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UNIVERSITY OF NORTHERN COLORADO

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OVERCOMING INNER AND OUTER CONSTRAINTS
TO ENHANCE EMERGING ADULT COLLEGE
STUDENTS' EUDAEMONIC WELL-BEING:
A MIXED METHODS STUDY

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ABSTRACT

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Emerging adulthood is often recognized as a time of uncertainty, confusion, pressure, and stress. This time period also coincides in the Western world with many attending a college or university. Many emerging adults arrive at this developmental stage feeling the pressure and obligation for success but lack the resources needed to make required choices (Rogers & Maytan, 2012). Increasing levels of awareness and positive emotions represent a promising strategy for increasing eudaemonic well-being. To date, no known study has brought together constructs of self and constructs of education to foster eudemonic well-being. The current study fills gaps in the existing literature by bringing together positive psychology constructs and educational constructs. The objective of this mixed methods research project was to gain an understanding of and establish a connection between self and education for emerging adult college students in relation to eudemonic well-being. The first quantitative portion of the study sought to address the issue by examining causal relationships among dispositional mindfulness, self-esteem, academic self-concept, motivation, and eudaemonic well-being in a sample of 222 emerging adult college students. The path analysis model showed strong causal relationships among dispositional mindfulness, self-esteem, academic self-concept, motivation, and eudaemonic well-being and a correlation between dispositional mindfulness and positive reappraisal. Self-esteem, academic self-concept, and motivation mediated the relationship between dispositional mindfulness and eudaemonic well-being. Positive reappraisal within the

model also predicted eudaemonic well-being as well. The second portion of the quantitative analysis consisted of experimental intervention with 102 participants (51 intervention group and 51 in the control group) and assessed the effects of mindful positive reappraisal online interventions on college students' self-esteem, academic self-concept, motivation, and eudemonic well-being. Comparing to students receiving no interventions, students who engage in mindful positive reappraisal interventions report greater positive change from pre to post in terms of hedonic well-being, self-esteem, motivation and eudaemonic well-being. The qualitative portion of the current study consisted of interview data with 14 participants who completed the online interventions. Interview data suggested dispositional mindfulness and positive reappraisal are key in helping emerging adults overcome their limiting beliefs about their perception of themselves and about their perception of their abilities to learn and achieve. Overcoming self-limiting beliefs and subsequently self-limiting behaviors are essential to foster eudaemonic well-being.

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CHAPTER I

INTRODUCTION

We do not learn from experience...we learn from reflecting on experience.
—John Dewey

Emerging adulthood is a vulnerable developmental stage, and, when it coincides with college age years, it is a defining stage in the development of the self (Arnett, 2004a). This transitional period of identity development from teenagers to emerging adults, brings in lifestyle changes, career changes, and/or changes in romantic partners. But most importantly, it is a period of self-discovery, character building, self-assertion, and cultivation of an enduring sense of meaning and purpose in life (Arnett, 2004b). During this developmental stage, life presents opportunities to flourish and to identify one's path, which supports the development of a clear self-concept, high self-esteem, and positive perception of self. During this period of development, individuals can also engage in opportunities that promote remaining stagnant resulting in confusion, low self-esteem, and negative perception of self (Baggio et al., 2017). These different experiences depend on the mindset cultivated and individual decision-making process created within a plethora of choices at the personal or situational level (Padilla-Walker & Nelson, 2017; Schwartz, 2004).

College students embody this period of life, giving them opportunities for personal experimentation, exploration, and navigating potential identities and a sense of self. This process of navigation can be challenging and may be one of the reasons emerging adults often experience a lower sense of well-being than older adults (Mackenzie et al., 2018). The Coronavirus Disease-

19 (COVID-19) pandemic world has undoubtedly contributed to the reported decrease in emerging adults' well-being (Liu et al., 2020). Many emerging adults who attend college have experienced low well-being, higher anxiety, increased stress, and increase in other negative emotions (American College Health Association, 2020, 2021). A Fall 2020 survey of over 123,000 college and university students reported that at any given time within the previous 12 months, 68.9% reported feeling hopeless, 1% felt worthless, 44.9% stated academics caused personal distress, 81.7% said stress affected their academic performance, and 89.6% reported the COVID-19 pandemic impacted their overall level of stress (American College Health Association, 2020). In Spring 2021, 51.5% of university students surveyed reported challenges with academics along with 78.6% indicating a problem with procrastination. Past surveys of American college students reported the vast majority interviewed—88.4%—experienced feelings of being overwhelmed by all they had to do and 84.8% felt exhausted that was not from physical activity. Of those sampled, 92.9% were 18-24 years old (American College Health Association, 2017, 2018).

Data from pre-COVID-19 pandemic surveys revealed a negative emotional and psychological state for emerging adult college students, thus inviting examination and further focus with regard to this particular group. Cultivating a positive mindset may help college students navigate a more positive college life existence (Rogers & Maytan, 2012). The field of positive psychology has developed possible answers that have the potential for fostering positive mindsets and providing ways to empower individuals in times of crisis. Waters et al. (2021) discussed the role of positive psychology factors in buffering against negative mental states, supporting mental health during COVID-19 pandemic, and building positive processes that might help strengthen future individual mental health. These researchers discussed meaning,

coping, self-compassion, courage, gratitude, character strength, positive emotions, and positive relationships as major positive psychological factors, which hold the potential of supporting individuals in times of crisis. Several studies examined the protective role of gratitude (Jiang, 2020; Tong & Oh, 2021), courage (Smith et al., 2020), character strength (Martínez-Martí et al., 2020), positive relationships (Campion-Barr et al., 2021), meaning making (Kapoor & Kaufman, 2020; Yang, 2020; Yang et al., 2020), and positive reappraisal (Garza Varela et al., 2021) during the COVID-19 pandemic. Each of these studies investigated the isolated role of one positive psychology component on the general population. The current study explored the role of combined positive psychology interventions (PPIs) on emerging adult college students. Specifically, this study examined the role of meaning, positive emotions, and positive reappraisal as positive psychology factors that might enhance college students' psychological well-being.

Positive psychology has, with no doubt, offered blueprints for well-being and flourishing. Over the past 20 years, the field of positive psychology developed as the science of human flourishing. This branch of psychology credited to Seligman, Csikszentmihalyi, Peterson, Diener, Maslow, and others focused on scientifically studying the strengths that enable individuals and communities to thrive. It was based on the idea that psychological research could help researchers understand the characteristics and qualities that allow people to lead more meaningful and fulfilling lives by designing techniques that can help them lead this type of life. The “fulfilled individual and the thriving community” (Csikszentmihalyi & Seligman, 2000, p. 5) have garnered attention in this emerging science. Positive psychology relies on positive processes to enhance and develop existing strengths (e.g., positive emotions, hope, optimism, love of learning, creativity; Sheldon & King, 2001) but also helps individuals recover from

adversity (Ryff, 2014) and rebuild personal strengths (e.g., resilience, mental toughness, meaning, forgiveness, and post-traumatic growth; Rusk & Waters, 2013).

Today, in this COVID-19 pandemic world we live in, positive psychology goals seem more relevant than at any other time. The uncertainty, changing conditions, and destabilizing circumstances that the world has experienced require a specialized focus with regard to not only physical well-being but also psychological well-being. This dual focus could help navigate the challenges of the new experienced reality and may help individuals find the inner strength required for daily living. What makes positive psychology's theoretical orientation on the positives and the self-fulfillment of inner needs important is not simply its focus on enhancing experiences of pleasure (i.e., hedonic well-being), but also a focus on inner strength, resilience, virtues, personal flourishing, positive outlooks in life and achievement of optimal functioning (i.e., eudaemonic well-being; Lyubomirsky, 2007; Phan et al., 2017).

Real well-being or flourishing is a state that combines feeling good and functioning well (Grenville-Cleave et al., 2021). This includes experiencing positive emotions, feeling valued, seeing oneself as competent, developing one's potential and having a sense of meaning and autonomy (Grenville-Cleave et al., 2021). It is important to indicate that well-being does not entail experiencing positive emotions or feeling good all the time, but also embracing the 'dark side of life' (Ivtzan et al., 2015), a principle well supported by the second wave of positive psychology (Lomas & Ivtzan, 2016).

While the first wave of positive psychology initially devoted its focus to the importance of focusing on the positive, the second wave cleared the critics' indictment of positive psychology as "happiology." Well-being is not about suppressing or ignoring the negative, but rather about embracing both the positive and negative sides of life. "The dark side refers to

challenging experiences, thoughts, emotions, and behaviors, which trigger discomfort in us. Such discomfort is frequently avoided as it carries an engagement with fear, pain, distress, or confusion” (Ivtzan et al., 2015, p. 3). The COVID-19 pandemic world has created distress, confusion, fear and pain (Kumar & Nayar, 2020) and it can be argued that it is the most recent collective dark side shared by everyone in the modern world. Positive psychology offers modalities to deal with the consequences of the darker side of life. Positive psychology does not support suppressing or ignoring negative emotions and challenges as the pathway to self-identified happiness and reported well-being. Rather it calls for embracing the dark side as an important component of human experience that supports individuals toward growth and transformation. In fact, “engaging with the challenge and discomfort has a great potential for growth, healing, insight, and transformation. In other words, the “dark side contains the seed for a potential positive outcome even when the path toward this outcome is tested” (Ivtzan et al., 2015, p. 3). Recent literature, however, discusses how positive and negative emotions (i.e., mental distress and mental health) not only co-exist but interact (Lomas & Ivtzan, 2016; Wong, 2011). Waters et al. (2021) discussed specifically three types of interactions: buffering, bolstering, and building, which will be reviewed in the next chapter.

The path toward growth and transformation presupposes an acknowledgement of the dark side and an awareness of associated emotions and thoughts. In fact, one of the most significant findings in recent decades is that individuals can choose the way they think (Seligman, 2011). Choosing one thought over another entails an awareness of one’s thoughts and feelings. Thoughts and feelings form the inner world that people need to attend to so as to live a positive existence. The inner world is as much a part of reality people live in as is the external world. Thus, living consciously or mindfully has become a necessary initial ingredient to reach self-

identified well-being. In support of this notion, Brown and Ryan (2003) indicated that awareness is an important concept requiring further investigation toward the promotion of positive thinking and well-being.

Our inner world is part of reality; “no one is said to be living consciously who empts self-awareness and self-examination from the agenda” (Branden, 1999, p. 28). To function effectively, an individual needs to attend to both directions, outward and inward; in other words, remain connected with the world and the self. Remaining connected to the self means placing one’s attention on how one is feeling and to what one is experiencing in that moment. Being in the moment (i.e., being mindful) helps overcome running unconsciously on autopilot mode. It is no surprise that mindfulness has paved its way throughout the years to become one of the most researched psychological processes in positive psychology (Hendriks et al., 2020).

The benefits of mindfulness have been demonstrated in several domains including education. Mindfulness promotes and develops self-regulation, and control of thoughts and emotions (MacDonald, 2021; Schonert-Reichl & Roeser, 2016; Zelazo & Lyons, 2012). Mindfulness-based training for students helps regulate mind-wandering and helps cultivate focused attention. When students learn how to engage mindfully with stress triggers, mainly by learning to accept positive and negative emotions, there is less reactivity to stress triggers. This type of regulation has been correlated with improved attention, improved executive functioning for adolescents, enhanced academic performance, positive mood, decreased rumination and improved health and well-being (Sin & Lyubomirsky, 2009). In a world where technology in all its forms is thriving and competing for everyone’s attention, it has also become a distracting tool used to cope with inner or outer stress or discomfort.

Media, Distraction and Well-Being

The topic of distraction and overuse of media in all its forms is a current concern with young adults, students in particular (Twenge, 2017). When overwhelmed with stress or any type of discomfort, individuals reach out to their smartphone, surf on social media, or binge watch TV as an escape mechanism to disengage from the painful reality and/or thoughts and feelings that are emerging (Eyal, 2019). Studies on distractions with young adults in particular claim that distraction is caused by external factors like social media and/or smart phones (Twenge, 2017), and internal triggers, such as feelings of discomfort, boredom, loneliness, uncertainty, and fear (Eyal, 2019). Thus, these various forms of distraction do not support subjective positive experiences (Dahl et al., 2020) as they are maladaptive coping mechanisms often used as avoidance strategies (Twenge, 2017).

While these cited studies on distraction are pre-COVID-19 pandemic, they are certainly relevant in the anxiety inducing, stressful COVID-19 pandemic world. Distractions take attention from the present moment where the mind escapes addressing pressing and uncomfortable emotions and drifts into unconscious automatic behaviors. When the mind is distracted, instead of attending to the tasks at hand, the mind seeks an instant rewarding emotion, which results in shifts in behavior. Studies have shown that rapid shifting in thought content is a human norm. Individuals engage in thousands of thoughts every day. However, shifting thought patterns become a self-destructive pattern when the thought content gets in the way of immediate individual goals or when the mind seeks escape from facing undesirable emotions (Sarason et al., 2014). Students, in particular, are challenged with distractions. It would be no surprise that students' multitasking, instant messaging, and extensive use of smartphones not only compete for their attention and prevent many from giving their full attention to the task at hand

(Calderwood et al., 2014), but are safe coping strategies for avoiding daily challenges.

Distractions are linked to a psychological and emotional states. States of distraction, as opposed to higher levels of awareness, are characterized by lower levels of well-being (Dahl et al., 2020).

Distraction is associated with adverse psychological outcomes including depression (Hoffmann et al., 2016), stress and anxiety (Seli et al., 2019). Cultivating the capacity to notice distractions and redirect one's attentional focus, however, is linked to a range of positive outcomes from academic performance (Mrazek et al., 2013) to emotional well-being (Dahl et al., 2020).

Researchers argue that avoiding distractions and self-regulating of attention is difficult when students experience low self-efficacy, negative self-concept, low self-confidence, rumination, worry about grades, or a negative mindset (Batool et al., 2017; Calderwood et al., 2014). To control the impact of distracting factors, students need to find ways to overcome discomfort and internal triggers (Eyal, 2019). Thus, links should be established between psychological state of well-being, self-esteem, motivation, and achievement. In this context, perception of the self, self-efficacy, self-esteem, having a sense of meaning, value, and worth can be considered as promising variables of interest to help counter the discomfort that triggers distraction and procrastination (Batool et al., 2017).

Discomfort may be expressed as feeling anxious about a task, restlessness, self-depreciation, or low self-efficacy. Individuals learn to control feelings and thoughts that emerge by becoming aware of the discomfort, or the feelings or thoughts that precede the distraction. Not giving in to distraction means the mind stays in the present moment, allowing thoughts to emerge without active suppression. This process is referred to as decentering (Fresco et al., 2007).

The process of mindful detachment or decentering happens when individuals observe their thoughts without suppressing them or judging them (Fresco et al., 2007). Decentering may help overcome negative thoughts and feelings or internal discomfort that may promote giving in to distractions. The connection between decentering, positive thinking, and affect were examined in the pilot study described below.

Pilot Study

I developed an interest in bringing together positive psychology and educational psychology, and researching connections between college students' mindset, level of awareness, dispositional mindfulness, emotions, and general psychological well-being. The pilot study addressed two gaps in the literature. First, although extensive research in positive psychology is being conducted on well-being of children and adolescents and on academic achievement of elementary and secondary school students (Seligman et al., 2009; Waters & Loton, 2019), few studies have been conducted on emerging adults and their well-being. Also, most prior studies explored well-being of emerging adults but neglected the educational component. Second, no known scholarly articles explicitly established the connection between positive psychology and educational psychology.

The study was conducted to fulfill my comprehensive examination requirement. Data were collected from emerging adult college students on psychological well-being, specifically addressing psychological mechanisms that foster a positive mindset (i.e., dispositional mindfulness, detachment, decentering). To be specific, the focus of the study centered on the relationship between dispositional mindfulness, decentering, and a positive mindset with emerging adult college students (Ben Salem & Karlin, 2021). Data suggested dispositional mindfulness had a significant direct effect on positive thinking and was connected to positive

feelings through the process of decentering. However, dispositional mindfulness alone did not lead to a positive affect/mood. Findings from this study suggest it was the process of detachment that promoted positive affect.

Further analysis of the data demonstrated certain factors (e.g., rumination) were not predictive of positive affect. Specifically, negative correlations were identified between dispositional mindfulness and rumination, rumination and decentering, and rumination and positive thinking. When emerging adults engage in negative thoughts, they perpetuate a negative state of mind, which may explain the negative prediction of positive thinking and positive affect.

The pilot study identified a pattern between levels of decentering and levels of affect. The data suggested that a high level of decentering predicted high positive affect and low level of negative affect, while a low level of decentering predicted low level of positive affect and a high level of negative affect. Findings from Ben Salem and Karlin (2021) are relevant in identifying decentering as an important cognitive process that may help understand how emerging adults shift from a negative to a positive mindset. An awareness of a current negative state and the desire for a positive state generates an intentional decision to bridge the gap between the two opposing states with movement toward feeling better. Thus, as found in the pilot study, intentional decisions to shift one's perception i.e., reframing, a concept not previously examined was investigated as part of the process of positive reappraisal in the current study.

Positive reappraisal is one of the keys to resilience (Garland & Fredrickson, 2013) and active coping strategy (Folkman, 1997), and it is associated with reduced stress and improved mental health outcomes (Helgeson et al., 2006). Positive reappraisal is also facilitated by the metacognitive state of mindfulness (Garland et al., 2009). Mindfulness is a state of awareness (Garland & Fredrickson, 2013) that can moderate the impact of potentially distressing

psychological content through decentering (Fresco et al., 2007) or re-perceiving i.e., the mental operation of stepping back from thoughts, emotions, and sensations (Garland & Fredrickson, 2013; Shapiro et al., 2006). The aim of the current present study was to explore the interconnectedness between state of dispositional mindfulness, positive reappraisal, positive affect, and psychological well-being. Specifically, this study examined these concepts in relation to emerging adults' college students' psychological well-being within the framework of positive psychology and positive education.

Rationale

Enhancing students' experience of education should not be limited to focusing on motivational issues but must also include the psychological well-being of students. Students seek higher education for the educational experience but also the learning of non-academic subjects. Students seeking higher education spend a portion of one or more years in an academic environment, which is a non-negligible time in the crucial developmental stage of many emerging adults (Shin & Steger, 2016). The experience of college not only offers an academic learning experience, but also a personal growth experience. The college experience offers students opportunities to learn about themselves, their current desires, and future aims and to gain abilities to navigate social environments, relationships, and responsibilities. Within this context, it is expected that in the midst of this college experience, they learn to negotiate their emotions and thoughts. Students leave college with the intent to face the world with the self that was shaped in an academic environment. Self-concept, perceptions of who they are impact their self-esteem and shape a positive or negative self, their experience of education, and experience of learning. Hence, to understand the emerging adult college student experience of education, it is essential to bring the positive psychology goal of well-being and the educational psychology

goal of motivation together. The current study also sought to understand the relationship and intricacies between hedonistic and eudaemonic well-being and alongside college experience.

There is a need to investigate the connection between psychological and academic self-concept, well-being, and the emerging adult's motivation to learn. Feeling good about oneself is important not as an end itself but, for emerging adults, as a means to acquiring confidence in their abilities, finding meaning in what they do, and thereby possessing the motivation and drive to move forward in life. To draw these connections, the current study focused on the emerging adult student's self and education. These two aspects were addressed through the general positive psychology framework, relying on Fredrickson's broaden and build theory of positive emotions, Garland's mindfulness to meaning theory and positive education as support for the connection between importance of dispositional mindfulness, self-reflection, positive reappraisal, the finding of meaning and fostering positive self-concept. All theoretical frameworks are addressed in the next section.

Theoretical Frameworks

The proposed research study used three theoretical frameworks. The first theoretical framework, based in positive psychology, is Fredrickson's (2001) broaden and build theory of positive emotions. The second theory is mindfulness to meaning theory (Garland et al., 2015b) and the third is positive education (Seligman et al., 2009).

Fredrickson's Broaden and Build Theory of Positive Emotions

Since the development of positive psychology in 2000, there has been a rise of interest in human flourishing. Fredrickson (2001, 2004) described flourishing as being beyond happiness in that it encompasses both feeling good and doing good. This definition is based on other empirical work that conceptualized and measured human flourishing as a combination of hedonic and

eudaemonic well-being (Keyes, 2002). The Aristotelian understanding of well-being distinguishes between hedonic well-being, which captures individuals' satisfaction in life along with pleasant affect, whereas eudaemonic well-being encompasses a sense of purpose and meaning as well as resilience and social integration (Fredrickson, 2004). Flourishing starts with the experience of positive emotions.

By definition, positive emotions feel good. People enjoy feeling the pleasant emotions of joy, gratitude, and serenity. People look for opportunities to feel good (Fredrickson & Kurtz, 2011). Scientific evidence suggests that feeling good is not the only reward of positive emotions. There is evidence that positive emotions do far more than promote feeling good. Positive emotions give people a break from stress, help them engage in more adaptive coping, strengthen social relationships, and through these effects, stress reduction (Fredrickson, 2001). Positive emotions have many implications for psychological, social, and physical well-being. A large body of the positive emotions research stems from Barbara Fredrickson's (2004) broaden and build theory and the newer positivity resonance theory. While the broaden and build theory focuses on mechanisms of positive emotions to lead to an open mindset (on the individual level). Positive resonance happens when positive emotion is shared with other people which would result in a kind synchrony of positivity.

This study used Fredrickson's (2004) broaden and build theory because it seeks to examine fostering positive emotions at the individual level. The broaden and build theory of positive emotions was first introduced in 1998 and has been widely tested and supported (Fredrickson, 2001, 2004). The theory is a revised version of Alice Isen's (1987) work on the social and cognitive effects of positive emotions that demonstrated "the many ways positive affect gives rise to an enlarged cognitive context" (p. 222). Fredrickson's broaden and build

theory states that positive emotions widen people's outlooks as the latter build beneficial personal resources. These resources can be psychological, such as the ability to maintain a sense of mastery over environmental challenges or develop resilience to adversity; they can be cognitive such as the ability to mindfully attend to the present moment or develop various pathways toward a goal and social, for example the ability to reciprocate social support, as well as physical, for example the ability to sleep well or even deflect a common cold (West & Fredrickson, 2020). Broaden effect is the ability of positive emotions to expand individuals' awareness, thoughts and mindsets and subsequently allow them to create and execute action plans outside their typical routine (Fredrickson & Branigan, 2005). Broadened mindset creates a form of consciousness within individuals supporting the discovery of new skills and knowledge. The positive affect resulting from the broadened mindset facilitates approach behavior (Fredrickson, 2001). The theory contends that when individuals experience positive affect they tend to be prompted to engage with their environment and partake in helpful and adaptive activities. "Without such an offset, individuals most often would be unmotivated to engage with their environments. Yet with such an offset, individuals exhibit the adaptive bias to approach and explore novel objects, people, or situations" (Fredrickson, 2001, p. 219). Of particular interest to this study was the link between positive affect and activity engagement. Experiencing positive emotions thus could be a motivational factor for students to engage in their learning.

Mindfulness to Meaning Theory

Amid the flourishing mindfulness literature and research, Garland, Hanley et al. (2015) addressed an important neglected question of how dispositional mindfulness affects emotion regulation to impact the sense of meaning in life. The authors contend that the focus of the existing dispositional mindfulness literature on the reduction of negative mental states and

behaviors and remains an incomplete account of how dispositional mindfulness results in lasting change. Garland, Hanley et al. proposed mindfulness to meaning theory to address the gap in dispositional mindfulness capacity to provide an explanation for positive self-transformation toward eudaimonia. Garland, Hanley et al. argued that dispositional mindfulness fosters eudaemonic responses to stress that provide a sense of meaningfulness in life.

The mindfulness to meaning theory provides a detailed process model of the mechanisms by which dispositional mindfulness may promote well-being. The theory claims that dispositional mindfulness generates eudaemonic well-being by promoting positive reappraisal, the positive psychological process through which stressful events are re-constructed as benign, meaningful, or growth promoting (Garland et al., 2017). Central to the mindfulness to meaning theory is the mindful reappraisal hypothesis, which suggests mindfulness training promotes well-being by facilitating positive reappraisal.

Positive reappraisal, unlike avoidance or suppression of negative experience or emotions, supports well-being (Gross & John, 2003). It important to stress that Garland et al. (2015) did not use of the term positive reappraisal to imply that mindfulness involves recasting harmful or negative experiences as positive. Rather,

the process of positive reappraisal that flows from mindfulness involves broadening the scope of appraisal to appreciate that even aversive experiences are potential vehicles for personal transformation and growth. Through this reorienting to aversive experience, positive reappraisal provides meaningful experiences in the face of stress that complement and sustain the extinction of maladaptive cognitive habits. (Garland et al., 2015, p. 295)

Positive reappraisal improves the appreciation of positive experience i.e., savoring (Cheung & Ng, 2020). Studies have shown positive associations observed between well-being and positive reappraisal and meaning (Hanley et al., 2021; McRae et al., 2012).

Mindfulness to meaning theory was relevant to the study as it provided the theoretical link between dispositional mindfulness and meaning. Dispositional mindfulness promotes positive reappraisal to enhance eudaemonic well-being. Thus, dispositional mindfulness in education needs to shift from reducing psychological distress to focus on meaning making and positive engagement with education (e.g., perception of education, classes, schoolwork, activities.).

This study explored the effects of positive reappraisal and meaning on educational concepts of motivation to learn and on eudaemonic well-being. The link between dispositional mindfulness, positive reappraisal and meaning will be further discussed in the next chapter. Beyond the two theoretical bases of interest, the current study relied on positive education and associated approaches (i.e., positive university and positive humanities).

Positive Education

The field of positive education has emerged to connect student well-being to education through either teaching about well-being or applying positive psychology interventions within the classroom (Seligman et al., 2009). Most of these interventions focus on elementary and secondary education students. There have been limited attempts to bring new insight into the role of well-being within the academic environment beyond elementary and secondary education. In the next section, I will describe two main approaches (positive university and the positive humanities project) that consider positive education and its application within post-secondary education.

Positive University

Oades et al. (2011) developed the idea of positive university to expand the concept of positive education to post-secondary education. The authors' interest in the concept of Positive University emanates from experiences within many university environments that report student psychological distress along with significant student dropout. The authors used a well-being approach to secondary school developed by Seligman et al. (2009) and extended it to post-secondary education. Just as for all levels of education, universities are appropriate environments to address explicitly and implicitly the well-being/needs of students, faculty, and staff (Oades et al., 2011). According to Oades et al., a focus on the well-being and needs of students promotes a decrease in depression, an increase in life satisfaction, improved learning, and generates creative thinking.

Oades et al. (2011) proposed an initial framework for the cultivation of well-being within the university context and a centralized focus on well-being activities (i.e., positive emotions, engagement, relationships, meaning and accomplishment) across five key contexts (i.e., classroom, social, local community, faculty/administration and residential). Three classroom examples for the cultivation of well-being were identified as part of Oades et al.'s research. First, the authors state teachers can strive to enhance positive emotions by developing a curriculum that uses positive psychology constructs (e.g., gratitude) and positive mood inductions (e.g., using humor or music at the start of classes). Second, teachers can enhance meaning by developing a curriculum that allows students to connect learning material to personal strengths and values, by having students contribute ideas for the curriculum, and using student suggestions in curriculum development. Third, teachers can enhance engagement by teaching students about the concept of flow and what it promotes. Flow is an optimal psychological state that has been

introduced by Csikszentmihalyi (1998). Flow helps students engage with their learning in that it allows them to become totally involved in their learning activities and experience and great enjoyment of the process. These same teachers should encourage exercises that cultivate flow and start classes with simple mindfulness training exercises. A number of empirical studies have used positive psychology interventions, such as flow, as classroom-based strategies to promote student well-being (for example, Šouláková et al., 2019; Suldo et al., 2015; Zhang et al., 2020).

Positive Humanities

Tay et al. (2018) completed what is known as the positive humanities project, where they brought together the humanities (including arts) and the sciences toward understanding and advancing the role of culture in human flourishing. One of the questions this project investigated was how the humanities support flourishing and overall well-being. The focus was not limited to what students are studying, but how they study. The project was based on the assumption arts and humanities provide a level of satisfaction due to the mechanisms involved, namely the modes of engagement with particular courses.

Stemming from this project, Shim et al. (2019) proposed a conceptual model that included mechanisms through which the modes of engagement and the activities of involvement with the arts and humanities lead to positive effects: immersion, embeddedness, socialization, and reflectiveness. While these mechanisms are not exclusive to humanities, the authors suggest that these four mechanisms are central toward improving psychological and social outcomes within the educational environment. The authors define immersion as the immediate engagement that often happens with arts and the resulting elevated positive states that accompany this immersive experience. Embeddedness is referred to as the set of cognitive and psychological processes that underlie the development of particular habits, skills, or perspectives such as self-

efficacy (Bandura, 1997), self-regulation (Carver & Scheier, 2012), emotion regulation (Gross & Thompson, 2007), hope (Snyder, 1994), and feelings of autonomy, relatedness, and competence (Deci & Ryan, 2000).

With an additional step, Tay et al. (2018) suggest that engagement within the arts and humanities activates psycho-cognitive processes that underlie practice and learning and can lead to positive outcomes that enrich other domains within the learner's life. Tay et al. stress the role of reflectiveness in this process. The authors use reflectiveness to refer to an intentional, cognitive-emotional process for developing, reinforcing, or discarding one's habits, character, values, or worldview. The last mechanism that the authors propose that may lead to positive effects is socialization which has to do with the various roles and identities an individual's play with their communities. The authors stipulate that engagement with arts and humanities through the mechanisms of immersions, embeddedness, reflectiveness, and socialization creates a desire to change and facilitate the means for change. These four mechanisms are mediators and moderators to human flourishing (Tay et al., 2018). The authors suggest that positive engagement in the arts and humanities may enhance human flourishing directly, through positive psychological reactions or experience of elevated states and increase hedonic well-being; or indirectly, through less pleasant psychological reactions that ultimately will "serve to broaden experience, promote emotional breadth and depth, and increase eudaemonic well-being" (Tay et al., 2018, p. 217).

During his oral presentation at the 2019 6th World Congress in Positive Psychology, Pawelski (2019), the lead researcher in the positive humanities project, shared his insights on how academia can help people make sense of their lives. The disciplines taught in college can serve as a method of engaging individuals with their daily lives. In particular, through

introducing weekly reflection activities, students are able not only to draw connections between their lives and the material studied but it provides an opportunity to reflect on the self. When students are given the opportunity to bring into awareness some part of themselves, they will see the potential for positive change. When students understand more of who they are, why they do certain things, why they keep engaging in certain behaviors or thoughts, why they have specific attitudes, students feel better about themselves which results in an increased engagement with the class (Pawelski, 2019).

Pawelski's (2019) positive humanities project goes beyond disciplinary considerations as it considers public engagement and public policy. Pawelski and colleagues are pioneers in promoting a connection between academic disciplines and well-being. These researchers asked innovative and unprecedented questions creating an open door of investigation toward the role of academia in students' well-being (Pawelski, 2019). This project stands out as an attempt to empirically consider the eudaemonic value of the humanities. Pawelski's project is important because of the bringing together of academia and the domain of well-being. The focus is not about what is taught but about the relationship students establish with particular disciplines. Academic disciplines and education overall have the potential to not only bring meaning and shape students' lives but also to enhance their well-being. When learners are able to see connections between what they study and their own lives and are provided with opportunities to draw meaning from individual classes, then education is allowed to play a key role toward enhancing student psychological well-being (Pawelski, 2019).

Despite all the benefits education can provide to student well-being, they will remain hypothetical if educators do not consider the role of students' perceptions in education. Not all students are able to recognize and draw connections between academic discipline and relevance

to their life or potential for increased well-being because many feel estranged from their classes and to course material (Efklides, 2006). The benefits of teaching certain disciplines or incorporating reflective activities may be thwarted by student mindset and approach to learning (McGuire, 2015). In other words, students who fail to see the value of course material or lack interest in what they study, and thereby, approach learning as simply a way to get a good grade and avoid failure (i.e., surface learning; Beattie et al., 1997), fail to find meaning in their classes (Miller & Krajcik, 2019) and rarely if ever consider the role education can play in their well-being.

Within the field of positive education, no known studies on well-being have explicitly addressed the reciprocal relationship between student self-concept and learning mindset. The quantitative part addressed the link between self-esteem, academic self-concept, and motivation to learn while the qualitative part of the current study, through the online positive psychology interventions addresses the role of education in increasing students' positive self-esteem, and how students can use positive self-concept and self-esteem to enhance the personal educational experiences.

In the above section, the available and current academic attempts to incorporate well-being within the college experience were described. These academic attempts have included positive universities that provide activities on campus to enhance a positive environment and positive humanities or the use of academic subjects of art and discipline of humanities to foster meaning and enhance students' well-being. There has been no known research on positive education where there has been an integration of approaches to learning, perception or meaning of education with happiness and well-being for college level students. Furthermore, research on students' well-being within positive education has been largely limited to elementary and

secondary education students. The current study seeks to investigate positive education at college level by bringing together the disciplines of positive psychology and educational psychology.

Current Study

To date, no known study has combined self-based concepts to examine the connection between positive psychology and educational psychology concepts at postsecondary level. While recent research focused extensively on psychological and emotional well-being, the role of academic constructs in fostering well-being and the relationship between psychological and academic components seems to have been neglected. Understanding the well-being of college students is incomplete without addressing the educational component. More specifically, perception of education and attitude toward education need to be part of the equation. The traditional definition of a student success that equates success with increased graduation offers little insight into the complexity of student success. Existing research largely limits success to academic achievement. Students' success is not separate from their psychological well-being from their levels of happiness, satisfaction, learning and personal development. Existing literature focuses on identifying and discussing factors that promote student achievement or on factors that promote their well-being. The link, however, between understanding students' success and students' well-being is missing.

The current study fills gaps in the existing literature by bringing together positive psychology constructs and educational constructs. While previous research addressed the relationship between academic self-concept and meaning of education in relation to students' performance and achievement, this study explores academic self-concept and perception of education as factors contributing to college students' well-being. Emerging adult college students who attend an institution of higher education go to classes many days throughout the week. Post-

secondary education is therefore a shaping factor of their life and has a role in either enhancing or thwarting personal overall well-being.

This study joins the research on positive psychological interventions in fostering psychological well-being and aims to provide an addition to the existing literature by specifically focusing on college students. Many factors affect the well-being of college students including emotional as well as academic factors. Self-esteem, self-concept, and academic achievement have been identified as possible mediators affecting the overall well-being of college students (Guay et al., 2010; Marsh & Craven, 2005). A proposed model examined the link between these variables.

This study addressed the missing link in the current literature between self-related and academic-related concepts of emerging adult college students' well-being. To date, no studies have looked at the relationship between the internal and external factors that shape emerging adult college students' well-being. Well-being for emerging adult college students is defined for the current research as internal and external. The internal components comprise the aspects related to the self (i.e., self-esteem, self-concept, positive emotion, positive thinking). The external aspects comprise the aspects related to their experience of education (i.e., their perception of their education, their feeling toward the classes they go to, and their thoughts about what they study). After an extensive review of the existing literature and research on emerging adult college students, the concept of meaning emerges as not only a crucial factor in fostering positive perception of self and positive perception of education, but also holds the potential of linking these two together. This study explored meaning in the lens of college students.

Purpose of Current Study

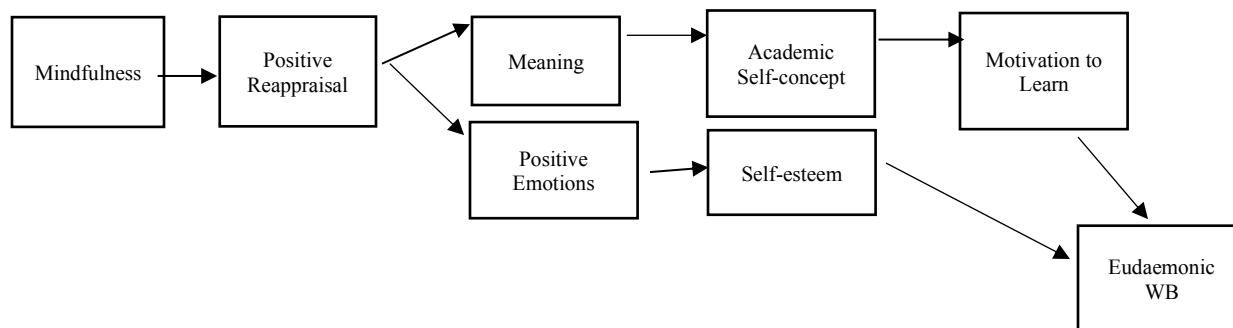
The purpose of this mixed methods study was to examine college students' well-being through the exploration of concepts of dispositional mindfulness, positive appraisal, and relation to self (self-esteem, meaning in life) as well as academic concepts of academic self-concept, perception of education and motivation to learning. This study seeks to address emerging adult college students' psychological well-being by examining the factors that foster hedonic and eudaemonic well-being and motivation to learn. The central research question for the study revolves around the relationship between perception of self and perception of education. This study aims to establish connections between constructs about the self (self-esteem, self-concept) and constructs around education (academic self-concepts, motivation to learn).

Research Questions

- Q1 How is the process of dispositional mindfulness related to eudaemonic well-being: what concepts mediate the relationship between dispositional mindfulness and eudemonic well-being?

Figure 1

Proposed Model



- Q2 Compared to student receiving no interventions, do students who engage in mindful positive reappraisal interventions report greater positive change from pre to post in terms of hedonic well-being, and is this change moderated by demographic variables?
- Q3 Compared to student receiving no interventions, do students who engage in mindful positive reappraisal interventions report greater positive change from pre to post in terms of, self-esteem, self-concept, motivation, and eudaemonic well-being, and is this change moderated by demographic variables?
- Q4 What are the helpful mechanisms that allow college students to modify their thinking so that they change their view of themselves and their view of their education?

Definitions of Terms

Dispositional Mindfulness. For the current study, it is defined as the metacognitive process of creating a psychological distance between the observer and the objects of their awareness such as their thoughts, feelings, or physical sensation (Fresco et al., 2007).

Eudaemonic Well-Being. Captures long-term psychological well-being based on meaning, purpose, or accomplishment aspects of well-being (Huta & Waterman, 2014). It is opposed to hedonic well-being which is the situation and time dependent subjective well-being based on positive affect and pleasure.

Meaning. The degree to which people have made sense of their lives and the world around them, perceive their own lives to have inherent value and to be worth living, and identify highly valued and long-term aspirations towards which they strive (Steger, 2021).

Positive Reappraisal: Reframing. Noticing something good that could have come from the stressful situation (Garland & Fredrickson, 2013); effective regulation strategy; it aims to alter one's emotional response by encouraging one's reinterpretation of the emotional stimulus' meaning (Buhle et al., 2014).

Self-Concept. Refers to how someone thinks about, evaluates, or perceives themselves. To be aware of oneself is to have a concept of oneself. Carl Rogers (1959) believed that the self-concept has three different components: The view one has of oneself (e.g., self-image), how much value one places on oneself (e.g., self-esteem or self-worth), and what one wishes one was really like (i.e., ideal self).

Self-Esteem. A component of self-concept. It is an individual's positive or negative evaluation of self (Branden, 2001).

Summary

This chapter introduced the background and rationale for this study. Emerging adulthood is a critical developmental stage and understating factors that may affect or shape wellbeing was at the heart of this project. This project specifically focused on emerging adults who attend college hence this study considered educational factors in understanding wellbeing for this specific category. This project used educational psychology and positive psychology principles to examine the factors that foster hedonic and eudemonic wellbeing for emerging adult college students. This chapter described theoretical frameworks of this project and identified the main constructs for fostering emerging adult college student well-being. Chapter II describes in further details these constructs within their respective studies.

CHAPTER II

LITERATURE REVIEW

In every block of marble, I see a statue as plain as though it stood before me, shaped and perfect in attitude and action. I have only to hew away the rough walls that imprison the lovely apparition to reveal it to the other eyes as mine see it.

—Michelangelo

Positive psychology is able to survive and thrive as a robust field in academia because it supports the empowerment of people through bridging academic and individual needs through different stages of life and life challenges. Similar to Michelangelo's (as cited in Shaikh & Leonard-Amodeo, 2005) quote about his masterpiece David, the work of positive psychology seeks to unravel the optimal human potential hidden in all of us even through the darkest times, such as the COVID-19 pandemic.

A significant conceptual contribution of positive psychology is its efforts to define the core features of well-being or flourishing (Chaves, 2021). Although the construct of well-being has been operationally defined in a variety of ways in the literature (i.e., flourishing, life satisfaction, happiness, or finding meaning in life; Howell et al., 2016), the consensus has been that well-being is a complex construct that concerns optimal experience and flourishing (Chaves, 2021). Positive psychology embraces and adopts both the hedonic and eudaemonic dimensions of well-being.

The hedonic dimension of well-being is referred to as subjective well-being and includes the affective and cognitive components. The affective component includes positive affect, that is experiencing positive or pleasant emotions, low negative affect, or distressing emotions. High

levels of hedonic well-being do not imply the absence of negative affect, but rather negative emotions are less prominent or less present than the positive ones (Fredrickson, 2004). The cognitive component includes general life satisfaction and satisfaction with specific areas of life such as education, health, etc. (Chaves, 2021).

The second dimension of well-being includes eudaemonic well-being which focuses on meaning and self-realization. It includes actions that are congruent with the individual's value or "daimon" (i.e., true self). In this case, people will be fully or holistically engaged with life (Ryan & Deci, 2001). This study considered both hedonic and eudaemonic components in order to explore a comprehensive and holistic approach to well-being. Overall, well-being is influenced by multiple variables that play the role of buffering against negativity, bolstering positive mindset and building well-being.

Waters et al. (2021) discussed the factors of positive psychology in buffering against negative mental states, supporting mental health during COVID-19 pandemic, and building positive processes that help strengthen future mental health. These researchers indicated that the processes of buffering, bolstering, and building can be fostered through these positive psychology variables: meaning, coping, self-compassion, courage, gratitude, character strength, positive emotions, and positive relationships. These are major positive psychological factors that hold the potential of supporting individuals in times of crisis. Buffering, bolstering, and building are used here as an umbrella framework that unifies the variety of concepts of positive psychology, each of which incorporates fostering the positive and enhancing well-being. The current study explored meaning, positive emotions, and positive reappraisal as positive psychology factors that have the potential for enhancing college/university students' psychological well-being.

In this section, I review and summarize the main studies that provide evidence on the buffering (e.g., positive psychological variables, positive reappraisal), bolstering (e.g., boosting aspects of mental health, positive emotions, resilience), and building processes and outcomes (e.g., self-perception, knowledge of one's strength, appreciation of life) to enhance well-being before and during COVID-19 pandemic. Then, I outline and identify support for a connection on meaning and motivation to learning.

Positive Psychology and Coronavirus-19 Pandemic Empirical Studies

Recent studies on positive psychology during the COVID-19 pandemic (Burke & Arslan, 2020; Chu, 2020; Waters et al., 2020; Yamaguchi et al., 2020) have shown that using positive psychology constructs lead to positive growth and foster a positive outlook on life. One way to regain control of life circumstances during dire conditions is to focus on positive factors within the self.

Current literature suggests mental distress and mental health may not only co-exist but also interact (Lomas & Ivztan, 2016; Wong, 2011) in three different ways (Waters et al., 2020): buffering, bolstering, and building. A buffering effect happens when positive emotions, conditions or relationships help diminish psychological distress during a crisis. The bolstering effect of positive psychology occurs when positive emotions, conditions, processes, or relationships act to maintain mental health despite the crisis. The building effect emerges when the individual is able to use crisis in a transformative way to develop new practices (e.g., greater strength use), new processes (e.g., more self-compassion), and new outlooks (e.g., enhanced meaning) that can lead to improved mental health in the future (Waters et al., 2020). Studies conducted during the pandemic that focused on factors that buffer against college students'

psychological distress and COVID-19 pandemic stress examined the constructs of grit (Bono et al., 2020), resilience, social support, and adaptive coping mechanisms (Yang et al., 2020).

Buffering Effects

With regards to buffering effects, empirical studies results showed that students who used higher levels of positive refocusing such as turning one's attention toward positive things in life, positive reappraisal such as focusing on what they can learn from the situation, and positive planning or thinking about the future had lower levels of psychological distress (i.e., tension, insomnia, moodiness, and fear of infection) (Yang et al., 2020).

Bolstering Effects

In regard to the bolstering effect of positive psychology constructs and how positive psychology can boost aspects of positive mental health as opposed to reducing mental distress), grit was positively related to levels of resilience during the pandemic (Bono et al., 2020), resilience promoted good psychological functioning at the beginning of the COVID-19 pandemic outbreak (Kavčič et al., 2020), positive resonance shared positive emotions involving caring and synchrony, and resilience predicted positive mental health during the COVID-19 pandemic crisis (Prinzing et al., 2022) and humor during COVID-19 pandemic sparked joy, surprise, and playfulness (Rhoads, 2021).

Building Effects

In terms of building effect, prior research has shown that after a crisis, positive growth may happen in various areas such as self-perception, self-knowledge, knowledge of strength, interpersonal relationship, and appreciation of life (Joseph & Linley, 2005). Positive psychology factors such as positive reappraisal and optimism (Prati & Pietrantoni, 2009), reflective modes of thinking (Waters & Strauss, 2016) also play a role in growing stronger through adversity. During

COVID-19 pandemic, Waters et al. (2020) examined stress related growth in teenagers and found that the use of strength and positive reinterpretation by middle school and high school students predicted levels of growth including learning to deal with uncertainty, discovering one's inner strength, learning not to be bothered by small problems, and becoming more accepting of others.

Positive psychology provides an important lens through which to understand how people can cope and experience personal growth through a time of crisis. The above stated findings suggest that further research is needed to explore how positive psychology constructs impact positive psychological well-being, specifically for college students during the extraordinary conditions of a pandemic. To my knowledge, no known study, has examined the link between positive psychological constructs of meaning, positive reappraisal, positive emotions, and self-perception in fostering specifically college students' well-being nor draw a connection between these constructs and educational constructs. The current study combines positive psychological constructs with educational constructs of academic self-concept and motivation to learn to give a larger and more complete picture of factors that shape college students' well-being.

The current study considers how the processes of buffering, bolstering, and building can be generated through positive emotions, dispositional mindfulness, positive reappraisal (i.e., positive reinterpretation), and meaning. The current study also focuses on how the above-named factors foster undergraduate students' positive well-being, enhance view of self, and influence the experience of education.

Positive Emotions and Stress

The role of positive emotions in fostering well-being is significant as it has been identified in the buffering, bolstering, and building effects to foster psychological well-being.

Positive emotions give people a break from stress (Folkman, 1997), help them engage in more adaptive ways of coping (Folkman & Moskowitz, 2000), and strengthen social relationships (Gloria & Steinhardt, 2016). Through these effects, stress is reduced. Positive emotions play an important role because they have effects of their own regardless of the presence or absence of negative emotions. In other words, positive and negative emotions are not bipolar ends of a single continuum. Positive emotions co-occur with negative emotions. The broaden and build theory (Fredrickson, 2013) suggests that individuals do not have to struggle to eliminate negative emotions from their lives, but they can steer themselves away from negative emotions.

Fredrickson (2004) states that frequent experience of positive emotions can ultimately trigger an upward spiral between positive emotions, and creative and expansive thinking which can lead to personal growth and flourishing (Fredrickson, 2004; West & Fredrickson, 2020). This contrasts with the downward spiral dynamic between negative emotions and narrow pessimistic thinking that can lead to depression and has been the focus of cognitive behavioral therapy for many decades (Garland et al., 2010). The desired upward spiral of positive emotions explains the goal of positive psychology interventions which have been designed with the aim of generating positive emotions and fostering a general state of well-being.

Positive Psychology Interventions (PPI)

Positive psychology empirical research has implemented positive psychology theories through positive psychology interventions (PPI). Despite the body of empirical research on PPI, there is no definitive definition for positive intervention. Parks and Biswas-Diener (2013) define positive intervention as “an activity that successfully increases some positive variable and that can be reasonably and ethically applied in whatever context it is being used” (p. 161). Generally, positive interventions reflect positive psychology principles. Sin and Lyubomirsky (2009)

defined positive intervention in their meta-analysis as one that “aimed at cultivating positive feelings, positive behaviors, or positive cognitions” (p. 1). In an effort to provide a synthesis of what constitutes positive interventions, Parks and Biswas-Diener provided three broad conceptions of positive intervention. They defined the conceptions of positive intervention as (a) interventions that focus on positive topics, (b) interventions that target a positive outcome variable such as or operate by a positive mechanism such as positive emotion, meaning etc., and (c) interventions that are designed to improve and to promote wellness rather than fix weakness.

Parks and Biswas-Diener (2013) propose a set of criteria that integrate and refine the multiple definitions provided throughout the body of work on positive interventions. First, the primary goal of the intervention is to build some positive variable (s; e.g., positive emotions, meaning, subjective well-being). This eliminates behaviors that have no goal toward self-improvement like self-indulgent or avoidant behaviors. Second, there is empirical evidence that the intervention successfully manipulates the positive variables. This eliminates the existing self-help approaches that have no research basis. Third, there is empirical evidence that supports that the target variable will lead to positive outcomes for the target population. For example, gratitude intervention with recent trauma victims would be unlikely to produce positive outcomes. Hence it would not be a positive intervention.

Positive psychology interventions revolve around the identification and amplification and even sometimes creation of positive experience. It is important to point out that while PPIs aim to replace negative experience (Parks & Biswas-Diener, 2013), they are not avoidance or suppression strategies. However, they operate under the assumption that positive factors make negative factors less important, salient, or urgent to individuals (Seligman et al., 2006). The approach acknowledges that both positive and negative emotions play important roles in

psychological functioning. This has developed especially with the second wave of positive psychology (Ivtzan et al., 2015) that challenged the “happiology” reputation of positive psychology. Positive emotions with no negative emotion as an anchor can be problematic.

Positive psychology interventions aim to improve individuals’ lives and are rooted in self-determination theory’s concept of autonomous functioning (Ryan & Deci, 2008). The self-determination approach aims to help individuals to pursue their goals in a way that is authentic and self-driven. Self-determination theory emphasizes that emotions are an important source of information, and that awareness of emotions allows for greater autonomous regulation and the positive consequences associated with them (Schultz & Ryan, 2015). Emotions signal the relevance and meaning of events relative to a person’s needs, aims, or goals, therefore providing potential to enhance individuals’ capacities for choice and authenticity (Roth et al., 2019).

Positive Psychology Intervention Procedure

Participants are randomly assigned to practice one of many potential activities designed to increase some aspects of well-being while other participants serve as controls. Participants complete pre-intervention questionnaires, practice the activity for some predefined time period typically ranging from one to six weeks, and then complete post intervention questionnaires. Areas of positive interventions involve strength, gratitude, meaning, forgiveness, social connections, and savoring. Strength and meaning are the most recognized variables in which college students are discussed (Steger, 2013).

Strength

Strength has been conceptualized as character in the Value in Action Strength (VIA) Test; Peterson & Seligman, 2004) or talent by the Strengths Finder (Rath, 2007). Broadly,

strengths are positive personality traits. Strength interventions are activities that involve the identification, use and/or the development of one's strength.

The general structure of strengths intervention is as follows: Individuals take the strength test, receive feedback on their strength and then change their behavior in order to use their strength more often and effectively (Parks & Biswas-Diener, 2013). Researchers point to the difference between the "identify and use" approach versus the "develop" approach. To *identify and use* may encourage individuals to think of strengths as fixed/stable, permanent, and unchangeable. In this case individuals may be less motivated to improve. Developing strengths, however, has psychological and motivational benefits. It feels intrinsically rewarding to people; thus, they are more driven to engage in the process of developing strength.

Meaning

Meaning interventions involve primarily writing (Parks & Biswas-Diener, 2013). This is no surprise as prevalent theories suggest that people derive a sense of meaning by forming a coherent narrative about their lives (Pennebaker & Seagal, 1999). Examples of writing activities on meaning ranged from personal narratives of traumatic or stressful events, to writing about "the best possible self" (i.e., a future version of the self that turned out according to the highest hopes and aspirations for 20 minutes a day for 4 days; King, 2001). A version of this activity is the: "life summary" activity (Seligman et al., 2006) where participants describe in one to two pages their life as they hope they would have lived it and in doing so, they would address the ways they are or are not actively progressing onward personal long-term goals. Subsequent work has shown that writing is not the only strategy that can be used to harness the benefits of imagining one's positive future. Thinking about the best possible self at least twice a week was found to be as beneficial according to work by Sheldon and Lyubomirsky (2006a). However, this

strategy has limitations with a college student population whose future is uncertain. Writing about the future self can be very unpleasant, especially for anxious or depressed students (Parks & Biswas-Diener, 2013). The current study relied on mindful writing as the basis for the PPIs in this stud. While writing was anchored in deriving meaning from daily experiences and reflecting on college experience, motivation and understanding the self, the future best self-reflection was included in the third intervention of this study.

The Best Possible Self-Writing Intervention

Students imagine and write about a future where everything unfolds as its best possible outcome. This technique promotes optimistic thinking as demonstrated in Layous et al. (2013) and Sheldon and Lyubomirsky (2006b).

Mindful Positive Reappraisal Intervention

Research has established positive association between mindfulness and positive reappraisal in college students' population (Garland et al., 2015; Hanley & Garland, 2014). However, interventions on the effectiveness of combining mindfulness and positive reappraisal with college students has been scarce. As of the time of writing, only one known pilot study was conducted to examine the facets of combined mindful- reappraisal intervention on college students (Pogrebtsova et al., 2017). The study comprised 105 college students who were randomized in three groups: mindful reappraisal intervention, reappraisal only and control group. Participants were asked to practice mindful reappraisal or reappraisal only exercised over a period of five days and then report their overall affect. The results showed that mindful-reappraisal group reported overall lower daily negative affect and marginally higher daily positive affect over the five-day intervention. Findings suggest that a brief daily mindful

reappraisal practice helps promote positive affect and buffer against negative affect. The definition and description of the PPIs clearly suggest that its effectiveness in triggering a shift in affect, mindset or behavior relies on the person's mindful awareness of their emotional state, their mindset and seeing the value or the meaning in the activity.

Dispositional Mindfulness, Positive Reappraisal, and Meaning

One reason contemporary research has focused on studying dispositional mindfulness is to understand the link it has with well-being in general and happiness in particular. The quest for happiness is an ongoing never ending human endeavor. The rise of mindfulness research brings in new answers is one of the paths toward understanding well-being. Dispositional mindfulness research on happiness and well-being has established a connection to the construct of meaning. Whether it is a theoretical connection (Bellin, 2015) or empirical relationship (Hanley et al., 2021), meaning has been identified as a possible mediator between dispositional mindfulness and well-being. Hanley et al. (2021) conducted a six-year longitudinal study that showed a connection between mindfulness, positive reappraisal, and well-being. The study established a connection between these variables as mindfulness training increased decentering leading to broadened awareness, which was associated with positive reappraisal, ultimately promoting well-being (Hanley et al., 2021).

This can be explained through the mindfulness reappraisal hypothesis of the mindfulness to meaning theory which states that “mindfulness generates eudaemonic well-being by promoting positive reappraisal, the positive psychological process through which stressful events are reconstructed as benign, meaningful, or growth promoting” (Hanley et al., 2021, p. 780). Positive reappraisal plays a major role in the creation of personal meaning. When individuals change and reappraise their emotional response toward an event, whether positive or negative,

they change their emotional response by reinterpreting the meaning of the experience (Garland & Fredrickson, 2013). The negative or positive event can be associated with external events (i.e., life experiences) or internal events (i.e., thoughts and emotions). The negative or positive event could be either a life experience or self-attribute that one identifies with for that particular time. Garland et al. (2011) argue that accepting past life experiences is a significant step to release the impact of a negative past from one's psyche. It is important to state that this does not involve the recreation of false memories nor releasing responsibility toward what happened. Rather, it involves rethinking the responses so that they become productive rather than destructive. For example, reappraising failure for students involves reinterpreting this experience as an opportunity for challenge and learning rather than as the termination of their goals or an expression of self-esteem and worthlessness.

Within the same logic, students can recognize negative self-attributes that shaped their self-concept and perception of the self, which was a factor behind driving their unhealthy behavior. The recognition and the awareness of that attribute helps students rethink self-narrative and self-talk (i.e., how they think about themselves and how they talk to themselves), what they can learn so as to improve themselves (i.e., recognizing what they do not want in their current self and shifting their focus to desirable self).

Self-Esteem, Academic Self Concept, and Motivation to Learn

Self-concept is one of the oldest and most important constructs in psychology, dating back to the seminal work of the father of psychology, William James (1890). Enhancing self-concept has become one of the major goals in education. Work of educational psychologist Herbert Marsh and others over the last two decades suggested academic self-concept is positively related to academic achievement (Marsh & Craven, 2005; Marsh & Martin, 2011).

These scholars' findings support the long-known relationship between motivation constructs and academic achievement with the integrated constructs of academic motivation with positive psychology yielding positive insights. Self-efficacy, hope, and optimism are positive predictors of academic achievement (Feldman & Kubota, 2015).

Marques et al. (2011) demonstrated that hope, life satisfaction, and self-worth have significant relationships with mental health and academic achievement for middle school students. This establishes the importance and the impact of bolstering and building positive characteristics and positive psychology variables as a means to influence valued outcomes in the younger population. The relationship between positive constructs and academic motivation and goal orientation for middle school students has also been demonstrated by Pajares (2001). Pajares integrated constructs from positive psychology with constructs from motivational theories. Specifically, achievement goals, academic self-efficacy, academic self-concept, and valuing school predicted positive psychological variables of optimism and authenticity. The data went on to indicate that performance avoidance goals were negatively related with optimism and perceived authenticity. While achievement boosts optimism and a student's sense of self-efficacy, students from high school to college who adopt performance goals and are motivated solely to achieve or perform well in exams or tests are defined by Dweck's (1996) self-implicit theories as entity theorists, students with a fixed mindset. These students experienced low self-esteem and helplessness in the face of challenges (Robins & Pals, 2002). Students, however, who have learning goals are incremental theorists, students with a growth mindset. These students tend to have higher self-esteem and experience higher levels of optimism in face of challenges (Robins & Pals, 2002). Hence, encouraging students to cultivate a motivation to learn will help their sense of self and foster their psychological well-being.

The self-maintenance theories see self-esteem primary function as providing a consistent self that serves as a buffer against stress (Mruk, 2006). Paradoxically, self-esteem can play a causal role; just like it is affected by goal orientation and type of mindset, the relationship also works in the other direction (Baumeister et al., 2003; Marsh & Craven, 2005). Increasing self-esteem can lead to improved motivation and better achievement. In fact, many researchers and psychologists suggest that one of the roles of self-esteem is that it not only maintains the self but also enhances the self. Self-esteem motivates the individual to expand the self (Ryan & Deci, 2003). Hence, self-esteem takes on the character of an intrinsic motivation to reach higher levels of growth and mastery. Such motivation pushes the individual to take risks and face challenges and in life (Mruk, 2006).

Motivation to Learn, Meaning, and Adaptive Thoughts

Motivation to learn is defined as cognitive response where the learner tries to understand its knowledge and master the skills of an activity (Wentzel & Brophy, 2014). More specifically, motivation to learn refers to “a student’s propensity to value learning activities: to find them meaningful and worthwhile and try to get the intended benefits from them” (Wentzel & Brophy, 2014, p. 217). Motivation to learn is different from interest; that is students can be motivated to learn even if they do not find the activity of the subject interesting. They can do that by choosing to make the most of the learning opportunity (Wentzel & Brophy, 2014) and find meaning in the activity. Among the suggestions given to teachers in order to motivate students to learn is to stimulate them to see value in the learning (Blumenfeld, 1992; Wentzel & Brophy, 2014).

Finding meaning in learning (i.e., one of the eudaemonic forms of motivation to learn) and a desire for knowledge are correlated with general sense of well-being and life satisfaction (Kashdan & Steger, 2007; Ryan et al., 2008; Steger et al., 2008; Waterman et al., 2008).

Motivation to learn is driven by the need to learn and understand material. When learning brings satisfaction, there is meaning behind the act of learning, it shapes the sense of identity of the learner, and it shapes students' self-concept. Hence, students become motivated, engaged in the learning process. In fact, one of the dimensions described in motivational engagement research that helps students' positive motivation and engagement with their learning environment is adaptive thoughts (Martin, 2003; McCann & Turner, 2004). These thoughts comprise self-belief, valuing and learning focus. In other words, believing in oneself (which entails having high self-esteem and self-efficacy) and valuing learning (i.e., value comes from meaning allocated to learning) are driving factors for positive and high motivation to learn. McCann and Turner (2004) and Martin (2003) show that adaptive thoughts are linked with adaptive behaviors like task management, persistence, and planning. Lower or negative motivation, on the other hand, is connected with maladaptive thoughts like anxiety, failure, and/or avoidance. These maladaptive thoughts are connected with maladaptive behaviors and negative engagement (i.e., disengagement and self-handicapping; Martin, 2003; McCann & Turner, 2004).

Research on motivation and motivational theories show that adaptive thoughts or positive thoughts about the self (i.e., self-belief or self-esteem) and value (i.e., giving meaning to learning) are crucial constructs in understanding positive motivation and fostering students' motivation to learn. Meaning and value are motivational educational constructs that help students do better and also be better. Studies show that people who report eudaemonic forms of motivation to learn score higher on measures of general life satisfaction and sense of well-being (Kashdan & Steger, 2007; Steger et al., 2008). Value in education is not only about understanding content but it should be framed in terms of appreciating learning. Wentzel and Brophy (2014) contend that students should not simply understand what they are learning but

also value it because they see good reasons for learning it. Appreciation of learning holds the potential of enhancing the quality of their inner lives (Wentzel & Brophy, 2014).

Perception of education can change through learning to appreciate and see the value in learning. This can start even before entering the classroom. If students engage in reframing the educational experience (i.e., going to class, doing homework), they can have a more positive classroom or learning experience. The current study's second intervention explored existing attitudes towards classes and college experience and then gave participants a space to reframe their mindset and find meaning college experience. When students actively edit their beliefs about their education and expand their self-concept to allow it to encompass the learning entity (i.e., when learning becomes part of the identity; "I am a learner") versus an external component (i.e., learning is something I do to fulfill certain requirements), then learning is not only a component of academic performance and achievement but becomes a component of well-being.

Meaning, Well-Being, and College Students

Cultivating meaning, also referred to as having purpose (Shin & Steger, 2016), is classified as an important ingredient to have a good life. It is a foundational component of well-being in the most prominent models. It is one of the dimensions and building blocks of well-being as described by Seligman's (2018) positive emotion, engagement, relationships, meaning, and accomplishment model of well-being and Ryff and Keyes' (1995) scales of psychological well-being. Research studies conducted over decades with different populations confirm people who report higher levels of meaning in life also are happier (Baumeister et al., 2013), express more frequent and strong positive emotions, have more satisfying relationships, have better health, report fewer health symptoms, and have better functioning immune systems (Cohen et al., 2016; Roepke et al., 2014; Steger, 2012). Moreover, meaning shapes an individual's personal

narratives (Adler et al., 2015) and is associated with healthy psychological functioning (Lewis et al., 2017).

Most people associate a meaningful life with feeling good (Baumeister et al., 2013). However, research on meaning in life addresses deeper and more holistic human strivings than the “feeling good” motives. Meaning is built from all types of experience in life namely positive and negative as well as happy and sad moments. According to Steger (2013), meaning shifts the emphasis from “what feels good for the individual to what is important for the individual, for his/her group, and for the wider universe” (p. 243). In other words, it enhances a shift from hedonic happiness to eudaemonic goals and well-being. Hedonic happiness focuses on pleasures or short-lived enjoyment experience. It is important as it minimizes the psychological impact of negative life events, but it is also insufficient in generating lasting or sustainable positive affective or cognitive change (Diener et al., 2006). The fragility of hedonic happiness is attributed to the hedonic adaptation process which entails that after the short-lived moments of increased enjoyment or pleasure, individuals will regress back to their relatively stable, baseline level of affect (Diener et al., 2006). The pursuit for more lasting positivity, then, needs to extend beyond monetary pleasures of emotions and encompass a rather holistic state of well-being, i.e., eudaemonic well-being. This can be achieved through cultivation of meaning. The mindfulness to meaning theory (Garland et al., 2015a, 2015b) supports cultivation of meaning through positive reappraisal. Eudaemonic well-being enhanced through mindful reappraisal and meaning, has the capacity to shift a negative stable mindset into a self-reinforcing cycle of positive affect and cognition otherwise described as psychological resilience and well-being that spirals upward (Garland et al., 2010).

The process of mindful reappraisal promotes positive change as it prioritizes eudaemonic well-being and meaningful goals over simple short lived hedonic gratifications. Meaning focuses on the journey rather than the hedonic outcomes of the journey (Steger et al., 2008); it, then, provides a stable framework for sustaining fulfillment even in the face of negative events, pain, or setbacks. Finding meaning in stressful situations is one of the coping strategies for overcoming the stress and consequences of past misfortunes (Baumeister et al., 2013). Hence, encouraging college students to adopt mindful reappraisal as a coping strategy may be critical for establishing a not only general well-being state but also potentially a sustainable positive path of educational well-being, especially today when they are experiencing lower states well-being resulting from challenges of world pandemic conditions along with challenges of the emerging adulthood developmental phase

While meaning is a protective factor in different life stages, it certainly is most required during the transitional life developmental stage of emerging adulthood. In fact, cultivating an enduring sense of meaning and purpose in life has been suggested as one of the critical developmental tasks for individuals in late adolescence (Habermas & Bluck, 2000; Magolda, 1992) and emerging adulthood (Arnett, 2004b). College students encompass these periods of life. During these years adult commitments and responsibilities are usually delayed while the role of experimentation and exploration become intensified (Arnett, 2004b). Emerging adult college students are given maximum opportunities for exploration in their life. Within these opportunities, they can find and cultivate meaning not only to improve their personal and educational life but also use it as a buffer against adversities the pandemic world has experienced recently.

Research conducted during the pandemic shows that meaning in life buffers against COVID-19 pandemic specific stress (Trzebiński et al., 2020) and general levels of boredom, depression, anxiety, and stress (Chao et al., 2020). Meaning plays an important role in coping with stress, trauma, and adversity especially during the present pandemic conditions (Trzebiński et al., 2020). Finding meaning in one's pursuits and activities is an effective coping strategy that allows for the use of positive reappraisal of stressful events or conditions. August and Dapkewicz's (2021) qualitative study with college students who experienced extreme stressful conditions during seven weeks of the pandemic gives initial answers to the importance of using meaning as a coping strategy. In that study students used "benefit finding" as a strategy in meaning-focused coping. The description of the students' responses shows that students who were able to identify self-related benefits in response to their experiences with the pandemic, i.e., being grateful, unexpected personal growth and new clarity toward the future also reported less fear, anxiety, or stress. This supports both buffering and building effects of meaning described earlier in Waters et al. (2021). Thus, helping students cultivate meaning, through self-based concepts or educationally based concepts, is a worthwhile goal to enhance and foster their well-being.

Summary

There has never been a more important time to consider the importance of well-being for college students. There is no question that the COVID-19 pandemic world brought the need to make well-being a priority with a mandated push to bring human well-being to the central stage of research. After an extensive examination of the existing literature on well-being in general and well-being for college students in particular, this study adopted a holistic approach of well-being and examined variables related to both hedonic and eudaemonic dimensions. Furthermore, this

study theorized that these two dimensions are influenced by internal variables (variables related to the self: self-perception, self-esteem, self-concept) and external variables (variables related education), which in the context of college students are educational variables (for example, motivation to learn, perception of education).

CHAPTER III

METHODOLOGY

The self is not something ready-made, but something in continuous formation through choice of action.

—John Dewey

Mixed Methods Research

To answer my dissertation research questions, I used a mixed methods approach (Tashakkori & Teddlie, 2021), which is a procedure for collecting, analyzing, and integrating both quantitative and qualitative data at some stage of the research process within one study (Creswell & Creswell, 2017). The rationale for using both types of data is that using either quantitative or qualitative approach on its own may be insufficient in uncovering multiple perspectives and thorough understanding of the problem (Creswell & Clark, 2017). Using both quantitative and qualitative data will help understand college students' inner and outer constraints and capture the patterns of thoughts or the complex issue of college students' mindset in the post-COVID-19 pandemic world. When used in combination, quantitative and qualitative methods complement each other and provide a more complete picture of the research questions (Tashakkori & Teddlie, 2021). Moreover, a mixed methods approach can reveal subjective meaning overlooked within an exclusive quantitative study. Indeed, mixed methods research provides a series of strengths. These strengths include multiple sources of evidence and types of validity in a single style (Creswell & Clark, 2017). Explanations can be deeper, broader, and more comprehensive than single method studies. Weakness of this method relates mainly to lengthy time and expense in comparison with a single method approach. Strengths of mixed

methods outnumber its few weaknesses by a significant margin and make it a viable approach when investigating dissertation research questions.

An explanatory, sequential, mixed methods design (Creswell & Clark, 2017) was used in this dissertation (see Figure 2). The explanatory, sequential, mixed methods design is one of the most common approaches used in mixed methods research (Creswell, 2012). Biesta (2010) argues that explanatory research focuses on identifying relationships, causes, and factors that would promote the generation of knowledge useful in influencing future events. An explanatory, sequential, mixed methods design focuses on assessing relationships between quantitative data while capturing an explanation of factors influencing the relationship (Creswell & Clark, 2017). Because my research questions are more quantitatively oriented, the explanatory, sequential design is appropriate because the focus is on the quantitative part. The qualitative data are used to explain and clarify expected and unexpected quantitative findings (Creswell & Clark, 2017).

Figure 2

Explanatory Mixed Methods Sequential Design



Phase One: Quantitative

- Q1 How is the process of dispositional mindfulness related to eudaemonic well-being: what concepts mediate the relationship between dispositional mindfulness and eudemonic well-being?

Procedure

A convenience sample was used for the first part of the study. An email was sent out across campus to various departments asking instructors to distribute the survey among their undergraduate students. Following Institutional Review Board approval (see Appendix A), data were collected from students via survey responses on Qualtrics. Before answering survey questions, each participant was provided with an informed consent (see Appendix B) that provided relevant study and contact information. Participants were asked to consent by clicking ‘I want to proceed’ to proceed to the survey questions. The initial survey set asked participants to rate, in order, their dispositional mindfulness, positive reappraisal, affect, self-esteem, meaning, motivation, academic self-concept, and eudemonic well-being (see Appendix C). Demographic information was sought last (see Appendix D). Completion of the survey series took approximately 25 minutes.

Instrumentation

Quantitative data were collected to answer the first research question of the study. The content of the survey set is described below.

Dispositional Mindfulness

Mindfulness, as a metacognitive form of awareness, involves the process of decentering, a shifting of cognitive sets that enables alternate appraisals of life events (Garland et al., 2009). In this study, dispositional mindfulness was measured using the Experiences Questionnaire Decentering subscale (EQ-D; Fresco et al., 2007) is an 11-item scale of decentering originally developed to assess mechanisms of mindfulness (e.g., “I can separate myself from my thoughts and feelings”). The Experiences Questionnaire Decentering subscale is scored on a 5-point

Likert scale (1= *never* to 5 = *all the time*) and has demonstrated adequate internal reliability ($\alpha=.72-.90$; Fresco et al., 2007; Naragon-Gainey & DeMarree, 2017).

Positive Reappraisal

This was measured using the subscale of the Cognitive Emotion Regulation Questionnaire (Garnefski et al., 2001) which is a 4-item scale that specifically measures the use of positive reappraisal in response to negative events during the past week. On each of the four items, participants rated the extent to which they engaged in positive reappraisal using a 5-point scale from 1 (*almost never*) to 5 (*almost always*). Items included “I think that I can become a stronger person as a result of what has happened” and “I think that the situation also has its positive sides” ($\alpha =.84$).

Positive Emotions

Hedonic well-being was measured using the Scale for Positive and Negative Experience (SPANE; Diener et al., 2009). The scale has a total of 12-items with the response options ranging from 1 (*very rarely or never*) to 5 (*very often or always positive*). The measure can be used to derive an overall affect balance score but can also be divided into positive feeling scale (six items) and negative feelings scale (six items; $\alpha = .80$). The negative feelings score varies from 6 (*lowest negative feeling score possible*) to 30 (*highest negative feelings score*) with positive feeling scores also varying from 6 (*lowest possible*) to 30 (*highest positive feelings score*; Diener et al., 2009). Affect balance was used to measure hedonic well-being in this study.

Meaning

The Meaning in Life Questionnaire (Steger et al., 2006) is a 10-item scale that measures meaning in life. All items are answered using a 7-point Likert scale format ranging from 1 (*absolutely untrue*) to 7 (*absolutely true*) with $\alpha = .80$.

Self-Esteem

The Rosenberg Self-esteem Scale (Rosenberg, 1965) is a 10-item scale that measures global self-worth by measuring both positive and negative feelings about the self. The scale is believed to be unidimensional. All items are answered using a 4-point Likert scale format ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with $\alpha = .88$.

Academic Motivation Scale

This 28-item scale measures academic motivation for college students (Vallerand et al., 1992). All items are answered using a 7-point Likert scale format ranging from 1 *does not correspond at all* to 7 *correspond exactly* with $\alpha = .81$.

Academic Self-Concept

This 19 item-scale measures academic self-concept (Liu & Wang, 2008). It consists of two subscales—students' confidence and students' effort. The students' confidence subscale assessed students' feelings and perceptions about their academic competence. Examples of items are "I am good in most of my school subjects" and "I always do poorly in tests" (negatively worded). The students' effort subscale focused on students' commitment to and involvement and interest in schoolwork. Examples of items are "I study hard for my tests" and "I often feel like quitting school" (negatively worded). Answers are reported on a four-point scale ranging from 1 (strongly disagree) to 4 (strongly agree) with $\alpha = .88$.

Eudaemonic Well-Being

This 21-item scale measures eudaemonic well-being (Waterman et al., 2010). All items are answered using a 5-point Likert scale format ranging from 0 *strongly disagree* to 4 *strongly agree*. Examples of items include "I feel best when I'm doing something worth investing a great

deal of effort in" and "I find I get intensely involved in many of the things I do each day" with $\alpha = .88$.

Demographic Characteristic

To gain a more complete picture of these emerging adults, demographic information was collected, including age, ethnicity, gender, major, academic year level, grade point average (GPA), socio-economic class, and marital status. This information provides a more complete picture of those individuals surveyed at this specific institution of higher learning.

Participants

A total of 222 undergraduate students' responses were retained for this part of the study. Frequencies of the main demographic characteristics are reported in Table 1. A total of 277 survey responses were collected and 55 were excluded from the data analysis as the respondents did not meet the criteria required for the population of interest or whose responses showed missing data. The population for the current study were emerging adults (age 18 to 28) enrolled as an undergraduate at a university in the western United States. The sample consisted of 168 females, 35 males, 10 binary, and eight others with mean age of 20.19 ($SD = 2.75$). The racial/ethnic breakdown of the sample was 71.2% Caucasian, 6.4% African American, 16.4% Latino/Hispanic, 2.7% Asian/Pacific islander, 0.9% American Indian or Alaska Native, and 2.4% who indicated Other. Academic classification was 22.4% freshmen, 24.2% sophomores, 28.8% juniors, and 21.5% seniors.

Table 1*Summary of the Sample Characteristics*

		<i>n</i>	Valid %
Sex	Male	35	16
	Female	168	76.7
	Non-binary	10	4.6
	Other	8	.5
Ethnic Origin	White	156	71.2
	Hispanic	36	16.4
	Black	14	6.4
	Asian/ Pacific Islander	6	2.7
	American Indian or Alaska Native	2	.9
	Other	8	2.4
College Standing	Freshman	49	22.4
	Sophomore	53	24.2
	Junior	63	28.8
	Senior	47	21.5
Major	Psychology	104	47
	Nursing	16	7
	Criminal justice	11	5
	Biology	11	5
	Other	79	36
	Lower	20	9
Family Social Class/SES	Working	60	27
	Middle	107	48.2
	Upper Middle	31	14
	Upper	0	0
Marital Status	Single, never married	207	94.5
	Married or domestic partnership	4	1.8
	Divorced	1	.5

N = 222

Participants reported their individual cumulative GPAs. The mean cumulative GPA for the 222 participants was 3.32 (*SD* = .54). Breakdown of majors was as follows: the majority of the participants were psychology majors 47% (*n* = 104), 7% nursing (*n* = 16), 5% criminal justice (*n* = 11), 5% Biology (*n* = 110), and 36% other majors (*n* = 79). In terms of marital status,

94.5% of the participants were single ($n = 207$), 1.8% were married or living in domestic partnership ($n = 4$) and 0.5 % divorced ($n=1$). As for family social class, 9% reported belonging to the lower class, 24 % to the working class, 48.2% to the middle class and 14% belonged to the upper middle.

Reliability

Survey 1 showed the following internal reliability for the instrument used in the first part of the study (see Table 2).

Table 2

Scale Statistics

	<i>n</i>	Scale Mean	Item minimum	Item maximum	Cronbach's Alpha (on Standardized items)	Scale Range (Total items)
Dispositional Mindfulness (11 items)	222	36.00	2.89	3.76	.810	11 to 55
Positive Reappraisal (4 items)	222	15.51	3.60	4.1	.76	4 to 20
Meaning (10 items)	222	49.27	4.50	5.4	.806	10 to 70
Self-esteem (10 items)	222	26.92	2.08	3.16	.879	10 to 40
SPANE P (pos,feel)(6 items)	222	20.76	3.30	3.5	.857	6 to 30
SPANE N (neg,feel)(6 items)	222	17.71	2.64	3.36	.797	6 to 30
Motivation (28 items)	222	96.5	2.10	4.5	.931	28 to 140
Academic Self-concept (19 items)	222	53.72	2.36	3.37	.838	19 to 76
Eudaemonic WB (21 items)	222	73.89	2.52	4	.862	21 to 105

Statistical Analysis

Path analysis with maximum likelihood estimation in Mplus 8 (Muthén & Muthén, 2017) was used to examine the relationships between dispositional mindfulness, positive reappraisal, meaning, positive emotions, academic self-concept, motivation and eudaemonic well-being.

The goodness of fit of the model to the data was evaluated using the following indices: the Chi-square statistic, the Root-Mean-square Error of Approximation (RMSEA), the standardized Root-Mean-Square Residual (SRMR), the Comparative Fit Index (CFI), and the Tucker-Lewis Index (TLI). A model is considered to have good fit when the RMSEA is below 0.06, the SRMR is below .08, and the CFI and TLI are above .95 (Hu & Bentler, 1999). Participants who were missing data on any three of the eight scales were deleted from the analyses ($n = 50$). Responses were screened for the possibility of careless reporting in this survey; this was performed by checking inconsistently on two out of four pairs of selected questions. None were identified. Results of path analysis will be discussed in the following chapter.

Positive Psychology Interventions Experiment

- Q2 Compared to student receiving no interventions, do students who engage in mindful positive reappraisal interventions report greater positive change from pre to post in terms of hedonic well-being, and is this change moderated by demographic variables?
- Q3 Compared to student receiving no interventions, do students who engage in mindful positive reappraisal interventions report greater positive change from pre to post in terms of, self-esteem, self-concept, motivation, and eudaemonic well-being, and is this change moderated by demographic variables?

To answer Research Questions 2 and 3 and to understand the effects of positive reappraisal on affect, perception of self, motivation and eudaemonic well-being, the second phase of this study included an experimental design. The intervention was used for (a) pre and

post comparison to measure any potential growth in hedonic well-being, self-esteem, academic self-concept, meaning, motivation, and eudaemonic well-being; and (b) to see whether the mindful exercises intervention had any effects on the experimental group in comparison to the control group.

Positive psychology intervention of dispositional mindfulness and positive reappraisal: mindful writing activity fosters positive reappraisal to reconfigure the view of self in a positive way. The four interventions are described in Appendix E.

- Intervention 1: Mindful reappraisal and meaning. Participants were asked to reflect on an internal event (emotion or thought) and external event (something that happened in school, at home, with their relationships, etc.) and engage in reinterpreting that event.
 - Positive perception of-self: Participants write about how the event can be appraised to help them foster a positive self-perception (high self-esteem, positive self-concept, self-worth).
- Intervention 2: Positive perception of education. Participants engaged in free writing activity (uninterrupted writing from 6 to 10 minutes where they reflect on their thought and feelings toward their classes, their education, whether they find meaning in their classes. Then they answered the free association exercises. They were asked to choose words that reflect their perception themselves as students, such as lack of motivation. Self-doubt achievement, success, I can do this etc.
- Intervention 3: The future self-exercise. Participants were asked to write about a future where everything unfolds as its best possible outcome. Then participants were asked to identify one behavior or a thought pattern that they do not like about

themselves that can be an obstacle to reaching that best future self. Then, they were asked to consciously reflect and identify at least one way to help them change that to get closer to their ideal future self.

- Intervention 4. This last intervention aimed to bring all the three previous interventions together. Participants were asked to reflect on inner dialogue and reflect on what that tells them about who they are and what they can do to change it.

Intervention Fidelity and Activity Evaluation

The last activity included additional questions to determine how well they followed the instructions and what feedback they might have about the experience. For instance, when asked if they thought by repeating the exercise consciously, they can change their thought patterns, the majority responded affirmatively.

Sample

The sample consisted of participants selected from the first part of the study i.e., participants who responded to Survey 1. After completing Survey 1, participants were solicited to volunteer to participate in the second phase of the study. Participants who responded 'Yes' to volunteering for the second part of the interview were the experimental group in this study. Participants who responded 'No' did not take part of the intervention were the control group in this study. The control group was contacted later in the study to take the post survey, i.e., Survey 2.

Participants in the experimental group received an email describing the intervention with a Qualtrics link to the intervention. The experiment consisted of four mindful positive

reappraisal positive psychology interventions (see Appendix E). An email was sent once a week for a period of four weeks. Fifty-two participants completed all four interventions.

Procedure

After the end of the fourth intervention, an email was sent to all participants— those who were part of the interventions and those who did not participate. A total of 177 participants responded to Survey 2. After excluding missing responses and age criteria, a total of 104 were retained, 52 for the intervention group and 52 for the control group.

Survey 2 Sample Description

The 177-post intervention sample consisted of 78.8% female, 16.6 male and 4.4 non-binary; 66.4 white, 9.5 African American, 19.7 Hispanic, 4.4 % others; 20.4% freshmen, 25.5% sophomore, 27.7% junior and 26.3 % senior with mean age of 20.78 across groups ($SD= 2.66$).

Instruments

Survey 2 included the same scales used in Survey 1.

Reliability

These instruments showed good reliability and validity in the existing literature and in the first analysis of this dissertation as well. Survey 2 showed the following internal reliability for the instruments (see Table 3).

Table 3*Internal Reliability for Survey 2*

Scale	Internal Reliability
Dispositional Mindfulness	.815
Positive Reappraisal	.826
Meaning	.779
Self Esteem	.866
Motivation	.932
Academic Self-Concept	.840
Eudaemonic Well Being	.834
Positive Affect	.857

Reliability is an important factor in determining whether the findings in a study are consistent and reliable (Creswell & Clark, 2017). All measurements in this study showed good reliability scores as demonstrated by their respective reported Cronbach's alphas. Pre- and post-intervention survey data were used to assess the effectiveness of the intervention on participants in the intervention group on hedonic well-being (Research Question 2) and on self-esteem, academic self-concept, motivation, and eudaemonic well-being (Research Question 3) through:

1. Growth measurement by computing changed scores, i.e., difference between posttest and pretest scores. Pretest scores come from the data collected through Survey 1, used as the first measurement in this study.
2. Intervention and control group comparison using multivariate analyses of variance (MANOVA) of self-esteem, academic self-concept, motivation, and eudaemonic well-being.

Phase Two: Qualitative

One of the advantages of the mixed methods explanatory design was it allowed the exploration of quantitative data findings in more detail. In a sequential explanatory mixed methods design, qualitative data follow the quantitative data with the quantitative findings informing the qualitative data collection. In the final part of this study, I was interested in exploring participants' reflection on their thoughts and emotions as they were reflected on the intervention and their thoughts and emotions after the intervention. Qualitative data from interview questions were used to answer the last research question in this study:

- Q4 What are the helpful mechanisms that allow college students to modify their thinking so that they change their view of themselves and their view of their education?

Qualitative Data Collection Procedure

During the last phase of this mixed methods study, qualitative data included individual interviews after the fourth intervention and after completion of a post survey measure. I created a list of participants' pseudonyms with their respective emails. I emailed participants who completed all four intervention and post survey measures to recruit volunteers for interviews. Twenty-four participants responded—15 confirmed and 14 showed up to the interview. The discrepancy between the number of participants who were willing to volunteer for the interview and those who actually showed could be understood when considering the timing of that last phase of the study. The interviews were conducted by the end of spring semester 2022 mainly last week of class, finals week, and the week after. The consenting participants ($n = 14$; 11 female, two male, and one non-binary; three Hispanic and nine Hispanic Whites) completed 30 minutes semi-structured interviews (see Appendix F for interview questions). Eight interviews

were completed in person and recorded on a phone voice memo software and seven were completed online and recorded via Zoom.

Ethical Considerations

Before the start of the interview, I read a list of statements to each participant. The statements were important to ensure ethical considerations and protect confidentiality of participants. Statement stated that only participants' pseudonyms would be used during the interviews. Zoom interviewees were given the choice to turn the video on or off while recording and were asked to give their consent to the recording. Moreover, participants were told they could end the interview at any moment and they could skip answering any question if they felt at any moment that it could make them uncomfortable. Participants had to verbally consent to the recording of the interview before proceeding to the interview questions.

A conversational style was used to conduct semi-structured interviews. Twelve questions were created to explore in more detail the results of the surveys. Interview questions revolved around the affective and the cognitive experience of the intervention and the potential psychological and academic benefits. The questions enquired about the positive reappraisal intervention perceived effect on self-perception, academic self-concept and on motivation to learn (see Appendix F).

Benefits and Compensation

Positive psychology interventions (PPIs) used in this study consisted of intentional mindful reflections that aimed to enhance positive feelings, behaviors, cognition, and boost well-being (Sin & Lyubomirsky, 2009). Participants who engaged in mindful reflective exercises may have benefited from positively reappraising negative situations and learning how to overcome negative thoughts or self-sabotaging behaviors. Data were collected in the Spring 2022 semester,

when the world was emerging from a two-year world pandemic. Many students were still recovering emotionally and psychologically from the aftermath of the pandemic's effects on their lives. In this study, the newly acquired techniques about shifting mindset toward a more positive self and towards more positive educational experience may have been new acquired skills and may have helped participants who engaged with the intervention to experience a new level of self-awareness and a better emotional state. Participants did not experience any cost aside from the cost of time. Participants who participated in the semi-structured interviews received a \$10 Target gift card as compensation.

Ontology and Quality of Mixed Methods Inquiries

The underlying ontological assumption in explanatory sequential mixed methods where the design entails using quantitative data to explain qualitative data is a post-positivist approach (Terry & Hayfield, 2021). The aim of post-positivist research is an explanation that ultimately enables prediction and control of a phenomenon (Guba & Lincoln, 1994; Terry & Hayfield, 2021). It is important for a researcher to be aware of matching criteria that ensure the quality and rigor of a design according to the appropriate ontological assumption adopted in his or her study. The criteria that are appropriate to judge the quality of a for post positivist inquiry are the conventional benchmarks of rigor internal validity (isomorphism of findings with reality), external validity (generalization), reliability (in the sense of stability), and objectivity (distanced and neutral observer). These criteria depend on the realist ontological position; without that assumption, isomorphism of findings with reality can have no meaning, strict generalizability to a parent population is impossible, stability cannot be assessed for inquiry into a phenomenon if the phenomenon itself can change, and objectivity cannot

be achieved because there is nothing from which one can be distant. (Guba & Lincoln, 1994, p. 114)

In this study, reliability and validity were ensured for both quantitative and qualitative data as described in reliability of instruments used, significance for quantitative data analysis, and trustworthiness and credibility for qualitative data.

Trustworthiness and Credibility

Reliability and validity in qualitative research relate to trustworthiness. Trustworthiness in qualitative research tries to establish credibility, transferability, and confirmability (Creswell & Poth, 2018).

Credibility refers to whether or not the researcher captures constructs of the original reality or the extent to which a researcher is confident in the truth of the reach finding (Creswell & Poth, 2018). To maximize credibility, triangulation was used. The strength of mixed methods design is that it relies on more than one method to help draw conclusions about pertinent questions. In the mixed methods paradigm, this is referred to as triangulation. Triangulation allows researchers to be more confident of their results, which is the overall strength of mixed methods design (Creswell & Clark, 2017). Thus, the sequential mixed methods technique exploring college students eudaemonic well-being used triangulation in gathering data from multiple data sources: survey responses, and interview data. Also, data used in this study came from college students from diverse ethnic backgrounds, majors, and social economic classes. Triangulation supports confirmability in qualitative research (Creswell & Clark, 2017).

Confirmability refers to the extent to which results are grounded in the data and inferences are not based on researcher bias or personal motivation (Creswell & Poth, 2018).

Using same open-ended questions for all data collection, triangulation support's confirmability in

qualitative research (Creswell & Clark, 2017). Confirmability ensures a degree of neutrality in the research finding, as findings are from different data sources, and based on participants' response which limits potential bias from the researcher. Triangulation was also composed of existing research in the literature, findings from the qualitative data analysis of the quantitative data.

Transferability is where the research findings are applicable to similar situations, population, or phenomenon (Teddlie & Tashakkori, 2009). The study's purpose and participants' demographics are described in detail to provide the basis for establishing transferability.

Dependability is the extent to which the study could be repeated by other researchers and findings are consistent (Teddlie & Tashakkori, 2009). Dependability was ensured by documenting and describing every step of data collection and data analysis.

Summary

This chapter described the study design and the method used in this dissertation project. A mixed methods sequential explanatory design was used. The quantitative part was divided into two analyses. A path analysis was followed by an experimental design. The experimental design was used to test the effects of a mindful positive reappraisal interventions administrated once a week for a period of four weeks total. The qualitative part of the study included semi-structured interviews with participants who completed the interventions. Data from the interviews would be used to understand and explain findings from the quantitative data.

CHAPTER IV

RESULTS

The good life is a process, not a state of being.

—Carl Rogers

Purpose of the Study

The purpose of this mixed methods study was to examine college students' well-being through the exploration of concepts of dispositional mindfulness, positive appraisal, and relation to self (self-esteem, meaning in life) as well as academic concepts of academic self-concept, perception of education and motivation to learning.

Phase One: Quantitative

Path Analysis

Correlational values between scales are displayed in Table 4. Many significant correlations were identified. Dispositional mindfulness was found to have a positive correlation with positive reappraisal ($r = .494$), with self-esteem ($r = .697$), self-concept ($r = .428$), positive affect ($r = .596$) and eudaemonic well-being ($r = .509$). Dispositional mindfulness was negatively correlated to negative affect ($r = .589$). Positive reappraisal was found to have a positive correlation with self-esteem ($r = .438$), a positive correlation with positive affect ($r = .427$) and negative correlation with negative affect ($r = -.402$). Self-esteem was found to have a positive correlation with academic self-concept ($r = .534$) and with eudaemonic well-being ($r = .597$).

Table 4

Correlations for Dispositional Mindfulness, Positive Reappraisal, Meaning, Motivation, Affect, and Eudaemonic Well-Being

Variables	1	2	3	4	5	6	7	8	9	10
1.Disp.Mindfulness	1									
2.Positive Reappraisal	.494**	1								
3.Self-esteem	.697**	.438**	1							
4.Academic Self Concept	.428**	.292**	.524**	1						
5.Motivation	.108	.143*	.130	.321**	1					
6.Eudemonic WB	.509**	.416**	.597**	.606**	.382**	1				
7.Positive Affect	.597**	.427**	.624**	.469**	.200**	.408**	1			
8.Negative Affect	-.589**	-.402**	-.655**	-.335**	-.008	-.334**	-.648**	1		
9.Affect balance	.653**	.457**	.705**	.442**	.115	.408**	.908**	-.908**	1	
10. Meaning	.399**	.376**	.419**	.298**	.380**	.580**	.376**	-.261**	.350**	1

** . Correlation is significant at the 0.01 level

* . Correlation is significant at the 0.05 level

Model Estimation

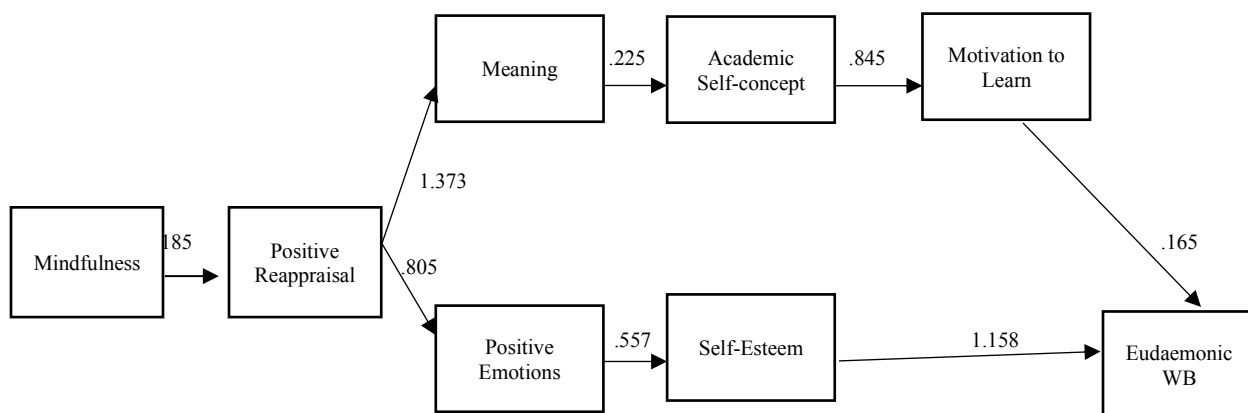
Path analysis with maximum likelihood estimation in Mplus 8 (Muthén & Muthén, 2017) was used to answer Research Question 1, the hypothesized causal connections between dispositional mindfulness and eudaemonic well-being and test the proposed model. The goodness of fit of the model to the data was evaluated using the following indices: the Chi-square statistic, RMSEA, SRMR, CFI, and the TLI. A model is considered to have good fit when the RMSEA is below 0.06, the SRMR is below .08, and the CFI and TLI are above .95 (Hu & Bentler, 1999).

The path analysis provides estimates of the magnitude and significance of dependencies among the above-mentioned variables. The initial model included paths from dispositional mindfulness to positive reappraisal, then positive reappraisal to meaning, academic self-concept

motivation to learn, and another path from positive reappraisal to positive affect self-esteem then to eudaemonic well-being. Figure 3 shows the original model with significant pathways. This model did not fit well according to fit indexes: RMSEA = 0.27, CFI = 0.527, TLI = 0.338, and SRMR = 0.233. The chi-square test was significant, $\chi^2(28) = 707.91, p = 0.0000$.

Figure 3

Original Model with Significant Pathways



The path from dispositional mindfulness to positive reappraisal to positive affect was significant and consistent with Gallagher and Lopez (2009). The mindful coping model originally established the connected and the causal pathway between these constructs. This path however did not hold when adding the variables of meaning, self-esteem, and academic self-concept.

One of the possible explanations to the model misfit is because both variables meaning and affect violated the unitary variable assumption in path analysis (Wright, 1984). Meaning is a composite of two subscales meaning search and meaning presence which denote two different aspects of meaning. Even though meaning was used as a composite score of in this study, the components of this variables behaved in different ways with the variable affect in this study,

which violated the unitary variable assumption in path analysis. The meaning presence component is positively correlated to positive affect ($r = .464$) and negatively correlated to negative affect ($r = -.648$). Meaning search, however, is positively correlated with both positive affect ($r = .062$) and negative affect ($r = .043$; see Table 5).

Table 5

Correlations for Meaning Subscales and Affect Subscales

Variables	1	2	3	4	5	6
1. Positive Affect	1					
2. Negative Affect	-.648**	1				
3. Affect balance	.908**	-.908**	1			
4. Meaning (total)	.376**	-.261**	.350**	1		
5. Meaning (search)	.062	.043	.010	.699**	1	
6. Meaning (presence)	.464**	-.406**	.479**	.740**	.037	1

Adjusted Model

Meaning and positive affect were excluded from the model because they violated unitary variable assumption in path analysis. After excluding affect and meaning from the model, and to establish a meaningful conceptualization of the relationships between the relevant suggested constructs in this, new pathways were suggested that also align with how these constructs have been examined previously in the literature.

Dispositional Mindfulness and Positive Reappraisal

Dispositional mindfulness and positive reappraisal showed a significant positive correlation which agrees with findings from Garland et al. (2015a, 2015b) and Hanley and

Garland (2014), the model was altered to include with two independent variables: dispositional mindfulness and positive reappraisal. The combination of these two variables enhances a more powerful effect than when tested separately (Garland et al., 2015a, 2015b; Pogrebtsova et al., 2017).

Self-Esteem, Academic Self-Concept, and Motivation

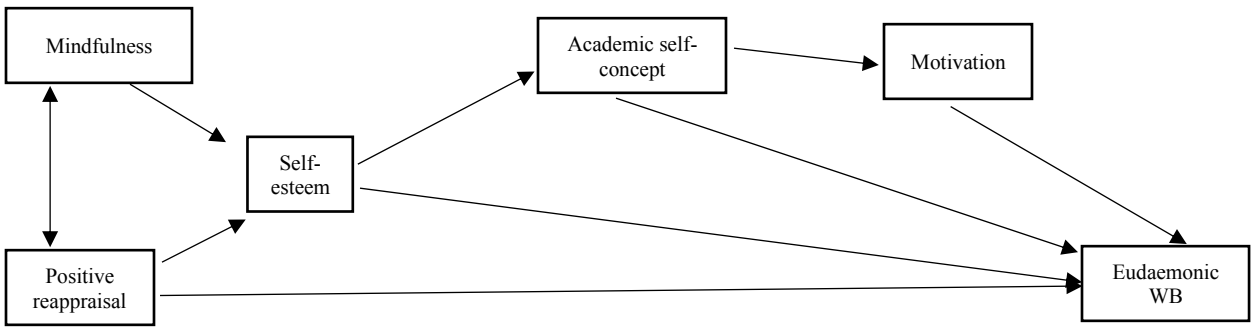
One of the main purposes of this study was to understand and identify the constructs that relate, directly or indirectly to college student well-being. Self-esteem, academic self-concept, and motivation were tested previously in the literature as mediators to well-being (Guay et al., 2010; Marsh & Craven, 2005). This study also sought to demonstrate a direct effect of these on well-being. Hence direct paths from academic self-concept, and from motivation were added to test for the direct effects of these constructs on eudaemonic well-being.

Positive Reappraisal and Eudaemonic Well-Being

Studies have shown that positive reappraisal leads to positive emotions (Garland et al., 2015a). After dropping positive affect from the original model and because of the importance of positive reappraisal construct in this study, the new model tested for the effect of positive reappraisal on eudaemonic well-being. Positive association have been demonstrated in the literature between positive reappraisal and well-being (Hanley et al., 2021; McRae et al., 2012). Positive reappraisal leads to positive emotions which leads to an opening of perception and broadening of perception (Fredrickson, 2013). Self-esteem is perception of self. Then, a positive self-perception could lead to well-being. So, a path from positive reappraisal to self-esteem have been added. he suggested pathways for these variables have been tested (see Figure 4).

Figure 4

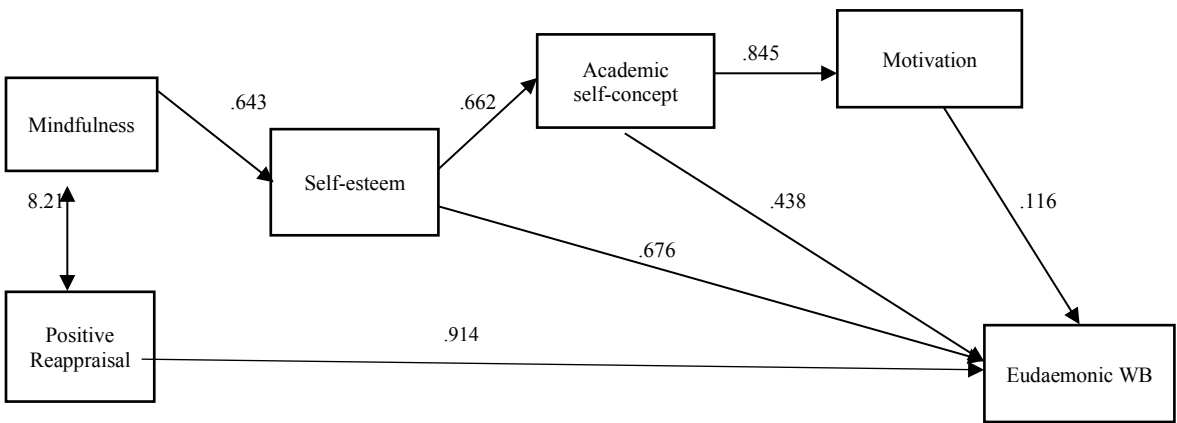
Dispositional Mindfulness-Eudemonic Well-Being Model



The results of the path analysis with the standardized regression coefficient are presented in Figure 5. This model showed a good fit: RMSEA= 0.05, CFI =0.992, TLI = 0.980, SRMR = 0.026. The chi-square test was significant, $\chi^2 (14) = 411.436, p = 0.0000$.

Figure 5

Eudemonic Well-being Fit Model with Significant Paths



The direct path from positive reappraisal to self-esteem was not significant. So, it was dropped for the model (see Figure 5). There is a direct effect from positive reappraisal to eudaemonic well-being ($\beta = .914, p = 0.00$). Self-esteem mediates between dispositional mindfulness and eudemonic well-being, self-esteem and academic self-concept have mediating effects between dispositional mindfulness and eudaemonic well-being, and self-esteem. Academic self-concept and motivation also have cumulative mediating effects between mindfulness and eudemonic well-being. The direct and indirect effects estimates are shown in Table 6.

Table 6

Summary of Mediation Direct and Indirect Effects

Effect	Estimate	SE	<i>p</i> -value
Direct Effects			
Disp. Mindfulness → Eudemonic WB	0.239	0.13	.067
Indirect Effects			
Disp. Mindfulness → Self-esteem → eudaemonic WB	0.346	0.94	.000
Disp. Mindfulness → Self-esteem → academic-self-concept → eudaemonic WB	0.186	0.94	.000
Disp. Mindfulness → Self-esteem → academic-self-concept → motivation → eudaemonic WB	0.043	0.015	0.003
Total Indirect			
Disp. Mindfulness → Eudemonic WB	0.575	0.098	.000
Direct Effects			
Positive reappraisal → eudemonic well-being	0.914	0.240	.000
Indirect Effect			
Positive reappraisal → self-esteem → eudemonic well-being	.110	0.066	0.98
Mindfulness with positive reappraisal	0.528	0.048	.000

- Q1 How is the process of dispositional mindfulness related to eudaemonic well-being: what concepts mediate the relationship between mindfulness and eudemonic well-being?

- Self-esteem is a mediator between dispositional mindfulness and eudaemonic well-being
- The combined indirect effect of self-esteem and academic self-concept between dispositional mindfulness and eudaemonic well-being is very small ($\beta = .186, p < .01$). Adding motivation to those previous effects does not add any important effect to the mediation ($\beta = .043, p = .003$).
- The model shows positive reappraisal predicts eudaemonic well-being ($\beta = .914, p < .05$)

Post-Intervention Survey 2 Analysis

Demographic characteristics of intervention and control groups are summarized in Table 7. Chi square tests were performed to see if there were any differences in terms of for gender, ethnicity and major between intervention and control group conditions. The relation between gender and group condition was not significant, $X^2(2, N = 104) = 104, p = .39$. The relation between ethnicity and group condition was not significant, $X^2(5, N = 104) = 5.24, p = .38$. The relation between major and group condition was also not significant, $X^2(1, N = 104) = 0.4, p = .84$.

Independent *t*-tests were performed to examine any preexisting differences between intervention and control group in terms of age and college standing (college standing was treated as an ordinal variable to examine any significant differences between college ranking of students i.e., freshmen, sophomores, juniors, and seniors). There was no statistical difference between intervention group age ($M = 20.35, SD = 3.67$) and control group age ($M = 20.10, SD = 1.96$), $t(102) = .43, p = .66$. College standing mean differences were not significant between intervention group ($M = 2.63, SD = 1.13$) and control group ($M = 2.38, SD = 1.10$), $t(102) = 1.17; p = .25$. No

statistically significant differences in terms of any of the demographics variables between the two conditions were observed.

Table 7

Intervention and Control Group Sample Description

		Intervention %	Control %
Age		$M = 20.35 (3.67)$	$M = 20.10 (1.96)$
Gender	Female	82.7	78.8
	Male	9.6	17.3
	Non-binary	7.7	3.8
Ethnicity	White	67.3	73.1
	Black or African American	7.7	9.6
	American Indian or Alaska Native	1.9	1.9
	Hispanic	17.3	15.4
	Other	5.8	0
College Standing	Freshman	17.3	28.8
	Sophomore	25.0	23.1
	Junior	26.9	28.8
	Senior	28.8	19.2
Major	Psychology	59.6	57.7
	Others	40.4	42.3

Note. $n = 52$

To control for pre-existing differences between the intervention group and the control group, change scores (mean differences between post-tests and pre-tests) were used for the second quantitative analysis part of this study. Moreover, to control for any potential effect of

demographic characteristics variables in the intervention and control group, analyses of variances (ANOVAs) were used to compare group differences in terms of gender, ethnicity, college standing and major (see summary Tables 8-12).

Table 8

Affect Balance by Demographic Variables

	Affect Balance	<i>F</i>	<i>p</i> value
Gender	Intervention	5.06	.010
	Control	3.91	.025
College Standing	Intervention	.09	.985
	Control	2.05	.116
Ethnicity	Intervention	0.26	.898
	Control	1.39	.279
Major	Intervention	.45	.506
	Control	3.89	.054

Table 9

Self-Esteem by Demographic Variables

	Self-Esteem	<i>F</i>	<i>p</i> value
Gender	Intervention	.391	.679
	Control	1.38	.261
College Standing	Intervention	1.70	.164
	Control	.34	.797
Ethnicity	Intervention	1.27	.293
	Control	1.70	.178
Major	Intervention	3.11	.084
	Control	3.15	.82

Table 10*Academic Self-Concept by Demographic Variables*

	Self-Concept	<i>F</i>	<i>p</i> value
Gender	Intervention	2.78	.071
	Control	.82	.442
College Standing	Intervention	.73	.573
	Control	1.35	.267
Ethnicity	Intervention	1.15	.345
	Control	.86	.466
Major	Intervention	1.80	.186
	Control	2.93	.093

Table 11*Motivation by Demographic Variables*

	Motivation	<i>F</i>	<i>p</i> value
Gender	Intervention	.408	.667
	Control	.447	.642
College Standing	Intervention	.88	.482
	Control	.34	.793
Ethnicity	Intervention	1.77	.150
	Control	.92	.438
Major	Intervention	.94	.336
	Control	.67	.416

Table 12*Eudaemonic Well-Being by Demographic Variables*

	Eudaemonic Well-Being	<i>F</i>	<i>p</i> value
Gender	Intervention	1.49	.235
	Control	.040	.961
College Standing	Intervention	.91	.466
	Control	.18	.908
Ethnicity	Intervention	1.77	.150
	Control	.77	.515
Major	Intervention	.38	.538
	Control	.39	.533

- Q2 Compared to student receiving no interventions, do students who engage in mindful positive reappraisal interventions report greater positive change from pre to post in terms of hedonic well-being, and is this change moderated by demographic variables?

Hedonic well-being was measured using affect balance (which is measure by subtracting negative affect from positive affect). A high affect balance thus indicates a higher positive affect and low negative affect (Diener et al., 2009). The mean reported in Table 13 below shows higher scores for intervention affect balance than affect balance for control group.

Table 13*Affect Balance Descriptive Statistics*

Outcome	Intervention Group			Control Group			<i>n</i>
	Pre <i>M (SD)</i>	Post <i>M (SD)</i>	Change-score <i>M (SD)</i>	Pre <i>M (SD)</i>	Post <i>M (SD)</i>	Change-scores <i>M (SD)</i>	
Affect Balance	3.15 (6.27)	5.11 (6.02)	1.96 (5.25)	2.94 (7.13)	3.90 (97.14)	.96 (5.14)	52

To answer Research Question 2 and see whether there was any significant difference in hedonic well-being between participants who engaged in the mindful reflection interventions and those who did not, potential effects of demographic variables were tested. After statistically checking for any differences between intervention and control group, no significant differences were found between groups regarding ethnicity, academic standing and major. However, gender was significant for positive affect in the intervention group, $F(2, 49) = 5.06$, $p = .01$, and in the control group, $F(2, 49) = 3.97$, $p = .025$. Gender was used as a covariate when testing the effects of group differences on hedonic well-being. A one-way analysis of covariance was conducted to determine a statistically significant difference between groups on positive affect controlling for gender. Results show a significant effect of group belonging on positive affect after controlling for gender, $F(1, 101) = 253.61$, $p < .001$, partial eta squared = .71.

- Q3 Does engaging in mindful positive reappraisal on weekly basis for a period of four weeks positively impacts students' self-esteem, academic self-concept, motivational and eudaemonic well-being, and is this change moderated by demographic variables?

Descriptive statistics (see Table 14) show higher scores for self-esteem, academic self-concept motivation and eudaemonic well-being in the intervention group than in the control group when controlling. When controlling for demographic variables, there was no statistically significant difference in gender, ethnicity, college standing and major between the groups in terms of self-esteem, academic self-concept, motivation and eudaemonic well-being.

Table 14*Dependent Variables Descriptive Statistics*

Outcome	Intervention Group			Control Group		
	Pre <i>M (SD)</i>	Post <i>M (SD)</i>	Change-score <i>M (SD)</i>	Pre <i>M (SD)</i>	Post <i>M (SD)</i>	Change scores <i>M (SD)</i>
Self-esteem	26.40 (4.65)	27.86 (4.59)	1.46 (3.18)	27.88 (5.38)	28.09 (5.80)	.21(3.33)
Academic self-concept	55.01 (6.09)	55.82 (6.09)	.81 (3.17)	54.92 (6.7)	54.23 (7.03)	-.69 (3.13)
Motivation	98.66(16.46)	103.48 (16.31)	4.82(.46)	95.25 (19.96)	95.71 (18.70)	.46 (9.26)
Eudaemonic WB	75.31 (9.71)	76.75 (8.41)	1.44 (6.21)	73.88 (10.33)	73.71 (11.42)	-.17 (5.85)

Note. $n = 52$

Mean comparison of change scores (accounting for pre-test and posttest differences) between intervention and control group shows (a) relative growth in self-esteem in the intervention group ($M = 1.6$, $SD = 3.18$) in comparison to control group self-esteem ($M = .21$, $SD = 3.33$), (b) a small growth in academic self-concept in the intervention group ($M = .81$, $SD = 3.17$) and a decrease in control group academic self-concept ($M = -.69$, $SD = 3.13$), (c) a higher increase in intervention group motivation ($M = 4.82$, $SD = 10.86$) in comparison with control group motivation small increase ($M = .46$, $SD = 9.26$) and (d) a small increase in intervention group eudaemonic well-being ($M = 1.44$, $SD = 6.21$) in comparison with a decrease in control group eudemonic well-being ($M = -1.7$, $SD = 5.85$).

To test for significant difference between participants who engaged in the mindful reflection interventions and those who did not, a MANOVA was used. This analysis was utilized to determine whether differences between the experimental group and the control group were statistically significant in terms of self-esteem, eudemonic well-being, and perception of education (academic self-concept and motivation) using change scores (posttest and pretest mean difference scores) to control for any pre-existing differences between the groups.

Checking Assumptions

1. Preliminary assumption checking revealed data were normally distributed as assessed by the Shapiro-Wilk test ($p > .05$).
2. There were no univariate or multivariate outliers as assessed by boxplot and Mahala Nobis Distance ($p > .001$).
3. Multicollinearity was moderate with ($r = .5$ -.636, $p = .000$) (highest correlation was between academic self-concept and eudemonic well-being, $r = .63$, $p = 0.000$).
4. Assumption of the equality of variance-covariance matrices: There were no univariate outliers in the data as assessed by inspection of a boxplot. (see Table 15).

Table 15

Equality of Variance Assumption Test

Box's Test of Equality of Covariance Matrices	
Box's M	6.151
<i>F</i>	.589
df1	10
df2	49740.239
Sig.	.824

The test was not statistically significant (i.e., $p = .824$, $p > .001$), which meant there was homogeneity of variance-covariance matrices and this assumption was not violated. There was

no homogeneity of variance as assessed by Levene's Test of Homogeneity of Variance ($p > .05$; see Table 16).

Table 16

Levene's Test of Equality of Error Variances

	Levene Statistic	df1	df2	Sig.
Self-Esteem	.018	1	102	.892
Academic Self-Concept	.000	1	102	.991
Motivation	.174	1	102	.678
Eudaemonic Well-Being	.533	1	102	.467

***Multivariate Analysis of
Variance Results***

A one-way multivariate analysis of variance was run to determine the effect of mindful positive reappraisal intervention on perception of self, academic self-concept, motivation, and eudemonic well-being. The differences between the experimental group and control group for the combined dependent variables, were statistically significant, $F(4, 99) = 3.042$, $p = .021$ Wilks' $\Lambda = .890$; partial $\eta^2 = .110$.

Multivariate analysis of variance results generated univariate ANOVAs that determined which dependent variable was contributing to the statistically significant MANOVA. Follow-up univariate ANOVA showed that there was a statistically significant difference in self-esteem between participants in different groups $F(1, 102) = 4.70$, $p = .03$; partial $\eta^2 = .044$; academic self-concept scores $F(1, 102) = 5.88$, $p = .01$; partial $\eta^2 = .054$, motivation scores $F(1, 102) = 4.86$, $p = .03$, partial $\eta^2 = .045$, using a Bonferroni adjusted α level of .025. However, there was

no statistical difference for eudemonic well-being scores between participants in the intervention group and participants in the control group $F(1, 102) = 1.86, p = .17$, partial $\eta^2 = .018$.

Intervention and control group MANOVA model suggest a medium effect on self-esteem, academic self-concept, and motivation.

Summary of Quantitative Analysis

The quantitative data analysis had two main goals. First was to identify a model of eudemonic well-being for college students through path analysis model estimation. The model showed that dispositional mindfulness and positive reappraisal predict eudemonic well-being. The model also identified self-esteem, academic self-concept, and motivation as mediators between dispositional mindfulness and eudaemonic well-being. Positive reappraisal was identified as a direct path to eudemonic well-being. The second goal of the quantitative component was to assess the effectiveness of mindful positive reappraisal reflections through a series of four positive psychology interventions for college students' self-esteem, motivation, and eudemonic well-being.

The identified model in the first portion of the current study suggests dispositional mindfulness leads to self-esteem that leads to high academic self-concept which in turn leads to a higher level of motivation and eudemonic well-being. The causal relationship between these concepts is significant when discussing variables to help improve college students' motivation and meaningful experiences in this stage of their lives. Eudemonic well-being entails a sense of purpose, meaning, and engagement with life (Heller et al., 2013). Findings from the current study indicate the potential for increasing these positive aspects for emerging adult college students through a process of mindful awareness, positive perception of self, positive perception of one's academic capabilities, and motivation.

The model suggests the following:

- Dispositional mindfulness and self-esteem. The model suggests higher levels of dispositional mindfulness predict higher levels self-esteem.
- Self-esteem and academic self-concept. The model indicates that higher levels of self-esteem lead to high level of academic self-concept. In other words, valuing and positively perceiving the self is primordial to how well a college student feels they can learn. Perception of self is necessary to perception of one's the perception of one's capabilities to succeed on academic tasks.
- Academic self-concept and motivation. Seeing oneself as capable promotes higher levels of motivation. Higher motivation predicted eudemonic well-being. The relationships between these variables denotes an important finding for the current study. Working toward something creates meaning and purpose in life and makes the college experience meaningful.

The first of two quantitative data analyses identified dispositional mindfulness and positive reappraisal as important predictors and causal factors for eudemonic well-being. These two specific concepts together were used as the basis of the second quantitative part of this study. A second set of data was collected after four mindful positive interventions about self, the college experience, and future self. Participants were asked to consciously reflect on their perception of themselves, their inner dialogue, view of their classes, college experience, and future self. The interventions consisted of mindful writing reflections while also asking participants to consciously engage with their own thoughts. Participants were guided to reflect on negative events or situations in their lives and consciously reappraise them. Furthermore, they were asked to identify sabotaging self-behaviors or self-limiting thoughts and to think and write

about how they as an individual could modify personal behavior or bring a gradual change to help them become the person, they know they can be. Results from data analysis from Survey 2, collected after the mindful positive reappraisal interventions, suggests a relative effectiveness of the mindful reappraisal interventions in helping college students score higher on academic self-concept, motivation, and eudemonic well-being. Intervention-control group comparison shows the interventions had a significant effect on academic self-concept, motivation, and eudemonic well-being. Participants in the interventions showed higher levels of self-esteem, academic self-concept, motivation, and eudemonic well-being after the four-weekly interventions. Also, even though the MANOVA test showed no significance for self-esteem, the intervention group in this study showed higher levels of self-esteem than the control group. Furthermore, comparison of pre-intervention means scores and post intervention mean scores, the intervention group shows, albeit small, an increase in their post intervention self-esteem, academic self-concept, motivation, and eudemonic well-being means scores. The mindful positive reappraisal interventions had an effect on hedonic well-being of the intervention-group participants as well. After the four-weekly interventions, participants had lower levels of negative affect and a higher level of positive affect on the post intervention test.

Phase Two: Qualitative

In mixed methods explanatory design, qualitative data are used to explain some of the answers provided by quantitative data and provide more detailed information about the quantitative data (Creswell & Creswell, 2017). Qualitative data were used to answer the following research question.

- Q4 What are the helpful mechanisms that allow college students to modify their thinking so that they change their view of themselves and their view of their education?

Qualitative Data Analysis

All audio and video-recorded interviews were transcribed verbatim using an automatic transcription (Temi transcription software) and checked for accuracy by the researcher. The transcripts were imported into an excel file software to organize data, locate thematic patterns, and facilitate analysis. While the original plan was to use NVivo for qualitative data analysis, the relatively small sample and the time constraints led to analyzing the qualitative data manually. Coding data manually increased familiarization with the data. Manual analysis of qualitative data also resulted in an intimate knowledge and greater understanding of the data.

A theme analysis (Terry & Hayfield, 2021) was conducted to capture common themes in students' response towards perception of self, academic self-concept, and motivation to learn. Theme identification was considered deductively through the lens of the mindfulness to meaning theory by Garland et al. (2010), broaden and build theory by Fredrickson (2004), and inductively (i.e., generated from the data). The first step in the qualitative analysis was a preliminary exploration of the data (i.e., reading through each transcript and organizing data into categories); this referred to as the open coding process (Terry & Hayfield, 2021). During the open coding, the transcripts were reviewed to identify patterns and themes. This was followed by focused coding which meant identifying repeated keywords and response patterns, creating high order codes for larger portions of the text, and categorizing the text. The third step included a comparative analysis between codes and categories, aggregating similar patterns together, and identifying the most prominent themes and subthemes.

In this next section, important themes generated from the data are numbered, described, and supported by interview excerpts. Participants' names are self-selected pseudonyms.

1. Dispositional mindfulness and positive reappraisal as a positive experience.

The conscious and intentional reflection on past thought or behaviors was perceived as a positive experience. Abigail (Female, 18, Freshman) said: "I did feel better afterwards."

Reframing a negative event as a learning opportunity was a positive experience. Positive experience was described as gaining perspective, feeling good, or releasing the judgment about the situation or the person. Madfoosh (female, 20 years, Junior) said: "I think, thinking about it, reflecting on it and looking at things from a different perspective, I think was really good." Aven (Female, 20 years, Junior) said:

It was good to take more of an introspective look, just take the time. Actually. That's not something I tend to do is just take time and reflect on myself. So, it was a good chance to do so and really look at the behaviors I have that are either positive or negative.

I definitely thought it was interesting in my personal experience, the situation that I chose to reframe. (..) I tend to consider myself a person that tries to look on the positive side or find the silver lining, but even thinking that about myself doing this specific intervention really made me dig deeper. It really allowed me to just think about it like that. Not only in a different light, but to have to reframe the situation. (..) what's the other person's side of the story, right? I'm like, I'm just one part of the entire problem. So yeah, it was enlightening.

College students' fear of the future can be overcome by mindful reflection on future possibilities and on the possible attainable best self.

2. Thinking about a possible best future self is a helpful tool to stay motivated and feel better about the college experience.

Joey (Male, 20 years, Junior) said, “I feel like if you don't have a purpose for why you're here and it felt like just doing that, like the third one was very like reassuring. It's like, oh, I kind of know what I'm doing or why I want to do it.” Qualitative data based on observations from small sample of interviewees who engaged in the study interventions showed evidence that thinking about the future seemed to be easier for students in their last year of college than for others. A pattern that emerged in the interviews was that students in their last semester or last year of college shared a greater favoritism for the best future self-intervention than other students. Gabby (female, 21 years old, Senior) who is in her last semester in college shared her thoughts on best future-self intervention:

I think the third, the third one, [referring the best future self-intervention] I think I liked that one a lot. Cuz like you said that one was the one where you reflected on like the future I think it was helpful because it helps you kind of create motivation and find reasons for a lot of like the stress. And I think that that helps cuz it can shift your perspective into more of like a positive thing. So, I liked that one a lot. Yeah.

While Banana Cream (Female, 19 years old, Sophomore) said:

I usually don't think about the future in a positive way (....) I think like doing that exercise, just imagining good things about the future where I have to like to focus on that. like the good things. I think that's like, yeah. Cause otherwise I just like, I'm just like, oh, future bad. But having that, like what is your ideal future? What does that look like?

Maria (female, age 19, sophomore), whose financial and family conditions has made her fearful of the unknown future, expressed her frustration about the future:

I kind of see it as frustrating. Sometimes I feel like I'm stuck in a hole and then other times I'm like, well, I like, I want to be educated. I want to be well versed, and I want

education. So, I'm like, I need this. So, it's like kind of go back and forth. I'm in college because I want a career. (..) but I don't really know what I want to go into after college. So I find that's also like, if I feel like I don't like the class, then I'm just like, why am I here? You know? Yeah. Yeah. But like I wanna be here. I just get stuck. I guess.

However, because the intervention was not limited to simply imagining or depicting a future self but also at identifying or naming obvious obstacles and/or sabotaging behaviors that stand in the way of that future self and consciously deciding on one way to overcome it, the future-self intervention has a different impact on Vicky (Female, 20, Junior):

I typically don't really think about the future all that often because it makes me a little bit nervous. So, I typically kind of put it on my back burner. So, like actually having to sit down and write and think about it, it helped me de-stress almost because I was like, this really isn't that bad. I was kind of like freaking myself over nothing. And so that was something that I definitely liked.

3. Finding meaning in the college experience makes it worthwhile.

When asked about their attitude toward college, many college students see the experience of college 'worthwhile.' However, college experience seems to be more meaningful for students who already have an idea about future goals or even 'purpose in life.' Gabby (21, female, Senior) said:

I feel that it can also give you a sense of purpose and a sense of motivation and life. So, I think it does impact wellbeing. (...). I'm very grateful for my education. I'm very grateful for the opportunity to be in college because I've learned so much, not only academically about the major I'm going in, but just about other people and about the world and just different opinions. Um, so I think that education is often viewed, you know, like where I

started often viewed as, okay, I'm going to get a job at the end of this. This is a path I'm supposed to follow in our traditional society. Um, but I think it also encompasses just learning about how people interact with each other and how the world interacts with itself. Right. And just the way, I don't know, different opinions, different, um, sharing different opinions and being able to listen to other people and being able to make a change about those things. I feel like all that comes from education.

A few students mentioned the word “pride’ when describing college. It was interesting that these participants were primarily from Hispanic background with one who was Caucasian. Pride was described in terms of their parents' expectations of them or pride in their own accomplishments. Attending college seems to be associated with personal value to the students interviewed.

4. Self-esteem, motivation, and well-being.

Perception of self affects motivation to learn. Maria (female, age 19, Sophomore) said: “On days that I see myself bad, I don't want to go to school. I don't want to do work. I don't want to study. I don't even want to look at canvas or anything. Yeah. But on the days that I feel good, happy, positive, then I'm like, okay, I have to write this paper.”

Academic achievement and belonging impacts self-esteem. Melody (Female, 20, Senior) said:

I will admit that, uh, academic validation is a huge thing. You know, once I get a good grade back on a test, it feels good. I think it's [education] a big part of my wellbeing, especially being up here in the sense of it's like, I really like again, get that academic validation in a sense, but it also, when there's a lot of like outside forces and everything that, you know, are not the best kind of things that I've experienced, it's nice to kind of

feel like I really have a place here. And I think like academics themselves is important and learning is important, but I also think fostering that like healthy classroom growth, I think, and just kind of that environment is really like I important too. And the sense of also helping students develop not on just a grade level, but in a like personal level and making those connections to give them the resiliency to face those outside things is really important.

Vicky (female, 19, Junior) said:

For me, education has just always been important. It's always been like a huge part of my life and like a, I think I base like a lot of my personality and like a bunch of my identity around education mm-hmm because it's always been like, oh, I've always been like the smart kid or the respectful kid. And so for me, it's always been a huge part of my identity. So, I always knew that I was going to continue on my education and go to college after high school.

Reflection on the Interviews

I was surprised but also delighted as the researcher of this study that a few interviewees came to the interview to express their enthusiasm about the intervention. As the researcher of the study, I interacted with all the interviewees and I couldn't help but notice how students not only were eager to discuss self, meaning and college but were waiting for an opportunity to discuss these issues. Aven (Female, 20 years, Junior) shared at the beginning of her interview: "Thank you for one for having the study, it was really enlightening to just get a chance to like sit down and think about it, and it allowed me to change my perspective on some things." While I am aware that this view does not represent all college students as interviewees in this study were

self-selected, it nevertheless indicates a relevance of these topics and interest in enhancing positive sense of self that needs not to be disregarded.

Summary

The following main themes were generated from the data:

- Dispositional mindfulness and positive reappraisal writing are perceived as a positive experience.
- College students' fear of the future can be overcome by mindful reflection on future possibilities and on the possible attainable best self.
- Finding meaning in the college experience makes it worthwhile.
- Perception of self affects motivation to learn.

Mixed Methods Integration

Integration of quantitative and qualitative data is an important component of mixed methods research. Integration is the intentional process of bringing together quantitative and qualitative. The qualitative data portion of the study supports the quantitative data findings in that mindful positive reappraisal allowed participants to step back, observe, and identify area of potential change in regard to their perception of self, their college experience, and their future self. Participants appreciated the usefulness and benefit of mindfully writing and reflecting on self, experience of college, and future self (see Table 17).

Table 17*Comparison of Quantitative and Qualitative Results Based on Main Themes*

Themes	Quantitative Findings	Qualitative Findings
Positive reappraisal helps increase hedonic and eudaemonic well-being	Q1: Positive reappraisal predicted eudemonic well-being. Q2: Intervention group shows higher affect balance than control group.	<ul style="list-style-type: none"> • “I did feel better afterwards” Abigail (Female, 18, Freshman) • “Doing this specific intervention really made me dig deeper. It really allowed me to just think about it like that. Not only in a different light, but to have to reframe the situation. (...) what's the other person's side of the story, right? I'm like, I'm just one part of the entire problem. So yeah, it was enlightening” (Aven, Female, 20, Junior) • “I found that was helpful. I do actively try to use it more. It's in my toolbox. It helps me look at situations and see the positive and look less at the negative” (Eva, Female, 21, Senior)
Mindful positive reappraisal help develop a positive attitude toward college/education	Q3: Intervention helped increase motivation and academic self-concept in the intervention group participants.	<ul style="list-style-type: none"> • “I feel that it can also give you a sense of purpose and a sense of motivation and life” (Gabby, 21, female, Senior): • “It was helpful because it helps you kind of create motivation” (Gabby, female, 21, Senior)
Perception of self is connected to perception of education and motivation.	Q4: Self-esteem predicted academic self-concept in Model 2.	<ul style="list-style-type: none"> • “I feel if I perceive myself or see myself as a good hardworking student wanting to learn, then I see myself doing that within class.” Santa Bred (Male, 18, freshman) • On days that I see myself bad, I don't want to go to school. I don't want to do work. I don't want to study. I don't even want to look at canvas or anything. Yeah. But on the days that I feel good, happy, positive, then I'm like, okay, I have to write this paper (Maria, Female, 19, Sophomore)

Qualitative data also showed that positive reappraisal is necessary for eudemonic well-being. This was revealed through interviewees reflecting back on the study interventions. Stepping back, allowing for different perspectives helps them feel better but also helps gain an understanding of the situation at hand and an understanding of the meaning of the activities they engage in. Moreover, in the best future-self intervention, where participants reflected on ‘best’

self (i.e., a positive self), participants appear to make a connection to their present college experience and recognize the value of what they are learning in college. For many of the participants, the experience of college is 'worthwhile.' The college experience is reported to be meaningful because it holds the potential to create a best possible future self. A life may be experienced as meaningful if it is "felt to have significance beyond the trivial or momentary, to have purpose, or to have a coherence that transcends chaos" (King et al., 2006, p. 180).

CHAPTER V

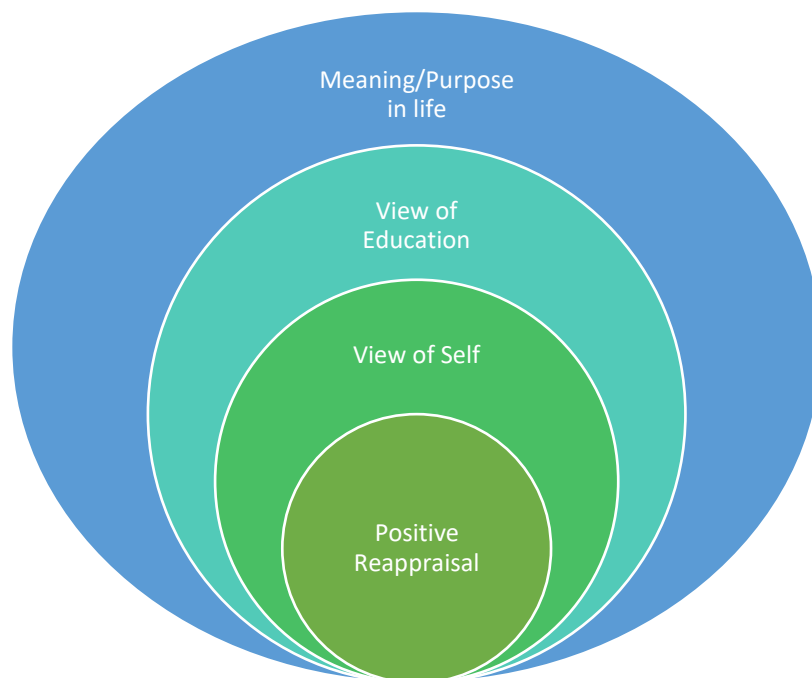
DISCUSSION AND CONCLUSIONS

As it is not one swallow or a fine day that makes a spring, so it is not one day or a short time that makes a man blessed and happy.

—Aristotle

Overview

In the light of a growing attention to the role of well-being in higher education from both researchers and practitioners (Dahill-Brown & Jayawickreme, 2016), a eudaemonic approach to well-being represents an important lens through which to examine well-being in the educational context. The main purpose of this study was to identify factors of eudemonic well-being for emerging adult college students through establishing a connection between constructs of self and constructs of education. This was performed by testing a dispositional mindfulness- eudemonic well-being model and by using positive psychology interventions. The findings were considered through a positive psychology lens, Fredrickson's (2004) broaden and build theory, and Garland et al.'s (2015b; Garland, Hanley et al., 2015) mindfulness to meaning theory. The findings support the role of dispositional mindfulness and positive reappraisal in fostering positive constructs like self-esteem, academic self-concept, motivation, and eudemonic well-being for emerging adult college students. An integration of the quantitative and qualitative data discussed in the previous section is summarized in Figure 6 below.

Figure 6*Model of College Students' Eudemonic Well-Being*

Positive Reappraisal and Education

The adaptive coping nature of positive reappraisal (Garland et al., 2009) is central to fostering and building positive emotional experiences and subsequently positive college experiences. Fredrickson's theory shows that humans react to positive emotions in ways that broaden their capacity to learn and consequently tend to learn more (build). In dire circumstances, positive reappraisal is a necessary emotional regulatory tool that helps increase positive emotions. Positive reappraisal was connected in both quantitative and qualitative data to perception of self (self-esteem), perception of education (academic self-concept and motivation) and eudemonic well-being. Fredrickson's (2004) theory and the findings from this mixed methods study represent an argument endorsing college students emotional state as an essential

part of their educational experience. This finding is a significant contribution to positive psychology interventions and a positive education.

Dispositional Mindfulness and Positive Reappraisal

Mindfulness is a metacognitive form of awareness that involves the process of decentering which entails shift in thoughts to allow alternate appraisals of events (Garland et al., 2009). Model 1 showed mindfulness predicts positive reappraisal but did not suggest a causal relationship. The fit model (Model 2) showed a strong correlation between mindfulness and positive reappraisal, and positive reappraisal prediction of eudemonic well-being. Positive reappraisal is not possible without awareness. The mindfulness capacity reinforces and strengthens the reappraising disposition. This is consistent with mindfulness to meaning theory and the mindful reappraisal hypothesis (Garland et al., 2015b; Garland, Hanley et al., 2015), which suggests mindfulness promotes well-being by facilitating positive reappraisal. Findings in this study show that reappraisal was possible because it was operating with a mindful awareness mindset towards the events or thoughts that are been reappraised.

Positive Reappraisal, Meaning, and Eudemonic Well-Being

Positive reappraisal has also been defined as meaning-based coping strategy that enables people to adapt positively to challenging life events. In this respect and aligning with mindfulness to meaning theory (Garland et al., 2015b; Garland, Hanley et al., 2015). Findings from the model in this study indicate positive reappraisal predicts eudemonic well-being, and MANOVA results showed that positive reappraisal interventions increase levels of self-esteem, positive affect, and motivation for college students. These results suggest positive reappraisal can be used as a psychological tool to protect against low self-esteem, negative emotions, and low motivation.

Positive and Negative Affect

Answering Research Question 3 showed that the interventions were effective in decreasing negative affect. This finding aligns with the only other existing, to my knowledge at the time of writing this dissertation, positive reappraisal intervention in college students, a study by Pogrebtsova et al. (2017).

Pogrebtsova et al. (2017) conducted a five-day positive reappraisal intervention and showed low levels of negative affect but no change in positive affect. Results of the current study are consistent with Pogrebtsova et al. as the intervention group showed lower levels of negative affect. However, the current findings also show an increase in positive affect after the interventions. It is important to mention that Pogrebtsova et al.'s study was conducted over a period of five days, and only asked to reappraise a negative life event. The present study was conducted over a period of four weeks and reappraisal involved, negative life events, perception of self, and personal attitude toward the individual college experience. The current results suggest that longer application and reminders of the technique along with reappraising more than daily random events but also purposefully reappraising personal and academic aspects of a college student life help increase positive affect and buffer negative affect for emergent adult college students.

Self-Esteem

The effectiveness of mindful positive reappraisal intervention findings supports previous studies (Pepping et al., 2013; Randal et al., 2015) that demonstrated the positive impact of mindfulness-based interventions on self-esteem. Moreover, the path analysis indicates self-esteem as mediator between dispositional mindfulness and eudemonic well-being. This is

consistent with Bajaj et al.'s (2016) findings on the mediating role of self-esteem between dispositional mindfulness and well-being.

Motivation and Academic Self-Concept

Dispositional mindfulness and motivation studies are prominent in the areas of work and organizational psychology (Donaldson et al., 2015). However, no studies have investigated the effect of mindful reappraisal on college students' motivation. The present study showed that mindful positive reappraisal interventions can increase motivation levels of university participants. This may possibly be explained by self-determination theory (Ryan & Deci, 2003). In a recent article, Ryan et al. (2021) drew a connection between mindfulness and autonomous form of motivation. In fact, the authors argue that the observing capacity of mindfulness supports autonomous functioning of mindfulness. The attention to the present moment and the clarity that results from absence of judgment allows a "more informed, selective and volitionally supported behavior" (p. 302). Ryan et al. hypothesis that mindfulness is expected to be strongly and positively related with intrinsic motivation, which has been empirically proven in the current study.

Positive Reappraisal and Emerging Adults

Positive reappraisal has been defined as a coping process (Garland et al., 2009) and an emotional regulation strategy (Tugade & Fredrickson, 2004). The protective factor of positive reappraisal has been documented in the literature with pre-adolescents (Thompson et al., 2013) and adolescents (Morrish et al., 2018). Reappraisal was a mediator between fearful temperament and adjustments of stress in pre-adolescents by Thompson et al.'s (2013) research and a mediator between exposure to stress and life satisfaction in adolescents (Morrish et al., 2018). The

findings in the current study add to the existing literature by focusing on another developmental life stage i.e., emerging adults. The current study opens the door to investigating positive outcomes of positive reappraisal for emerging adult college students and its role in increasing their self-esteem, academic self-concept, and motivation. The present study also shows applying the coping adaptive strategy to concepts of self or to academic concepts yields positive outcomes, which may benefit college student overall well-being.

Limitations

Findings of this study need to be considered in light of its limitation. One important limitation is lack of random assignment for intervention. Because of the lengthy process of collecting data for mixed methods study, I refrained from randomly assigning participants to intervention group and control group. To be able to complete my dissertation and answer my research questions, I needed to make sure that I had enough participants in my intervention group. The study was conducted during the second part of the spring semester, a time where semester gets busy for many students. To avoid non-committing participants who may drop out of the study, I asked for participants to willingly volunteer to participate in the intervention and later to participate in the interviews leading to the potential for self-selection bias. Also, post intervention survey data were collected prior to final exam week. Many participants who completed the intervention failed to complete Survey 2 in time. One additional challenge centered around online interventions, which tend to demonstrate high attrition rates. As discussed earlier, a few participants withdrew in the middle of the study. Also, data collected from the online interventions were not included in the original data analysis. Because of time constraints, those data were not included in the analysis as it would require creating a case study to combine

intervention and interview data. The case study analysis will be performed after this dissertation project and published as a separate study.

Finally, despite an effort to recruit a heterogenous college student sample from all departments on campus, the majority of the sample were psychology majors. Many psychology-major students are exposed to concepts explored in this study. Familiarity with concepts may have made it easier for these participants to complete online interventions than others.

Recommendations

The quantitative and qualitative findings in this mixed methods study show that dispositional mindfulness and positive reappraisal are effective habits of mind that help counter inner and outer constraints and enhance eudemonic well-being for college students. College education experience needs to address topics of the self besides isolated chapters in specific psychology classes. College and especially psychology programs teach about relationships with others, with the world around us, but relationship with the self is often not a priority in our curriculum.

The findings entail several implications for students' well-being and for enhancing motivation to learn and a positive experience of education. Students' well-being doesn't entail simply attaining but maintaining positive perception of self and positive perception of educational experience. Cultivating positivity bias is possible through systematic mindful reappraisal repetitions or trainings. Positivity bias effect has been discussed in the literature through Fredrickson's positivity ratio theory (Fredrickson & Losada, 2005). Fredrickson's positivity ratio theory exposes a mathematical positivity ratio stating that a person needs at least three times as many positive emotions as negative ones in order to flourish (Fredrickson & Losada, 2005). Positivity ratio counters the long-held evidence in psychology about the

dominance of negativity bias- or the tendency to experience bad or negative aspects of life stronger than positive ones. Hence, to counter negativity bias, lower negative affect, increase positivity bias and increase positive affect, it has become necessary to give special attention to emotional regulatory tool of positive reappraisal.

Positive reappraisal works because it is not a defense mechanism against negativity in life nor is it an avoidance strategy that encourages repression or suppression of unwanted emotions or thoughts. On the contrary, reappraisal works because it allows for an engagement with the cause of negativity or stress. A mindful positive reappraisal is effective because the distance created in observing those thoughts or emotions creates a space where reappraising takes place- a space where transformation is possible.

Besides enhancing concepts about the self (emotions, self-perception) positivity is also important for a positive educational experience. Morrish et al. (2018), among many others, argue that an optimal educational experience requires positivity and overturning negativity in college students. By fostering positive emotions and encouraging a positive outlook of events, positive reappraisal is pivotal in not only keeping negativity within limits but in fostering motivation and eudemonic well-being for college students. In all important respects, learning marked by negativity, whether academic performance, negative self-perception of one's capabilities, is by definition counterproductive (Knoop, 2013). Moreover, learning that lacks meaning, is at best highly ineffective (Knoop, 2013). This author goes on to suggest education needs first and foremost to be a positive and inspiring experience. This study's findings on college students' eudemonic well-being offer an initial answer. Education can be a positive experience by helping college students first cultivate positive view of self and capabilities. It is within that positive

framework where education has the potential to foster individual meaning and purpose; thereby promoting a positive educational experience to the undergraduate.

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APPENDIX A
INSTITUTIONAL REVIEW BOARD APPROVAL



Date: 02/23/2022

Principal Investigator: Maha Ben Salem

Committee Action: **IRB EXEMPT DETERMINATION – New Protocol**

Action Date: 02/23/2022

Protocol Number: [2202035469](#)

Protocol Title: OVERCOMING INNER AND OUTER CONSTRAINTS TO ENHANCE EMERGING ADULT COLLEGE STUDENTS EUDAEMONIC WELL-BEING

Expiration Date:

The University of Northern Colorado Institutional Review Board has reviewed your protocol and determined your project to be exempt under 45 CFR 46.104(d)(702) for research involving

Category 2 (2018): EDUCATIONAL TESTS, SURVEYS, INTERVIEWS, OR OBSERVATIONS OF PUBLIC BEHAVIOR. Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met: (i) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects; (ii) Any disclosure of the human subjects' responses outside the research would not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation; or (iii) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by 45 CFR 46.111(a)(7).

You may begin conducting your research as outlined in your protocol. Your study does not require further review from the IRB, unless changes need to be made to your approved protocol.

As the Principal Investigator (PI), you are still responsible for contacting the UNC IRB office if and when:

APPENDIX B
SURVEY CONSENT FORM



CONSENT FORM FOR HUMAN PARTICIPANTS IN RESEARCH
University of Northern Colorado

Researchers: Maha Ben Salem, Ph.D. student, Educational Psychology, phone xxxxxx, email: maha.bensalem@unco.edu
Nancy. Karlin, Ph.D., Professor, School of Psychological Sciences. phone: 970-351-2717

Project Title: *Overcoming inner and outer constraints to enhance emerging adult college students eudaemonic well-being: a mixed method study”.*

Project Description. We are exploring the relationship between habits of mind and general well-being of college students to college. The central goal of our research is to understand the degree to which different habits of students and perception of self and outside events enhance well-being of students in college.

Procedure for Participation If you agree to take part in this study, you will be asked to complete an online questionnaire twice: upon receiving this link and one more time after 4 weeks. This questionnaire will ask about your thought habits, well-being and it will take you approximately 30-55 minutes to complete.

Confidentiality. Because you are asked to fill in the questionnaire twice, we need to be able to connect each participant’s identity with his or her data. Therefore, you’ll be asked to create a pseudo-name as your identifier and provide your email. Therefore, we cannot maintain participant full anonymity. However, in order to ensure maximum confidentiality, we will adhere to the following procedures: all of your data will be electronically recorded and stored with only a random, three digit identifying number. In other words, your email or any other self-identifying information will not be included on any of the stored data. Additionally, as you have been asked to provide email for this survey, please know that it will be removed immediately from your data set and stored in a separate secured file, away from any other data. Other than the researchers, no one will have access to your individual data. No information about you will be shared with professors, students, or anyone else. We will maintain the highest possible standards for protection of privacy.

Only minimal risk and discomfort is anticipated for participants. This risk is the same as an individual would experience in completing an online survey

Participation is voluntary. You may decide not to participate in this study and if you begin participation you may still decide to stop and withdraw at any time. Your decision will be respected and will not result in loss of benefits to which you are otherwise entitled. Having read the above and having had an opportunity to ask any questions, please sign below if you would like to participate in this research. A copy of this form will be given to you to retain for future reference. If you have any concerns about your selection or treatment as a research participant, please contact the Office of Research, Kepner Hall, University of Northern Colorado Greeley, CO 80639; 970-351-1910.

APPENDIX C
SURVEY QUESTIONS

1. Below you will find a list of statements. Please rate the truth of each statement as it applies to you. Choose the number that corresponds to your response. Use the following scale to make your choice (i.e., 1 = Never, 5 = All the time).

1	2	3	4	5
Never	Rarely	Sometimes	Often	All the Time

- | | | | | | |
|--|---|---|---|---|---|
| 1. I am better able to accept myself as I am | 1 | 2 | 3 | 4 | 5 |
| 2. I can slow my thinking at times of stress. | 1 | 2 | 3 | 4 | 5 |
| 3. I notice that I don't take difficulties so personally. | 1 | 2 | 3 | 4 | 5 |
| 4. I can separate myself from my thoughts and feelings. | 1 | 2 | 3 | 4 | 5 |
| 5. I can take time to respond to difficulties. | 1 | 2 | 3 | 4 | 5 |
| 6. I can treat myself kindly. | 1 | 2 | 3 | 4 | 5 |
| 7. I can observe unpleasant feelings without being drawn into them. | 1 | 2 | 3 | 4 | 5 |
| 8. I have the sense that I am fully aware of what is going on around me and inside me. | 1 | 2 | 3 | 4 | 5 |
| 9. I can actually see that I am not my thoughts. | 1 | 2 | 3 | 4 | 5 |
| 10. I am consciously aware of a sense of my body as a whole. | 1 | 2 | 3 | 4 | 5 |
| 11. I view things from a wider perspective | 1 | 2 | 3 | 4 | 5 |

2. Think about a stressful event and how you reacted to it.. Please rate the truth of each statement as it applies to you. Choose the number that corresponds to your response. Use the following scale to make your choice (i.e., 1 = Never, 5 = All the time).

1	2	3	4	5
Never	Rarely	Sometimes	Often	almost always

1. I think I can learn something from the situation.
2. I think that I can become a stronger person as a result of what has happened.
3. I think that the situation also has its positive sides
4. I look for the positive sides to the matter

3. Please think about what you have been doing and experiencing during the past four weeks. Then report how much you experienced each of the following feelings, using the scale below. For each item, select a number from 1 to 5.

Positive	1. Very Rarely or Never	2. Rarely	3. Sometimes	4. Often	5. Very Often or Always Positive
Negative	1. Very Rarely or Never	2. Rarely	3. Sometimes	4. Often	5. Very Often or Always Positive
Good	1. Very Rarely or Never	2. Rarely	3. Sometimes	4. Often	5. Very Often or Always Positive
Bad	1. Very Rarely or Never	2. Rarely	3. Sometimes	4. Often	5. Very Often or Always Positive
Pleasant	1. Very Rarely or Never	2. Rarely	3. Sometimes	4. Often	5. Very Often or Always Positive
Unpleasant	1. Very Rarely or Never	2. Rarely	3. Sometimes	4. Often	5. Very Often or Always Positive
Happy	1. Very Rarely or Never	2. Rarely	3. Sometimes	4. Often	5. Very Often or Always Positive
Sad	1. Very Rarely or Never	2. Rarely	3. Sometimes	4. Often	5. Very Often or Always Positive
Afraid	1. Very Rarely or Never	2. Rarely	3. Sometimes	4. Often	5. Very Often or Always Positive
Joyful	1. Very Rarely or Never	2. Rarely	3. Sometimes	4. Often	5. Very Often or Always Positive
Angry	1. Very Rarely or Never	2. Rarely	3. Sometimes	4. Often	5. Very Often or Always Positive
Contented	1. Very Rarely or Never	2. Rarely	3. Sometimes	4. Often	5. Very Often or Always Positive

4. Please take a moment to think about what makes your life and existence feel important and significant to you. Please respond to the following statements as truthfully and accurately as you can, and also please remember that these are very subjective questions and that there are no right or wrong answers. Please answer according to the scale below:

Absolutely Untrue	Mostly Untrue	Somewhat Untrue	Can't Say True or False	Somewhat True	Mostly True	Absolutely True
1	2	3	4	5	6	7

1. I understand my life's meaning. _____
2. I am looking for something that makes my life feel meaningful. _____
3. I am always looking to find my life's purpose. _____
4. My life has a clear sense of purpose. _____
5. I have a good sense of what makes my life meaningful. _____
6. I have discovered a satisfying life purpose. _____
7. I am always searching for something that makes my life feel significant. _____
8. I am seeking a purpose or mission for my life. _____
9. My life has no clear purpose. _____
10. I am searching for meaning in my life. _____

5. Below is a list of statements dealing with your general feelings about yourself. Please indicate how strongly you agree or disagree with each statement.

	Strongly Disagree	Disagree	Agree	Strongly Agree
1. On the whole, I am satisfied with myself.	1	2	3	4
2. At times I think I am no good at all.	1	2	3	4
3. I feel that I have a number of good qualities.	1	2	3	4
4. I am able to do things as well as most other people.	1	2	3	4
5. I feel I do not have much to be proud of.	1	2	3	4
6. I certainly feel useless at times.	1	2	3	4
7. I feel that I'm a person of worth, at least on an equal plane with others.	1	2	3	4
8. I wish I could have more respect for myself.	1	2	3	4
9. All in all, I am inclined to feel that I am a failure.	1	2	3	4
10. I take a positive attitude toward myself.	1	2	3	4

6. Using the scale below, indicate to what extent each of the following items presently corresponds to one of the reasons why you go to college.

7.

Does not correspond at all	Corresponds a little	Corresponds moderately	Corresponds a lot	Corresponds exactly
-------------------------------	-------------------------	---------------------------	----------------------	------------------------

WHY DO YOU GO TO COLLEGE?

1. Because with only a high-school degree I would not find a high-paying job later on.
1 2 3 4 5 6 7
2. Because I experience pleasure and satisfaction while learning new things.
1 2 3 4 5 6 7
3. Because I think that a college education will help me better prepare for the career I have chosen.
1 2 3 4 5 6 7
4. For the intense feelings I experience when I am communicating my own ideas to others.
1 2 3 4 5 6 7
5. Honestly, I don't know; I really feel that I am wasting my time in school.
1 2 3 4 5 6 7
6. For the pleasure I experience while surpassing myself in my studies.
1 2 3 4 5 6 7
7. To prove to myself that I am capable of completing my college degree.
1 2 3 4 5 6 7
8. In order to obtain a more prestigious job later on.
1 2 3 4 5 6 7
9. For the pleasure I experience when I discover new things never seen before.
1 2 3 4 5 6 7
10. Because eventually it will enable me to enter the job market in a field that I like.
1 2 3 4 5 6 7
11. For the pleasure that I experience when I read interesting authors.
1 2 3 4 5 6 7
12. I once had good reasons for going to college; however, now I wonder whether I should continue.
1 2 3 4 5 6 7
13. For the pleasure that I experience while I am surpassing myself in one of my personal accomplishments.
1 2 3 4 5 6 7
14. Because of the fact that when I succeed in college, I feel important.
1 2 3 4 5 6 7
15. Because I want to have "the good life" later on.
1 2 3 4 5 6 7

16. For the pleasure that I experience in broadening my knowledge about subjects which appeal to me.

1 2 3 4 5 6 7

17. Because this will help me make a better choice regarding my career orientation.

1 2 3 4 5 6 7

18. For the pleasure that I experience when I feel completely absorbed by what certain authors have written.

1 2 3 4 5 6 7

19. I can't see why I go to college and frankly, I couldn't care less.

1 2 3 4 5 6 7

20. For the satisfaction I feel when I am in the process of accomplishing difficult academic activities.

1 2 3 4 5 6 7

21. To show myself that I am an intelligent person.

1 2 3 4 5 6 7

22. In order to have a better salary later on.

1 2 3 4 5 6 7

23. Because my studies allow me to continue to learn about many things that interest me.

1 2 3 4 5 6 7

24. Because I believe that a few additional years of education will improve my competence as a worker.

1 2 3 4 5 6 7

25. For the "high" feeling that I experience while reading about various interesting subjects.

1 2 3 4 5 6 7

26. I don't know; I can't understand what I am doing in school.

1 2 3 4 5 6 7

27. Because college allows me to experience a personal satisfaction in my quest for excellence in my studies.

1 2 3 4 5 6 7

28. Because I want to show myself that I can succeed in my studies.

1 2 3 4 5 6 7

8. For each of the following statements, please indicate your level of agreement or disagreement by circling one of the scale categories to the right of each statement. Use the scale as shown below:

	Strongly Disagree	Disagree	Agree	Strongly Agree
1. I can follow the lessons easily.	1	2	3	4
2. If I work hard, I think I can go to the college or university.	1	2	3	4
3. I pay attention to the teachers during lessons	1	2	3	4
4. I study hard for my tests	1	2	3	4
5. I am usually interested in my schoolwork	1	2	3	4
6. I am willing to do my best to pass all the subjects.	1	2	3	4
7. I daydream a lot in class.	1	2	3	4
8. I often forget what I have learnt.	1	2	3	4
9. I get frightened when I am asked a question by the teachers.	1	2	3	4
10. I often feel like quitting school.	1	2	3	4
11. I am always waiting for the lessons to end.	1	2	3	4
12. I always do poorly in tests.	1	2	3	4
13. I am not willing to put in more effort in my schoolwork.	1	2	3	4
14. I do not give up easily when I am faced with a difficult question in my schoolwork.	1	2	3	4

- | | | | | |
|--|---|---|---|---|
| 15. Most of my classmates are smarter than I am. | 1 | 2 | 3 | 4 |
| 16. I am good in most of my school subjects. | 1 | 2 | 3 | 4 |
| 17. I often do my homework without thinking. | 1 | 2 | 3 | 4 |
| 18. My teachers feel that I am poor in my work | 1 | 2 | 3 | 4 |
| 19. I am able to do better than my friends in most subjects. | 1 | 2 | 3 | 4 |

9. The following statements refer to how you may feel things have been going in your life. Read each statement and decide the extent to which you agree or disagree with it. Try to respond to each statement according to your own feelings about how things are actually going, rather than how you might wish them to be. Please use the following scale when responding to each statement. Strongly Disagree 0 1 2 3 4 Strongly Agree

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I find I get intensely involved in many of the things I do each day.	0	1	2	3	4
2. I believe I have discovered who I really am.	0	1	2	3	4
3. I think it would be ideal if things came easily to me in my life.	0	1	2	3	4
4. My life is centered around a set of core beliefs that give meaning to my life.	0	1	2	3	4
5. It is more important that I really enjoy what I do than that other people are impressed by it.	0	1	2	3	4
6. I believe I know what my best potentials are and I try to develop them whenever possible.	0	1	2	3	4
7. Other people usually know better what would be good for me to do than I know myself.	0	1	2	3	4
8. I feel best when I'm doing something worth investing a great deal of effort in.	0	1	2	3	4
9. I can say that I have found my purpose in life.	0	1	2	3	4
10. If I did not find what I was doing rewarding for me, I do not think I could continue doing it.	0	1	2	3	4
11. As yet, I've not figured out what to do with my life.	0	1	2	3	4
12. I can't understand why some people want to work so hard on the things that they do	0	1	2	3	4

13. I believe it is important to know how what I'm doing fits with purposes worth pursuing.	0	1	2	3	4
14. I usually know what I should do because some actions just feel right to me.	0	1	2	3	4
15. When I engage in activities that involve my best potentials, I have this sense of really being alive.	0	1	2	3	4
16. I am confused about what my talents really are.	0	1	2	3	4
17. I find a lot of the things I do are personally expressive for me.	0	1	2	3	4
18. It is important to me that I feel fulfilled by the activities that I engage in.	0	1	2	3	4
19. If something is really difficult, it probably isn't worth doing.	0	1	2	3	4
20. I find it hard to get really invested in the things that I do.	0	1	2	3	4
21. I believe I know what I was meant to do in life.	0	1	2	3	4

APPENDIX D
DEMOGRAPHIC SURVEY

What is your age? _____

What is your ethnic origin?

Hispanic

White/Non-Hispanic

Black/African American

Native American

Asian/Pacific Islander

Other _____

What is your gender? Female Male Other _____

What is your college standing?

Freshman

Sophomore

Junior

Senior

Major _____

Grade Point Average _____ (range of 0.0 to 4.0)

Select the one that best describes our social class.

Lower

Working

Middle

Upper Middle

Upper

Marital Status:

Single, never married

Married or domestic partnership

Widowed

Divorced

Separated

APPENDIX E
INTERVENTION QUESTIONS AND
CONSENT FORM

Intervention 1

Thank you for volunteering to participate in the online reflection for student well-being study. This is the first of 4 interventions. Next week you'll receive a different link for the second intervention.

Remember you are using a fake name for this activity; your answers are anonymous and there are no right or wrong answers. We want you to report your honest genuine reflections.

1. Please lean back and relax for a moment. If you want to, you can close your eyes. Allow yourself to explore your thoughts and keep an open mind while you engage in this activity. First please complete the breathing technique: Keep count of the number of seconds it takes you to inhale, and then to exhale, for three full breaths. Now relax and take some time to recall a negative event (preferably academically related) that happened to you within the last seven days. As you recall the negative situation (an experience that caused negative thoughts and/or negative emotions), please try to do so objectively without evaluating the situation or making judgments about what happened. Pretend as if you are an outsider viewing the situation with no background knowledge.

1. Think about what happened exactly? Where did it happen? What did you do or say? Were you alone or were other people involved? How did you feel? why do you think you felt that way? If another person was (or several people were) involved, what exactly did they do or say? Write a summary below (You can avoid details. Report what you are comfortable sharing about the experience):

2. What are some other ways that you could view the situation.

3. Explain how can you find personal meaning in this situation?

4. Think of the benefits you may have gained from your experience (such as self-understanding, insight, or improvement in a relationship) and describe your **thoughts and feelings** associated with those benefits (such as empowerment and relief).
5. Explain how can you learn from this situation? How can dealing with this situation make you stronger person? how it will help you in your future experiences. Is there a blessing in disguise there?

Please finish the exercise by completing the breathing technique again. Keep count of the number of seconds it takes you to inhale, and then to exhale, for 3 full breaths to allow yourself to focus on the present moment.

Write down any comment you want to add on the overall reflection:

We hope that you gained some insights from today's activity. Researchers say that even when we cannot control any situation, we always have the choice on how we react or respond to the situation. It is not about suppressing negative emotions nor about denial, but about teaching your mind to learn from any situation. In the coming few days, we encourage you to think about using the same technique above (i.e., positive reappraisal) to shift your mindset around any unpleasant situation that may come up and trigger negativity.

Intervention 2

Hello! and welcome back to Intervention 2 of Students' wellbeing study!

Today's intervention consists of two parts (a free writing exercise followed by quick 1 MCQ and two very short questions).

First, we are going to do some writing about your thoughts, attitudes and feelings about college, classes you go to, your perception of yourself a student. This technique requires uninterrupted

writing for 6-10 minutes. It is a very simple technique; you start writing about college/classes/your perception of yourself a student in the space given below. You need to write about how you feel and think about college, your classes, your perception of yourself as a college student. Please use the guiding questions mentioned below in your reflections. Remember you are using a fake name for this activity; your answers are anonymous and there are no right or wrong answers. We want you to report your honest genuine reflections.

Please do not rush in this exercise. Find a quiet space where you know you won't be uninterrupted for next 10 minutes (this is very important!!).

a. We invite you to express your thoughts, feelings, and experiences about education/ college/ classes you go to. Please use these guiding questions in your reflection:

Do you feel good about yourself as you are walking to class?

What do you feel about college and about the classes you go to?

What thoughts go in your head as you head to classes?

What feelings or emotions you have as you head to classes?

How do you feel when you sit to do your homework? What ideas/ thoughts go in your mind?

Please write your answers in the space below.

b. What are the challenges you think are associated with college/classes?

c. When you are stressed about college/education, how does it feel in your body?

d. What are some examples of negative thoughts or self-defeating behaviors that may delay or block the pursuit of your goals/ finishing projects/ doing homework?

e. Do you like what you are studying?

f. How can you make education meaningful to you? How can you find meaning in the classes you are taking? (goal-oriented meaning or personal meaning) Goal oriented meaning: for example, Classes allow you to learn new things, learning this material will help you achieve bigger goals toward your dream job etc., or Personal meaning: for example: doing well in class makes feel good about who you are, you like yourself more when you see yourself learning? etc...)

Intervention 3

Hello! and welcome to Intervention 3 of Students' well-being study! Today's intervention consists of two parts (a future self-exercise with follow up questions and a quick 1 MCQ). Your contribution is highly valued. We appreciate the time you give to complete this intervention and we hope you leave with new gained insights.

a. Imagine your future self (your best self in 5-10 years). Write about a future where everything unfolds as its best possible outcome. Write about your best happiest, healthiest self, best qualities, best decisions, best behaviors and thought patterns that have made that best future-self possible.

b. Next: Think about one or two things you don't really like about yourself: a quality, a behavior, a negative thought about yourself etc.

If that thought or behavior is not serving you to be the best self you know you can be, you have the choice to consciously make a change.

c. Think about the best future self you described above. Explain what steps you can concretely take, what shift in thought-pattern you need to make to develop that quality or to make the change you know you need to get closer top that ideal future (For example: treat

negative thoughts or negative emotions as triggers to make a change, focus on the positive in your life/ in your relationships/ environment, try to find meaning and value in what you do etc.)

d. Now for the last activity, click on as many options as you want, which you associate with how do you see yourself, what you think about who you are, and if you think the exercise above helped you see change is possible.

Worthy

Happy

Positive

Sad

I love who I am

I don't feel worthy

I expect failure

I know I change

This exercise makes me realize I can be better and improve myself

So, what. I don't think that will help change how I think about myself

I think if I keep repeating this exercise consciously, I can change my thought pattern

I look forward to my best possible self

I think I deserve the best in life

I don't think change is possible

I think change is possible

Thank you so much for your time and all the responses. I hope you might have gained some insights about your attitudes towards the self while answering some of these questions.

Intervention 4

Hello! and welcome to Intervention 4 and last online reflection of Students' well-being study! Your contribution is highly valued. We appreciate the time you give to complete this intervention and we hope you leave with new gained insights about cultivating positive attitude yourself and toward your education. Remember you are using a fake name for this activity; your answers are anonymous and there are no right or wrong answers. We want you to report your honest genuine reflections.

We hope the last three activities (positive reappraisal/ reinterpreting negative events and finding alternative explanation or positive aspects to any situation and projecting your thoughts toward your future self) gave you some insights on how to cultivate to think positively towards yourself and also toward your education. We hope that it helped you become aware that even if you feel upset or experience negativity, you still have a CHOICE about how you think about the situation and how you respond to the situation.

Today we are doing one fun activity which will require you to be a bit imaginative and creative, or you can use the insights you have gained in last 3 activities. So, in this reflection, you will be pondering and writing about few activities:

(1) Your INNER DIALOGUE: do you need to change how you talk to yourself about yourself and/or about life?

Take a moment to reflect on your inner dialogue, will you talk to someone else as you talk to yourself? if not, what can you do to change that?

(2) Dealing with negativity: how will you be Re-seeing negative situations and Re-seeing yourself as someone deserving and capable etc. Think about thought or habits of minds you can cultivate etc.,

(3) Activities which you would like to do in the future which will increase your happiness, shift your focus toward the positive, and which will make your attitude towards classes you are taking and toward your education more positive, or will reduce stress around that.

a. Take few minutes to reflection on that. Then, below: Write about ANY or ALL of these activities that YOU think will help You increase your positive perception towards who you are, and toward what you do (your education).

b. After you finish the activities above, please write down at least 5 words that describe your attitude toward yourself (how you think about yourself):

c. Now write 5 words that describe your attitude toward your classes/your education and how you see yourself as a student.

Thank you so much for your time and all the responses. We hope you might have gained some positive insights while answering some of these questions.



CONSENT FORM FOR HUMAN PARTICIPANTS IN RESEARCH
University of Northern Colorado

Researchers: Maha Ben Salem, Ph.D. student, Educational Psychology, phone: XXXXXX, email: maha.bensalem@unco.edu

Nancy. Karlin, Ph.D., Professor, School of Psychological Sciences, phone: 970-351-2717, email: nancy.karlin@unco.edu

Project Title: *Overcoming inner and outer constraints to enhance emerging adult college students eudaemonic well-being: a mixed method study”.*

Project Description. We are exploring the relationship between habits of mind and general well-being of college students to college. The central goal of our research is to understand the degree to which different habits of students and perception of self and outside events enhance well-being of students in college.

Procedure for Participation If you agree to take part in this intervention, you will be asked to complete weekly online activities. The online activities will ask about your thought habits, well-being and it will take you approximately 5-7 minutes to complete.

Confidentiality. Because you are asked to complete four online activities, we need to be able to connect each participant’s identity with his or her data. Therefore, you’ll be asked to create a pseudo-name as your identifier and provide your email. Therefore, we cannot maintain participant full anonymity. However, in order to ensure maximum confidentiality, we will adhere to the following procedures: all of your data will be electronically recorded and stored with only a random, three digit identifying number. In other words, your email or any other self-identifying information will not be included on any of the stored data. Additionally, as you have been asked to provide email for this survey, please know that it will be removed immediately from your data set and stored in a separate secured file, away from any other data. Other than the researchers, no one will have access to your individual data. No information about you will be shared with professors, students, or anyone else. We will maintain the highest possible standards for protection of privacy.

Only minimal risk and discomfort is anticipated for participants. This risk is the same as an individual would experience in reflecting and journaling.

Participation is voluntary. You may decide not to participate in this study and if you begin participation, you may still decide to stop and withdraw at any time. Your decision will be respected and will not result in loss of benefits to which you are otherwise entitled. Having read the above and having had an

opportunity to ask any questions, please sign below if you would like to participate in this research. A copy of this form will be given to you to retain for future reference. If you have any concerns about your selection or treatment as a research participant, please contact the Office of Research, Kepner Hall, University of Northern Colorado Greeley, CO 80639; 970-351-1910.

APPENDIX F
INTERVIEW QUESTIONS

1. How do you hear about the study? What motivated you to participate in the interventions?
2. What are your thoughts about the interventions?
3. If you were to recommend one to your peers that you think is helpful or beneficial which one would you say has made difference for you? Why?
4. What did you learn from these interventions.
5. Do you see any use of these interventions in your life? What can you apply now? In the future?
6. How do you manage stress in your life? Can you describe how do you deal with negative emotions/ thoughts?
7. What is important to you? what do you care about?
8. What do you want to be different about the world
9. Is there anything you may have not thought of that occurred to you during the interview?
10. Is there anything you would like to ask me?