervention began by taking a manualized approach, which meant attention on a target population with specific problems. This led to DBT’s primary focus on patients with Borderline Personality Disorder because these individuals are typically high risk for suicide and self-harm. Additionally, while DBT has a manual, the developers emphasize that DBT does not necessarily take a linear approach, as both the DBT skills and the modules within each skill set are flexible and are meant to be used based on individual or group needs, clinical
severity, and any comorbid disorders that might exist. Thus, practitioners using DBT are free to pick and choose from the manual based on need (Linehan & Wilks, 2015).

DBT began as an intervention with a primary focus on behavioral approaches; however, developers found that patients needed to learn how to tolerate distress rather than completely change it (as the latter, which was considered a “problem-solving” approach, proved ineffective and actually distressing for some patients). This is where the development of mindfulness as a “core” skill came about (to be explained in further detail later). The term “dialectics,” or in other words, “synthesizing oppositions” [p. 100]), emerged as a function of integrating the practice of mindfulness to promote radical acceptance with the science of behaviorism to enact change (Linehan & Wilks, 2015). Over the course of treatment, DBT introduces three “dialectical tensions”: “Feelings and Beliefs versus Wise Mind,” “Willingness versus Willfulness,” and “Good Guy versus Bad Guy” (Linehan, 2015, p. 84-85).

From Linehan’s (2015) perspective, mindfulness defined is “…the act of consciously focusing the mind in the present moment without judgment and without attachment to the moment” (p. 151). Unlike Kabat-Zinn, this approach to mindfulness fell away from the use of meditation and focused more on mindfulness as an intra-psychic process. In fact, Linehan (2015) argued that one does not need to meditate to be mindful. As one will see, this type of mindfulness practice permeates throughout DBT’s curriculum.

DBT is primarily a skill-building intervention meant to change problematic behavioral responses to situations. It consists of four skill modules: mindfulness (categorized as an “acceptance skill,” which is one of the over-arching dialectics),
interpersonal effectiveness (categorized as a “change skill,” the other dialectic), emotional regulation (“change skill”), and distress tolerance (“acceptance skill”).

Mindfulness’s role in DBT is a significant one. In fact, it is so important to DBT that each of the 4 skill modules incorporates mindfulness in some way: “…mindfulness of others in interpersonal skills, mindfulness of current emotions in emotion regulation, and mindfulness of current thoughts in distress tolerance” (Linehan & Wilks, 2015, p. 104).

More specifically, mindfulness is achieved through 6 modules (i.e., observe, describe, participate, non-judgmentally, one mindfully, effectively), each of which are classified as either a “What” skill or a “How” skill (Linehan & Wilks, 2015).

In “What” skills, one must be actively aware of oneself and the environment or else behaviors are driven primarily by emotions. The mindfulness modules in the “What” skills are: observe, describe, and participate. In the “observe” module, one learns to be aware of internal and external experiences without trying to change or control them. Participants are taught and encouraged to step outside of oneself to become more aware of the self (Linehan, 1993). This module can be compared to the idea of being one’s own meta-cognitive observer. The “describe” module is an extension of “observe” but involves verbally describing what one is observing in an objective manner. It is very cognitive in its function, asking questions such as: are the thoughts rational given the situation or environment? Or are they more controlled by emotion? In the “participate” module, one learns how to be in the here-and-now present moment, which involves “participating with attention” (Linehan, 1993, p. 64). However, one must be careful not to be overly-aware or self-conscious and also not be completely mindless. A balance must exist between the two (Linehan, 1993).
The “How” skills of DBT teach participants the “how” to do the “What” skills (i.e., how to observe, describe, and participate) and use the following modules to do so: non-judgmentally, one-mindfully, and effectively. The “non-judgmentally” module teaches participants to be non-judgmental of their experiences by taking a neutral stance. In doing so, one learns to accept internal and external events as they are without assigning labels of “good” or “bad.” In the “one-mindfully” module, participants learn to focus attention on one moment or task at a time in the present versus ruminating on the future, lingering on the past, or being distracted from the present moment via internal or external stimuli. Finally, the “effectively” module involves “letting go of ‘being right’” (p. 64) and instead allowing oneself the flexibility to accept what is more beneficial in a situation (even if it is the opposite of what one believes is “right”). Participants are asked to think: Is what is “right” actually the most efficacious for oneself in the moment (Linehan, 1993)?

DBT has been used extensively over the years in a variety of settings, such as schools and prisons. It has shown to be effective for an assortment of mental health concerns and behaviors such as eating disorders, depression, borderline personality disorder, post-traumatic stress, ADHD, and emotion dysregulation. However, because DBT can be used flexibly and thus, some skills and modules may be used and other not used, the developers caution that research is needed to determine each individual skill set’s efficacy with the aforementioned mental health concerns (Linehan & Wilks, 2015).

*Steve Hayes’ Acceptance and Commitment Therapy (ACT)*

Another 3rd wave scholar and researcher who is influential in the mindfulness literature is Steve Hayes, who developed Acceptance and Commitment Therapy (ACT).
ACT heavily emphasizes the role of language and cognition and the potential for fusion between the two, which may cause individuals to experience the world as if their thoughts were factual and true (Hayes, 2004). In fact, ACT understands psychopathology as a product of “psychological inflexibility” (p. 6), where language holds so much power over cognition that one will act as though their linguistically-derived thoughts are truth or rules they must abide by, even despite the context and the individual’s values. As such, the overarching goal of ACT is to become more psychologically flexible (Hayes, Luoma, Bond, Masuda, & Lillis, 2006). This is achieved via two primary objectives, the first of which is to change the way individuals relate to maladaptive thoughts. The reasoning here is that when one experiences a thought that conceptualizes him or her in a certain way, one may behave as though that thought’s conceptualization is literally true. This results in a fusion of one’s cognition and one’s actual experiences as if they were the same. Consequently, these kinds of thoughts, because they can be distressing and are accompanied by negative emotions, often result in experiential avoidance. Thus, the objective here involves “weakening of literal language” (Hayes, 2004, p. 654) and to become more aware of thoughts so one is able to take perspective on them. Secondly, a space (or “alternative context”) must be developed that is more adaptive and where more value-aligned behaviors may be expressed. This is the space where change can occur (Hayes, 2004).

ACT does not have a specific manual or set of prescribed interventions. Rather, it is to be thought of as a set of psychological principles to work by when developing interventions for clients. ACT is comprised of several inter-working components: its philosophy of Functional Contextualism, its basic theory of Relational Frame Theory,
and 6 Core Processes (including being present, cognitive defusion, self as context, acceptance, values, and committed action) (Hayes, 2004; Hayes et al., 2006). For the relevance of this discussion, the role of mindfulness in the Core Processes will be discussed.

ACT explains that mindfulness is the deliberate focus on experiencing the present moment (including one’s experience of thoughts, feelings, sensations, etc.) without trying to judge or avoid. When one judges, one uses language in a way that communicates the literal message of their thoughts, which may be harmful (for example, “I am a failure”). Therefore, in order to be non-judgmental, one must alter his or her language in a way that reframes one’s experiences to reflect cognitive flexibility (for instance, “I am a human being who makes mistakes”) (Hayes, 2004). More explicitly, ACT’s mindfulness principles are reflected in 4 of the 6 Core Processes, specifically: being present, cognitive defusion, self as context, and acceptance. ACT’s notion of “being present” represents allowing the present moment as it is to have more control than the language of cognitions that may be judging the moment (Hayes et al., 2006). “Cognitive defusion” is the act of “letting go” of target cognitions and allowing oneself distance from maladaptive and ruminative internal processes (i.e., thoughts, emotions, memories, etc.) (Ciarrochi, Kashdan, & Harris, 2013). In the core process of “self as context,” one is taught to take a metacognitive perspective. This allows one to step outside of one’s own experiences and be more of an objective observer, taking note of bodily sensations, emotions, and cognitions. One learns that he or she can still be constant while noticing how one’s emotions are changing. The overarching lesson here is: one can experience emotions of all sorts but it does not mean that one is defined by one’s emotions. Finally, and most
notably, mindfulness is strongly reflected in the core process of “acceptance,” where one is encouraged to deliberately and purposefully experience (in other words, lean into) his or her thoughts and emotions in the present. This then becomes the antithesis to experiential avoidance (Hayes, 2004; Hayes et al., 2006).

ACT has been used in a wide variety of settings and with diverse populations experiencing a broad range of mental health severity. Hayes et al.’s (2006) review and analysis of the efficacy of numerous studies conducted using ACT show that it is promising in its effectiveness with most all of the samples.

_Zindel Segal’s Mindfulness-Based Cognitive Therapy (MBCT)_

Influenced by the earlier work of John Kabat-Zinn, Zindel Segal and his colleagues developed what is known as Mindfulness-Based Cognitive Therapy (MBCT), which was conceived from working with chronically depressed patients. This approach combines elements of both Kabat-Zinn’s MBSR (particularly the incorporation of mindfulness practice) and cognitive therapy. As the title suggests, MBCT’s central focus and core skill of the program is mindfulness (used interchangeably with “awareness”) and the ability to “let go [emphasis in original]” (Segal, Williams, & Teasdale, 2002, p. 91). In their development of MBCT’s mindfulness component, Segal and colleagues (2002) explained that they decided to veer away from the meditative practices of MBSR and more towards using mindfulness as a vehicle for helping clients increase their overall awareness of thoughts and feelings. They emphasized this decision by stating, “The aim of the program is freedom [from habitual negative thought patterns; emphasis in original], not happiness, relaxation, and so on, although these may be welcome by-products” (p. 91). However, they did adopt MBSR’s principle of embracing all thoughts
and feelings as they come as opposed to trying to fix them (which is a primary focus of traditional cognitive therapy practices). Additionally, MBCT incorporates a humanistic approach to patient’s internal experiences, emphasizing that participants of this intervention gain a sense of “empowerment” over their thoughts and emotions, as they become the “‘experts’ on themselves” (p. 92).

At the start of its development, MBCT’s main emphasis was to help depressed patients develop experiential (i.e., including both raw bodily sensations and emotions) and cognitive awareness in the present moment; incorporate a non-judgmental acceptance of those physical, emotional, and cognitive experiences; and develop more adaptive approaches to those experiences. To achieve this objective, patients participate in 8 sessions that combine psychoeducation and process elements, as participants are encouraged to share their experiences as they arise after an activity (Segal et al., 2002).

Sessions 1-4 of MBCT are focused on learning how to be more aware of the present moment (dubbed, “learning to pay attention”). As a brief overview, these initial sessions include the following practices: noticing how thoughts come and go, learning how to bring attention back to the present when thoughts begin to drift into the past or future (through the use of breathing intentionally and focusing on bodily sensations), and become aware of the negative ramifications of thoughts drifting away from the present. Sessions 5-8 are focused on coping with depressed mood and learning how to sit with negative emotions and thoughts, however unpleasant they may be. Only after one learns how to be with these experiences can they approach them in a way to change them (here, MBCT emphasizes a slow, linear approach). In becoming aware of one’s thoughts and feelings, participants are first asked to make a “breathing space,” putting attention on
bodily sensations and intentional breathing and then moving outward toward their problematic thoughts and emotions. This space allows participants to take their time in responding to their negative experiences versus judging them in a way that might result in impulsively pushing those experiences outside of present existence. Finally, clients work to develop a future-oriented treatment plan that is specific to their own experiences of depression to help prevent relapse (Segal et al., 2002).

Mark Epstein’s Psychodynamic Perspective on Mindfulness and Meditation

While Mark Epstein did not develop a specific mindfulness-based intervention, he did offer a unique perspective of mindfulness from a psychodynamic perspective and with a heavy emphasis on mindful meditation, which was influenced by Buddhist practices. Epstein (1995) defines mindfulness as “…the ability to shift attention to a succession of objects of awareness” (132). In achieving mindfulness, Epstein emphasizes the role of mindful meditation, which he explicates is facilitated by the use of “bare attention” or the “…the clear and single-minded awareness of what happens to us and in [emphasis in original] us at successive moments of perception,’ bare attention takes this unexamined mind and opens it up, not by trying to change anything but by observing the mind, emotions, and body the way they are” (p.110).

The concept of bare attention plays a number of roles in the psychodynamic view of mindful meditation. First, it parallel’s Freud’s notion of free association, as he encouraged his patients to allow thoughts to flow freely and without any interference from the therapist. Additionally, Freud emphasized the importance of therapists listening to everything their clients bring with them without judgment and with unbiased attention to client’s thoughts and emotions. Bare attention also requires one to be open to
everything the experiential self has to offer. Epstein points out how this process of allowing oneself to fully experience the depth and breadth of one’s thoughts and emotions in a non-judgmental way is much like a secure attachment figure who allows his or her child to explore away from him or her without reactivity or interruptions. This also aids in one’s ability to be fearless in the face of potentially painful emotions or thoughts versus reactive and avoidant. Additionally, bare attention engages what Epstein termed as “Astonishment,” which is one’s willingness to find wonder or astonishment even in negative experiences. This allows one to act with approach rather than avoidance or suppression of those experiences. Astonishment, along with the aforementioned fearlessness, allows the ego’s defenses to be seen and realized in a non-threatening manner. Finally, bare attention results in allowing the separation of oneself from one’s experiences (termed “transitional space”). Consequently, one’s thoughts and emotions become detached from oneself rather than remaining fused, which may manifest as one feeling as though one is their internal experiences, resulting in reactive attachment to or preoccupation with those experiences (note the similarity to ACT’s Core Processes of cognitive defusion). Again, Epstein parallels this to the healthy developing child’s realization that the self is separate from their attachment figure, who is now “other” (the secure attachment figure makes this “transitional space” feel safe and thus, facilitates its occurrence) (Epstein, 1995).

From Epstein’s psychodynamic perspective, meditation is used as a tool to help develop a healthy ego that neither becomes preoccupied or obsessed with what brings “delight” (described as narcissism) nor becomes fearful of what brings “terror.” With the use of bare attention in meditation, the ego then becomes equally accepting and
embracing of all experiences, which facilitates a non-reactivity and non-defensiveness to internal and external stimuli. This ego split occurs in both meditation and psychotherapy as one separates the self and becomes a meta-cognitive observer (i.e., in Epstein’s terms, the part of the ego engaging in bare attention) of the self (Epstein, 1995).

As mentioned previously, Epstein (1995) did not develop a specific or manualized target intervention for cultivating mindfulness; however, he did engage in a therapeutic approach using mindfulness. His approach was adopted from Freud’s notion of the therapeutic processes of remembering, repeating, and working through, and then he integrated mindful meditation within these practices. First, the process of “remembering” was a psychoanalytic psychotherapy concept used to tap into the unconscious to discover early (and possibly suppressed) childhood memories that could shed light onto one’s current difficulties. Epstein argued that meditation may not only serve as a potential window into the unconscious, but it may also simultaneously aid in one’s ability to effectively cope with and ultimately accept potentially painful memories. Additionally, Buddhist mindfulness is emphasized in this “Remembering” process as also “remembering the present,” or allowing oneself to experience the here-and-now. Freud alluded to this process without calling it mindfulness when he decided to put more focus on “…whatever is present on the surface of the patient’s mind” (p. 166), much like his technique of free association.

Epstein (1995) explains that in Freud’s notion of “repeating,” he contends that this process involved the client unconsciously repeating problematic patterns (usually in interpersonal relationships, including with the therapist) that are a result of the “remembered” childhood memories and experiences. Because these repetitions are
usually expressed outside of a client’s awareness, gaining awareness of the patterns occurring in the present moment are important. Thus, Freud began to focus on clients’ interpersonal ways of being in the here-and-now (hence, the emergence of the notion of transference). Epstein (1995) points out that mindfulness practices (particularly, fully being in the here-and-now) can be integrated in this process at the level of self-awareness of these repeated patterns, stating that it is more important for a client to have a first-person experience of these patterns rather than being told by the therapist that he or she is having them. In this way, the therapist acts as a support and facilitator for clients as they are having these experiences rather than “forcing” it upon a client. To do this, Epstein (1995) states that the use of bare attention will be important to help client’s cope with the thoughts and emotions that come with becoming fully aware of oneself.

Finally, in the process of “working through,” one is encouraged to engage in experiential approach rather than avoidance or escape. Epstein (1995) elaborated, “To work through something means to change one’s view. If we try instead to change the emotion, or the precipitants of the emotion, we may achieve some short-term success; but we may remain bound, by the forces of attachment and aversion, to the very feelings we are struggling to be free of” (p. 204). In this process, mindfulness teaches the ego flexibility in accepting the inevitable (i.e., negative thoughts, emotions, memories, etc.) via changing its perception of it by using non-judgment rather than working hard to escape it. In Buddhism, it is emphasized that one’s internal experiences (i.e., emotions, thoughts, memories, and drives) are not a separate entity from oneself but are instead part of the whole self and should be experienced as such. When they are viewed as separate from the self (“‘it’ rather than ‘I’” [p. 206]), they seem uncontrollable, larger-than-life,
and consequently, more threatening. In experiencing emotions as a part of oneself, one can develop a deeper experience of the “I” and subsequently, come to realize that these internal experiences are normative and not so insidious.

Dan Siegel’s Interpersonal Neurobiological Perspective on Mindfulness

Dan Siegel has played a significant role in the field of interpersonal neurobiology, integrating the brain and attachment-based theories and approaches. Through this lens, Siegel (2009) has developed perspectives on mindfulness’s central role in human mental functioning, both from a general perspective and from a more specific interpersonal perspective. First, from a general perspective on mindfulness, Siegel (2007) elucidates that a “mindful brain” is one in which the “mind” is aware and attentive to the “brain.” From his standpoint, mindfulness facilitates a newer experience of emotions that is less reactive, more regulated, and is flexible rather than rigidly automatic. When one’s emotional reactivity is not automatic it means one has the freedom to choose to react or not react to emotions. Furthermore, if one can separate oneself from the experiences of mental activities (i.e., sensations, feelings, images, and thoughts, or S.I.F.T.) and see them as just physical activities of the brain (like brain waves), this allows for “discernment,” or one’s ability to recognize that these S.I.F.T. experiences do not represent the whole self. Additionally, Siegel explicates the idea of “invariant representations,” which are much like schemas developed as a result of S.I.F.T. experiences and stored memories. As one grows older, more invariant representations exist and novel experiences become less frequent, which, when encountered, slows down our sense of time. Siegel argues that the overabundance of invariant representations “deaden our feelings of being alive” (p. 105). Thus, he maintains that mindful practice
enables one to be able to slow down even in the presence of familiar stimuli and appreciate those stimuli for what they are rather than what we already know them to be.

Siegel (2007), who is also a proponent of mindful meditation, stated that this practice is important in the overall process of mindfulness, as it “initiates a self-regulatory mind-monitoring process that ultimately is an awareness of awareness itself” (p. 98). Of note, while Siegel acknowledges the importance of the breath control aspect of basic meditation, which begins the “‘aim and sustain’ function of attention” (p. 98), he clarifies that mindful meditation brings the focus of awareness on the entire consciousness system, not just the breath. From a neurobiological perspective, Siegel (2009) explains that this process of awareness relies heavily on the middle prefrontal cortex, which is a hub of neural integration that closely interacts with the limbic system, surrounding cortical areas, the brainstem, and the insula (responsible for internal bodily awareness). As a result, this prefrontal area, whether directly or indirectly through the other brain areas, plays a role in facilitating what he outlined as 9 empirically-validated processes that contribute to effective mindfulness. These include: body regulation (i.e., the balance and homeostasis of the sympathetic and parasympathetic nervous systems); attuned communication (i.e., the sense of interpersonal harmony between self and others [reflected initially in attachment figures early in life]); emotional balance (i.e., the middle-ground between excessive emotional arousal and near-absent arousal); fear extinction (i.e., unlearning a conditioned fear); response flexibility (i.e., the antithesis to impulsivity where one allows oneself the space to think before doing); insight (i.e., one’s ability to see within with active awareness); empathy (i.e., one’s ability to take the perspective of another); morality (i.e., one’s internal sense of what is good for the social
whole and acting on those values both with others and when alone); and intuition (being able to recognize and be aware of nonverbal information, such as bodily sensations).

Siegel also adopts an interpersonal angle on mindfulness, for example, commenting that “Maybe mindfulness is actually a relational process where you become your own best friend” (Siegel, 2009, p. 145). He alludes to how secure attachments in early life may mirror mindfulness processes since secure attachment relationships reflect interpersonal attunement and mindfulness reflects *intrapersonal* attunement. During mindfulness practice, the social areas of the brain become active, suggesting that there is indeed a close link between the two. When the brain enters its “default mode” (p. 148), or when it is “resting,” the social areas of the brain are still being activated, suggesting that individuals are constantly scanning their external environment. With mindful meditation practices, that energy is focused on one’s internal environment through self-awareness and reflective practices, which may be mediated by the same social circuits of the brain. This intrapersonal attunement necessitates acquiring a different relationship with the self—not changing the self. In this way, mindfulness practice allows the space to experience the self as separate from the “prison of repeating patterns of thought and response” (p. 146) (i.e., top-down processes; note that this also parallels ACT’s notion of the rigid linguistically-mediated rules and perceived “truths” of thoughts). Mindfulness changes the focus from perceptual top-down processes, which may come to dominate the system, to sensory bottom-up processes, which anchor individuals in the here-and-now. Finally, intrapersonal attunement also requires activation of the self-engagement system, which essentially is the act of bringing attention to internal experiences with loving purpose and intention but without judgment or fear (Siegel, 2009).
Most notably, Siegel (2007) developed the acronym C.O.A.L., which represents how one should engage in mindful practice: with curiosity, openness, acceptance, and love. This acronym is meant to represent a “mind” that engages in non-judgmental and open receptivity to the internal experiences of the “brain.” It is important to note that this receptivity, or curiosity, is significant in the practice of mindfulness as it goes beyond just being “aware” of one’s environment and instead engages a process of open, non-threatening exploration with “an appreciation of novelty, challenge, and uncertainty” (Ciarrochi et al., 2013, p. 11). This process is what begins the engagement of mindfulness in the first place. Siegel (2007) goes on to argue that the C.O.A.L. approach to mindfulness is also very similar to how one would treat a close friend—with loving acceptance and appreciation. Thus, mindfulness very much mirrors healthy interpersonal processes but at the individual level is reflected as self-love, as though one is engaging in a “self-relationship” (p. 17). This emphasis on self-compassion and love will be explored in further detail in the discussion of positive psychology and mindfulness in a later section. Additionally, Siegal’s C.O.A.L. was the precursor to Henriques developing the C.A.L.M. M.O. model.

*Les Greenberg’s Emotion-Focused Perspective on Mindfulness*

Les Greenberg, another important scholar in the field of psychotherapy, was a central figure in the development of Emotion Focused Therapy (EFT), which, as the name suggests, puts heavy emphasis on people’s experience of emotions and how that informs the self. Emotions are (and have been) crucial to human survival, as they serve as a signal to orient people to determine the meaning of situations, to decide whether to approach or avoid situations depending on the cost or benefit to their well-being, and to
communicate their own action to others. However, as Greenberg (2004) pointed out, “There is a strong human tendency to avoid painful emotions. Normal cognitive processes often distort or interrupt emotion and transform adaptive unpleasant emotions into dysfunctional behavior designed to avoid feelings” (p. 9). Therefore, EFT’s main objective is to teach people how to use their emotions in an adaptive way, much like a tool, rather than fighting against them or being overwhelmed by them (Greenberg, 2004). Much like DBT and ACT, a mindful attitude is central to the effectiveness and success of EFT’s interventions.

Overall, there are three primary goals of therapy using EFT: awareness of emotions, improved emotion regulation, and maladaptive emotion transformation (i.e., replacing the maladaptive emotion with an adaptive one). To accomplish these goals, EFT engages clients in being coached about emotions, in particular as “Arriving” and “Leaving.” Greenberg (2004) states that “…one cannot leave a place until one has arrived at it” (p. 7), suggesting that one cannot move beyond an emotion until that emotion is realized and felt. Arriving entails the practice of awareness and acceptance, as the therapist encourages their clients to become aware of their emotional experiences, teaching them how to sit with those emotions (including emotion tolerance and regulation), how to verbally describe their experiences, and whether or not the felt emotions are primary (i.e., the core emotion directly resulting from the situation) or secondary (i.e., the emotion that may occur as a defense against or response to the primary emotion). It is important here to emphasize the more directly cognitive approach to emotions in the Arriving phase, which is the verbalization of emotions. Being able to form linguistic representations of emotions allows one’s emotions to become more
concrete and meaningful rather than remaining as ambiguous and potentially mysterious entities. These symbolic representations facilitate the development of one’s emotional narratives in response to situations and stimuli. The second phase of therapy is Leaving, which involves change. This includes an evaluation of whether the primary emotion is adaptive or maladaptive, and, if maladaptive, determining what internal cognitive processes are causing that emotion to occur; collaborating on developing more adaptive emotions based on the client’s needs; and helping the client learn how to counter the past negative voice with their new adaptive voice (Greenberg, 2004).

Emotional reactions to events develop from learning and experience over time. EFT coins these reactions as “emotion schemes,” which are top-down emotional processes where learned emotional reactions in response to situations or people may stay fixed over time and across similar situations or people. This can become maladaptive, especially if one develops a negative emotion scheme (i.e., shame, fear, etc.) to something that would otherwise be considered positive or developmentally appropriate (i.e., autonomy, closeness, etc.). Whereas top-down processing engages more problem-focused coping (i.e., trying to figure out ways to avoid the situation or person, which would thus eradicate or avoid the emotion), Greenberg (2004) emphasizes the importance of taking a bottom-up approach to emotions (much like Siegel’s interpersonal neurobiological perspective), which requires more emotion-focused coping (i.e., “…[one] focuses on processing emotion to completion, transforming emotion and integrating emotion into ongoing narratives” [p. 6]). Using this bottom-up approach puts more focus on awareness of raw sensations, including emotions, and tracking them with intention in the present moment rather than avoidance (Greenberg, 2004).
Through the stages of Arriving to Leaving, mindfulness is pervasive throughout this psychotherapy approach in its explicit attempt to help regulate emotions. In conjunction with this learned emotional awareness, other more specific mindfulness treatments such as mindful breathing, self-soothing, and/or meditation may be used in order to help regulate emotions. Uniquely, EFT employs mindfulness practice at both the didactic level as therapists act as “emotion coaches” with their clients as well as the therapist modeling these practices in the therapeutic relationship (Greenberg, 2004). In fact, Geller and Greenberg (2012) advocate for interpersonal mindfulness in conjunction with intrapersonal mindfulness, especially in the therapeutic relationship, stating that therapists’ humanistic treatment of their clients should be a model for how clients can and should treat themselves. They stated:

“Mindfulness with ourselves and our experience parallels humanistic approaches to being with and accepting clients’ experience—but it is mainly focused on the self rather than the other. It is a way of being genuinely with our own experience, with empathy, unconditional positive regard, and acceptance. Therapists’ personal practice of mindfulness can help to cultivate qualities of acceptance, empathy, compassion, and presence within one’s self and, by extension, ultimately within the client” (p. 180).

Ellen Langer and “Langerian Mindfulness”

Ellen Langer developed what is referred to as “Langerian Mindfulness.” This is a concept of mindfulness that excludes meditation and instead focuses on “novel distinctions” (Pagnini, Bercovitz, and Langer, 2016, p. 94), which essentially reflects an openness to and acceptance of ever-changing present moments. The basic premise of this
practice revolves around perceived control, which is synonymous with locus of control, and has been shown to increase well-being when one believes they have more control over their life and life’s circumstances. Pagnini et al. (2016) discusses Rothbaum and colleague’s (1982) concept of primary and secondary perceived control, which covers two different aspects of what one may have control of. Primary perceived control involves taking it upon oneself to change the environment in order to reflect one’s goals (i.e., control the environment). Secondary perceived control means changing one’s goals to align with the environment. This is typically when the original goal is unattainable.

Thinking about mindfulness within this context “allows people to experience more control because they perceive reality as something in constant change, and therefore with endless potential entry points for beginning or trying again” (Pagnini et al., 2016, p. 95). This is the antithesis to mindlessness, which is thought of as a vector for psychopathology. Langer contends that mindlessness is essentially an over-reliance on top-down processes (i.e., experiences and memories that facilitate automatic processes [stereotypes, for example]) with a rigidity that does not mold to the current context because one is too dependent on expectations (Langer, 1992; Pagnini et al., 2016). It can also be a defense against experiential and cognitive processes and may be habitual in nature, as it can be automatic or impulsive for some (Brown & Ryan, 2003). A primary example of what Pagnini and colleagues (2016) believe is the most “intense form of mindlessness” (p. 96) is learned helplessness, as one continues to engage in negative expectations of current situations as though they were past situations where failure, shame, or pain occurred. As such, one must combat mindlessness with mindfulness, a perspective that very much mirror’s Greenberg’s (2004) emphasis on the importance of
transferring one’s focus from top-down processes (usually a mindless process) to bottom-up processes, which requires mindfulness.

Pagnini and colleagues (2016) outline a number of interventions that are used within the framework of Langerian Mindfulness. First, provide clients with multiple perspectives and explanations of the same event as to demonstrate cognitive flexibility and openness to possibility. Second, teach clients how their perception of an event as “good” or “bad” can determine their mood, so it stands that changing one’s perception of an event (i.e., perceived control) will also change one’s mood. Third, teach clients to accept uncertainty by reframing this unpredictability as a “resource” that activates clients to stay with the present. This reframing can also be accomplished by the therapist asking the client questions about the probability of something happening or not. Fourth, help clients become aware of the changeability of moods, thoughts, and behaviors and working to become more flexible and accepting of these changes. For example, one’s emotions do not always remain stable—they fluctuate from positive to negative to positive. Fifth, avoid the use of absolute language (i.e., should, must, etc.) and instead invite “conditional language” (i.e., could, might, etc.). This facilitates openness and allows cognitive flexibility in developing multiple perspectives of a situation or event. Sixth, use of strategic, appropriate humor about a situation or event provides a lighter perspective that would otherwise be seen with a negative filter. This again helps reinforce the use of multiple perspectives. Seventh, help clients work to avoid the use of labeling themselves in a particular way. Labeling has the potential of creating a self-fulfilling prophecy and reinforces rigid expectations of self and others. Instead, allow the space to see oneself as multidimensional. Finally, the therapist must demonstrate this same level
of mindfulness themselves in order to be effective in teaching it. In fact, the authors noted several studies that have demonstrated that therapists engaged in mindfulness had positive results in psychotherapeutic processes and outcomes.

*Positive Psychology and Mindfulness as a Construct for Well-being*

In *Mindfulness, Acceptance, and Positive Psychology: The Seven Foundations of Well-being*, Todd Kashdan and Joseph Ciarrochi set out to integrate principles of ACT and positive psychology to emphasize the promotion of human flourishing and personal growth. In doing so, they proposed seven “Foundations” of well-being, which are essentially seven broad categories that encompass optimal functioning and well-being from a variety of psychological perspectives, including ACT, positive psychology, and CBT. A number of scholars and researchers in the field discuss each foundation from their own perspectives and in some cases, provide specific interventions aimed to achieve the overall goal of the foundation of focus. The seven foundations are as follows: functional beliefs about the self, others, and the world; mindfulness and awareness; perspective-taking; values; experiential acceptance; behavioral control; and cognitive skill (Ciarrochi et al., 2013). While not all of these foundations will be discussed here, one of obvious note is the foundation of mindfulness and awareness.

Throughout the book, authors discuss mindfulness as a construct for well-being and do so based from a positive psychology perspective. Two authors in particular are Garland and Frederickson (2013), who elucidate the well-known Broaden-and-Build theory in positive psychology. This theory asserts that positive emotions help one to engage in more present-moment experiences (i.e., broaden awareness), build upon one’s personal psychological resources, and build resilience against negative emotions,
particularly the physiological effects. As it relates to mindfulness, this approach emphasizes the mindfulness practice of “decentering,” which may look very similar to ACT’s cognitive defusion. This decentering involves actively detaching oneself from the “content” of one’s internal processes (i.e., beliefs, thoughts, emotion, etc.) and focusing instead on the processes themselves. It is suggested that this will minimize one’s attachment to the content and will allow more cognitive flexibility to accept the processes as “stories” rather than the whole of one’s identity. In turn, this may lead to increases in positive reappraisals of stressors (i.e., “reconstructed as benign, beneficial, or meaningful” [p. 44]) as one begins to approach his or her conscious experiences with a more rational perspective on the stressors in context. Here, the authors lay out specific interventions for “mindful appraisal” to improve cognitive flexibility and engagement of positive appraisals. Some of these include: help guide the focus of a client’s emotions and cognitions in the present; pose questions aimed at clarifying the meaning of one’s emotions and potential positive aspects of an otherwise negative situation; mindful breathing; and daily logs of positive reappraisals.

Another author whose focus centers on the non-judgmental aspect of mindfulness as well as self-compassion is Robyn Walsner. Much like Greenberg (2004) pointed out, Walsner (2013) highlighted that over time, people have learned that negative emotions hurt and should be avoided, while positive emotions feel good and thus, should be pursued. The difficulty with this is that in doing so, one denies him or herself the full experience of what it is to be human as well as tries to hold tightly onto positive emotions which, just as with negative emotions, are meant to be momentary. She states, “When we are experiencing immeasurable pain, fear, and sorrow, when we are vulnerable and
tender, that is the very time to turn toward experience rather than to escape it. It is the
very time when we most need acceptance; when we most need love” (p. 70). Judgment of
one’s internal experiences facilitates fear (i.e., fearing fear) and in this way, does not
leave room to love oneself or be present with those experiences (instead, reactive escape
and avoidance ensues, which is the antithesis to mindfulness). In order to love in this
way, one must first create a space of openness to negative emotion with the knowledge
that pain and fear is pervasive and in fact necessary in order to be human. This engages
non-judgmental approach behavior toward these experiences. Then, one must allow him
or herself to sit with these emotions with intentional awareness in the present moment.
This allows negative emotions to enter and exit consciousness freely. Both processes
ultimately result in a calmer, more mindful approach to the experience pain.

**The Missing Link in Mindfulness: A Map of Human Consciousness**

It is clear from this review that mindfulness has captured the attention of many
scholars and therapists and seems to have much potential utility. However, despite these
efforts to capture mindfulness (both in terms of conceptualization and intervention),
throughout the literature, what appears to be lacking is a clear representation of what one
is supposed to be mindful of—human consciousness. This is important when considering
mindfulness because in mindful practices when one is being asked to “act with
awareness” or “observe” internal experiences with nonjudgment and to hold on to those
experiences in a non-reactive way, essentially one is being asked to harness and “be
with” consciousness.

In fact, Brown and Ryan (2003) contended that mindfulness abilities, such as
attention and awareness, are central to human consciousness. From their perspectives, it
then stands that mindfulness involves the intentional, conscious employment of these
abilities to present moment experiences. Although mindfulness is comprised of abilities
other than attention and awareness, as evidenced in Baer et al.’s (2006) description of the
five mindfulness facets described earlier, it may be argued that each of those facets still
involves the skillful use of one’s self-consciousness system. This can be a difficult task,
however, if one does not have a clear map of consciousness. The argument is made here
that a map of this nature is needed in order to delineate the complicated network of
internal experiences that one is supposed to become “aware” and “accepting” of.
Additionally, throughout the literature, authors note that mindfulness includes meta-
cognitive abilities (Bishop et al., 2004), “conscious awareness” (Ciarrochi et al., 2013, p.
10), or “awareness of awareness” and “paying attention to intention” (Siegel, 2009, p.
147), confirming that self-consciousness is necessary in effective mindfulness practice.
However, when or if these abilities are further elaborated on, the explanations are
ambiguous, stating for example, that “conscious awareness” is the process of
“intentionally regulating attention toward what is happening here-and-now” (Ciarrochi et
al., 2013, p. 10). Even Kabat-Zinn (2011) argued, “Our internal map, if we are unaware
of it, or strongly attached to it, can unwittingly impose just such a coordinate system for
the patient/participant that can lead to idealizing a goal to be realized or attained, rather
than letting realization and attainment take care of themselves.” (p. 297). However, no
map of internal experiences was presented. To a layperson (i.e., likely a client or patient)
who may be new to learning what it means to be “present” or learning what his or her
emotions and thoughts represent, this ambiguity is unhelpful. Thus, if mental health
professionals are going to teach mindfulness, there must be a deeper understanding of
what is in clients’ conscious awareness and further, helping clients become aware of this themselves. Once this map of consciousness is established, mindfulness practice may be more easily navigable.

**Human Consciousness: Mapped and Navigated through Mindfulness**

Fortunately, one such map does exist, and it is called the Tripartite Map of Human Consciousness, developed by Gregg Henriques (2011). However, before immediately delving into this map’s components, it is useful to describe its evolution and the framework in which it is embedded. Specifically, the C.A.L.M. M.O. approach, which guides folks using the Tripartite Map, is part of a new vision for the fields of psychology and psychotherapy called UTUA. This framework is an amalgamation of the unified theory of psychology (UT) and a unified approach to psychotherapy (UA).

*The Development of the UTUA*

The field of psychology is deeply fragmented and has been since its beginnings. Although it is not often discussed in textbooks, scholars of the field know that the science of psychology has existed without a collectively shared scheme or system of understanding, which has led to vast confusion and debates about “right” and “wrong” approaches in the field. It was this realization in the early 1990’s that started Henriques (2017a) on a 20-year-long journey to create a framework that he argued could unify psychology. The journey began with an awareness of the psychotherapy integration movement, which is the attempt to pull the major paradigms in psychotherapy together in psychology (i.e., cognitivism, behaviorism, humanism, and psychoanalysis). However, Henriques soon realized that a more foundational approach to unification was needed. Specifically, he realized that psychotherapy was dependent upon the field of psychology, such that psychotherapy could be unified only to the extent that the discipline of
psychology could be. Subsequently, a series of “key insights” set the stage for a new meta-theory of psychology.

The first major idea to emerge was the “Justification Hypothesis,” which recognized the evolution of language as an important precursor to the development of human consciousness. This will be explained in more depth in the following section entitled, “The Justification Hypothesis and the Rise of the Tripartite Map of Human Consciousness.” Not soon after this hypothesis was developed, Henriques realized that language was not the only information processing system that created major phase shifts over time in the history of the universe. In fact, there were three: 1) genetic information processing that gave way to life; 2) neuronal information processing that gave way to the development of the mind (which corresponds to animal behavior); and 3) language information processing that led to the development of culture and the capacity of humans to behave as persons. Through this discovery, Henriques developed what is now called the “Tree of Knowledge” (ToK) that delineates these phase shifts (Henriques, 2017a).

The development of the ToK led Henriques in 2003 to formally outline his unified theory of psychology in The Tree of Knowledge System and the Theoretical Unification of Psychology (Henriques, 2003). In the article, Henriques showed how his system could align the central insights of theories that exist on opposite ends of a spectrum—Sigmund Freud’s psychoanalysis and B.F. Skinner’s radical behaviorism. In doing so, Henriques demonstrated how “the ToK System allowed the field to realign the central insights of Skinner and Freud and did so in a way that allowed for much greater specificity regarding the relationship between the physical, the biological, the psychological, and the social dimensions of complexity” (Henriques, 2017b, p. 32). However, this paper did not
outline specific psychotherapy practices but rather delineated radical behaviorism and psychoanalysis as knowledge systems that can be used to describe and explain. It was not until Henriques took on the role of James Madison University’s Combined-Integrated Clinical and School Psychology program director in 2005 that he began to see a need for a clearer articulation of the application of this framework (Henriques, 2017b).

During this time, as he taught core content courses in psychology as well as supervised doctoral students, he began to encounter students and supervisees that expressed interest in learning about his theory of unification but were unclear about how to integrate his system in their clinical practice with clients. This demand, in conjunction with his role as program director, where he sought to solidify the identity of the program, led Henriques to begin developing and elucidating a foundational representation of his unification of psychology. In doing so, he wrote and published a book in 2011 entitled, *A New Unified Theory of Psychology*. It was from this book that “the unified theory” (UT) came to fruition through the articulation of the four major interconnected pieces that comprise it: 1) The Tree of Knowledge System, 2) the Justification Hypothesis, 3) Behavioral Investment Theory, and 4) the Influence Matrix. In Chapter 8 of this book, Henriques also introduced the need for a unified approach to the practice of psychotherapy.

Over the years after writing this book, Henriques began to shift his attention to developing this unified approach, whose foundation rests on the principles of the UT. The unified approach to psychotherapy has evolved into the development of four major structures and frameworks (i.e., the Character Adaptations System Theory [or CAST]; the Character Wheel of personality; the Nested Model of well-being; and the C.A.L.M. M.O.
approach to conflict and distress) that allow for a comprehensive understanding of human nature and development as well as an inclusive, holistic psychotherapy practice (Henriques, 2017a; Henriques, 2017b). Most recently, Henriques (2017b) combined his unified theory (UT) and unified approach (UA) together into a complete framework called UTUA (pronounced ə tū əʾ). This system allows for a method of explaining the foundation of psychological phenomena while also providing a guiding structure for performing psychotherapy using the four frameworks mentioned above (Henriques, 2017b).

The Justification Hypothesis and the Rise of the Tripartite Map of Human Consciousness

The Justification Hypothesis (JH) is an idea about the evolution of human consciousness and culture. It stemmed from using an evolutionary reverse engineering approach, whereby Henriques (2017a) recognized that the evolution of language posed an adaptive problem for humans. Although language allowed our ancestors to be able to share information and thoughts with each other, it also required them to justify their actions to one another. This created the adaptive pressure that shaped the evolution of human consciousness. In short, the JH gave way to three very important discoveries: 1) language as an information processing system gave rise to the evolution of human consciousness and subsequently, culture; 2) human self-consciousness can be delineated into distinct systems via the Tripartite Map of Human Consciousness; and 3) humans exist within justification systems made up of beliefs and values that range from the individual (i.e., one’s private narratives), dyadic (i.e., two individuals sharing thoughts together), group (i.e., multiple individuals sharing amongst each other) and macro-level
(i.e., large-scale systems that groups are embedded in, such as religion or the justice system) (Henriques 2017b).

With the emergence of the JH, Henriques (2011) began to delineate human consciousness into a clear map, which came to be called the Tripartite Map of Human Consciousness. The Tripartite Map of Human Consciousness (see Figure 1 below) is composed of three interwoven “selves”—the experiential self, the private self, and the public self—and each of these systems are separated by filters. The conglomerate of these systems and filters are what comprise human consciousness. It is called a “tripartite” map in clear reference to Freud’s tripartite to id, ego and superego. Although there are parallels with Freud’s model, there are important differences as well.

The experiential self is the part of one’s consciousness where core emotions, raw sensations, and primal drives (e.g., hunger, sex) reside. The attentional filter is the vehicle of sensory input into the experiential self, whereby it puts attention on certain environmental or bodily stimuli and not on others. The private self is where one’s internal narrator (i.e., self-reflective thoughts) exists, which works to explain and judge the core

Figure 1: The Tripartite Map of Human Consciousness
feelings, sensations, and drives from the experiential self (here, the experiential self is also providing feedback to the private self). Between the experiential and private selves exists the Freudian filter, which filters and redefines potentially troublesome memories, images, and/or urges from the subconscious in order to help one maintain consistency with one’s “conscious justification system” (p. 47). The public self is the part of one’s self-consciousness where one decides how and what of their internal experiences and identity they want to share with others, a decision of which is based on what one wants others to see and what one imagines others see. This notion is framed within the Influence Matrix, which asserts that humans seek “relational value” with one another. Relational value means that people have a need to be known and valued by important others in their lives, such as family, intimate partners, friends, and groups. As a result, generally-speaking, they then strive to seek acceptance while also trying to avoid rejection by these important others. The last filter, the Rogerian filter, resides between the private and public selves and dictates how much or how little of one’s “true self” he or she allow others to see. Both the Freudian and the Rogerian filter serves the important purpose of maintaining a “justifiable image in the eyes of others” (Henriques, 2011, p. 47).

The Potential for Conflict and Disharmony

The JH explicates how humans came to justify their actions to themselves and others, of which these justifications could likely have had significant social consequences (either continued acceptance by others or rejection, which could threaten one’s survival). This is further explained by the Influence Matrix’s notion of relational value, where humans seek to be known and valued by important others and themselves. Embedded in
this assertion is humans’ innate and immediate experiences of emotions in relation to their context (i.e., the Experiential Self), how they relate to their emotions and how they come to justify and explain them both to self and others (i.e., the Private Self), and further, how these justifications and choices of action can impact their relational value within a given social context (i.e., the Public Self). This then either creates the space for intrapsychic and interpersonal harmony and flourishing or disharmony and stagnation, depending on a combination of one’s own emotional intelligence and sophistication as well as what the micro and macro systems within a culture communicate to individuals about their emotions (Henriques, 2017a; Henriques, 2017b). When one experiences intrapsychic or interpersonal disharmony, this can often be representative of conflict among the systems of human consciousness.

Emotions in this system serve an important purpose. They are physiological responses or signals that provide data from the environment and/or one’s body and are dependent upon one’s motivational states of approaching or avoiding specific stimuli (Henriques, 2017c). In the language of the UTUA framework, emotions are a function of the Experiential Self. However, humans are unique in that they are also equipped with the ability to judge or make sense of the Experiential Self, which is via the Private Self. This then leaves the potential for the Private Self to either accept the Experiential Self’s input or reject it based on what the Private Self believes it “should” or “should not” be feeling. The ultimate judgment of “should” or “should not” that the Private Self makes about the Experiential Self is often a product of important others’ influences or implicit messages about emotions during formative developmental time periods in one’s life. While this judgment-making is a common and expected occurrence for humans, it can be
complicated by one’s natural temperament, specifically those who are high in trait neuroticism. This temperament encompasses one’s tendency toward heightened sensitivity to negative emotions, increased reactivity and intensity, and difficulty being soothed afterward. When these individuals experience a stressor in their environment, it may result in a quick and intense negative emotion state, impulsive behaviors in response to the emotion, and a slow return to baseline. To complicate this response to negative emotions, individuals who are high trait neurotic may also judge their negative emotions harshly and critically. In other words, they have “negative reactions to negative feelings” (Henriques, 2017f).

Some of these maladaptive responses to negative emotions include over-regulation, under-regulation, or a combination of the two. Those who over-regulate may believe that their emotional experience would be too painful, that it would not be accepted by others, or that they would lose control, so they avoid or suppress their emotions. Individuals who under-regulate may become overwhelmed or flooded by their emotions and may have trouble regulating their own behaviors or impulses to act on those emotions. Often, people will both over-regulate and under-regulate their emotions. For instance, in an effort to avoid their negative emotions, some people become overwhelmed by them, which may result in self-blame (i.e., “I failed to control myself”) (Henriques, 2017c). Unfortunately, because individuals who are high trait neurotic are confronted with negative emotions more often than others, this maladaptive treatment of emotions over time can lead to very serious mental health issues (Henriques, 2017f).

The reason these coping strategies are maladaptive are because both attempt to try and avoid or get rid of negative emotions prematurely. However, the difficulty with this
is that it creates what Henriques (2017d, 2017f) terms a “closed neurotic loop.” Emotions do not disappear on their own, especially when they have not yet served their function of signaling and providing data of one’s external and internal environment. Instead, when these maladaptive coping strategies are employed regularly, emotions may be pushed into one’s subconscious, at which point it takes more and more energy to regulate them and to continue suppressing them. Subsequently, this may lead to increased self-criticism and harsh self-talk to try and inhibit the emotions. This process then creates even more negative emotions and inner hostility, which can result in turning against the self (in other words, directing anger inward and potentially internalizing a negative introject).

Eventually, the emotions that were not processed adaptively in the first place along with the negative emotions generated from one’s inner hostility come rushing out of the subconscious, and the individual becomes overwhelmed by the feeling. This can result in a flood of emotions that may take the form of rage, anxiety attacks, depressive episodes, or even suicide attempts. Unfortunately, without learning new, more adaptive ways of processing emotions, these individuals will instead continue to shut down their emotions even further, setting the neurotic loop up to repeat itself.

Henriques (2017c) explicates an adaptive means of processing emotions, which he describes as finding one’s emotional “Sweet Spot.” Here, one is to strike a balance between emotional awareness and attunement and adaptive emotion regulation. How well or poorly one is able to be aware and attuned to their emotions as well as how well or poorly one is able to regulate their emotions is largely dependent upon how these abilities are modeled and cultivated by caregivers during early formative years.
To see this clearly, Henriques invites us to consider the example of “Johnny,” who is a seven-year-old boy learning how to ride his bike. While he is practicing, he falls and scrapes his knee. He then immediately begins crying and runs to his father who is nearby. How his father responds is very important, given where Johnny is in his development. His response will not only make a significant impact in how Johnny expresses his feelings in the future but as Johnny grows to be an adolescent, it will also have strong implications for what Johnny internalizes from his father’s response—as either critical or accepting of emotions. If Johnny’s father responds with too much awareness and attunement without any modeling of emotion regulation (i.e., “I am sorry you are hurt”), then he does not provide Johnny with any scaffolding on how to deal with emotional pain. If Johnny’s father responds with over-regulatory remarks and no emotional awareness and attunement (i.e., “Stop being a wimp”), then not only is he dismissing Johnny’s emotional pain, but he is teaching Johnny to hold his emotions inside, creating a maladaptive and critical relationship with his emotions. Instead, the “Sweet Spot” response strikes a balance between the two: “Oh, I am sorry you hurt your knee. Let me see it. It is just a scrape and a little blood. I know it hurts, but it won’t kill you. You are tough; you can handle it. It happens to everyone when they are learning to ride their bike. Do you want to try again or are you done for the day?” Here, his father is acknowledging awareness of Johnny’s feelings and is attuned to his son. He is also helping Johnny regulate his emotions by illuminating the reality of the situation and what Johnny is capable of (Henriques, 2017c).

The neurotic loop is the product of poor scaffolding of emotional processing. People who find themselves caught up in this loop often have internalized maladaptive
messages about their emotions and have come to view them as threats to their system. Henriques (2017c) contends that in order for people to find their emotional “Sweet Spot,” they must first recognize that their emotions are not the problem, but rather they simply provide information about a problem in the environment. Once this is acknowledged, one can then become a curious observer of one’s emotions (i.e., being aware and attuned) and work toward developing a new, less judgmental attitude of their experiential, private, and public selves (i.e., engaging in adaptive emotion regulation). Henriques argues that in order to do this, one must become mindful of one’s conscious experiences. The next section outlines the mindfulness framework, C.A.L.M. M.O., developed by Henriques (2011) that is aimed at providing this very scaffolding needed to stop the neurotic loop from perpetuating itself.

A New Perspective on Mindfulness: On Developing a C.A.L.M. M.O.

The C.A.L.M. M.O. framework is deeply embedded in the UTUA system. Just like the other three major frameworks that make up the unified approach, C.A.L.M. M.O. is grounded in a unified science of psychology via the unified theory. In particular, its foundation is informed primarily by the interrelation of the Justification Hypothesis (JH) described above, which is where the Tripartite Map of Human Consciousness arose from (Henriques, 2017b), and the Influence Matrix.

C.A.L.M. M.O. is a principled approach to effective and adaptive emotional processing that provides a framework for facilitating both intrapsychic and interpersonal harmony. More specifically, it uses the Tripartite Map as the foundation of awareness of conscious experiences (among the experiential, private, and public systems) in order to ease the facilitation of curiosity, acceptance, self-compassion, and new ways of
interacting with self and others. At its broadest level, it provides people with a different choice in attitude towards themselves and others. Rather than reactive emotional avoidance or hostility (due to self-justifications that one’s negative emotions will result in social rejection or isolation, for example), C.A.L.M. M.O. acts as a catalyst to slow down the entire system to allow individuals the space for developing adaptive emotional awareness and attunement together with adaptive emotion regulation (Henriques, 2011).

When using this framework, the intention is to introduce the concept as helping one work to develop a C.A.L.M. M.O. The “M.O.” at the end stands for “Meta-cognitive Observer,” which characterizes a frame of mind where one is encouraged to think and reflect upon one’s own conscious cognitive and affective processes (as discussed via the Tripartite Map of Human Consciousness). It also carries a second meaning, which will be noted below.

The “C” represents “Curiosity,” which facilitates a non-threatening attentive awareness to present-moment processes. Here, one’s metacognitive observer takes a stance of “wondering,” which prompts non-reactivity. “A,” or “Acceptance,” adopts the non-judgmental approach to here-and-now emotional and cognitive experiences. Using curiosity, one will be able to “make sense” of their internal experiences in relation to their context, which then manifests as acceptance to the extent to which they can be present with the feeling and what it is communicating. Loving compassion, represented as the “L” in this acronym, prompts one to remember his or her humanity as well as the humanity of others. The importance of this element is the reminder that emotions are a natural human process that deserve attention and care rather than hostility or avoidance. Finally, the first “M,” representing “Motivation to learn and grow from a place of safety
and security,” refers to one’s commitment to change, so long as circumstances allow this to happen. Here, one is reminded that if current ways of being are not working (i.e., maladaptive emotional processing), then work towards “doing differently” (i.e., adaptive regulation and processing) (Henriques, 2015).

With the attitude encapsulated by C.A.L.M. spelled out, we can highlight the second meaning of “M.O.”. This also stands for “modus operandi” and represents someone’s way of doing something or way of being. Therefore, the overall idea behind this framework is two-fold: 1) it outlines elements of an effective mindfulness practice that seeks to develop and facilitate intrapsychic and interpersonal harmony among emotional, cognitive, and interpersonal domains; and 2) the broad use of the term itself (C.A.L.M. M.O.) serves as a reminder for one to develop a different modus operandi—one that goes from critical to calm (Henriques, 2015). To more clearly elucidate how this change may occur, a brief case example is illustrated below.

A Case Example: Maggie Nelson

The following case is that of a college student named “Maggie” (real name changed here), a true story of one of Gregg Henriques’ individual therapy clients in recent years, who suffered from severe depression and suicidal ideation. She has since given permission to share her story. The following is a brief summary of Dr. Henriques’ work with her, which he outlined in his blog on Psychology Today entitled, Maggie’s Story: The Many Reasons Why Not (Henriques, 2017d).

At the time that Maggie met Dr. Henriques, she had already attempted suicide 3 times and was cutting her wrists 4-5 times a week. She suffered from severe depression and was unable to cope with her negative emotions, as she would often decompensate
quickly in the face of stress. Maggie appeared to have a long-standing history of high trait neuroticism, as she was sensitive and reactive to negative affect, which began on the onset of puberty—often a common experience of most. She was also a very agreeable person and cared very much about her impact on others, so whenever she did feel negative emotions, she would frequently engage in very critical and harsh self-talk and would internalize her anger (versus expressing this anger outwards). Most importantly, Maggie had a prior history of rape at the age of 15 from her boyfriend at the time and had not told anyone before. Instead, because her automatic impulse was to turn her emotions inward to avoid the potential that others may not accept her otherwise (in fact, believing that her mother would be angry at her for drinking at the time of the rape), she held on to this trauma, which began to consume her and led her to feeling powerless and hopeless.

Through her time in therapy she eventually began processing her trauma in therapy and finally disclosed her trauma to her mother. In doing so, she encountered a healing experience with her mother, who not only expressed sadness for what happened to Maggie but also expressed her love for her daughter despite her sexual trauma. As time went on, she transformed a great deal after receiving this healing response from her mother and was able to eventually tell her father of her rape. However, she continued to struggle with her emotional health. At his juncture, Dr. Henriques introduced Maggie to C.A.L.M. M.O. to help her recognize and become attuned to her emotions as well as to help her adaptively regulate them. Below is an excerpt, which demonstrates Maggie’s internalization of C.A.L.M. M.O. and her use of it. This excerpt begins after a difficult exchange between Maggie and her father. Maggie had planned on attending a concert with a male friend and staying overnight in a hotel with him. However, her father, who
had been in a poor mood that day, responded by forbidding her to go and telling her that if she did, he would no longer pay for her college tuition.

It was a harsh exchange and completely unsettled her. A short time later she was alone in her room, crying and feeling completely overwhelmed. She had told her friend she was not going, and he was pretty upset. So now she felt completely trapped. How could her father do this to her? Everything sucked.

Her mom came up into her room an hour later or so. “I know you are pretty upset, dear. I understand.”

“Mom, it is just not fair,” Maggie proclaimed.

“Sometimes life is not fair. What would Dr. Henriques tell you?”

“He would tell me to activate my C.A.L.M. M.O.” It was the first time she had really thought about it as she was in a panic.

“That sounds interesting, what is that?” her mother asked.

“It says when you get stressed, take a perspective that is curious about what is happening, accepting of negative emotion, loving and compassionate toward self and others, and motivated to get the best outcome.”

“Ok,” her mother said. “Can we apply that here?”

And so they did. And it immediately began to transform how she was experiencing the event. One major shift was that she turned her “curious” attention to her father. She asked herself, with a curious attitude, what was he feeling and why. She quickly recalled he had been grumpy all day. It started when they had gotten lost, and the family was late to the tour. Her dad hates getting lost. And he was not happy about the transfer; he loved JMU and was really hoping she would graduate from there. And, of course, there was the rape incident that hung between them. Clearly, her going to a city and spending a night in a hotel with a boy activated that thought. What was he really trying to do? She asked herself. And a little voice told her that he was just trying to protect her.

This awareness immediately led to another insight. She had unacknowledged fears about what the rape would mean for her life. Would she always need to be looked after? Would she always be seen as vulnerable? Would others try to control her? Would she be judged as not being able to make good decisions? Yes. These thoughts resonated. This was why his reaction was so upsetting to her. It meant all of these things she secretly had feared.
With a much deeper understanding available, then the other pieces fell into place. She was in a much better place to accept her feelings. Yes, this sucked, but it was hardly torture. And both her father’s feeling and her own made perfect sense. So, she could hold a loving attitude toward both in the midst of the conflict. And the path forward seemed clear. Make the best out of the night and find a time to process this event with her father going forward. A half an hour later she and her mother were making popcorn and getting ready to watch a movie.

From this excerpt, one can see how Maggie was able to slow down her negative reactive feelings simply by reminding herself of Dr. Henriques, who would tell her to “activate [her] C.A.L.M. M.O.” In doing so, she found herself stepping into the perspective of her meta-cognitive observer, who became attuned to her emotional experiences through curiosity of her father’s reaction, acceptance that his reaction made sense given the context, and love and compassion for him for simply wanting to protect her—restoring her perceived relational value. Not only was she able to engage this in respect to her father, but she was also able to become attuned to the underlying impact that her own fears and related emotions had on this situation. Additionally, instead of continuing to suffer by wallowing in her room and ruminating, she was motivated to “make the best” of the situation by enjoying time with her mother and finding a time later to process this with her father. Overall, this mindful attunement to her conscious experiences opened the space to adaptively regulate her emotions by not only allowing herself the experience of them but also recognizing the reality of the situation — “Yes, this sucked, but it was hardly torture.”

The Development of a Project and Subsequent Change of Plan

This project set out to explore the utility of using C.A.L.M. M.O. as a new mindfulness intervention for college students, particularly in the form of a small group, as this arrangement was most prevalently used in the literature and appeared to be an
effective vehicle for delivering and processing mindfulness practice. Thus, the research question that developed subsequently was as follows: Can a unified mindfulness practice and curriculum that incorporates a deep understanding of human consciousness increase college student well-being, decrease anxious and depressive symptomology, and increase a deeper, more meaningful awareness of the self?

Originally, the study’s use of this intervention was going to be delivered via a small 11-week group (serving approximately 8-10 participants). Each session, occurring once weekly, would have lasted 1.25 hours. The first 6 sessions of the group was going to be dedicated to facilitating comprehensive physical, emotional, cognitive, and interpersonal awareness using meta-cognitive self-reflective practices, informed by the Tripartite Map of Human Consciousness as well as various major paradigmatic perspectives on mindfulness (such as interpersonal neurobiology, DBT, ACT, psychodynamic, and emotion-focused therapy, to name a few). The last 4 sessions would have brought this knowledge and self-awareness together using C.A.L.M. M.O., as students would learn explicitly how to use each part of the acronym and then practice integrating the parts into a coherent whole that encompasses mindfulness. Participants were recruited via the use of a flyer, which was provided to four Psychology 101 classes (approximately 40 students per class) and was posted at JMU’s Counseling and Psychological Services (CAPS) center as well as JMU’s Counseling Center (clinicians were also made aware of this group to refer clients as appropriate). Students who would have been eligible to participate in this group would be currently enrolled students at JMU as a Freshman, Sophomore, Junior, or Senior between the ages of 18-22. Additionally, through pre-selected screening measures, preferred participants would have
been those who: 1) expressed interest in self-reflection, 2) were motivated to participate and engage in change; 3) were experiencing socioemotional difficulties; 4) were not currently suicidal or at risk to harm self or others; and 5) were not seriously mentally ill or experiencing chronic emotional issues.

Unfortunately, after recruiting for approximately two to three weeks, only two students reached out expressing interest in participating in this group. Additionally, the inclusion and exclusion criteria may have limited access to a larger pool of participants, especially criteria related to motivation to engage. For example, Psychology 101 professors were not encouraged to provide an incentive for participation due to the amount of intrinsic motivation needed to engage in self-reflection over the course of the group intervention. Thus, this lack of external incentive plus the time dedication seemed to have an unappealing affect on students. The implications of this as well as what this means from a diagnostic standpoint will be reflected on further in the “Discussion” section.

A new plan for delivering this mindfulness intervention was developed in an effort to reach more participants. As such, to address the time dedication, it was decided that a one-time occurrence (versus 11) in the form of a small and brief (1.5 hour) workshop may be more appealing to students. In order to gain accessibility to a larger number of students, the inclusion and exclusion criteria were broadened out such that no age limit was enforced, and students would not undergo a pre-screening. Additionally, it was decided to utilize JMU’s participant pool to allow any and all willing and able students to participate. This would also address student’s motivation to participate, as students in the participant pool are required to participate in order to receive credit for
their corresponding classes. The possible unfortunate downside to this method was that students may not be intrinsically motivated to engage in the workshop, as their reason for participating was largely extrinsic. However, upon further reflection, it could also be argued that the sample of participants would more realistically represent JMU’s population and may provide insight into the effectiveness of this intervention among all types of students, whether intrinsic or extrinsically motivated. Thus, it was decided to move forward with the one-time brief mindfulness workshop, of which the following newly revised research question was addressed in its content: Can a brief unified mindfulness intervention that incorporates a deep understanding of human consciousness increase college student well-being, decrease anxious and depressive symptomology, and be easily internalized?
Chapter Three:

Methods

Overview

In this study, participants, all of whom were college students at James Madison University, completed the unified mindfulness workshop entitled, *From Critical to CALM: A Guided Mindfulness Workshop*. Stages of this study included the following: 1) Participant recruitment; 2) Conduct the pre-intervention assessment of participants; 3) Conduct the workshop; 4) directly after each workshop, administer a brief “Quiz” to assess the knowledge they obtained as well as a satisfaction survey; and 5) Conduct the post-intervention assessment of all remaining participants. Participants were recruited from JMU’s participant pool through an online system called SONA, where they received class credit for their participation. Pre-intervention assessments included an informed consent, the *Henriques-10 Well-Being Questionnaire*, the *CORE-OM*, and the *GAD-7* and were administered via a hyperlink using Qualtrics, an online research software. Participants then attended the one-time, one and three-quarter hour workshop. For the first one and a half hours, participants were provided psychoeducation about human consciousness, emotions in general, maladaptive emotional processing, and adaptive emotional processing using the C.A.L.M. M.O. model. During the last 15 minutes, they completed two qualitative and quantitative surveys regarding 1) the knowledge they obtained from the workshop (labeled as small “Quiz”) and 2) their feedback about the workshop and its processes. Finally, remaining participants who completed the pre-intervention assessments and attended the workshop were asked to complete post-intervention assessments. These assessments again included the *Henriques-10 Well-Being*
Questionnaire, the CORE-OM, and the GAD-7 as well as one qualitative question asking them to indicate what concept(s)/idea(s) from the workshop they remember learning. Finally, data analyses were run to determine demographics, group means from post-intervention quantitative data, major themes from qualitative data, and pre/post-intervention data from the three assessments (see Results for more details).

Participants

All participants in this workshop were James Madison University (JMU) students. Students came from JMU’s participant pool through an online system called SONA, where they received class credit for their participation. Students who were eligible to participate in this workshop included those who are currently enrolled at JMU as a Freshman, Sophomore, Junior, or Senior. No age limit was enforced; however, per SONA policy, students under the age of 18 are not permitted to participate in studies. As such, all participants in this study were over the age of 18. Additionally, students who signed up for the workshop through SONA must have completed the online pre-assessment before the start of the workshop in order to attend and participate. Otherwise, there were no further inclusion or exclusion criteria for this study.

A total of 69 participants completed the pre-intervention survey, of which 67 participated in the From Critical to Calm mindfulness workshop (2 did not show) and 61 completed the post-intervention survey. Analysis of the participants’ experience of the workshop (discussed further in the following section) were based on the 67 students who participated in the intervention itself (despite whether or not they completed the post-intervention survey). The statistical analyses performed to assess pre/post-intervention
effects were based on the participants who completed the entirety of the study (i.e., pre-test, workshop, and post-test), which resulted in a total of 61 participants.

Procedure

The procedure for this intervention was as follows: 1) Participant recruitment; 2) Conduct the pre-intervention assessment of participants; 3) Conduct the workshop; 4) directly after each workshop, administer a brief “Quiz” to assess the knowledge they obtained as well as a satisfaction survey; and 5) Conduct the post-intervention assessment of all remaining participants. These procedural steps are described further:

1) Recruiting participants. In early February, 2017, participants were recruited to participate in this workshop, which were offered on five different days and times and took place in Miller G027 at James Madison University. Participants were recruited via JMU’s participant pool (through an online system called SONA), where they had the opportunity to sign up for which days/times of the workshop they wanted to attend. Additionally, Psychology 101 professors at JMU, who are students in JMU’s Combined-Integrated Clinical and School Psychology Psy.D. program, were provided flyers (see Appendix A) for their students and were asked to announce this workshop opportunity to their classes. On one occasion, by request of one Psychology 101 professor, I presented this workshop opportunity to a class of students.

2) Pre-interventions assessment. Upon signing up for the study through SONA, students from the participant pool were sent a Qualtrics (an online research
software) link the week of their chosen day for the workshop, which contained all pre-intervention assessment measures. Participants were asked to complete the pre-intervention assessment no later than one hour before they attended their workshop. The day before the workshops, students who had not yet completed the pre-assessment were sent a reminder via email to do so. The online pre-assessment link included the following: an Informed Consent (see Appendix B; this must have been agreed upon by the student before continuing further with the assessments), the H10WB Questionnaire, the CORE-OM, and the GAD-7, (refer to Appendix C for a table of all measures and the schedule of administrations).

3) **Workshop intervention.** This workshop was broken up into three parts. Within the first part of the workshop, the purpose and need for this workshop as well as what it hoped to accomplish was outlined for participants. The foundation of this first section was dedicated to exploring and facilitating comprehensive physical, emotional, cognitive, and interpersonal awareness informed by Gregg Henriques’ (2011) Tripartite Map of Human Consciousness. Here, participants learned how to cultivate a meta-cognitive observer (the M.O. in C.A.L.M. M.O.) through an experiential exercise of mindful eating (using Skittles), where students explored the role of their experiential, private, and public selves in their experience of the candy. In facilitating further depth in this first section, participants learned about negative emotions, what they are, how people might often avoid them or become hostile towards them, and how this experiential avoidance/hostility creates inner disharmony. The second part of this workshop brought this knowledge together using the mindfulness acronym, C.A.L.M. M.O., as students learned explicity
how to use each part of the acronym (i.e., Curiosity, Acceptance, Love and compassion, and Motivation to learn and grow) when exploring (and engaging meta-cognition of) their own experiences of emotions, thoughts, and relationships. The third part incorporated another experiential element where students practiced the use of the Tripartite Map and C.A.L.M. M.O. through group discussion. Here, students were asked to think about thoughts and emotions through a different perspective. For instance, they were asked to discuss the difference between critical versus curious thoughts, reflect on times they feel are most judgmental of themselves (and why), or times in the past or currently where they have avoided or have been hostile against their emotions and how self-compassion/curiosity/acceptance might change how they experience themselves.

4) Brief “Quiz” and Satisfaction Survey. Directly after the end of the workshop, approximately 15 minutes was reserved for participants to answer qualitative and quantitative questions regarding 1.) the knowledge they obtained from the workshop (indicated as a brief “Quiz”) and 2.) their feedback about the workshop and its processes (Refer to Appendix C for questions asked on the Quiz and Satisfaction Surveys).

5) Post-intervention assessment. At the commencement of the workshop, participants were asked to complete the online post-assessment via a Qualtrics link, which was emailed to them approximately 2 – 3 weeks following the workshop. Students were given approximately one week to complete the survey, and if they had not completed it the day of the indicated deadline, they were sent a reminder via email to do so. The post-intervention assessment measures included
the CORE-OM, the H10WB, and the GAD-7. Overall, these post-intervention measures are intended to note any changes in overall well-being, socio-emotional difficulties, and levels of depression. On this post-intervention survey, participants were also asked to indicate what from the workshop do they remember learning (in other words, report what concept(s) or idea(s) they remember).

Measures

*Henriques-10 Well-Being Questionnaire*

The Henriques-10 Well-Being Questionnaire (H10WB; Henriques, unpublished) is a 10-item self-report measure assessing subjective well-being. Using a 7-point Likert scale (i.e., 1 – 7) per question, participants rate their current levels of functioning (over the past month) according to 10 domains of well-being. These domains include: overall life satisfaction, sense of mastery over the environment, degree of emotional health, overall quality of relationships with others, sense of autonomy, satisfaction with academic functioning, satisfaction with health and fitness, sense of purpose in life, and level of personal growth. Scores may range from a minimum of 10 to a maximum of 70. Scores less than or equal to 30 are considered “low well-being”; scores between 31 and 40 are “somewhat low well-being”; scores between 41 and 50 are “mixed to somewhat high well-being”; scores between 51 and 60 are “somewhat high to high”; and scores greater than or equal to 61 are “high to very high well-being.”

*CORE Outcome Measure*
The Core Outcome Measure (CORE-OM; Core Systems Group, 2011) is a 34-item self-report measure assessing global psychological distress. Along with assessing general distress, the CORE-OM’s items are also categorized into 4 dimensions: well-being, problems/symptoms, life functioning, and risk. On a 5-point Likert scale (i.e., 0 – 4), participants rate their current level of functioning (over the last week). Scores may range from a minimum of 0 to a maximum of 136—the higher the score, the more distress the participant is indicating.

**Generalized Anxiety Disorder, 7-item Scale**

The Generalized Anxiety Disorder, 7-item (GAD-7) scale is a 7-item self-report measure assessing generalized anxiety symptoms (Lowe, Decker, Muller, Brahler, Schellberg, Herzog, and Herzberg, 2008). On a 4-point Likert scale (i.e., 0 – 3), participants rate how often they experience anxious symptoms over the past 2 weeks. Scores may range from a minimum of 0 to a maximum of 21. Scores between 5 and 9 indicate mild anxiety; scores between 10 and 14 indicate moderate anxiety; and scores greater than or equal to 15 indicate severe anxiety.

**Post-workshop “Quiz”, Satisfaction Survey, and 2 – 3 Week Follow-up Question**

The post-workshop quiz contained three questions asking about specific material from the workshop. The first question, asking to define emotions, was worth 1 point; the second, asking about the three parts of the Tripartite Map of Human Consciousness, was worth 3 points; and the third question, asking to name the parts of the C.A.L.M. M.O. acronym, was worth 6 points. Scores may range from 0 to a possible 10 points.
The satisfaction survey, given immediately after the workshop alongside the quiz, asked two quantitative questions and three qualitative questions. Each quantitative question was a 5-point Likert scale (i.e., 1 – 5). On the first Likert scale question, participants were to rate their satisfaction of the workshop and on the second Likert scale question, they were to indicate how likely they are to use the strategies from the workshop in the future. For each question, scores may range from a minimum of 1 to a maximum of 5. For the three qualitative questions on the satisfaction survey and the one qualitative question on the post-intervention survey 2 – 3 weeks following the workshop, participants’ answers were varied and were categorized into salient themes (refer to “Results” section for a list of the themes per question).

**Data Analysis Plan**

All data analysis for this current study was performed using the statistical analysis program, SPSS. Descriptive statistics for demographic variables (i.e., sex, age, race, and year in college) were found. Unfortunately, not all participants responded to the demographics survey; therefore, missing data exists among these variables (refer to “Results” for specific data numbers).

Data from the post-workshop “Quiz” and satisfaction survey were analyzed to determine information retained immediately after the workshop and to what degree participants found the workshop engaging, respectively. Quantitative data (such as from the Quiz and the Likert scales on the survey) were analyzed for group means. Qualitative questions (i.e., found on the satisfaction survey as well as from the last question on the post-intervention survey 2 – 3 weeks following the workshop asking about information
retained) were examined for major themes of internalized material. Responses were then grouped into these themes to determine frequency of types of responses.

Finally, pre-intervention data from the H10WB, the GAD-7, and the CORE-OM were analyzed separately to create Time 1 means for each measure. The same was also performed to create Time 2 (post-intervention) means, which were then compared to Time 1 data to determine pre- to post-intervention effects for these measures.
Chapter Four:

Results

Demographics

Table 1 (below) outlines demographics for all participants who provided this information (the 2 students who did not participate in the workshop were excluded).

<table>
<thead>
<tr>
<th>Table 1: Demographic information for <em>From Critical to Calm</em> mindfulness workshop participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>Age (years), N = 53*</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Sex, N = 60*</td>
</tr>
<tr>
<td>- Male</td>
</tr>
<tr>
<td>- Female</td>
</tr>
<tr>
<td>Ethnicity, N = 53*</td>
</tr>
<tr>
<td>- Caucasian/White</td>
</tr>
<tr>
<td>- Black/African American</td>
</tr>
<tr>
<td>- Asian/Asian American</td>
</tr>
<tr>
<td>- Hispanic/Latina/Latino</td>
</tr>
<tr>
<td>Year in college, N = 53*</td>
</tr>
<tr>
<td>- First/Freshman</td>
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<tr>
<td>- Second/Sophomore</td>
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<tr>
<td>- Third/Junior</td>
</tr>
<tr>
<td>- Fourth/Senior</td>
</tr>
</tbody>
</table>

*Total N per variable will vary due to not all 67 participants (across five total workshops) reporting their demographic information. As such, percentages are based on “Valid” / reported data.
Analysis of *From Critical to Calm* Mindfulness Workshop Experiences

*Immediate Retention of Workshop Material and Overall Satisfaction*

Directly after the commencement of each workshop, participants were asked to complete a brief 3-question “Quiz” to assess information retained from the workshop as well as a satisfaction survey with both quantitative and qualitative questions.

The mean score for the quiz across all 5 workshops ($N = 67$) was $6.69$ ($SD = 2.5$) out of a possible 10 points, indicating that participants appeared to retain a majority of the important concepts discussed in the workshop. On the satisfaction survey, participants were asked two questions rated on Likert scales. On the first question, they were asked: “Overall on a scale from 1 to 5 (*1* being ‘Not at all satisfied’ and *5* being ‘Very Satisfied’), how satisfied are you with this workshop?” Scores on this question indicated an overall positive response to the workshop ($M = 4.3$, $SD = 0.7$), indicating that most participants were satisfied with the workshop. The second Likert question asked: “On a scale from 1 to 5 (*1* being ‘Not at all likely’ and *5* being ‘Very Likely’), to what extent do you believe that you will be using these strategies from the workshop going forward?” Again, there was a positive response as participants’ scores on this question indicated a high likelihood of engaging in strategies from the workshop ($M = 4.2$, $SD = 0.7$).

Participants were also asked if the workshop helped them understand and process their thoughts and emotions, of which an overwhelming majority (94%) indicated that the workshop succeeded in doing this (1.5% indicated “No” and 4.5% indicated an ambiguous response such as “Somewhat” or “Sort of”).
Other questions on the satisfaction survey were qualitative in nature and as such, these were categorized in terms of themes (of note, some responses included more than one theme). The first qualitative question asked the following: “Did you find the workshop to be beneficial or helpful for you? If yes, how so?” Sixty-five out of the sixty-seven total participants (97%) indicated explicitly “Yes” or in the affirmative, while 1.5% indicated “No” and 1.5% indicated “Possibly.” Of those who reported “Yes” or in the affirmative, 25 responses indicated that the workshop helped them develop insight and/or awareness of their own personal affective experiences. Examples of such responses ranged from, “Yes, because it made me really think hard about how I process my emotions and to see how that affects my life and how to process it better” to “Yes, I found it was very beneficial to [sic] discovering more about my emotions and how to deal with them.” Another salient theme that emerged was 17 responses indicating that the workshop helped participants gain a better understanding of emotions in general (primarily from a psychoeducational standpoint). For example, “Yes, it helped me to understand that emotions are a good thing” and “Helpful to get a better understanding of what emotions really are and not just about how to cope/deal with our emotions.” Other themes that emerged are listed in Table 2 below.

The final qualitative question on the satisfaction survey asked participants for their suggestions on how the workshop could be improved. The most salient theme that emerged in participants’ feedback was to make the workshop shorter or expand it to two or more workshops (12 responses). Other participants suggested making the workshop more interactive, such as including more group activities (10), as well as developing the group’s dynamics and/or rapport to make for easier or more open discussions (6). More
themes are outlined below in Table 2. Of note, because this survey was given at the end
of each workshop, the workshop’s presentation was adjusted according to immediate
feedback that was appropriate and feasible to address or change. Thus, the final
workshop’s presentation varied from the first workshop. The changes that were made
based on participants’ feedback are indicated in Table 2 with an asterix (*).
<table>
<thead>
<tr>
<th>Question</th>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did you find the workshop to be beneficial or helpful for you? If yes, how so?</td>
<td>1. Developed insight/awareness of personal affective experiences (25)</td>
</tr>
<tr>
<td></td>
<td>2. Better understanding of emotions, in general (17)</td>
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<tr>
<td></td>
<td>3. Learned adaptive coping and/or affective processing (8)</td>
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<tr>
<td></td>
<td>4. Helped to engage in self-compassion (4)</td>
</tr>
<tr>
<td></td>
<td>5. Information provided was relatable/relevant to participants (4)</td>
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<tr>
<td></td>
<td>6. Helped to engage in curiosity (3)</td>
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<tr>
<td></td>
<td>7. Use of metaphor was helpful in explaining the concepts (2)</td>
</tr>
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<td></td>
<td>8. Developed deeper understanding of mindfulness (2)</td>
</tr>
<tr>
<td></td>
<td>9. Workshop opened a space to talk about emotions (2)</td>
</tr>
<tr>
<td></td>
<td>10. Information was presented in a way that was easy to understand (1)</td>
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<tr>
<td></td>
<td>11. Learned to take a calm (vs. critical approach) of conscious</td>
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<tr>
<td></td>
<td>experiences (1)</td>
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<tr>
<td></td>
<td>12. Informative (1)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What suggestions do you have on how this workshop could be improved?</th>
<th>1. Make shorter or expand to 2+ workshops (12)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2. Make more interactive (10)*</td>
</tr>
<tr>
<td></td>
<td>3. Develop group dynamics/rapport for easier/open discussions (6)</td>
</tr>
<tr>
<td></td>
<td>4. Use more scenarios/examples (4)*</td>
</tr>
<tr>
<td></td>
<td>5. Use videos (3)*</td>
</tr>
<tr>
<td></td>
<td>6. Make information presented less dense (2)*</td>
</tr>
<tr>
<td></td>
<td>7. Develop discussion questions (2)</td>
</tr>
<tr>
<td></td>
<td>8. More explicit discussion/focus about mindfulness (2)</td>
</tr>
<tr>
<td></td>
<td>9. Too many metaphors (1)*</td>
</tr>
<tr>
<td></td>
<td>10. Take small break in middle of workshop (1)*</td>
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<tr>
<td></td>
<td>11. Add meditative portion for self-reflection (1)</td>
</tr>
<tr>
<td></td>
<td>12. Add more information about adaptive emotional processing (1)</td>
</tr>
<tr>
<td></td>
<td>13. Add more information about emotional development across the life</td>
</tr>
<tr>
<td></td>
<td>span (1)</td>
</tr>
<tr>
<td></td>
<td>14. Develop timeline of presentation (i.e., introduce emotions before</td>
</tr>
<tr>
<td></td>
<td>group discussion of them) (1)</td>
</tr>
<tr>
<td></td>
<td>15. Provide handouts with main concepts (1)</td>
</tr>
<tr>
<td></td>
<td>16. Add follow-up opportunity regarding material learned (1)</td>
</tr>
</tbody>
</table>
Post-workshop Follow-up of Information Retained

Approximately 2 – 3 weeks following the workshop, when participants were asked to complete their post-intervention survey, they were also asked to answer the following question aimed to assess what material/concepts they retained weeks later: “What from the workshop do you remember learning (in other words, what concept(s) or idea(s) do you remember)?” Not all participants responded to this question, but of those who did, most of them recalled information focused around emotions (29 responses) and in particular, emotions’ function (11), engaging in adaptive coping and/or affective processing (including approaching [vs. avoiding] emotions, engaging in healthy emotional processing, allowing self to experience emotions, taking a curious approach, or any vague mention of adaptive coping) (8), different types of emotions (5), gaining a new/different perspective of emotions (1), or a vague mention of emotions (4). Seven participant responses made mention of the mindfulness framework, C.A.L.M. M.O., either as a whole or naming some or all parts of the acronym, and 4 participant responses mentioned the Tripartite Model of Human Consciousness (some naming the model by its title, while others indicated “3 forms of self” or labeled each system and explained their function). Other information retained are outlined in Table 3 below.
Table 3: Information retained from workshop 2 – 3 weeks later

<table>
<thead>
<tr>
<th>Question</th>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>What from the workshop do you remember learning (in other words, what concept(s) or idea(s) do you remember)?</td>
<td>1. Answer is focused around emotions (29)</td>
</tr>
<tr>
<td></td>
<td>a. Function (11)</td>
</tr>
<tr>
<td></td>
<td>b. Types (5)</td>
</tr>
<tr>
<td></td>
<td>c. New/different perspective (i.e., “not all emotions are bad”) (1)</td>
</tr>
<tr>
<td></td>
<td>d. Vague mention of emotions (4)</td>
</tr>
<tr>
<td></td>
<td>e. Adaptive coping/processing (including approaching emotions, engaging in healthy emotional processing, allow self the experience of them, taking a curious approach, or any vague mention of coping) (8)</td>
</tr>
<tr>
<td></td>
<td>2. Mention of any part of C.A.L.M. M.O. (7)</td>
</tr>
<tr>
<td></td>
<td>3. Indicated increased awareness of maladaptive processing tendencies (i.e., avoidance/suppression) (6)</td>
</tr>
<tr>
<td></td>
<td>4. Mention of Tripartite Model of Human Consciousness (4)</td>
</tr>
<tr>
<td></td>
<td>5. Mention of mindfulness (4)</td>
</tr>
<tr>
<td></td>
<td>6. Mention of “calm” (not indicated as part of acronym) (2)</td>
</tr>
<tr>
<td></td>
<td>7. Other:</td>
</tr>
<tr>
<td></td>
<td>f. Empathy (1)</td>
</tr>
<tr>
<td></td>
<td>g. Introversion/extroversion (1)</td>
</tr>
<tr>
<td></td>
<td>h. Closet metaphor (of stuffing emotions) (1)</td>
</tr>
<tr>
<td></td>
<td>i. Stay positive (1)</td>
</tr>
<tr>
<td></td>
<td>8. Self-compassion (i.e., “love yourself”) (1)</td>
</tr>
</tbody>
</table>

Pre-intervention Survey Descriptives of Participants and Correlative Data of Measures

*Henriques-10 Well-Being (H10WB) Questionnaire*
The mean scores on the H10WB were 50.6 (SD = 7.6), indicating participants experience “somewhat high” levels of well-being. Pre-intervention data from the H10WB were compared to normative data from a non-clinical sample of college students from JMU, which was 50.7 (SD = 9.1). These means were not different, t(148) = -0.098, P = 0.93, d = 0.01.

*Generalized Anxiety Disorder (GAD-7) Scale*

Overall, average scores on the GAD-7 indicated that participants experienced moderate levels of anxiety (M = 13, SD = 5.1). Pre-intervention survey data from the GAD-7 were compared to normative data from both clinical and non-clinical populations from a validation study (Lowe et al., 2008). Interestingly, participants’ mean GAD-7 scores from this current study were closer to clinical normative data, t(68) = -3.11, p<.01 (Cohen’s d unknown), than non-clinical, t(68) = 16.23, p<.01, d = 2.89. This appears to indicate that students who sought out this workshop study likely wanted help.

*CORE-OM, 34-item Measure*

Finally, participants’ mean CORE-OM scores appeared to indicate relatively low levels of symptom endorsement (M = 37, SD = 15.3). Participants’ pre-intervention survey data from the CORE-OM were compared to clinical and non-clinical normative data presented in the CORE-OM user manual (CORE System Group, 2011). Normative comparisons indicate that the current sample of participants’ CORE-OM mean scores rests somewhere in between non-clinical, t(1151) = 5.28, p<.01, d = 0.66, and clinical populations, t(930) = -8.17, p<.01, d = 1.02. It is possible that this may be a function of
the selection process. In other words, it is likely that this workshop may have attracted participants who experience frequent negative emotions and stress.

**Correlative Data Between All Measures**

Correlation analyses were run to determine how the pre-survey H10WB, CORE-OM, and GAD-7 data relate to one another. Analyses indicate that these three measure do relate and are significantly correlated with one another. See **Table 4** for correlative data between all measures.

<table>
<thead>
<tr>
<th>Measures</th>
<th>H10WB</th>
<th>COR-OM</th>
<th>GAD-7</th>
</tr>
</thead>
<tbody>
<tr>
<td>H10WB</td>
<td>1</td>
<td>-0.734</td>
<td>-0.534</td>
</tr>
<tr>
<td>COR-OM</td>
<td>-0.734</td>
<td>1</td>
<td>0.726</td>
</tr>
<tr>
<td>GAD-7</td>
<td>-0.534</td>
<td>0.726</td>
<td>1</td>
</tr>
</tbody>
</table>

**Effect of From Critical to Calm Workshop on Well-being**

In order to determine intervention outcomes on domains measured in this study, a repeated measures MANOVA test was conducted to analyze effects on well-being (via the H10WB), anxiety (GAD-7), and general psychological distress (CORE-OM) (see **Table 5** for pre-/post-test means and standard deviations of all measures). The overall MANOVA was found to be significant (Roy’s Largest Root=0.492, F(3, 58)=9.51, p<0.002). More specifically, results indicated that a statistically significant positive change from pre- to post-intervention occurred with the H10WB, F(1, 60) = 15, p < 0.002, $\eta_p^2 = 0.205$, with a small to medium effect size. A statistically significant change did not occur with the GAD-7, F(1, 60) = 3, p = 0.072, $\eta_p^2 = 0.053$. However, although it
did not meet significance, there was a trend in the expected direction. The CORE-OM, F(1, 60) = 0.2, p = 0.659, $\eta_p^2 = 0.003$, did not show meaningful change.

<table>
<thead>
<tr>
<th>Measures</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-H10WB</td>
<td>50.65</td>
<td>7.569</td>
</tr>
<tr>
<td>Post-H10WB</td>
<td>53.43</td>
<td>7.890</td>
</tr>
<tr>
<td>Pre-GAD-7</td>
<td>12.90</td>
<td>5.076</td>
</tr>
<tr>
<td>Post-GAD-7</td>
<td>11.93</td>
<td>5.118</td>
</tr>
<tr>
<td>Pre-CORE.OM</td>
<td>36.65</td>
<td>15.32</td>
</tr>
<tr>
<td>Post-CORE.OM</td>
<td>36.70</td>
<td>17.12</td>
</tr>
</tbody>
</table>

These results appear to indicate that there was a bigger change in well-being than with symptom reduction\(^a\). As such, further investigation occurred to determine potential change in other domains of well-being on measures used, specifically, the CORE-OM, which contains the Well Being dimension and the Functioning dimension, both of which correlated with the H10WB, $r(69) = -0.619$, $p < 0.002$, and, $r(69) = -0.748$, $p < 0.002$, respectively. Upon conducting a repeated measures MANOVA, results indicated that change did not occur among either the CORE-OM’s Well Being dimension, F(1, 60) = 1.3, $p = 0.226$, $\eta_p^2 = 0.021$, or the CORE-OM’s Functioning dimension, F(1, 60) = 1.7, $p = 0.203$, $\eta_p^2 = 0.027$, again leaving the H10WB to be the only measure significant for change and with the largest effect size, F(1, 60) = 15, $p < 0.002$, $\eta_p^2 = 0.205$.

\(^a\) To assess all potential areas of change, numerous variations of repeated measures MANOVAs were conducted to investigate any possible effects on symptoms from domains on the CORE-OM (including the CORE-OM as a whole along with the CORE-OM depression domain, anxiety domain, somatic domain, and trauma domain) and the GAD. No significant change was found across the board. As such, these analyses were excluded from the final report.
**Intervention Effects at Item-Level**

Due to the H10 consistently showing a change across pre- and post-intervention times, further investigation was conducted to determine what items specifically on the H10WB participants showed the most change. In doing so, a paired samples t-test was performed analyzing pre- and post-test means of each item.

Significant positive changes occurred among the following item domains: overall life satisfaction, mastery over environment, relationship with others, levels of self-acceptance, and satisfaction with academic functioning (see Table 6 for pre-/post-test analysis of all 10 items).

<table>
<thead>
<tr>
<th>Pre- and Post- H10WB item numbers</th>
<th>Domain of Well Being</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre- to Post-test Item 1</td>
<td>Overall life satisfaction</td>
<td>-.492</td>
<td>.994</td>
<td>-3.865</td>
<td>60</td>
<td>.000</td>
</tr>
<tr>
<td>Pre- to Post-test Item 2</td>
<td>Mastery over the environment</td>
<td>-.623</td>
<td>.986</td>
<td>-4.935</td>
<td>60</td>
<td>.000</td>
</tr>
<tr>
<td>Pre- to Post-test Item 3</td>
<td>Emotional health</td>
<td>-.246</td>
<td>1.260</td>
<td>-1.524</td>
<td>60</td>
<td>.133</td>
</tr>
<tr>
<td>Pre- to Post-test Item 4</td>
<td>Quality of relationships with others</td>
<td>-.377</td>
<td>.879</td>
<td>-3.351</td>
<td>60</td>
<td>.001</td>
</tr>
<tr>
<td>Pre- to Post-test Item 5</td>
<td>Sense of autonomy</td>
<td>-.016</td>
<td>.957</td>
<td>-.134</td>
<td>60</td>
<td>.894</td>
</tr>
<tr>
<td>Pre- to Post-test Item 6</td>
<td>Levels of self-acceptance</td>
<td>-.344</td>
<td>1.237</td>
<td>-2.174</td>
<td>60</td>
<td>.034</td>
</tr>
<tr>
<td>Pre- to Post-test Item 7</td>
<td>Satisfaction with academic functioning</td>
<td>-.361</td>
<td>1.278</td>
<td>-2.203</td>
<td>60</td>
<td>.031</td>
</tr>
<tr>
<td>Pre- to Post-test Item 8</td>
<td>Satisfaction with health and fitness</td>
<td>-.295</td>
<td>1.295</td>
<td>-1.779</td>
<td>60</td>
<td>.080</td>
</tr>
<tr>
<td>Pre- to Post-test Item 9</td>
<td>Sense of purpose in life</td>
<td>-.230</td>
<td>.920</td>
<td>-1.948</td>
<td>60</td>
<td>.056</td>
</tr>
<tr>
<td>Pre- to Post-test Item 10</td>
<td>Level of personal growth</td>
<td>.000</td>
<td>1.211</td>
<td>.000</td>
<td>60</td>
<td>1.000</td>
</tr>
</tbody>
</table>
Performing the same paired samples t-test on the CORE-OM, it was found that significant changes occurred among 3 out of 4 of the depression items (i.e., “I have felt totally lacking in energy and enthusiasm” [went down]; “I have felt despairing and hopeless” [went up]; and “I have felt unhappy” [went down]), 1 anxiety item (i.e., “I have felt panic or terror” [went up]), and 1 wellbeing item (i.e., “I have felt OK about myself” [went up]). With the GAD-7, the only significant change found at the item level was a decrease in participants feeling nervous/anxious/on edge.
Chapter Five:

Discussion

This study sought out to develop a brief mindfulness workshop as an intervention for college students to help facilitate increases in student well-being, as well as decreases in anxious and depressive symptomology. Such efforts are necessary because of the dramatic rises in levels of anxiety, stress, and depression seen in college students. The intervention was a psychologically mindful approach that focuses on awareness, acceptance and adaptive change. The particular framework used here was Henriques’ UTUA framework because it is grounded in a larger understanding of human psychology, comes with a clear map of human consciousness, and offers an acronym that captures a mindfulness attitude in a way that lines up with the theory and can be easily internalized. In particular, the foundation of this workshop was based on two major frameworks: 1) the Tripartitie Map of Human Consciousness (Henriques, 2011) to provide guidance for students’ discovery and awareness of inner conscious experiences, and 2) the C.A.L.M. M.O. approach to mindfulness, as a vehicle for facilitating intrapsychic and interpersonal harmony among the domains of the Tripartite Map.

Each *From Critical to CALM* workshop lasted one and a half hours with 15 additional minutes for completing a brief “quiz” and feedback surveys. In total, 67 students participated in all five of the workshops. The mode of delivering information during the workshops consisted of a PowerPoint presentation along with activities throughout aimed at guiding participants through their Experiential, Private, and Public systems of self-consciousness as well as learning a new attitude toward their conscious experiences. This was accomplished by providing psychoeducation about human
consciousness through the use of the Tripartite Map of Human consciousness, information about emotions in general, outlining implications of maladaptive emotional processing, and engaging in adaptive emotional processing using the C.A.L.M. M.O. model.

Students’ satisfaction of the workshop overall was quite high and the vast majority reported that they would likely use the workshop’s strategies in the future. Based on qualitative feedback given directly after the workshop in the satisfaction surveys, students indicated that the workshop was helpful in developing insight and awareness of their own affective experiences as well as gaining a new, different perspective of emotions. This appeared to hold up two to three weeks after the workshop, as students seemed to retain important knowledge of material from the workshop, not only regarding the major frameworks introduced to them (i.e., the Tripartite Map and C.A.L.M. M.O.), but also their experience of emotions (ranging from general psychoeducational knowledge of emotions to adaptive coping of their own personal affective experiences). This indicated that participants were able to internalize some of the material from the workshop. It is difficult to say to what extent students experienced an increase in deeper, more meaningful self-awareness, but according to their self-reports, it appears that, at the very least, many began to think differently about their internal experiences.

As previously mentioned, part of what the workshop aimed to do was increase well-being and decrease anxious and/or depressive symptomology. The results for this outcome were mixed. Statistically significant change was found to occur among students’ well-being, as indicated by the H10WB. While there was an increase in all but one
domain on the H10WB (i.e., level of personal growth remained the same from pre- to post-testing), the most statistically significant increases occurred on items specific to overall life satisfaction, mastery over environment, relationship with others, levels of self-acceptance, and satisfaction with academic functioning. Interestingly, it is worth noting that despite the workshop’s focus on emotions and adaptive emotional processing, there was no significant change in the emotional health item from pre- to post-testing on the H10WB. While analysis of the CORE-OM and GAD-7 did not indicate statistically significant change, a positive trend on the GAD-7 was found. Given the brevity of the workshop, such changes are notable, although replication with a control group is necessary to have more confidence in the effect of the workshop.

Other domains of well-being (such as the Well Being and Functioning dimensions on the CORE-OM) did not show a significant change, even though they both correlated with the H10WB. The H10WB items are very descriptive in nature, offering narratives of what each item is asking for as well as what each end of the spectrum may look like for someone, whereas the CORE-OM items are not—it simply provides a statement one must respond to. Thus, a hypothesis for this may be that students’ responses to the H10WB were more well-informed versus on the CORE-OM and thus, may be a more accurate reflection of their well-being. It is also the case that the sample size was not large and there were no controls, so questions remain as to the interpretation of this finding.

Although strong conclusions cannot be drawn, the results are hopeful. Brown and Ryan (2003), demonstrated that mindfulness (defined by open attention and awareness of here-and-now human conscious experiences) is related to high well-being. These researchers found that those who were more mindful were more likely to experience
“higher pleasant affect, positive affectivity, vitality, life satisfaction, self-esteem, optimism, and self-actualization… [as well as] higher autonomy, competence, and relatedness” (p. 832). The researchers preface their findings by offering theoretical explanations founded in self-determination theory (SDT) by Edward Deci and Richard Ryan, which contends that increased psychological awareness may help guide one to behave in an adaptive, thoughtful (versus automatic) way to meet one’s needs of autonomy, competency, and relatedness (as indicated above). Thus, mindfulness, which facilitates attention and psychological awareness of the here-and-now (versus habitual, automatic processing), may help one meet one’s needs and attend to values that would enable increased well-being. Interestingly, several of the items from the H10WB that were statistically significant for change after the workshop appear to reflect many of the same characteristics above of one who is more mindful, such as: greater life satisfaction (i.e., overall life satisfaction, as indicated on the H10WB), competence (i.e., mastery over one’s environment and satisfaction with academic functioning), self-esteem (i.e., levels of self-acceptance), and relatedness (i.e., quality of relationships with others).

While the results of this study are not able to be effectively interpreted to determine causation (see “Limitations”), it is worth wondering about the positive change that occurred post-workshop in these domains of well-being. Further development of the workshop and adjustments to the study will need to be performed to determine if, indeed, the workshop may have succeeded in initiating improvement in well-being, potentially through facilitating mindful awareness of intrapsychic processes (see “Future Directions”).

Implications
The original plan for this study was to develop an 11-week mindfulness group curriculum; however, due to the lack of response from students, this plan was abandoned and reshaped into the one-time mindfulness workshop it became. During the initial recruitment phase for the 11-week group, the researcher consulted with Dr. David Onestak, the director of JMU’s Counseling Center, regarding the structure and logistics of the intervention. In doing so, he explained that given the large number of sessions of this proposed group, limited group day/time, and the lack of external gain for students (i.e., no extra credit from psychology courses), he was concerned that this study would not get enough participants. As predicted, of the approximate 160 or more students reached by flyers, announcements in psychology classes, and networking with professionals over a two to three week period, only two students replied with an interest in participating in the group. In line with Dr. Onestack’s suggestions, the group was then minimized into a briefer intervention in the form of a one-time workshop, which allowed for more flexibility in days and times for students to attend. In addition, it was decided to utilize the SONA participant pool in order to reach more students, even if they would be more extrinsically motivated to participate in this study. As a result of implementing these changes, each workshop reached close to or met its maximum capacity of participants.

This experience illuminates the complexity of developing and implementing groups, especially from the ground up and in this case, establishing an intervention that college students would respond to. First, coordinating groups is very difficult. Before group participants are recruited, a great deal of effort is put into organizing the logistics of where the group will be held and when it will occur. Further, these details are often
contingent upon a great deal of networking with other professionals on campus to find a location for the group, get permission from upper administration to run the group in their space (which may also require one to present the group and its objectives to administration for approval), and coordinate scheduling within that space with others who may also be running groups or club meetings. Even once these logistics are established, the biggest obstacle then becomes recruiting participants. With groups that are starting from the ground up and for the first time, as this study’s original group was, much of the difficulty in recruitment is selling a product that is inticing to college students, stimulates an intrinsic motivation to join the group, and assuages anxiety about participating in a group. Concerning the latter, groups can already be anxiety-provoking for many. College students in particular, who are in an important developmental time period of navigating intimacy, relationships, and their own core identities, may be sensitive to anxiety about participating in a group full of their same-aged peers. The anxiety this provokes often then results in avoidance. This anxiety and avoidance may even be compounded by the focus of the group, especially if it requires participants to be vulnerable and open, as this study’s original group would have necessitated.

Although the idea for an 11-week group for this study did not come to fruition, it does not mean that this could not ultimately be an effective intervention, given more time and energy in advertising it. It is also the case that the abandonment of this plan and the subsequent development of this study’s one-time mindfulness workshop may have some important implications of its own. In particular, even though the intervention was simplified and abbreviated, it still seemed to have demonstrated itself as an effective modality of delivering psychoeducational interventions and material about emotions and
mindfulness. As previously mentioned, the results of this study are hopeful, especially when reflecting on the significant changes that occurred in overall wellbeing and the small but positive trend in changes in anxiety from pre- to post-testing. Of course, limitations of this study exist that could potentially help elucidate these changes (see “Limitations” for further explanation). However, the fact that such a change occurred after only an hour and a half of learning this workshop’s material may point to 1) the necessity of teaching students about their emotions and how to process them adaptively through mindfulness and 2) how this can be done in a short, feasible time frame with a consolidated intervention.

From a broader perspective, these results may speak to what is missing in the United States education system writ large, including how lack of basic knowledge of emotions and adaptive emotional processing contributes to the current College Student Mental Health Crisis (CSMHC). Prior to attending college, students have, on average, attended 12 or so years of schooling. Most of these students have worked hard to make the grades that will allow them admission into college. However, upon beginning college, an alarming number of students are unable to function in their academics due to debilitating anxiety and/or depression. They are well-versed in various academic subjects but seem to have little to no knowledge of their own internal experiences. One can argue that this is at least in part a function of having never been provided education on emotions throughout their schooling. Couple this absence of emotion education with neurotic temperaments, and this creates a generation of students who are mindlessly and critically reactive to their negative emotions, which creates the vicious cycle of the “closed neurotic loop” mentioned previously.
As a result, these students then flood college counseling centers with declines in their mental health without any understanding as to why they are suffering. In fact, in the most recent 2017 annual report of the Center for Collegiate Mental Health (CCMH), the top three presenting concerns bringing students into college counseling centers for help were directly related to negative affect states: anxiety (62.2%), depression (49.7%), and stress (45.5%). It is worth wondering what role society and the education system has played thus far in perpetuating this steadily increasing trend as well as what role it could play in ceasing it from growing even further.

The CSMHC is a conglomerate of numerous factors and players that have created a complex problem without any one clear, concrete explanation as to its birth and development. Many of these factors were discussed previously (see “A Review of the College Student Mental Health Crisis” in the Literature Review of this paper) but one worth expanding on here as it relates to society’s conceptualization of emotional difficulties is the current biomedical model of mental illness, or the “disease-pill model.” This perspective takes the stance that negative affect states, such as anxiety and depression, are diseases, which can be treated or cured via psychopharmacological treatments (Henriques, 2014). The danger with this perspective is that it severely reduces negative emotions into something being inherently “wrong” with one’s biology. Consequently, individuals struggling with negative emotions are taught to believe that their natural feelings are actually unnatural (and unwanted) diseases without any other explanation besides a biological mishap. As a result, this outlook does not leave any space for self-exploration, curiosity, or self-compassion. Further, it denies individuals a sense of agency of their internal states because emotions are seen instead as diseases,
which they have no control over. Unfortunately, this model is so pervasive in society that it leaves little room for justifying teaching emotions in school or in the home, especially if the biomedical model’s message is that emotions are not within the realm of one’s control and to leave that control to medication. This perspective then teaches society that mastery over emotions is unproductive and thus, is not valued as an area of focus in the education system. It may be that this helps explains some of why the education system has not equipped itself to teach children about their emotions.

Several noteworthy events occurred that are suggestive of a need for educational materials on emotions. First, during an activity, where participants were to discuss in small groups the function of four basic emotions (anger, fear, disgust, and sadness), a few participants in separate workshops were observed commenting to their group members: “This is hard.” Even during the discussion following this exercise, some participants appeared to have difficulty articulating the role of each emotion, especially anger, stating simply, “It’s negative,” or explaining, “It doesn’t have a purpose.” Because this seemed to be a quite difficult exercise for most participants, it prompted the researcher to gather an informal poll of students, asking if anyone had ever been given education in their schools about their emotions growing up. In doing so, of the 67 students who participated in this workshop, no participant responded in the affirmative to this question. It is important to note that these participants did not come from one education system in one county. They came from education systems from various counties or cities across Virginia and surrounding states (and a few from different countries). Even still, according to this informal poll, none of them have encountered emotion education in any of their school systems.
The second experience that shed light on the implications of the lack of emotion education in schools was participants’ general difficulty understanding some of the material on emotions being presented. To some degree, even during the development phase of this study’s workshop, participants’ comments about the difficulty of the exercises was to be expected. The workshop was initially created with an understanding that most participants would not be well-versed in emotions and would, at the very least, not have much more than a rudimentary understanding of intrapsychic processes. As such, the workshop’s curriculum was created to be simple and easy to understand. Even still, students from the first workshop provided the researcher with feedback that the material was dense and difficult to follow. The ease of comprehension of the material was then developed further as the researcher received feedback from participants after each workshop.

For example, one significant addition came from the suggestion of participants who recommended including additional modes of learning, such as using videos to illustrate points. As such, the workshop was revised to incorporate video clips from the children’s movie Inside Out that illustrated the function of emotions, the implications of mistreating negative emotions, and what acceptance of negative emotions looks like. This movie was chosen due to its targeted audience of young children (accordingly, individuals who may be just learning about their emotions or have little prior knowledge of what they are), the positive messages about emotions, and the easily accessible language around maladaptive and adaptive emotional processing. The addition of these clips proved to be substantial and was deemed very popular by participants in subsequent workshops, many stating, “Loved the Inside Out clips!” and “More videos – they really
helped.” Even two to three weeks after the workshop during the post-intervention survey when asked what they retained, participants remarked on how much the Inside Out clips helped in their overall understanding of emotions. For instance, one participant stated, “I remember the videos from the movie Inside Out. They brought to life the emotions inside us and it helped us understand that not all emotions are bad.” Given how these participants, by self-report, never received emotion education in school growing up, it is perhaps unsurprising that a more “child-like” intervention such as these video clips had such a positive reaction and helped participants retain some of the messages of the workshop.

Taking these experiences in aggregate, it seems to be clear why students may assume that emotional processing feels arduous, “hard,” or unapproachable if they have had no prior exposure to emotion language or have never been given the space to learn about and practice adaptive emotional processing. Further, society’s emphasis on the biomedical model of mental illness sends a meta-message that emotions are too threatening and complex to tackle on one’s own, portraying emotions as mysterious, threatening entities that require a cure. This solution is clearly not the answer, as the research on college mental health is consistently showing a steady increase in mental health issues from year to year. What is the answer is explicit emotion education for children. It is interesting to note and reflect on that this study’s short, one-time workshop, which does not subscribe to the biomedical model, seems to have enough potential to impact students’ overall well-being and functioning. This means that introducing and cultivating a new, mindful attitude towards internal experiences does not have to be a large feat to accomplish. It all starts with thinking critically and dialoguing about the
education’s system’s values of what constitutes student success—having a high GPA versus a high degree of physical, psychological, and social well-being. The latter is what will provide the space for students to succeed long-term, even beyond their academic career. Thus, much of this dialogue must reflect on how to rearrange the priorities of the system to establish a curriculum that cultivates these values. In short, the strong argument can be made that emotion education should be required as a part of the teaching curriculum as early as possible and as frequently as possible as children grow from preschool, elementary, middle, and high school. The workshop in this study could serve as a starting point for this kind of implementation.

**Limitations**

Being that this study was a pilot study, important limitations should be outlined. First, the sample size of participants was relatively small due to the desired intimate nature of each workshop (only allowing a maximum of 15 participants per workshop). In addition, there was no control group for this study. As such, it is difficult to say whether or not the workshop itself was a catalyst for change in students’ well-being. Furthermore, because participants are college students, there are countless confounding variables that may have played a role in any changes of participants’ well-being. For instance, during the time of this workshop, many students were taking mid-term examinations and thus, may have experienced an increase in stress and a decrease in subjective well-being. By the time they were to take the post-intervention survey, these mid-term examinations would have passed, thus potentially reducing any stress or perceived difficulties in well-being. Other contextual influences on overall well-being may include: students becoming involved in extracurricular activities, forming new relationships, coming to the end of the
semester, a change in the season and warmer temperatures, etc. Therefore, inferring causation from the results of this study would not be advised or appropriate.

**Future Directions**

This workshop was intended to be a space to encourage curiosity, question current beliefs about affective experiences, and to plant seeds to raise conscious awareness. While the limitations of this study discussed above restrict the interpretation of the workshop’s effect on students, based on participants’ positive subjective feedback of their satisfaction as well as many participants’ successful retention of the material two to three weeks post-workshop, it may be safe to assume that the workshop was impactful at least at a small level. As a pilot workshop, a small impact is still a success.

The college student mental health crisis means that universities need to start developing new ways of helping students cope effectively with negative emotions, especially those whose difficulties do not warrant on-going individual therapy. One way of doing this that would be worth exploring is through mental health outreach on college campuses. Outreach services are incredibly diverse in what they can provide, one method of which is providing alternative mental health services to students, such as this study’s workshop. Upon developing it further, this workshop may have the potential to help free up counseling centers, which are often flooded with students seeking help for emotional difficulties that could be resolved through fostering curiosity and facilitating a calm approach to their problems. It is consolidated, feasible to administer, and flexible in its structure, as one can implement it in a variety of settings and across varying lengths of time (i.e., from a one-time workshop to an 11-week group). In addition, the material taught in the workshop is easy to understand, and the simplicity of the frameworks
introduced may help in retaining the information long-term. In sum, this workshop has the potential to be a valuable resource for students who need a quick nudge in the opposite direction of self-criticism and emotional avoidance and towards intrapsychic and interpersonal harmony.

Based on participants’ feedback, this workshop was enjoyable and was received well by most students. Given this general reaction, it seems worthwhile to continue to build upon this workshop’s foundation and improve its delivery. Participants from the workshops provided valuable feedback that could be feasible to apply in the future. For instance, expanding the workshop to two or three meetings of a shorter length (perhaps 45 minutes to 1 hour) may be more effective at holding students’ attention long enough for them to retain the material and would break up the material so each meeting is less information-dense. This may also allow more space to develop the workshop’s group dynamic so students may feel more comfortable to participate in the group discussions as time goes by. Participants also mentioned wanting the workshop to be more “interactive,” so it may be important to consider adding a few more group activities, especially during the discussion of C.A.L.M. M.O., as this section of the workshop did not have any activities. It would certainly be productive to dedicate a significant amount of time to practicing the use of the framework, such as through role-playing. This would also address participants’ concerns about not getting as much of an understanding of how to implement the mindfulness framework for oneself in real time.

In sum, the feasibility of an hour and half, one-time workshop to potentially induce positive change is a hopeful starting point in attempting to reverse the current societal trend toward maladaptive emotional processing. The results of this study seem to
justify the need for further research and exploration of the implementation of the workshop’s material and the impact it has long-term on well-being and functioning. Much of this future research could include implementing the material across a number of sessions (i.e., from two sessions to as many as 11), breaking up the material into workable and even more consolidated foci per session, experimenting with different modes of learning (i.e., other videos, group activities, worksheets, role playing, etc.), or administering the material to different age groups. Finally, if one were to perform this study again, using a control group would be beneficial in determining to what degree the workshop plays a role in improvement of students’ overall well-being.
Appendices

Appendix A – Workshop Flyer

Need some calm in your life?

Yeah?? Then check out this new mindfulness workshop!

From Critical to CALM

Location: UREC’s Meditation Studio
Days/Times: TBD
Length: 1 hour 30 minutes

Feeling discombobulated by your own thoughts and emotions? You’re not alone! College is full of stress and hardship with all kinds of ups and downs. This workshop offers a new way of experiencing life that could help you increase your overall inner and interpersonal harmony!

If interested, contact:
Mandi Quay
eggenbmn@dukes.jmu.edu
Appendix B – Informed Consent

Consent to Participate in Research

Identification of Investigators & Purpose of Study
You are being asked to participate in a research study conducted by Mandi Quay, MA, and Gregg Henriques, Ph.D, from James Madison University’s doctoral program in clinical and school psychology. The purpose of this study is implement a new mindfulness workshop and explore its impact on socioemotional functioning and well-being. This study will contribute to the researcher’s completion of her doctoral dissertation.

Research Procedures
Should you decide to participate in this research study, you will be asked to sign this consent form once all your questions have been answered to your satisfaction. This study consists of 3 parts. First, you will asked to complete a few assessments through an online survey system, Qualtrics, which will assess your socioemotional functioning, overall well-being, and levels of anxiety. The second part will be the actual workshop you will attend, where, upon the last 15 minutes, you will be given some open-ended questions regarding the knowledge you obtained from the workshop as well as your experience and feedback of the workshop. Finally, third, approximately 2 – 3 weeks after the completion of the workshop, you will asked to complete another set of online assessments measuring the same constructs outlined above.

This workshop will occur once for 1.75 hours, and it will take place in Miller G027. During the workshop, you will learn about and engage in two broad domains: 1.) the inner workings of your conscious experiences, namely, your sensations, thoughts, emotions, and interpersonal ways of being; and 2.) how to engage in mindfulness with this knowledge as a means of developing harmony, both within yourself and with others. You will be asked to engage in an experiential activity as well as group discussion both with the student researcher and with peers in the workshop.

Time Required
Participation in this study will require approximately 30 minutes of your time as you complete the 1st set of online assessment materials, 1.75 hours of your time for the workshop itself, and another 30 minutes of your time as you complete the 2nd set of online assessment materials after the workshop. Thus, as a participant, the total commitment is approximately 2.75 hours.

Risks
The investigator perceives the following are possible risks arising from your involvement with this study: the nature of this workshop is such that it involves self-reflection, where you will be exploring and discussing various areas of your psychological functioning and well-being. As such, there is potential risk of becoming overwhelmed or distressed or learning new and perhaps difficult things about yourself. These risks will be managed by virtue of having the process supervised by a licensed clinical psychologist with special
training in mental health, and by having the group facilitator be a trained doctoral student in professional psychology.

Benefits
Potential benefits from participation in this study include: developing a deeper understanding of yourself and how your sensations, emotions, thoughts, and interpersonal ways of being all work together, and learn to do so mindfully, which may enhance your overall well-being and decrease your socioemotional difficulties. The value of this research is in developing a method and space for you to explore self-awareness, cultivate resilience, and develop more adaptive skills for coping with your internal and interpersonal processes.

Confidentiality
All of your responses will be kept confidential, and only non-identifiable and aggregate data will ever be published in either publications or presentations. The results of this project will be coded in such a way that the respondent’s identity will not be attached to the final form of this study. The researcher retains the right to use and publish non-identifiable data. While individual responses are confidential, aggregate data will be presented representing averages or generalizations about the responses as a whole. All data will be stored in a secure location accessible only to the researcher and faculty advisor. Names and identifying data will be removed from the data set. Upon completion of the study, all information that matches up individual respondents with their answers will be destroyed.

Participation & Withdrawal
Your participation is entirely voluntary. You are free to choose not to participate. Should you choose to participate, you can withdraw at any time without consequences of any kind.

Questions about the Study
If you have questions or concerns during the time of your participation in this study, or after its completion or you would like to receive a copy of the final aggregate results of this study, please contact:

Mandi Quay, M.A.  Gregg R. Henriques, PhD
Department of Graduate Psychology (Director)  Department of Graduate Psychology
James Madison University  James Madison University
eggerbmn@dukes.jmu.edu  henriqgx@jmu.edu

Questions about Your Rights as a Research Subject
Dr. David Cockley
Chair, Institutional Review Board
James Madison University
(540) 568-2834
cocklede@jmu.edu
Giving of Consent
I have read this consent form and I understand what is being requested of me as a participant in this study. I freely consent to participate. I have been given satisfactory answers to my questions. The investigator provided me with a copy of this form. I certify that I am at least 18 years of age.

______________________________
Name of Participant (Printed)

*Please provide a personalized 4 digit code that you will be able to remember in the future ____________

______________________________ ______________
Name of Participant (Signed) Date

______________________________ ______________
Name of Researcher (Signed) Date
Appendix C – Table of Measures, Schedule of Administrations, and Quiz/Survey Questions

<table>
<thead>
<tr>
<th>Pre-Intervention Assessments (administered online)</th>
<th>For pre-intervention assessment:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Henriques-10 Well-Being Questionnaire (H10WB)</td>
<td></td>
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<tr>
<td>- CORE-OM, 34-item measure</td>
<td></td>
</tr>
<tr>
<td>- Generalized Anxiety Disorder (GAD-7) scale</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Post-Intervention Assessments (given immediately after completion of workshop – administered in paper form)</th>
<th>“Test” of knowledge from the workshop</th>
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</thead>
<tbody>
<tr>
<td>• 1. What are emotions, especially negative emotions?</td>
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<tr>
<td>• 2. What is the Tripartite Map of Human Consciousness?</td>
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<tr>
<td>• 3. What does C.A.L.M. M.O. stand for?</td>
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<tr>
<td>• Qualitative questions assessing experience of the workshop and feedback:</td>
<td></td>
</tr>
<tr>
<td>1. Overall, on a scale from 1 to 5 (1 being “Not at all satisfied” and 5 being “Very Satisfied”), how satisfied are you with this workshop?</td>
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<td>2. Did you find this workshop to be beneficial or helpful for you? If yes, how so?</td>
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<td>3. A goal of this workshop is to help you understand your thoughts and emotions and to help you process them. Did you find that this workshop helped you to do this?</td>
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<tr>
<td>4. On a scale from 1 to 5 (1 being “Not at all likely” and 5 being “Very Likely”), to what extent do you believe that you will be using these strategies from the workshop going forward?</td>
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<td>5. What suggestions do you have on how this workshop could be improved?</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Post-Intervention Assessments (given approximately three weeks after completion of workshop – administered online)</th>
<th>Henriques-10 Well-Being Questionnaire (H10WB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• CORE-OM, 34-item measure</td>
<td></td>
</tr>
<tr>
<td>• Generalized Anxiety Disorder (GAD-7) scale</td>
<td></td>
</tr>
<tr>
<td>• Qualitative question assessing material internalized 2 – 3 weeks post-workshop: What from the workshop do you remember learning (in other words, what concept(s) or idea(s) do you remember)?</td>
<td></td>
</tr>
</tbody>
</table>
References


