

The Current Mental Health Challenge on College Campuses

Studies have demonstrated that there is a positive relationship between college students' emotional health and their persistence to college completion (Choy, 2002). The importance of students' psychological well-being for college persistence and completion is underscored by a meta-analysis of multiple studies, which led its authors to conclude that the effect of *psychosocial* adjustment on college retention is so influential and *independent of academic preparedness* that we should consider "almost all first-year students to be underprepared" (Perzadian & Credé, 2015, p. 40).

Compared to their parents' generation, college students today are 50 percent more likely to report feeling overwhelmed (Twenge, 2014). More than half now report experiencing emotional distress (ACHA-NCHA, 2017) and the emotional distress rates of college students are trending upward (Hibbs & Rostain, 2019). Compounding these mental health challenges is the COVID-19 crisis. A study conducted by the Centers for Disease Controls and Prevention revealed that 46% of Americans between the ages of 18 and 24 reported mental health disorders related to the pandemic, which was a higher percentage than any other age bracket (Czeisler, Lane, Petrosky et al. (2020). National surveys of college students, in particular, indicate the pandemic is elevating their stress level (Active Minds, 2020), lowering their access to social support, and increasing their sense of social isolation (*PLOS One*, 2019). The adverse emotional impact of COVID-19 is likely to persist for some time to come due to a well-founded psychological principle called "negativity dominance"—the tendency for negative experience to have more intense and lasting impact than positive experiences (Rozin & Royzman, 2001) and slow down the belief that things are getting better when they actually are (O'Brien, 2020). In a national survey conducted in December, 2020 by the American Council of Education, 70% of college and university presidents reported that students' mental health is now one of their "top concerns" (Chessman, Vivil, & Soler, 2020).

Given the number of college students experiencing emotional health issues (Raimondi, 2019), which reached a level of a public health concern (Eisenberg et al., 2007; Glass, 2016) even before being compounded by COVID-19, strongly suggests that now is the time for student-support professionals to adopt a broader view college preparedness that includes "emotional preparedness" and intentionally initiate proactive programs designed to promote first-year students' mental health and emotional well-being. As Rostain and Hibbs (2019) point out, "There is no Advanced Placement class for emotional readiness, but research has shown that it is the best predictor of whether a student will adjust successfully to college life" (p. C2).

Despite the growing number of students experiencing emotional challenges, studies show that many of them do not utilize campus counseling centers, in large part due to lingering social stigmas or self-stigmas associated with help-seeking for mental health issues (Eisenberg, Hunt, & Speer, 2012). Students from minority racial and ethnic groups, in particular, exhibit low rates of help-seeking for emotional adjustment issues (Cheng, Kwan, & Sevig, 2013)—a particularly disturbing finding because a disproportionate number of them are first-generation college students who are also saddled with stressors associated with lower levels of academic preparedness, less college knowledge and social capital, and limited fiscal resources. In fact, the added effort that upwardly-mobile minority students must exert to cope with these additional stressors and the emotional toll it takes on their mental health, has been referred to as "John Henryism" (Hamblin, 2017)—named after John Henry Martin, a steel-driving African American folk hero who worked hard enough to complete with a steam-powered machine, but died as a result of the stress he experienced in the process (Tracy, 2008).

These findings point to the need for traditional “passive programming” that relies on students making individual, self-initiated contact with personal counselors be augmented with campus-initiated, proactive, and preventative outreach programs that bring mental health education directly to students before they are in crisis mode. Given research indicating that students experiencing mental health issues are twice as likely to withdraw from college (National Academies of Sciences, Engineering, and Medicine, 2017), such early outreach would provide preventative support for students who may be at risk for attrition. Such outreach is particularly important for supporting students who may lack the assertiveness or cultural proclivity to seek such help on their own. Given research indicating that students experiencing mental health issues are twice as likely to withdraw from college (National Academies of Sciences, Engineering, and Medicine, 2017), such early outreach would provide preventative support for students who may be at risk for attrition. In addition, it would promote the success of students who are simply languishing in college—as opposed to thriving in college (Schreiner, 2015), thus supporting students in the “murky middle” who may not be on the precipice of a mental health crisis, but who are not flourishing and functioning at an optimal level.

POSITIVE PSYCHOLOGY

Definition & Description of Positive Psychology

The field of Positive Psychology was born in 1998 when then president of the American Psychological Association, Martin Seligman, called for a new direction in the discipline of psychology that focuses on “not just fixing what is broken [but] nurturing what is best within us” (Seligman, quoted in Compton & Hoffman, 2020, p. 1). In 2002, the First International Positive Psychology Conference took place. Since then, numerous peer-reviewed academic journals have emerged devoted to research in the new field of positive psychology, including the *Journal of Positive Psychology*, the *International Journal of Wellbeing*, the *Journal of Happiness and Well-Being*, and the *Journal of Happiness Studies*. Between 1990 and 2014, the number of peer-reviewed publications on happiness alone increased from approximately 100 to more than 1,100 (Compton & Hoffman, 2020).

According to the International Positive Psychology Association, “Positive psychology is the scientific study of what enables individuals and communities to thrive” (Compton & Hoffman, 2020, p. 2). Its overarching aim is to enhance the growth and development of the “whole person” (Miller, 2015) and humanity as a whole (Smith, Vicuna, & Emmanuel, 2015) by the systematic study of positive personal traits or attributes—such as strengths and virtues, and positive qualities of communities or institutions—such as civility and justice (Positive Psychology Center, 2020). When humans move beyond merely coping to experiencing positive emotions, they move from languishing to flourishing (Fredrickson, 2002). “The gold standard for measuring well-being is flourishing, and the goal of positive psychology is to increase flourishing” (Seligman, 2011, p. 13). *Flourishing* is defined as experiencing high emotional well-being and low mental illness. In contrast, experiencing low emotional well-being and low mental illness is defined as *languishing*, and experiencing low emotional well-being and high mental illness is defined as *struggling* (Keyes & Lopez, 2002). Thus, the key to flourishing is to experience a higher ratio of positive emotions relative to negative emotions (Fredrickson, 2013).

Positive psychology involves the practical application of psychological research on human flourishing and optimal functioning to help humans lead an engaged, meaningful, and fulfilling life (Peterson, 2013). As stated in the website of the Positive Psychology Center (2020), positive psychology studies what promotes “contentment with the past, happiness in the present, and hope for the future” (Positive Psychology Center, 2020). Shushok and Hulme (2006) succinctly capture the practical implications of positive psychology research for fulfilling higher education’s goal of promoting student success: “The

promotion of success begins with the study of success” (p. 6). Applying the principles of positive psychology to the study of student success would involve measuring student success more holistically—in ways that go beyond traditional measures of in-class intellectual engagement (e.g., how often students experience engaging pedagogy in the classroom), or out-of-class intellectual engagement (e.g., how frequently students write papers or use the library), and include psychological measures of engagement—such as assessing the psychosocial, emotional, and motivational processes that affect how students engage and if they engage (Louis, 2015; Schreiner, 2015). Higher education scholars have argued that infusing the principles of positive psychology into the college curriculum, such as a first-year seminar, is the most effective and efficient way to equip the student body with the non-cognitive (holistic) skills needed to fully engage in college and, therefore, thrive in college (Fineburg, 2004; Schreiner, 2015). Higher education practitioners have also called for incorporating positive psychology into new-student orientation programs (Louis & Schreiner, 2012) and student leadership programs (Schreiner et al., 2009a). Supporting these claims for infusing emotional wellness programming directly into required curricular and co-curricular programming, rather than waiting for students to see it out on their own time and initiative, are the results of a 2013 report published by in the American Journal of College Health which revealed that the top-three reasons given by college students for not seeking support when experiencing significant emotional challenges were: (a) “My problem are not serious enough to warrant assistance (66%), (b) “I don’t have enough time” (27%), and (c) I prefer to manage my problems on my own (18%) (Czyz et al., 2013).

The Case for Positive Psychology

Research indicates that optimal well-being is achieved when individuals are aware of both negative and positive emotional experiences—that is, when they experience “emodiversity” (Adler & Hershfield, 2012; Quoidbach et al., 2014). These research findings underscore the importance of augmenting traditional psychotherapeutic interventions aimed at decreasing the intensity and frequency of negative emotional experiences with psychoeducational programs that increase the intensity and frequency of positive emotional experiences. In fact, studies show that positive emotions and negative emotions are typically independent (Ryff et al., 2006); in other words, the frequency with which a person experiences negative emotions is unrelated to how often they experience positive emotions (Schimmack, 2008). Thus, traditional psychotherapy designed to help people experiencing negative emotions will not necessarily increase their ability to experience positive emotions. Eliminating or avoiding emotional suffering doesn't automatically translate into attaining emotional well-being (Duckworth, Steen, & Seligman, 2005). To attain bona fide emotional well-being, experience optimal psychological wellness, and live a high-quality life, humans not only need to attend to negative emotions but also attend to and cultivate positive emotions (Ivetzan et al., 2015; Kashdan & Biswas-Diener, 2014), such as: optimism, contentment, vitality, joy, happiness, gratitude, self-acceptance, strength recognition, sense of accomplishment, experiencing excellence and “flow”, finding meaning and purpose in life, developing character and virtues, including empathy, compassion and altruism (Compton & Hoffman, 2020). Studies show that the ability to identify positive emotions with greater specificity and experience positive emotions with greater regularity serves to increase awareness of when positive emotions are being experienced in the future (Strauss & Allen, 2006) and lessens a person’s negative emotional reaction to future stressful events (Ong et al., 2006; Tugade, Fredrickson, & Barrett, 2005). There is also evidence that experiencing positive emotions can act as a buffer against depression (Fredrickson et al., 2003) and can “undo” ongoing or lingering negative emotions, reducing both their level of intensity and longevity—length of time taken to recover from them (Fredrickson, 2003; Fredrickson et al., 2000; Fredrickson et al., 2003).

Comprehensive reviews of research reveal that experiencing positive emotions is associated with higher levels of physical health, including greater resistance to disease (because of enhanced immune system functioning) and a longer lifespan (Boehm, 2018; Fredrickson, 2013; Lyubomirsky, King, & Diener, 2005; Richman et al., 2005). Experiencing positive emotions has also been found to have psychosocial benefits, such as: more satisfying interpersonal relationships, more frequent acts of altruism, higher personal agency or self-efficacy, striving more successfully to achieve desired goals, higher job satisfaction, and greater likelihood of experiencing career success (Diener et al., 2017; Diener & Chan, 2011; Klug & Maier, 2015; Welzer & Inglehart, 2010; Youseff & Luthans, 2011). Many students believe that if they are just able to get a good job and find a good partner, they will be happy (Marks, 2015); however, research in positive psychology shows that the process works in reverse: Experiencing positive emotions enable people to reach their goals, feel successful, and be happy (Achor, 2010; Boehm & Lyubomirsky, 2008).

Research also indicates that experiencing positive emotions has cognitive benefits that include openness to learning from new experiences and the ability to find meaning in them (Cohn & Fredrickson, 2009; Fredrickson et al., 2008) as well as increased cognitive flexibility, broadening of perspective, enhanced ability to generate creative solutions to problems and the capacity think in a more focused, productive and innovative manner (Fredrickson & Branigan, 2005; Isen, 2001, 2009; Lyubomirsky, King, & Diener, 2005; Pronin & Jacobs, 2008). In one study of nearly 4,000 first-year college students, it was found that their level of the positive emotion of optimism and hope was a more accurate predictor of their first-year grades than was their SAT score or high school grade-point average (Snyder et al., 1991). The benefits of positive emotions on cognitive and academic performance are likely to result from the fact that these emotions broaden one's repertoire of thoughts and actions to choose from, thus creating more potential solution options and success strategies (Fredrickson, 1998, 2001). Negative emotions do just the opposite; they have been found to narrow one's range of thinking and trigger tunnel vision (Frijda, 1986; Lazarus, 1991).

Studies also show that college students who report higher levels of optimism (Carver et al., 2009) and emotional well-being (Diener, 2000) enjoy college more and report higher levels of satisfaction with their college experience (Schreiner et al., 2009b). Lastly, positive psychology research on the recognition and development of personal strengths reveals that college students who participate in strengths training programs exhibit higher levels of academic self-efficacy (Louis, 2008), higher levels of both academic engagement and academic performance (Cantwell, 2005; Williamson, 2002), and are better able to leverage their personal strengths to garner social support and build on past successes (Bowers & Lopez, 2010). Similar evidence supporting strength recognition-and-development education for college students were reported in a study of over 600 students enrolled in a first-year seminar course, which included six 1-hour class sessions focusing on strengths recognition and development. Students who completed the course demonstrated significant pre/post-course gains in awareness of their own strengths (and the strengths of others), self-acceptance, optimism, self-confidence, goal-directedness, and realistic expectations (Anderson, Schreiner, & Shahbaz in Magyar-Moe, 2015). Comparable results were obtained in a qualitative study of a strengths-based, first-year seminar for academically underprepared college students. It was found that upon completion of the course, students reported higher levels of academic motivation, deeper understanding of how to apply their strengths to meet academic challenges, and better ability to form social networks (Estévez, 2005).

Taken together, these findings strongly suggest that positive psychology has the potential to promote positive outcomes of a college education that extend beyond credentialing and job placement to enduring, lifelong outcomes relating to the development of the whole person, holistic well-being, career fulfillment, and personal attributes that enrich the quality of a college graduate's life throughout life and the lives of others with whom that graduate interacts.

MINDFULNESS

Definition & Description of Mindfulness

Mindfulness has been defined as purposeful, nonjudgmental attentiveness to the present moment in oneself and in the external world . . . a “state of receptive awareness of our open minds to whatever arises as it arises” (Siegel, 2007, pp. 160-161). Mindfulness differs from related experiences, such as the following:

- *Self-awareness.* Mindfulness is not synonymous with self-awareness. Instead, it is “pure awareness” (Harris, 2009) or meta-awareness (Quaglia et al., 2015)—an awareness of being aware (Tart, 1994). In fact, mindfulness doesn't involve focusing on the self at all (Ryan & Rigby, 2015); it's about shifting focus off the self and onto what is being experienced in the present moment (Compton & Hoffman, 2020).
- *Self-evaluation or self-assessment.* Mindfulness is about being open to and appreciating the current experience for what it is—without evaluating it or trying to alter it (Compton & Hoffman, 2020).
- *Concentration or narrowing one's focus of attention.* Instead, mindfulness is about broadening one's attention to different aspects of what is currently being experienced (van Vugt, 2015) and about bringing attention back to the current experience when it wanders from it (Dreyfus, 2011). As Gunaratana (2019) notes: “Concentration is exclusive. It settles down on one item and ignores everything else. Mindfulness is inclusive. It stands back from the focus of attention and watches with a broad focus, quick to notice any change that occurs. Concentration keeps attention pinned down to one item . . . Mindfulness notices when the attention has gone astray” (pp. 143 & 147).
- *Metacognition* (thinking about our thinking). Mindfulness is not, in fact, a thinking process at all. It's a perceptual process (Gunaratana, 2019) that involves “watching your thoughts without being drawn into them . . . going *beyond* or *behind* our thinking, much the same way you might find a vantage point in a cave or depression in the rock behind a waterfall . . . We still see and hear the water, but we are out of the torrent” (Kabat-Zinn, 1994, p. 94).

The Case for Mindfulness

Taking time to be present and in touch with ourselves and our environment is particularly important in today's high-tech, perpetually “plugged-in” world where humans now have multiple, immediately accessible technological tools and toys which supply them with an “excess of distractions (e.g., commercial, social, and political messages) that leave little space for people to be present for their moment-to-moment lived experiences” (Deci et al., 2015, p. 126). As the founder of Western

mindfulness warns, "The species is at a critical juncture, a tipping point . . . mindfulness has never been more critically important" (Kabat-Zinn, 1994, p. 272). Another mindfulness scholar put it more bluntly: "The stream of modern life is biased toward *mindlessness*" (Tart, 1994, p. 73).

The technological revolution has spawned a burgeoning interest in the concept of mindfulness. In 2015, if someone were to conduct a Google scholar search, it would reveal that the number of publications containing the word "mindfulness" increased from 500 to 15,000 in the previous decade (Brown, Creswell, & Ryan, 2015). Between 2003 and 2017, there was a 2,000% percent increase in the number of articles with "mindfulness" in their title that appeared in academic journals (Compton & Hoffmann, 2020).

Positive Outcomes Associated with Mindfulness

Improved Focus of Attention

Studies show that mindfulness training (MT) is associated with: (a) reduced "mind wandering" during tasks that require focused attention (Mrazek et al., 2012), (b) increased ability to focus on the task at hand (Chan & Woollacott, 2007; Jha, Krompinger, & Baime, 2007) and (c) sustained attention to tasks over time (Lutz et al., 2009). Brain imaging studies also reveal that MT increases neurological activity and connectivity in areas of the brain associated with focused attention (Brewer et al., 2011; Chiesa & Serretti, 2010; Tang & Posner, 2015).

These positive outcomes are likely due to the fact that MT reduces focus on the self and internal narratives (e.g., "I'm bored"), opening up more time and opportunity for one's attention and working memory to focus on the task at hand (van Vugt, 2015, pp. 203-204). During MT, repeated practice with noticing when one has become distracted MT (e. g., "Where did I go? I was supposed to be paying attention to my breath"), strengthens one's ability to extricate the self from distractions and return attention to any task that requires focused and undivided attention (Gunaratana, 2019; van Vugt, 2015), particularly if that task requires deep concentration or a task that isn't particularly interesting (Tart, 1994). For instance, college students report that mindfulness "helps them 'get more out of' their academic work because they learn how to 'bring the mind back' when a professor is lecturing or other students are talking" (Grace, 2011, p. 241). Studies also indicate that mindfulness meditation increases alpha brain-wave activity—a brain-wave pattern associated with a mental state of deep, relaxed alertness. This alpha-wave activity is often a gateway to theta brain-wave activity—a state of consciousness associated with the type creative thinking that leads to problem-solving breakthroughs (Hart, 2011).

Emotional Awareness & Regulation

Research demonstrates that increased mindfulness is associated with increased emotional clarity—the ability to differentiate between emotions (Hill & Updegraff, 2012). Such increased emotional clarity, in turn, improves a person's ability to respond specifically and effectively to different emotions (Arch & Landy, 2015). Mindfulness has also been associated with *integrated emotional regulation*—a deeper awareness of personal feelings, sharper insight into how one's feelings are influenced by external events and how those events are interpreted, and greater control of whether to express and how to express one's feelings (Deci et al., 2015). This improved emotional regulation relating to mindfulness includes regulation of both positive feelings, such as joy and happiness, and negative emotions that the person may have lost touch with or is unwilling to acknowledge, such as grief, anger and fear (Kabat-Zinn, 1994). For instance, it has been found that when people experience a negative emotion like anxiety, those with

higher levels of mindfulness are more aware of what is specifically triggering their anxiety and how that emotion is affecting them cognitively, physically, and behaviorally (Tart, 1994).

Studies also show that individuals who are more mindful are more accepting of the emotions they experience (Teper & Inzlicht, 2013) and recover faster from unpleasant emotional experiences (Broderick, 2005). When we struggle with unpleasant emotions, it tends to intensify their negativity; mindfulness increases our acceptance of negative emotions and decreases our tendency to struggle against them, thus reducing their adverse impact on us (Gruber, Mauss, & Tamir, 2011). Mindfulness also reduces the adverse impact of negative emotions by minimizing “mind wandering” (Carmody, 2015) and rumination—i.e., worrisome thinking (Trapnell & Campbell, 1999). Research has demonstrated that mind wandering is associated with such negative emotions as anxiety and boredom (Kane et al., 2007); in fact, the association between mind wandering and negative emotions is causal—which is to say that mind wandering is not a result of unhappiness but a cause of unhappiness (Killingsworth & Gilbert, 2010). In contrast, research shows that people report feeling happier when they experience less mind wandering during positive emotional experiences and remain more aware of the pleasant emotions they’re currently experiencing (Killingsworth & Gilbert, 2010). Furthermore, it has been found that people who practice mindfulness are more likely to be perceived by others as being happy (Choi, Karremans, & Barendregt, 2012). This finding is particularly significant when viewed in light of a research conducted at Harvard, which revealed that if people who know someone who is happy, their chances of feeling happy increases by 15%; in other words, happy feelings can be contagious (Rath & Harter, 2010).

Stress Management

A growing body of evidence supports the effectiveness of mindfulness-based training for managing stress, maintaining mental health, and promoting subjective well-being (Hanley, Warner, & Garland, 2015; Kadziolka, Di Pierdomenico, & Miller, 2016; Keng, Smoski, & Robins, 2016). This body of evidence includes research on young adults (Rogers & Maytan, 2012) and first-year college students—for whom mindfulness practice has been found to facilitate adjustment to college (Ramler et al., 2016)—even after controlling for such variables of self-efficacy and social support (Klainin-Yobas et al., 2016; Mettler, Carsley, Joly, & Heath, 2019). In another series of studies, each using a different research methodology, it was found that college students with higher levels of mindfulness: (a) experienced lower levels of stress in response to academic stressors and (b) used less defensive, more effective coping strategies (Weinstein, Brown & Ryan, 2009). It has also been found that individuals with higher levels of mindfulness experience fewer posttraumatic stress symptoms following emotionally traumatic experiences (Garland & Roberts-Lewis, 2013).

These findings of more positive subjective (psychological) feelings associated with higher levels of mindfulness are further supported by objective (physiological) evidence that individuals high in mindfulness respond to stressful situations by releasing lower amounts of cortisol—a neurohormone released in the body when a person is under stress (Brown, Weinstein, & Creswell, 2012; Ciesla et al., 2012; Tamagawa et al., 2013). People higher in mindfulness also exhibit lower levels of neurological activity in the amygdala—the part of the brain that becomes activated during stress (Creswell, Eisenberger, & Lieberman, 2007; Modinos, Ormel, & Aleman, 2010; Way et al., 2010). Additional brain-imaging studies of college students reveal that more mindful students exhibit less cortical arousal immediately after being exposed to negative emotional images. These findings suggest that their higher level of mindfulness reduced the amount of stress they experienced by altering their brain’s cognitive interpretation of emotional stimuli (Brown, Goodman, & Inzlicht, 2013)—in a way that makes them less avoidant and more accepting of stressful events, minimizes their perception of threat, and enables them to respond less defensively to stressful events (Hodgins & Knee, 2002; van Vugt, 2015).

It has also been found that college students trained in mindful breathing are more likely to experience fewer repetitive thoughts and less intense negative reactions to those thoughts (Feldman, Greeson, & Senville, 2010). This finding suggests that one way in which mindfulness reduces stress is by reducing rumination (Watkins, 2015), a form of worrisome thinking that intensifies and sustains a person's initial response to stressful events, which, in turn, leads to higher levels of anxiety, depression, and other negative emotional states (Arch & Landy, 2015). Even a 15-minute focused-breathing mindfulness exercise has been found to effectively lower feelings of stress and lessen emotional reactivity to stressful stimuli (Arch & Craske, 2006). One college student reported after completing a course that included mindfulness-based exercises that mindfulness "allowed me to see the pattern of my own thoughts . . . I now have a greater understanding of where my anxieties came from and how to control them. This gives me confidence as a student" (Grace, 2011, p. 343).

Physical Health

Research on mindfulness and physical well-being reveals that higher levels of mindfulness are associated with stronger immune system activity, greater resistance to physical illness, and fewer doctor visits (Arch & Craske, 2006; 2010; Black & Slavich, 2016; Brown & Ryan, 2003; Davidson et al., 2003). It has also been found that college females with higher levels of mindfulness have higher quality sleep and better overall physical health (Murphy et al., 2012). The benefits of mindfulness for physical well-being is highlighted by the fact that more than 250 medical institutions across the country use mindfulness-based stress reduction methods to treat a variety of health conditions, including insomnia, chronic pain, heart disease and cancer (Kingston et al., 2007; Loucks et al., 2015; Matousek & Dobkin, 2010; Ong & Smith, 2017).

Self-Esteem

In our evolutionary past, physical threats were ever-present (e.g. from predators and territorial competitors). As result, the human nervous system has become hard-wired to focus vigilantly on the external environment so it can detect and react to threats to our well-being and to respond to those threats rapidly, automatically, and often unconsciously (i.e. fight or flight response). In modern life, those external evolutionary threats to our physical safety have been replaced by more internal, psychological threats (real or imagined) such as threats to our personal competence, social acceptance, social status, etc. These psychological threats are less likely to trigger an immediate physical action and more likely more to be responded to with cognition or thought (Andrews-Hanna, 2012), which can often "take the form of ongoing commentary experienced as an internal narrative . . . [that] insistently plans, compares, judges, and regrets" (Carmody, 2015, pp. 66-67). Since humans have the tool of language, they can they can use that tool to conjure up— and get caught up— in internal narratives that involve unfavorable comparisons (e.g., "He's smarter than me," or "I'm too fat"), which can damage self-esteem in any situation at any time (Harris, 2009). Mindfulness serves as a tool for combating this self-deprecating human tendency. As mindfulness founder, Jon Kabat-Zinn describes it: "Mindful inquiry can heal low self-esteem, for the simple reason that low self-estimation is really a wrong calculation, a misperception of reality. We see only our shortcomings and blow them out of all proportion. At the same time, we take all our good qualities for granted, or fail to acknowledge them" (1994, p. 193). Empirical support for this claim comes from research indicating that people who are more mindful individuals are less likely to respond defensively to self-threatening situations and are more resilient (Niemic et al. 2010; Perez-Blasco et al., 2015). It has also been found that female college students who participate in mindfulness training become more aware of how their body reacts to self-evaluative thoughts and are less likely to experience self-evaluative thoughts in the first place (Silverstein et al., 2011).

Interpersonal Relations & Social Adjustment

More mindful individuals report experiencing less stress about not "fitting in" or being socially excluded, and their subjective reports are confirmed by objective brain-images showing that their cerebral cortex exhibits less neurophysiological activity in areas associated with social anxiety (Creswell, Eisenberger, & Lieberman, 2008). People with higher levels of mindfulness also experience more satisfying relationships (Burpee & Langer, 2005), fewer feelings of relationship threat, less relationship distress when relationship conflict arises (Barnes et al., 2007), and use more effective strategies to cope with interpersonal conflict (Carson et al., 2004). These positive effects of mindfulness are likely due to the fact that people with higher levels of mindfulness are more aware of the issues underlying social conflict and are less likely to be distracted by feelings of threat during conflict, thus positioning them to respond less angrily and more adaptively to conflict (Ryan & Rigby, 2015). Jon Kabat-Zinn, founder of mindfulness training, offers the following metaphor to explain how mindfulness practice enables you to respond more effectively to interpersonal conflict: "Watching your reactions in situations that annoy you or make you angry are. . . opportunities to experiment with mindfulness as a pot into which you can put all your feelings and just be with them, letting them slowly cook, reminding yourself that you don't have to do anything with them right away, that they will become cooked, more easily digested and understood by holding them in the pot of mindfulness" (1994, p. 245).

Research also suggests that mindfulness increases empathy or "interpersonal attunement"—ability to focus on the internal state of another person with kindness and compassion (Siegel, 2012). Higher levels of mindfulness are also associated with higher levels of empathy and compassion (Beitel, Ferrer, & Cecero, 2005; Brown, Ryan, & Creswell, 2007). For example, in a study of pre-med and medical school students who participated in mindfulness training, it was found that these students displayed more empathy than a control group of students who didn't participate in the training (Shapiro, Schwartz, & Bonner, 1998). The need for increased empathy among colleges students is underscored by a meta-analysis of 72 studies involving 14,000 undergraduates conducted over a three-decade period, which revealed that college students' scores on measures of empathy dropped by 40% between the 1980s and 2010 (Konrath, O'Brien, & Hsing, 2011). (The researchers were unsure why empathy dropped so precipitously during this timeframe, but they hypothesized that it was due to reduced face-to-face contact among young adults as a result of their increasing use of social media and increasing stress relating to the economy and job market.) Mindfulness may provide an antidote for this disturbing decline in empathy among college students by helping them shift attention away from a focus on the self and on self-rumination, opening up more of their attentional capacity to focus on other people (Parker et al., 2015). In fact, a number of studies have shown that mindfulness practice increases neurological activity and neuroanatomical growth in parts of the brain known to mediate empathy (Lazar et al., 2005; Luders et al., 2009). These findings suggest that mindfulness enables the self to focus on the "we" while not losing the sense of "me" (Parker et al., 2015).

Preventing Prejudice & Promoting Critical Thinking

Since mindfulness deepens awareness of internal feelings and attitudes, individuals with higher levels of mindfulness are more likely to be more aware of implicit biases and prejudices. As the founder of Western mindfulness notes:

Our thinking colors all our experience [and] more often than not, our thoughts tend to be less than completely accurate. Usually they are merely uninformed private opinions, reactions and prejudices based on limited knowledge and influenced primarily by our past conditioning. When not recognized as such, our thinking can prevent us from seeing clearly in the present moment. When we commit ourselves to paying attention in an open way, without falling prey to our own likes and dislikes,

opinions and prejudices, projections and expectations, new possibilities open up and we have a chance to free ourselves from the straitjacket of unconsciousness" (Kabat-Zinn, 1994, p. 6).

Support for this argument come from research indicating that people high in mindfulness demonstrate greater congruity between their reported feelings and their actual feelings—as measured by the Implicit Association Test—a well-established instrument that assesses implicit stereotypes (Brown & Ryan, 2003). Research also shows that individuals high in mindfulness are less likely to make racially-biased judgments about the guilt or innocence of criminal suspects (Niemic et al., 2010). Furthermore, by helping people distance themselves from their personal viewpoints and emotional reactions, mindfulness has been found to promote critical thinking, including the ability to "examine assumptions, discern hidden values, evaluate evidence, and assess conclusions in an objective manner" (Brown, 2017, p. 319).

Intentional Decision-Making & Making Intrinsically-Motivated Choices

Siegel (2007) points out that the brain is an "anticipation machine," always readying itself for the next moment because its ability to anticipate immediate events has ensured the survival of our species, enabling our ancient ancestors to respond quickly to potential threats and dangers. This evolutionarily-rooted, brain-based tendency operates in an automatic and subconscious fashion that differs sharply from the type of conscious, reflective and intentional future planning that takes place in a more advanced part of the human brain: the prefrontal cortex. Mindfulness can combat our brain's natural tendency to rivet its attention on what is about to happen and help us be "present"—focus on what we are experiencing now (Parker et al., 2015). Such mindful presence helps young adults gain greater self-awareness, enabling us to see more clearly who we are and who we want to become, positioning them to pursue future goals that are congruent with their core values, signature strengths, intrinsic interests, and other important elements of the self (Deci et al., 2015). This mindful self-awareness also promotes a more intentional, integrated sense of self-functioning that is openly attentive to "all things considered" (Brown, Ryan, & Creswell, 2007). As Jon Kabat-Zinn puts it: "The work of mindfulness demands honoring and heeding our own energy, rather than rushing headlong into things with a mind that is sorely out of touch with large parts of ourself, a mind driven by narrow ambition and ideas of personal gain" (1994, pp. 90-91). Supporting this argument are research findings indicating that mindfulness increases awareness of, and pursuit of, intrinsic goals that are personally meaningful (Barnes et al., 2007; Brown & Kasser, 2005; Brown et al., 2009), serving as a "buffer to reduce the susceptibility to seductive extrinsic goals . . . [because] people higher in mindfulness are more likely to see material goods, displays of wealth, and social recognition as being distant from their basic psychological needs and from behaviors that would fulfill those needs" (Deci et al., 2015, p. 124).

Additional studies show that mindfulness is associated with higher levels of self-actualization (Beitel et al., 2014) and autonomous self-regulation—the ability to make self-governing decisions and intrinsically-motivated choices (Brown & Ryan, 2003; Levesque & Brown, 2007). Lastly, research indicates that choosing and pursuing goals that are intrinsic and concordant with one's strengths, interests and values is associated with higher levels of emotional well-being (Kasser & Ryan, 2001; Sheldon, 2001); this association holds true across different cultures (Sheldon et al., 2004).

SELF-COMPASSION

Definition & Description of Self-Compassion

Self-compassion refers to the capacity to forgive, encourage, and motivate oneself when struggling with feelings of personal failure or inadequacy. It involves "turning directly toward one's suffering . . .

and embracing it with feelings of kind, connected presence. As such, it transforms suffering in a way that enhances well-being, resilience, and coping with difficult thoughts and emotions" (Neff & Davidson, 2016, p. 38).

Similar to mindfulness, self-compassion involves fully accepting the present experience; thus, mindfulness is integral to self-compassion (Neff & Davidson, 2016). Mindfulness focuses on the person's relationship with the experience of being present, whether that experience be positive, negative or neutral; similarly, self-compassion involves being present, but with a special focus on present feelings of suffering and treating those feelings kindly (Germer, 2009). As Neff (2011a) notes: "Mindfulness alone is not enough to avoid getting trapped in depressed and anxious mind-states. Try as we may, sometimes our minds just keep getting stuck in negativity. In this case, we need to actively try to sooth ourselves" (p. 113). Thus, self-compassion builds on the focus of mindfulness on being present and non-judgmental and positive psychology's focus on experiencing positive emotions, adding that being mindful of our negative emotions and treating them compassionately is also important. The connectivity and synergy among these processes is suggested by research indicating that mindfulness training not only increases positive feelings toward the self (Hanley, Warner, & Garland, 2015), but also increase self-compassion (Keng et al., 2012), particularly if the training includes experiential and meditative exercises aimed at increasing self-compassion awareness (Germer & Neff, 2013).

It is important to note that self-compassion differs from self-esteem. Unlike the latter, the former doesn't involve self-assessment or self-evaluation. For example, to promote self-compassion, students might be instructed to "express kindness and understanding of yourself"; to increase self-esteem, they might be instructed to "describe your positive qualities" (Breines & Chen, 2012). In contrast to those who seek to improve their self-esteem, those seeking to improve their self-compassion do not make global evaluations of themselves as "good" or "bad"; they are less focused on self-evaluation—how they compare with others and how others are evaluating them (Neff & Davidson, 2016). Furthermore, as Kristin Neff (2011a) points out: "The good feelings of self compassion don't go away when we mess up or things go wrong. In fact, self-compassion steps in *precisely* where self-esteem lets us down—whenever we fail or feel inadequate" (p. 153). Supporting her point are the results of a study in which college students were asked to discuss their weaknesses in a mock job interview. The study revealed that self-compassionate students experienced fewer feelings of self-consciousness and social anxiety than students who lacked self-compassion. In contrast, students with high self-esteem did not report feeling less socially anxious than students with low self-esteem (Neff, 2011a).

Positive Outcomes Associated with Self-Compassion

Emotional Wellbeing

Neff and Davidson (2016) point out that, "We often relate to ourselves in a harsh, self-critical manner and routinely say things to ourselves that we would not say to a stranger or, in some cases, even someone we disliked . . . We have a tendency to jump immediately into problem solving mode without recognizing the need to provide ourselves comfort for the struggles we're experiencing" (Neff & Davidson, 2016, p. 39 & 40). The importance of self-compassion for dealing with personal struggles is well supported by a meta-analysis of multiple studies, which revealed that self-compassion correlates with higher overall mental health, lower susceptibility to psychopathology (MacBeth & Gumley, 2012), and fewer feelings of stress, anxiety, and depression (Barnard & Curry, 2011; Vam Dam et al., 2011). These findings have been reported for people in all age groups, and for adolescents and young adults in particular (Bluth & Blanton, 2015; Ferrari et al., 2018). In one study of college students who showed symptoms of PTSD following a traumatic event, students higher in self-compassion experiences less

severe symptoms after the trauma and were better able to face the negative feelings triggered by the traumatic event (Neff, 2011a).

Self-compassion training has also been found to reduce chronic academic stress among college students (Kyeong, 2013; Zhang et al., 2016). Even brief self-compassion interventions conducted with college students are effective for decreasing feelings of depression and increasing feelings of optimism, happiness, and self-efficacy (Neff, Rude, & Kirkpatrick, 2007; Shapira & Mongrain, 2010; Smeets & Neff, 2013).

Personal Motivation

Studies show that self-compassion is associated with higher levels of self-motivation (Breines & Chen, 2012) and is a more effective motivational strategy for changing one's behavior than self-criticism (Neff, 2003, 2011b). Research comparing people with low and high self-compassion also indicates those with higher self-compassion are more oriented toward personal growth, more likely to create specific plans for reaching their goals, and just as likely to hold high standards for themselves but are much less likely to be hard on themselves when they don't meet those standards (Neff, 2011a). Based on her research, Kristin Neff concludes that, "Self-compassion in no way lowers where you set your sites in life. It does however soften how you react when you don't do as well as you hoped, which actually helps you achieve your goals in the long run" (p. 168). For instance, women who are more self-compassionate are more likely to set and stick with goals for adopting a healthier diet (Adams & Leary, 2007).

Studies of college students indicate that higher levels of self-compassion are related to lower levels of procrastination (Sirois, 2014) and higher levels of resilience—willingness to try again after experiencing personal setbacks and failures (Neely et al., 2009). Self-compassionate students also more likely to respond constructively to academic setbacks, maintain self-motivation and a sense of competency, and perceive mistakes as opportunities for potential growth (Neff, Heish, & Dejitterat 2005). For instance, in a study of undergraduates who recently failed a midterm exam, self-compassionate students were more likely to view it as a growth opportunity rather than as a blow to their self-esteem (Neff, 2011). Furthermore, it has been found that people who participate in programs designed to increase self-compassion for personal failures and weaknesses are more likely to expend effort on learning from their past mistakes and changing their behavior to avoid making similar mistakes in the future (Neff & Davidson, 2016).

Collectively, the foregoing findings strongly suggest that "people who take an accepting approach to personal failure may be more motivated to improve themselves, seemingly paradoxically, precisely because they treat themselves more kindly" (Compton & Hoffman, 2020, p. 321).

Enhanced Social Adjustment & Interpersonal Relations

Research conducted with undergraduates indicate that students who exhibit higher levels of self-compassion are less likely to report feelings of homesickness during their first term in college (Terry, Leary, & Mehta, 2012) and experience fewer social adjustment issues throughout their time in college (Kyeong, 2013).

It has also been found that individuals higher in self-compassion are not only better able to recognize and accept their own suffering, they are better able to recognize and feel compassion for the suffering of others (Neff & Davidson, 2016). For instance, in a study of how people respond to difficult personal experiences, those who responded with higher levels of self-compassion for difficult events they had experienced were more likely to take a global perspective on those events, viewing them as experiences they shared with the rest of humanity, which enabled them to feel less personally isolated and develop greater empathy for others (Leary et al., 2007).

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