

THE INFLUENCE OF EMOTION REGULATION ON THE EMOTIONAL WELL-BEING
AMONG DIVERSE COLLEGE STUDENTS

by

Shandia Gardiner Robertson

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

School of Behavioral Sciences

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ABSTRACT

Emotion regulation is essential as it may help to enhance long-term well-being, improve work performance, enrich personal relationships, and lead to better overall health. The purpose of this study was to investigate the correlation between emotion regulation and emotional well-being among diverse university students when moderated by perceived discrimination. A similar study was conducted by Lavanya and Manjula (2017), with an Indian student population divided into two groups. The study's findings showed a significant correlation between emotion regulation strategies and psychological problems among the two groups. Results indicated negative emotion regulation strategies were associated with psychological issues among group two participants. This current study aimed to explore the correlation between emotion regulation and emotional well-being among diverse college students when moderated by perceived discrimination. This study hoped to see whether the original research conducted by Lavanya and Manjula (2017) holds on a broader, more ethnically diverse community. However, this current study looked at emotional problems and did not wholly replicate the study of Lavanya and Manjula (2017). Measurement tools consisted of the Emotion Regulation Questionnaire (ERQ), which captures cognitive reappraisal and expression suppression and has excellent internal consistency and convergent validity. The Warwick-Edinburg Mental Well-Being Scale (WEMWBS) has effective reliability and validity and measures hedonic (happiness) and eudemonic elements (emotional functioning). Finally, The Everyday Discrimination Scale (EDS) measures the participant's levels of perceived discrimination in everyday life. For this quantitative study, a convenience sample of 79 college students was drawn from Liberty University psychology department in Lynchburg, Virginia, who identified as male, female, or other aged 19-28 years old. ERQ was used as the independent variable and WEMWBS as the dependent moderated by

the Everyday Discrimination Scale (EDS) and categorized by gender, race/ethnicity, and age. The study used a Multiple-Regression Moderation Model 1 test and a Moderated-Regression analysis on ERQ and WEMWBS scores.

Keywords: College students, emotion regulation, emotional well-being, cognitive reappraisal, expressive suppression

Dedication

This research is dedicated to my amazing daughter Hannah, my husband Paul, and my loving mother, Catherine. You all have supported and encouraged me to accomplish greatness, and I thank you and love you dearly.

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List of Abbreviations

Emotion Regulation (ER)

American College Health Association (ACHA)

Autism Spectrum Disorder (ASD)

Borderline Personality Disorder (BPD)

Cognitive Reappraisal (CR)

Expressive Suppression (ES)

Posttraumatic Growth (PTG)

Warwick Edinburg Mental Wellbeing Scale (WEMWBS)

Everyday Discrimination Scale (EDS)

Major Depressive Disorder (MDD)

Emotional Intelligence (EI)

Early Life Stress (ELS)

Self Regulation (SR)

Emotion Dysregulation (ED)

Intimate Partner Aggression (IPA)

CHAPTER ONE: INTRODUCTION

Overview

In this first chapter, various content will be shared relative to the research topic's surrounding issues. A historical overview regarding the literature and how it has evolved will be discussed. The problem statement will be identified and supported by the current literature, as well as the independent and dependent variables for this study will be identified. A brief description concerning the significance of this present study will be shared. It will include the sample being studied and the imperative need to understand the overarching goal. At this time, the proposed research question will be presented, which would have originated from the initial problem and purpose statement. Finally, to complete this chapter, pertinent terms used in the literature will be defined for concise understanding. The chapter will conclude with a detailed summary of the problem and purpose of the study.

Background

The foundation of emotions reaches back to historians like Herodotus and Tacitus, who discovered that there were not only different ways of speaking, eating, and living, but there were also different ways of feeling (Plamper & Tribe, 2015). The history of emotions represents one of the new genres and rapidly growing fields in the contemporary historical debate (Gul, Mubarik, & Mustafa, 2017). There are many fascinating works on human emotions and the different variations among cultures and historical intervals related to the expression of emotions. Emotions can be powerful. The expressions of behaviors such as empathy, awareness of social cues, and sympathetic reactions are all said to be noted within the brain's anterior cingulate (Uhernik, 2017). A study conducted by the neuroscience team demonstrated that the conscious experience of feeling an emotion is directly associated with specific brain wave oscillations

(Scherer, 2012). Thus, all emotions and thoughts may be directly connected to the frequency range of oscillations. Throughout the fourteenth century, the English described emotions as a category of feelings conveying a combination of both affective and mental processes (Downes & McNamara, 2016). Additionally, research has suggested that emotions are shaped by one's culture and societal norms (Aranguren, 2017). Because earlier studies mainly focused on the emotional state of work-related stress and strain, new research is now investigating emotional processes in academic settings (Becker, Goetz, Morger, & Ranellucci, 2014).

Emotions may allow human beings the ability to express themselves based on the information being processed. The grand theory of Aristotle suggested that emotions did not denote a single state but rather feelings accompanied by pleasure or pain, inclusive of anger, fear, joy, love, confidence, hatred, as well as longing and pity (Bound Alberti, 2018). Emotions may motivate adaptive behaviors in reaction to messages (Kim, 2016). Therefore, from an early age, emotions may develop as children learn to understand feelings and control them. Emotions play a fundamental part of personal well-being and may predict learning and career outcomes (Becker et al., 2014). How emotions arise and unfold over time is referred to as the modal model of Emotion. The Modal Model of Emotion, which Gross and Thompson (2007) developed, highlights various steps in the emotion-generative process (Gross & Jazaieri, 2014). This includes the situation that compels attention, evaluating that situation, and the multisystem whole-body response (Gross & Jazaieri, 2014).

Emotions involve a person's mental state of readiness that then arise from cognitive appraisals of events or thoughts that are often expressed either physically using gestures, posture as well as facial features (Gunaratne, T, Gonzalez, Fuentes, Torrico, Gunaratne, N, Ashman, &

Dunshea, 2019). Emotions are skills. As people continue to evolve, they learn through experiences and learn to make sense of their emotional reactions (Mercer, 2019).

Very early in life, emotion regulation skills may have profound values. They may help individuals gain the ability to respond to environmental stimuli in a regulated manner. Emotions are essential as they play an integral part of personal well-being and predict vital learning and career-related outcomes inclusive of learning strategies (Becker et al., 2014). Studies have suggested that students spend significant amounts of time in the classroom, in an interactive setting flooded with emotions (Becker et al., 2014). Likewise, academic settings are pretty diversified and may potentially be emotionally challenging. Students experience various achievements during demanding phases, such as pride, enjoyment, anxiety, or anger (Respondek, Seufert, & Nett, 2019). The rapid and extensive social changes college students experience may be quite overwhelming, possibly impacting regulating healthy emotions.

Recent studies on emotion regulation have indicated that deficits in emotion regulation abilities lead to diminished coping resources (Pennequin, Questel, Delaville, Delurge, & Maintenant, 2019). Emotion regulation strategies like cognitive reappraisal and expressive suppression have been influential in understanding the dynamics of emotions and how they are regulated. Cognitive reappraisal involves being open and attentive to one's thoughts or thinking about the situation differently (Daros, Daniel, Meyer, Chow, Barnes, & Teachman, 2019). However, expressive suppression may involve a person trying not to attend to one's thoughts or trying to think about something else (Daros et al., 2019), which endorses avoidance. Studies by Brockmeyer, Holforth, Pfeiffer, Backenstrass, Friederich, and Bens (2012) have suggested that

“permanent avoidance of negative emotions may foreclose an adequate development of emotion regulation skills” (p. 353).

Individuals, in particular, college students, are confronted with many emotional challenges. These challenges might derive anywhere from a lack of social capital interventions focused on empowering students (Schwartz, Kanchewa, Rhodes, Gowdy, Stark, Horn, Parnes, & Spencer, 2018) to limited access to resources that assist students in helping them achieve academic and social success (Opsal & Eman, 2018).

In a previous study, it was also revealed that when sexual situations trigger a fear of sexual powerlessness, women must call on their ability to mindfully regulate their emotions in an attempt to manage that fear (Zerubavel & Messman-Moore, 2013). While this study urged the need for sexual assertiveness and empowerment-based prevention intervention, it also highlights the possibility one possesses when effectively managing their own emotions and the imperative need for healthy regulating of one’s emotions when presented with a stressful event.

Emotions are essential to human existence. They demonstrate reactions to circumstances containing knowledge and assessments of reality, all possessing their intelligence (Leget, 2018). Emotions have been under investigation for centuries and are affective responses that govern our daily lives (Ramer, Zorotovich, Roberson, Flanigan, & Gao, 2019). Previous studies have focused on negative emotions and reasons for low levels of regulations, which are believed to be mainly the cause of life problems (Ramer et al., 2019). However, research has suggested incorporating meditation, expression of gratitude, visualization, and mindfulness as activities to boost positivity (Ramer et al., 2019).

The process of evolving into an independent, self-sustaining individual may be very lengthy and filled with complex emotions. Hence, it is believed that during this evolving process, persons find themselves trying to balance instituting personal independence while also seeking to maintain continued dependence on caregivers for various assets (Ramer et al., 2019). Research has examined individuals' tendencies to suppress emotions often outweigh those tendencies to reappraise the causes of those unwanted emotions triggered by a stressful event (Blalock, Kashden, & Farmer, 2016). Because individuals with emotion regulation deficits may be at risk for externalizing and internalizing disorders (Steinberg & Drabick, 2015), it may be vital to possess healthy controls of emotion regulation for dealing with life stressors. Studies have analyzed emotion regulation with schizophrenia patients advocating the importance of emotion regulation in schizophrenia, indicating the substantial influence on social functioning that is above the impact of neurocognitive functioning (Nowicka, 2014).

Emotions are instilled in human beings' lives (Kim, Bigman, & Tamir, 2015), and healthy regulation may be essential for overall well-being and life satisfaction. Positive emotions build enduring aspects of character that may support living according to one's values and play a role in building enduring aspects of character, such as ego-resilience (Seaton & Beaumont, 2015). Thus, because studies have highlighted the essentialness of healthy regulation of emotions, this study will explore in-depth emotions and how emotion regulation may influence diverse college student's emotional well-being.

Problem Statement

College students often may engage in unhealthy behaviors, placing them at risk for developing severe health problems later in life (Balwin, Towler, Oliver, & Datta, 2017). In the

United States, studies have shown that an estimated 26% of Americans aged 18 and older, or about 1 in 4 adults, experience symptoms associated with a mental disorder (Salzer, 2012). In one study, it was said that college students tend to internalize their problems, which is a common trait among college students with further linkage to consistent deficits in emotion regulation (Asberg, 2013). Sixty-three percent of college students reported feelings of overwhelming anxiety, 42 percent reported being depressed, while 12 percent had suicidal ideations (American College Health Association, 2018) (ACHA, 2018). Other studies identified that early life stress (ELS) in females had been found to be a significant risk factor in the development of Major Depressive Disorder (MDD) (Colich, Williams, Ho, King, Humphreys, Price & Gotlib, 2017).

While Lavanya and Manjula (2017) have examined the correlation between emotion regulation and psychological problems in college students, further research is needed to explore student's emotional wellbeing and factors that may have further contributed to students' psychological problems. Lavanya and Manjula (2017) describe various characteristics impacting psychological health; still, little is mentioned regarding emotional issues that may have contributed or may have been exacerbated due to different environmental and social factors. Factors may include fear, anxiety, and sadness, which may all have negative ramifications on emotional state and are associated with high levels of negative affect or neuroticism and likely play a pivotal role in emotional disorders (Cassello-Robbins & Barlow, 2016). Other studies have revealed that college students faced higher rates of health and emotional problems, all resulting in lower academic performance (Valerio, Kim & Sexton-Radek, 2016).

Studies by the ACHA (2018) showed alarming emotional distress rates among college students, with high percentages of students reporting feelings of hopelessness, sadness, anxiety,

loneliness, feeling overwhelmed or angry and suicidal ideations (Schwartz, 2019). While Lavanya and Manjula (2017) have examined the correlation between emotion regulation and psychological problems in college students; further research is needed to explore student's overall emotional well-being, and factors such as stress and poor sleep are all said to be significant problems among college student's (Valerio, Kim & Sexton-Radek, 2016). Studies have revealed factors among college students such as relationship difficulties 4.7%, homesickness 4.3%, stress 31.9%, work, 12.5%, drug use 1.6%, alcohol use 2.5%, and sleep difficulties 20.2% all said to impact students academic performance (ACHA, 2018) negatively.

Sadness is thought to be associated with specific body parts and pain properties (Shirai & Soshi, 2019). It represents physical pain as an emotional concept that is said to be based on interactions between the body and external situations (Shirai & Soshi, 2019). These external situations may even lead to more significant mental health problems. When thoughts begin to become powerful and overwhelming, one's emotional state is threatened, and painful trauma-related memories are triggered (Briere & Scott, 2015). Therefore, emotional problems may be shaped by changes in a person's brain chemicals due to exposure to trauma-related events. Studies have shown that 66% of college students have experienced one or more criterion A traumas (Meyer & Stanick, 2018). Exploring emotion regulation and how students regulate it may help diffuse emotional triggers and further explain the high rates of emotional disorders among college students, as identified by the ACHA (2018).

Purpose Statement

The purpose of this study was to explore the correlation between emotion regulation and emotional well-being among diverse college students when moderated by perceived

discrimination. This was accomplished by conducting an exploratory examination of the various influences emotion regulation (cognitive reappraisal and expressive suppression) have on diverse college students' emotional well-being. Emotions are affective responses as they govern our daily lives (Ramer et al., 2019). Thus, this study wanted to investigate the impact of emotion regulation on college students' emotional well-being when moderated by perceived discrimination and controlled for gender, race, and age.

This present study hoped to see whether Lavanya and Manjula's (2017) theory holds when applied to diverse cultures. It intended to determine if there is a difference in the way students from different cultures manage their emotions, and if there is, what might the significance be when moderated by perceived discrimination. Psychological health problems can be attributed to many factors, such as physical or sexual abuse. However, this study felt an imperative need to specifically study emotional aspects to determine whether low levels of emotion regulation impact college students' overall emotional well-being. Finally, this study utilized college students between the ages of 19 and 28 who were enrolled in undergraduate and master's level classes. The Independent variable was emotional regulation scores (ERQ), the dependent variable was the Warwick-Edinburgh Mental Well-Being Scale (WEMWBS), and perceived discrimination was the moderator.

Significance of the Study

Studies have shown that emotions retain a primacy that subtly pervades human beings' mental life, guiding the rest of the brain and cognition on how to go about their business (O'Regan, 2019). Thus, understanding emotions is essential as well as the influential role of emotion regulation and its foundation in the lives of college students. Emotions have a long

history of human evolution as experienced directly in the body (Nummenmaa, Glerean, Hari, & Hietanen, 2014). Emotions prepare us to meet various challenges encountered in the environment by making adjustments to the activation of the cardiovascular, skeletomuscular, neuroendocrine, and autonomic nervous systems (Nummenmaa et al., 2014). When there are healthy levels of emotion regulation, it improves self-regulation, manages frustrations college life may bring, and may assist in controlling impulsive behaviors fostering resilience. Previous studies have shown that healthy emotion regulation levels are a direct mediator for resilience (Vaughan, Koczwara, Kemp, Freytag, Tan, & Beatty, 2019). When individuals are better able to identify and understand their emotions, this may also be beneficial in developing emotional intelligence (EI). EI is said to predict emotional awareness, self-motivation, and managing emotions and stress (Coccaro, Drossos, & Phillipson, 2016), which are all necessary skills for college students to have.

Studies have indicated that 85-99% of college students reported having been exposed to at least one stressful life event in their lifetime (Owens, Held, Hamrick, & Keller, 2018). Becoming aware of one's emotional state and being equipped with the necessary emotion regulation skills may contribute to less distress in college students, further promoting healthy levels of emotional well-being. Research has shown that high scores of emotion regulation may have a tremendous effect on an individual's happiness, while lower levels may contribute to depression (Extremera & Rey, 2015). Through disorganized attachment behaviors, feelings of threat, separation, and loss may foster painful and challenging emotions to emerge and often remain unintegrated (Gumley & International Society for Psychological and Social Approaches to Psychosis, 2013). Thus, this study was critical because it aimed to bring awareness to the importance of understanding emotions. It also sheds light on college students' emotional

problems because of having low emotion regulation, which may further contribute to more declining emotional well-being and other mental health problems. Additionally, this study highlighted the imperative need for effective emotion regulation strategies to be implemented on college campuses to help prepare students for challenges they may encounter as they pursue higher education. Conducting this study further contributes to the growing field of emotion regulation and its effectiveness in promoting good health among college populations, helping them learn ways to effectively regulate their emotions and may assist in preventing other mental disorders.

Research Question

RQ1: Does Emotional Regulation (cognitive reappraisal and expressive suppression) influence diverse college student's emotional well-being when moderated by perceived discrimination and controlled for gender, race, and age?

Definitions

1. *Cognitive Reappraisal*-Cognitive Reappraisal involves changing how we think about a situation in order to decrease the emotional impact (Patel, Nivethitha, & Mooventhan, 2018)
2. *Discrimination*- Discrimination that is perceived by the individual resulting in physical and mental health outcomes (Williams, Lawrence, Davis, & Vu, 2019)
3. *Emotions*- Emotions are the body's way of processing social conditions and may operate both as a conscious and nonconscious (Cottingham & Fisher, 2016)
4. *Emotional Regulation*- Emotional Regulation is the ability to regulate one's own emotions and emotional responses (Wu, Chen, & Li, 2014)

5. *Emotional Intelligence*- Emotional Intelligence refers to an individual's ability to recognize his or her own feelings and emotions, recognize the feelings and emotions of others, and are able to differentiate the various types of emotions appropriately, and then use this emotional knowledge gained to guide his or her thinking and behavior (Porche, 2016)
6. *Emotional Well-Being*- Emotional Well-Being is an emotional quality of individuals everyday experiences (Kahnerman & Deaton, 2010)
7. *Expressive Suppression*- Expressive Suppression involves inhibiting ongoing emotional, expressive behavior (Patel, Nivethitha, & Mooventhan, 2018)
8. *Regulation*- Regulation is a form of management, it is characterized by interventions that are intentional and direct (Koop & Lodge, 2017)
9. *Retention*- Retention refers to completion rate. It involves proportions of students in a given year who continues their studies until they obtain their qualification (Thomas, 2011)
10. *Self-Regulation*- Self-Regulation is the ability to know one's emotions, strengths, weaknesses, motives, values, and goals, along with the ability to recognize their emotion's impact on others while using awareness to guide decisions and behaviors (Porche, 2016)
11. *Stress*- Stress is a relationship between the person and the environment that is appraised by the person as relevant to his or her well-being and in which the person's resources are taxed or exceeded (Houghton, Wu, Godwin, Neck, & Manz, 2012)

12. *Trauma*- Trauma is an emotional response to a terrible event like an accident, rape, or natural disaster. Immediately after the event, shock and denial are typical (American Psychological Association, 2019)

Summary

Emotion regulation has a specific purpose in the lives of individuals. It encompasses a dynamic and yet complex process that may be involved in modifying emotional reactions in an attempt to meet situational demands (Mazefsky, 2015). Emotion regulation may reduce a vulnerability toward those undesired emotions while increasing one's level of emotional resilience to deal with life stressors. Studies have indicated that those who are more socially anxious usually select more avoidant emotion regulation strategies than non-anxious persons, contributing to interpersonal difficulties (Daros, Daniel, Meyer, Chow, Barnes, & Teachman, 2019). This level of interpersonal problems as a result of an inability to positively regulate one's emotions as well as the high levels of emotional disorders found in youths (Lavanya & Manjula, 2017) is what intrigued this study as well as to see its influence on diverse college students when faced with many life challenges. Studies have shown that when exposed to emotional difficulties, social and psychological adaptation is tested (Paradiso, Beadle, Raymond, & Grafman, 2016). Thus, this study desired to carefully examine the relationship between emotion regulation and college student's emotional well-being and how low levels of emotion regulation influenced students' emotions. Because college campuses are diverse, this study looked at emotion regulation from a global view.

CHAPTER TWO: LITERATURE REVIEW

Overview

In this second chapter of the literature review, this chapter's contents and organization will be discussed. Emotional disorders contribute to positive or deficits in emotion regulation (Carl, Soskin, Kerns & Barlow, 2013). Thus, the literature presented in this review will provide concise information regarding emotion regulation (cognitive reappraisal vs. expressive suppression) and how they influence college students' emotional well-being. This review will examine emotion regulation and the influence it may have on the emotional well-being of college students when there are low levels and vice versa when emotional regulation levels are high. Students were between the ages of 19-28 years old, all from diverse cultures attending the same university. This review will discuss the crucial role healthy regulation of emotions plays in students' academic and social lives. Finally, this review will explore appropriate interventions and strategies that can be made accessible to college students in an attempt to help them effectively manage and regulate healthy emotions that can intern foster healthy emotional wellness.

Theoretical Framework

Emotions such as enjoyment of learning, hope, and pride are all said to be critically imperative to students' motivation, learning, performance, identity development, and health (Pekrun, Goetz, Frenzel, Barchfeld, & Perry, 2011). Studies have suggested that college students present with massive amounts of difficulties regulating their emotions as well as distress tolerance (Van Eck, Warren, & Flory, 2017). For this reason, low regulations or dysregulation of emotions may play critical roles in both internalizing and externalizing symptom areas for

college student's overall emotional health (Van Eck et al., 2017). Theorist Charles Darwin (1872), who charted the field of emotional expressions, proposed that all humans and even animals show emotions through astonishingly similar behaviors displayed by anger, disgust, fear, happiness, and surprise (Valstar & Pantic, 2010). Because emotions are considered an integral part of human existence (Lavanya & Manjula, 2017); hence from infancy, it is said that intimate behaviors between infants and caregivers are not governed by genetic relatedness but by feelings (Packard & Delafield-Butt, 2014). Human emotions have high accuracy by non-verbal cues indicated by expression recognition and head movement (Chen, Zhou, & Fortino, 2017). Emotions are exchanged daily and may influence the way an individual communicates. Thus, Darwin (1872) also believed that emotional expressions are evolved and adaptive over time. They serve an important communicative function (Hess & Thibault, 2009). The research may further advance Darwin's (1872) theory of universality of emotions (Hess & Thibault, 2009), as it seeks to unveil similarities in emotions among culturally and ethnically diverse college students.

Related Literature

Healthy regulations of one's emotions are critical not only for successful social relationships but also for the reduction of stress and overall physical health. Furthermore, the social development of goals on stress levels and worry are said to be fully mediated by emotional regulation (Shim, Wang, Makara, Xu, Xie, & Zhong, 2017). However, while emotions may be linked to college students and how they manage feelings and thoughts, much about the linkage remains unclear.

Regulation is a form of management; it is characterized by interventions that are intentional and direct (Koop & Lodge, 2017). Regulating healthy emotions can lead to mood improvement; alternatively, over-regulating emotions can be cognitively costly, increasing the probabilities of aggression and hindering resolution to difficult situations (Robertson et al., 2012). While effective regulation of emotions is a significant element of emotional intelligence that also describes a person's ability to manage self-emotions, regulation of emotions also aids in reducing the possibility for interpersonal conflict (Mulki, Jaramillo, Goad, & Pesquera, 2015).

Unfortunately, regulating healthy emotions is often a challenge college student's encounter (Patel, Nivethitha, & Mooventhan, 2018) as they strive to accomplish academic achievement, deal with financial concerns and social stressors, which are all additional contributors that may negatively alter college students mental health (Mahmoud, Staten, Hall, & Lennie, 2012). Studies have identified the correlation between healthy emotion regulation and well-being, identifying its ability to help individuals change their experiences or the countenance of their emotions (Kim, Bigman, & Tamir, 2015), which could produce positive outcomes for challenged college students. When anxiety and depression are present, studies have shown these factors to impend academic performance (Mirsu-Paun, 2016).

Emotional Well-Being

Wellbeing is considered very broad and utilized across social, behavioral, and medical sciences, referring to one's health and functioning (Renshaw, 2018). However, Emotional Well-Being is more concise and defined as the emotional quality of an individual's everyday experiences (Kahneman & Deaton, 2010). It involves both the frequency and intensity of experiences of joy, stress, sadness, anger, and affection, which all determine whether a person's

life is pleasant or unpleasant (Kahneman & Deaton, 2010). Emotions have been perceived as basic inborn instincts related to physiological responses that are triggered by external events eventually predicted by the brain's activity (Hill & Updegraff, 2012). Healthy emotions are pivotal as they may promote overall good health and life longevity. Emotions are the body's way of processing social conditions. They may operate both as a conscious (forcing a smile before a talk, despite feeling nervous) and nonconscious (closing our eyes while watching a scary movie) mode that can eventually become a source of self-knowledge (Cottingham & Fisher, 2016). Because emotions are most conceptualized as a set of experiential, physiological, and behavioral responses that reveal over time (Robertson, Daffern, & Bucks, 2012), becoming self-aware of one's emotions may allow an individual to recognize and comprehend their experiences.

Further implications of an individual declining emotional well-being may be related to more significant mental health concerns such as overwhelming stress and depression. Depression is said to be associated with insomnia, psychomotor agitation, loss of interest in things that were once enjoyable, as well as an inability to concentrate (Briere & Scott, 2015). Research has reported that the American College Health Association (2018) indicated that 14% of college students had been diagnosed or treated by a mental health professional in the past 12 months for depressive symptoms, 17 % were treated for anxiety, and still, the trends continue to rise (Morton, Hinze, Craig, Hermna, Kent, Beamish, & Przybylko, 2017). An individual's emotional well-being dramatically impacts physical health. It may create physical illness that can further affect the immune system. Older adults and young adults may have various health ailments that may impact emotional well-being. Studies of parents with children with multiple sclerosis (MS) scored their child having more significant problems with depression, somatization, attention problems, adaptability, daily living, and problems with communication (Till, Udler, Ghassemi,

Narayanan, Arnold, & Banwell, 2012). This study's findings all suggested the fundamental need to also look closer into the family dynamics as it may also explain the declining rate of emotional well-being (Till et al., 2012).

A person's environment can significantly impact how they view themselves and the world at large. One's environment can influence mood; for example, a person may become very sad or begin to cry when they are in a dark room, or the weather is gloomy outside. Research examining brain activity and associated mood response in natural and urban environments have revealed that natural environments tend to be associated with lower brainwaves frequency and lower brain activity in the frontal areas indicating comfortability and subjectively restorative feelings (Norwood, Lakhani, Maujean, Zeeman, Cruex, & Kendall, 2019). However, the results were only the opposite for urban environments. It was revealed that urban environments appeared to induce brain responses associated with negative affect as identified by an overactive amygdala region (Norwood et al., 2019).

Relationships are essential to attaining emotional well-being (Masih, Belschak, & Willem, 2019). Healthy relationships with others are pivotal to human existence and are built on respect and trust. Research has shown that actual face-to-face and heart-to-heart relationships are most vital to one's personal and collective wellbeing (Swingle, 2015). However, further research has revealed that there is a trend of fewer and fewer people interaction and interpersonal relationships (Swingle, 2015). This revelation can negatively influence emotional well-being. Healthy relationships with others can enhance the mood in which interns may strengthen the immune system and help persons recover from diseases, thus, impacting overall emotional well-

being. Studies show that immune system responses and moods are multifaceted concepts, and people that are high on social support exhibit more mood stability (Masih et al., 2019).

Outcomes for Those Who are Emotionally Well

Recent studies suggested that people who can identify emotions during life situations will spend less time attending to their reactions, utilizing fewer cognitive resources, and permitting more adaptive coping strategies (Costa, Ripoll, Sanchez, & Carvalho, 2013). Baldwin, Towler, Oliver, and Datta (2017) asserted that “the world health organization (1948) redefined health to be a complete state of physical, mental, and social well-being, and not merely the absence of disease and infirmity” (p. 2). Thus, emotional wellness is said to be the cornerstone of health for all individuals (Pace et al., 2013). Therefore, individuals who can effectively regulate their emotions may experience a greater sense of emotional well-being.

Emotional well-being is essential to an individual’s life as it improves health and promotes high levels of self-confidence, which allows an individual to demonstrate confidence in success and one’s capabilities and resourcefulness in any given situation (Mano et al., 2019). Stress and other forms of depressive symptoms can hinder a person’s ability to focus and be productive. Being emotionally well enables people to function better in society and to meet the necessary demands of everyday life. Previous research has shown that persons who emotionally well demonstrate more mindfulness, self-compassion and lower perceived stress levels (Galla, 2016). People who are emotionally well are equipped with the necessary skills to handle life demands. They recover from illness, change, or misfortune (Katpar, Rana, Hussain, Khan, & Rehman, 2017) compared to those who are not emotionally well.

Being emotionally well is very important to overall health. People learn the skills necessary to manage stress for a healthy life (Melnyk & Neale, 2018). Not only does it allow individuals to gain control over thoughts, feelings, and behaviors, but it also demonstrates that those who are emotionally well are aware of their emotions and possess the ability to manage whether positive or negative. Research has indicated that when individuals are emotionally well, they can cope with stressors in healthy ways, not allowing themselves to become overwhelmed and interfere with daily functions or lead to unhealthy coping strategies (e.g., overeating, alcohol use or drug use, smoking) (Melnyk & Neale, 2018). Because many emotions may result from thoughts, emotional wellness allows individuals to monitor and better understand those emotions like sadness, anger, and depression and maintain the skills necessary to identify and express feelings in a healthy manner (Melnyk & Neale, 2018).

Individuals that are emotionally well may increase their chances of having high energy levels. Studies have shown that emotional problems are associated with lower quality of life and greater fatigue (Morrison, Novotny, Solan, Yang, Patten, Ruddy, & Clark, 2017). Thus, having control of one's emotions can create high energy levels promoting good physical and emotional health. Emotionally well individuals can comprehend their potential and make improvements when and where necessary. Emotional wellness is necessary as it helps to increase individual performance. Studies have indicated that emotions help to convey essential information about the person who is expressing them, inclusive of beliefs, social intentions, and orientation toward others (Warren, Pezzuti, Koley, & Kirmani, 2018). Because smiling and expressing emotions tend to foster interpersonal trust (Warren et al., 2018), emotionally well individuals may exude higher levels of interpersonal trust with their warm and inviting appearance, allowing them to be seen as more approachable and pleasant.

Emotional Well-Being in College Students

Emotions are said to be intimately involved in our behavior, cognition, as well as interpersonal communications; they are the building blocks of human existence (Nyklicek, Vingerhoets, & Zeelenberg, 2011). Therefore, emotional well-being in college students is essential because it helps with better academic and life outcomes. Healthy amounts of emotional well-being may promote healthier and less risky behaviors with college students. Research has shown that students with low levels of emotional symptoms who were paired with high levels of life satisfaction were most likely to report lower levels of substance abuse issues, fewer attention problems, greater levels of hope and gratitude compared to their counterparts who reported low levels of both emotional symptoms and life satisfaction (Renshaw, Eklund, Bolognino, & Adodo, 2016). Emotionally well college students can concentrate because they are in a better frame of mind and engage in less rumination. Research has identified a positive association between a student's ability to concentrate and higher academic achievement (Heijden et al., 2018).

College students experience an incredible amount of stress as part of their academic life. Each student may respond differently to such stressors relative to the high workload and lack of support (Tharani, Husain, & Warwick, 2017). High levels of continuous stress produce tension that negatively impacts students' ability to learn and succeed in their academics. Thus, an environment that promotes active learning is vital (Tharani et al., 2017). Having healthy emotional well-being may not imply being happy all the time, but understanding and being able to face difficult life situations are essential skills that may be beneficial to college students. Research has shown that people can ignore what they know. People that learn to repress emotions discover how to change the subject in socially acceptable ways, pushing uncomfortable

information away (Cluley, 2015). Repression is also a form of avoidance and unpleasantness that can damage one's emotional well-being. Considering the amount of stress brought on by various challenges college students face, effective emotional regulation strategies may help reduce interpersonal stress and depression (Moriya & Takahashi, 2013), further enhancing the quality of life and academic success.

Students who report experiencing psychological distress, depression, and anxiety have vastly increased over the past decade (Baldwin, Towler, Oliver, & Datta, 2017). Because such issues can significantly impact an individual's life, research findings have revealed that 30 percent of students reported being stressed while 21 percent reported sleep difficulties that were adversely impacting their grades, forcing them to drop courses (Baldwin et al., 2017). Thus, students who are emotionally well are better equipped to cope with life stressors in healthy ways by combating stress, reducing anxiety and depressive symptoms, keeping themselves on an even keel (Melnik & Neale, 2018).

Previous studies have established evidence suggesting that the general negative affect represents a non-specific factor that is common to both anxiety and depression, and low positive affect is more related to the later (Watson, Clark, & Stasik, 2011). College students have to meet the demands of daily life stressors such as academic success, balancing social life, and financial concerns. Being emotionally well allows students to become more aware of positive feelings, convey expressions in a healthy manner, stability of mood, sense of well-being, positive attitude toward others, and the ability to manage and cope with difficult life stressors (Katpar et al., 2017). Promoting wellness in academia is said to reduce diseases and improve overall health (Baldwin, Towler, Oliver, & Datta, 2017) and for this reason, students who are emotionally well

may perform significantly better in classes. Studies have shown that emotions are infused in classroom settings and play a central role in student's interactions with their peers as well as academic engagement (Linnenbrinl-Garcia & Pekrun, 2011).

Not only do students excel academically when they are emotionally well, but being emotionally well also permits healthy, stable intimate relationships. Research revealed that intimate partner aggression (IPA) is a serious public health concern that occurs quite frequently; it is also prevalent among the college student population (Maldonado, Dilillo, & Hoffman, 2015). It is estimated that both male and female college students participate in IPA, with 28% females and 21% males in college having been physically victimized by the person they were dating (Maldonado et al., 2015). Because aggressive behaviors are thought to occur consequent to anger or demand, healthy emotional well-being is vital when addressing problematic behaviors and various mental disorders (Robertson, Daffern, & Bucks, 2011;2012).

Challenges Faced by College Students

Stress is defined by Houghton, Wu, Godwin, Neck, & Manz (2012)“as a relationship between the person and the environment that is appraised by the person as relevant to his or her well-being and in which the person's resources are taxed or exceeded” (p.221). Stress is one of the most frequently reported health impediments to students' academic performance (Krumrei-Mancuso, Newton, & Wilcox, 2013). Stress can be an emotionally unstable condition that hinders a person's ability to focus and function at high levels. Eventually, it can lead to mental tension, agitation, irritability, and students are no different to this phenomenon as they experience a substantial amount of stress daily (Qamar, Khan, & Bashir-Kiani, 2015).

Because college is academically challenging; having to organize and manage time effectively can further produce stress as well as the impact on social life (e.g., friendships and relationships with family members). The stressors faced by college students can become insurmountable as they juggle both school and work, eventually finding themselves struggling to adjust socially (Shim, Wang, Makara, Xu, Xie, & Zhong, 2017). Studies have identified emotion regulation as one of the most critical factors contributing to college student's identity development (Shim et al., 2017). The findings are no doubt imperative to students discovering their own goals and abilities as they maneuver through college life.

Research has identified stress to be associated with less positive adjustment to college life over time (Krumrei-Mancuso et al., 2013). Further to this, stress is observed as a nonspecific response of the body's reaction and adaptation despite pleasure or pain (Van Deursen, Bolle, Hegner, S.M., Hegner, S, & Kommers, 2015), and accumulated levels of stress can impede students' levels of positive emotions, consequently, producing lower levels of psychological well-being. Students that possess little to no training in regulating their emotions could face dramatic health impacts. Stress is experienced when individuals perceive an imbalance between their ability to cope with the resources they have available (Moate, Gnilka, West, & Rice, 2019). Further to this, studies revealed that students that utilize maladaptive coping strategies have higher levels of depression, anxiety, and stress (Trindade, Duarte, Ferreira, Coutinho, & Pinto-Gouveia, 2018). This understanding creates a growing concern for the emotional well-being of college students; hence, issues left untreated can become debilitating and life-threatening.

College students may also struggle with enormous amounts of guilt for having left their families to pursue a college degree, and homesickness begins to set in. Guilt refers to emotions

characterized by feelings of regret, tension, and remorse over one's behaviors and is said to be one of the main characteristics associated with major depression (Hale & Clark, 2013). College students may also feel guilty for doing things in college that go against their cultural or religious norms, such as partying and excessive substance use and abuse. Empirical research has indicated that highly religious individuals experience more guilt than non-religious individuals (Hale & Clark, 2013).

Fear during rejection was said to be predictive of more distress (Coifman, Flynn, & Pinto, 2016). In attempts to improve dealing with issues of painful emotions and their effect on emotional wellness, research has suggested learning practical ways to adaptively regulate these experienced emotions as opposed to the experience itself (Trindade et al., 2018). Increased attention to negative emotions is said to be essential while placing substantial attention on an individual's emotional processing of the psychological as well as physical health and adjustment (Colifman et al., 2016).

Importance of Retention Among College Students

Retention refers to the "completion rate," and it involves proportions of students in a given year who continues their studies until they obtain their qualification (Thomas, 2011). Educational attainment is important from a societal as well as individual perspective (Van Batenburg & Jolles, 2013). However, many students face challenges that can sometimes hinder this achievement. College life can create new emotions for students as they adapt to living away from home and having to learn to share living spaces with other students. Studies have reported concerns all over the world regarding the mental health state of students, especially for those instances of depression and anxiety (Shim et al., 2017).

Retention and graduation rates are vital; yet, many students facing difficulties adjusting to college life and are experiencing poor preparation for higher education, lack of social integration, financial issues, and personal circumstances (Thomas, 2011) may find themselves in a predicament expanding on false assumptions that there are no other alternatives. Studies have identified that 14% of undergraduates screened positive for a depressive disorder and approximately 5% screened positive for generalized anxiety disorder (GAD) or panic disorder. More alarming was that 3% of students admitted to considering suicide (Mandracchia & Pendleton, 2015).

Educational success may give a sense of accomplishment in that it promotes happiness, accumulated knowledge, shape personal control, interpersonal relationships, income, and perceived quality of life (Van Batenburg & Jolles, 2013). These may be attainable when individuals possess healthy emotions that allow them to focus and deal with life's encounters as they come. Unfortunately, many college students who experience mental health problems engage in risky behaviors that perpetuate negative and poor academic performance, eventually dropping out of college (Mandracchia & Pendleton, 2015). Students may decide to leave college for several reasons: lack of commitment, uncertain goals, academic difficulty, adjustment issues, and inadequate finances (Morrow & Ackermann, 2012). College students have invested significant amounts of monies and partaken in student loans that must be paid back as agreed upon; hence, successful completion is most beneficial. More so, completing what was started shows profound determination and high rankings for colleges and universities.

Research has indicated that universities now face increasing competition as a result of globalization, and this also fosters good alumni loyalty from the moment a student is enrolled to

the time they have completed their degree (Schelesinger, Cervera, & Pere-Cabanero, 2017). However, in a traditional setting, a college student would select a major desired to focus on in college and follow that program of study until they are completed and ready to graduate. Such may not be the case in today's college setting. College students today are not just attending college, but they are taking on jobs, balancing family and finances, as well as a full load of schoolwork. Their priorities are much more complex which further impacts emotional wellbeing and minimizing chances of retention.

Healthy management of student's emotions can increase retention rates as it may help students manage behaviors and emotions necessary to achieve goals and live healthy balanced lives. Research has revealed that when emotional regulation is applied early in life, it allows persons to modulate arousal levels that may serve as a result of one's demanding environment; this contributes directly to better academic performance by facilitating cognitive processes (Graziano & Hart, 2016). Retention is a critical pathway to college student's economic and social mobility (Garriott & Nisle, 2018).

Things that May Contribute to Emotional Well-Being in College Students

Emotion Regulation

Healthy levels of emotion regulation can play a fundamental factor in emotional well-being and are essential for adaptive functioning (Yadav & Chanana, 2018). Studies have indicated emotional regulation as one of the core features of various forms of psychopathology with solid linkage to mental health outcomes (Lavanya & Manjula, 2017). Emotion regulation is defined as "the ability to regulate one's own emotions and emotional responses." (Wu, Chen, & Li, 2014). Emotion regulation involves the effort a person makes to influence the particular

emotion they may have when they have it and how these emotions are experienced and expressed (Jazaieri, Goldin, & Gross, 2017). Thus, increasing adaptive emotion regulation strategies can be effective in reducing the impact of acculturative stress, depression, suicidality, and anxiety symptoms (Mayorga, Jardin, Bakhshaie, Garey, Viana, Cardoso, & Zvolensky, 2018).

Emotion regulation may also help students respond to specific environmental situations such as beginning life at college, which can generate excitement and anxiety; the overall experience may be emotionally stressful. This experience no doubt may be traumatic for some as trauma is an emotional response to a terrible event (Briere & Scott, 2015), and how college students deal with these responses is what further intrigues this study. Trauma that occurs during stressful events or life changes is likely to create significant distress (Briere & Scott, 2015). For the college student, this may be either leaving home or difficulty managing daily living. Studies have highlighted that trauma exposure and posttraumatic stress disorder (PTSD) are common in college students (Read, Griffin, Wardell, & Ouimette, 2014). Three-quarters of college students report having experienced some traumatic event. However, both may represent significant mental health issues among this population (Read et al., 2014) as PTSD also reports having poor distress tolerance (Hancock & Bryant, 2018).

Emotion regulation is perceived as the extrinsic and intrinsic procedures that are accountable for all the monitoring, evaluating, and modifying of a person's emotional reactions, specifically those that involve intensive and temporal features in efforts to accomplish one's goals (Verzeletti, Zammuner, Galli, and Agnoli (2016). Individuals may engage in emotional regulation strategies daily, thus, demonstrating it to be an effective part of their lives. Effective

emotional regulating and control of emotions may have many health implications (Lavanya & Manjula, 2017) when appropriately managed.

Healthy emotion regulation contributes to emotional well-being, and it is essential to get the most out of one's life and create positive feelings and connections with others. Emotion regulation and healthy emotional well-being are both entangled in human cognition and behaviors, and more specifically, emotion regulation has a complex process that includes initiation, inhibition, or modulation of one's state or behavior in a given situation (Yadav & Chanana, 2018). In a cross-sectional study conducted among medical students to determine the prevalence of mental disorders; it was revealed that students suffer from poor mental health issues and about one-third of medical students worldwide suffer from depression or depressive symptoms (Adhikari, Dutta, Sapkota, Chapagain, Aryal, & Pradhan, 2017).

While emotion regulation may involve the process by which individuals influence which emotions they have, when, and how those emotions are experienced, inappropriate, extreme, and rampant emotional responses to a stimulus that are considered arousing could hamper functionality within society and make them emotionally dysregulated (Yadav & Chanana, 2018). Thus, contributing strategies associated with emotional regulation certainly have an impact on an individual's level of emotional well-being.

Gender and Emotions

Emotions are essential to human functioning, typically having adaptive value and the ability to enhance an individual's level of effectiveness in life (Nyklicek, Vingerhoets, & Zeelenberg, 2011). Thus, it is imperative to consider the implications of gender differences between males and females and those who identify as other ability to effectively regulate their

emotions. Understanding gender differences in emotional processing is essential. It may shed light on various emotional, psychological, arousal, cognitive process, and behavioral reactions displayed by both groups when responding to situations. For example, studies have identified females as being more emotional and having greater propensities for emotional experiences and expression than males who are generally suppressing or avoidant when expressing emotions (or both) (Zahniser, 2016). Intriguingly, females' emotions are inferred as representing their character, more in-depth, more meaningful, and more stable, whereas males' emotions are attributed more to the situation they experience (Zahniser, 2016).

This study desired to explore emotional well-being and diverse college students ability to regulate emotions not only in terms of looking at the various race/ethnicities college students identify with and how emotion regulations may have an impact on overall emotions, but also to further examine the contribution gender may have in regulation of one's emotions among college students. It is believed that first-generation college females indicate lower levels of stress than their male counterparts due to parental emotional support (Garriott & Nisle, 2018). Research has examined the association in emotion regulation by explaining the association between affective empathy and internalizing symptoms. Results revealed that girls are socialized to demonstrate affective empathy differently in their ability to identify, recognize, and respond to other's emotions around them. The study also suggested that girls may have a higher risk of empathic stress due to high levels of internalizing symptoms (MacDonald & Price, 2019). Nevertheless, further findings may shed light on the overall emotional well-being of college students (male and female) and how they regulate their emotions coming from culturally diverse backgrounds and identify the role gender may play in their overall health.

Demographic Differences and Emotional Well-Being (Cross-Cultural)

Cross-cultural may involve an assessment among two or more different cultures. For this reason, researchers believe there is evidence suggesting that the expression of one's emotions, as well as how it is processed in terms of emotion regulation, as well as emotion regulation strategies may differ across cultures (Tahmouresi, Bender, Schmitz, Baleshzar, & Tuschen-Caffier, 2014). Thus, the role of culture and characteristics of emotions may play in the link between emotion regulation and one's emotional well-being (Su, Lee, Park, Soto, Chang, Zamboanga, & Brown, 2015).

Even though Lavanya and Manjula's (2017) study would have investigated emotion regulation between college students in India; still, cultural differences may exist globally. Thus, findings may be limited regarding emotional well-being and how it is regulated from a cross-cultural comparison between other international college students and how they regulate emotions. Results could provide clarity to the emotional state of culturally diverse college students and further address the issue. Studies by Lavanya and Manjula (2017) revealed race/ethnicity as mediating variables in determining the correlation between emotion regulation and student's well-being. While there were no inconsistencies identified in the work of Lavanya and Manjula (2017), the study included a large sample size of Indian college students, making the study available only to Bengaluru city students demonstrated some restrictions. The study also lacked a cross-cultural outlook, which was identified as one of their gaps and required further study.

For example, individualistic cultures like Germany tend to place more emphasis on self-independence, autonomous and personal goals; At the same time, collective countries like Iran

stress the importance of dependency, belonging to others, collective identity, depending on and belonging to a group with values boosting group harmony, cohesion, and group goals (Tahmouresi et al., 2014). Emotions are formed through cultures, as individuals from a young age may be taught to categorize and express their emotions in many different ways. Countries like China are said to encourage children to become exposed to early display rules of emotion regulation training in an attempt to have significant benefits on their international personal relationships and social adaptation (Lu & Wang, 2012).

Further, studies among the differences in emotional expressivity, emotion regulation, and mood among ethnic minority students in China findings revealed vast difficulties in regulating emotions (Lu & Wang, 2012). Research shows that parents play a pivotal role in children developing healthy emotions; and because every culture may have different views, ideas, and experiences, this will guide how individuals feel, think, and act (Hapunda, Mahama, Mesurado, Verma, & Koller, 2019). Other research has revealed that children in the United States reported having less obvious expression and more constraint over sadness than children in countries such as Kenya and Ghana (Hapunda et al., 2019).

Benefits of Emotion Regulation

Emotion regulation strategies help people develop the ability to manage emotional reactions to achieve goal-oriented outcomes (Yeh, Bedford, Wu, Wang, & Yen, 2017). Studies show that emotion regulation validates that people are not passively influenced by their emotions; instead, they use different strategies to help regulate their emotions (Zhang, Kong, & Li, 2017). Research has revealed that emotional regulation is necessary for human life because of its powerful means for constructing regulatory skills and enhancing well-being (Dore, Morris,

Burr, Picard, & Ochsner, 2017). Hence, emotion regulation has proven to dominate the demands on human existence as it is needed daily to live stress-free productive lives.

College students may experience difficulties coping with academic and interpersonal challenges as well because of their daily demands. These challenges can lead to other impulsive-related constructs such as sensation-seeking, thrill-seeking, and behavioral inhibition (Khadka, Stevens, Aslanzadeh, Narayanan, Hawkins, Austad, & Pearlson, 2017). Hence, emotion regulation may assist with the controlling of impulsive behaviors (Tull, Gratz, McDermont, Bordieri, Daughters, & Lejuez, 2016). Higher levels of emotion regulation have been said to produce higher levels of individual's relationship quality (Zamir & Lavee, 2016). Studies have examined 152 college students where relationships mediated the dimensions of maladaptive regulation of emotions between interpersonal life stressors. The findings demonstrated that emotion regulation might act as a mediator between interpersonal life stressors (Moriya & Takahashi, 2013). Also, interpersonal stressors and affective instability are said to be associated with critical features of borderline personality disorder (BPD) (Hepps, Lane, Wycoff, Carpenter, & Trull, 2018), further indicating low levels of emotion regulation.

With new approaches evolving that are being applied to examine emotion regulatory process inclusive of process-oriented information processing framework, statistical technique on mediational analysis; and methods, such as experience sampling and deep brain stimulation have all made it possible to distinguish psychological and biological factors that influence an individual's emotions (Gross, 2013). Young adults diagnosed with Autism Spectrum Disorder (ASD) often experience co-morbid disorders like anxiety and depression (Morie, Jackson, Zhai, Potenza, & Dritschel, 2019). Diagnosed individuals with ASD may struggle with pervasive

impairments in socio-communicative functioning as well as being restricted of repetitive behaviors or interests (Weiss, 2014). Emotion regulation has proven to be beneficial in managing depression and anxiety disorders. Studies have confirmed deficits in emotion regulation will predict the development and continuance of anxiety disorders (Saleem, Ahmad-Khan, & Saleem, 2019).

Being able to regulate one's emotions effectively may improve mood, self-worth, empathy for others, and healthy loving relationships. This form of relationship is thought to be central to the lives of college students and may assist with overall happiness and life satisfaction (Coccia & Darling, 2016). Emotion regulation enhances couples' relationships when they are emotionally in tune with each other; this then affects the quality of the relationship (Mazzuca, Kafetsios, Livi, & Presaghi, 2019). Intrusive thoughts form in the minds of humans daily; still, how an individual responds to such intrusive thoughts may determine how affected they are by them.

Individuals who develop effective emotional regulation strategies may exhibit high levels of emotional intelligence because they tend to be very aware of their emotions. Research explains that emotionally intelligent persons can recognize their own feelings and emotions, the feelings of others, and can differentiate the various types of emotions effectively (Porche, 2016). Further to this, research has also identified positive constructs of emotional intelligence relative to self-regulation, social skills, empathy, and motivation (Porche, 2016), all of which are necessities for the success of college students.

Emotion Regulation and Transitions

Life may include many transitions as people move, change jobs, graduate from school, commit to new relationships, or even have children are just a few examples (Morrow, 2016). Being able to transition may bring about much anticipation and trepidation as emerging rhythms, new colleagues, as well as new novel experiences surface as one now journeys on with sorrow as a result of leaving behind what was once familiar (Morrow, 2016). Thus, emotion regulation can be recognized for the foundational role it plays in promoting emotional stability and healthy well-being across the lifespan of human beings when represented with such transitions.

Emotion regulation skills are essential very early on in life as children who experience chronic stressors are said to be vulnerable to emotional and physical health problems across the lifespan (Nusslock & Miller, 2016). Unlike little children who must learn to manage emotions, it may often be anticipated that adults are aware of or capable of self-regulating (SR) their emotions like fear and anger. However, the emerging adulthood years have been described as a prolonged period of adolescence and similar to the emotion regulation pattern found for adolescents (Zimmermann & Iwanski, 2014).

Previous studies have investigated age-related changes in emotional brain activity and have identified and characterized both emotional reactivity and regulation in adult brains indicating changes in the structure and function of key brain regions across development (Perlman & Pelphrey, 2011). Because life presents numerous changes and some unpredictable, regulating healthy emotions may be fundamental to overall health. It may determine how one experiences, expresses and manages such feelings and thoughts during emotional situations.

Emotion Regulation and Protection of College Students

Emotion regulation strategies may have a clear impact on an individual's mental health outcomes (Yeh et al., 2017). Lavanya and Manjula (2017) asserted:

A wealth of research has indicated that emotion regulation is one of the core features of various forms of psychopathology and has been linked to outcomes in mental health.

Deficits in emotion regulation have often been manifested as internalizing and externalizing disorders. (p. 312)

Because levels of emotion regulation so heavily determine one's mental state, it would be necessary for college students to exude healthy levels as depression has been inversely associated with positive emotion regulation (Lavanya & Manjula, 2017).

Studies have examined the effects of emotion awareness which were said to have been supported by specific teaching strategies on student's motivation, engagement, self-regulation, and learning outcomes (Arguedas, Daradoumis, & Xhafa, 2016). The findings reveal that when students become more aware of their emotions and are guided by specific teaching strategies, their learning performance improved (Arguedas et al., 2016). This study supported the vital need for healthy regulating emotions and demonstrated the power of when educators become engaged in students' emotional state, their attitude and feedback become more effective (Arguedas et al., 2016).

An inability to effectively regulate one's emotions may have a long-lasting impact on young adults if not taught from an early age how to effectively manage difficult situations;

hence, promoting maladaptive emotion regulation, also termed emotion dysregulation (ED). ED is associated with aggressive behavior that involves low levels of emotional clarity and awareness (Robertson et al., 2012). ED also leads to various adverse outcomes, including depression, self-injury, disordered eating, and drug use (Patel et al., 2018). Studies of mothers enforcing the use of psychological aggression such as spanking a child or the use of threatening words were said to cause the child to worry that something discomforting would happen and they would not be able to control the situation (Chen, Wu, & Wang, 2018). This study not only demonstrated the imperative need for all humans to be able to control their emotions effectively from early in life when faced with difficult or threatening situations but also that this behavior causes anxiety and produces negative emotional regulation (Chen et al., 2018), which may adversely impact the developing child into young adult years.

Undergraduates may become exposed to many stress symptoms that can affect their body, thoughts, feelings, and behavior. Studies have shown that this particular population frequently reported exposure to stressful life events and the adverse effects it contributes to one's overall health (Owens et al., 2018). Recognizing and remedying stress triggers can have a lasting impact on college students as they maneuver through their college lives. Studies on emotion regulation strategies have shown its benefits in reducing potential negative mental health impacts that stressful life events may present (Owens et al., 2018).

Been able to manage stress levels is very important. Emotion regulation teaches individuals the ability to effectively regulate and express their own emotions in a healthy manner, allowing meaningful connections and enhancing well-being (Swingle, 2015). The skills used with this type of strategy are said to develop from the mother-infant communication and

develop throughout a child's first years of life (Gulay, Ogleman, & Fethihi, 2019). Hence, emotion regulation plays an intricate part in an individual's developmental years and may be quite challenging due to fluctuations as the child goes through various developmental stages. With this said, college years can produce new stress as students come across complex and stressful situations throughout their academic career and youthful pursuits (Qamar et al., 2015).

Emotion Regulation (Cognitive Reappraisal)

Cognitive reappraisal (CR) has been identified as one of the most common and effective kinds of emotion regulation strategies (Buhle, Silvers, Wager, Lopez, Onyemekwu, Kober, & Ochsner, 2014). It is said to re-evaluate a given situation and is considered to be an adaptive emotion regulation strategy (Zahniser & Conley, 2018). CR condenses the emotional impact (Juang, Moffitt, Kim, Lee, Soto, Hurley, & Whiteborne, 2016) and allows individuals to change the way they may think about a stimulus in an attempt to alter its affective impact (Buhle et al., 2014). CR has been negatively associated with mental distress; thus, promoting more CR strategies improves mental health, particularly for those who have experienced adverse life events (Boyes, Hasking, & Martin, 2016). In a study conducted, laboratory experiments exposed participants to various situations that would produce anger. However, it was said that participants who demonstrated high levels of reappraisal reported less anger than those who did not (Juang et al., 2016).

Practices in reappraising adverse events have produced encouraging results to one's emotional state. In a study conducted with two groups of participants, one group was trained to reappraise negative valence film clips. In contrast, the other group watched the same film clips but instructed to avoid regulating their emotions (Christou-Champi, Farrow, & Webb, 2015).

Results showed that when both groups were asked to reappraise their emotional responses, the group that practiced reappraisal showed lower negative affect levels than the second group, who were not trained (Christou-Champi et al., 2015).

Emotions are described as initiating from a perceived stimulus where the individual then appraises the emotional stimulus significance (Buhle et al., 2014). Hence, this emotion regulation strategy may help individuals recognize negative emotions before they become destructive and may further aid in the healthy emotional development of college students considering the emotional challenges they succumb to daily. CR seeks to modify the content of thoughts a person may have, for example, “I am worthless” (Krafft, Haeger, & Levin, 2019). CR recognizes that life presents with unforeseen challenges at times; thus, while it cannot change the situation, it can help to change the way the situation is viewed or interpreted cognitively. Studies have examined the productive role of CR in regulating the effect during game-based learning; results revealed that CR does predict in-game success when frustration or confusion was high and that CR was the dominant strategy (Spann, Shute, Rahimi, & D’Mello, 2019).

Studies done on cognitive suppression had discovered that when individuals of an experiment were asked to suppress their emotions by watching a film meant to induce negative emotions, participants still reported negative feelings (Juang et al., (2016). This implied that suppression of one’s emotions could create dissonance between what a person is actually feeling and what he or she is outwardly expressing (Juang et al., (2016). Further studies conducted revealed that during the adolescent age, this is when fast and fundamental alterations begin to take place within the biological, cognitive, social, and emotional domains (Zimmermann & Iwanski, 2014). During this stage in the development process, many other areas of life are

accompanied by daily intense negative emotions occurring in life with an often unstable peer or romantic relationship and a decrease in perceived support from parents (p. 182) (Zimmermann & Iwanski, 2014).

College students are confronted with high levels of daily stressors, which may result from being away from loved ones and academic demands. Thus, CR increases awareness of thoughts that may arise and how they impact one's behavior (Kraft et al., 2019). CR helps alter emotional impact by reconstructing a person's negative thoughts while striving to emphasize more positive or rational facets of a situation (Krafft et al., 2019). Studies examining the effectiveness of CR on well-being have indicated positive long-term outcomes (Troy, Shallcross, Brunner, Friedman, & Jones, 2018). According to Kraft et al., (2019):

Tightly controlled laboratory studies, in which reappraisal use is experimentally manipulated, expand upon these studies by examining the short-term effects of reappraisal on the subjective experience of emotion. For example, participants instructed to use reappraisal in the lab have consistently reported significant decreases in negative emotion, relative to other strategies like suppression and to control groups not instructed to regulate their emotions. (p.3)

However, while researchers have explored CR and its impact on well-being, there is still limited information. Thus, this present study focused on the additional research needed on how college students regulate their emotions and how CR contributes to student's emotional well-being.

Emotion Regulation (Expressive Suppression)

Expressive suppression (ES) may be less effective and more harmful as opposed to CR simply because it involves reducing a person's ability to perceive and develop solutions

(Thomson, Overall, Cameron, & Low, 2018). ES suppresses one's emotions as opposed to reframing one's perception of a particular situation. Such harmful effects of ES may be associated with many physiological outcomes, inclusive of high blood pressure (Kao, Su, Crocker, & Chang, 2017). ES may also be related to social outcomes; for instance, studies have revealed that suppression disrupts the dynamics of social interactions and present relationships with others (Tackman & Srivastava, 2016).

Individuals who suppress their emotions mainly try to maintain their social image by minimizing facial expressions at all costs facial expressions in attempts to control emotions, whether positive or negative (Thomson et al., 2018). Thus, ES is said to involve attempts designed to inhibit or conceal an individual's emotional expression from others (Thomson et al., 2018). ES may also be a typical response during emotionally laden social interactions involving conflict (Thompson et al., 2018).

ES is another emotion regulation strategy that is considered a well-known source of executive lapses in younger adults (Franchow & Suchy, 2017). It is inherently an interpersonal emotion regulation strategy as it encompasses hindering expressions of emotions to others (Thompson et al., 2018). ES is considered to be a maladaptive regulation strategy that eventually leads to impaired memory and greater activation in emotion-generative brain regions (EGBG) (Spann et al., 2019). Such results negatively influence one's ability to have cognitive control (Spann et al., 2019), potentially resulting in risky behaviors.

College students who convey high levels of ES may have higher chances of being lured into risky behaviors such as substance use and abuse as they lack the ability to manage unwanted emotions effectively. Studies have shown that consuming excessive amounts of alcohol is a

maladaptive form of coping and is believed to be an archetypal and anticipated aspect of college life (Shimkowski, 2016). Problematic drinking is a concern for college students, leading to hazardous outcomes both acutely (Read et al., 2014). Excessive alcohol use then creates a threat to students in personal, social, and academic ways (Shimkowski, 2016). Studies have revealed an abundance of empirical data supporting the association of ES (inhibition of outward expression of emotional experiences) (Su et al., 2015). This may result in a linkage to negative emotional well-being and adverse psychological outcomes like depression, anxiety, and lower life satisfaction (Su et al., 2015).

Studies show that individuals who continuously avoid and do not confront their stressors by disengaging or distracting tend to turn to destructive behaviors such as alcohol use (Shimkowski, 2016). Because alcohol is readily available to college students, using alcohol to cope with difficult emotions is a dangerous path (Shimkowski, 2016) that may further impact well-being. Studies have explicitly identified that students from protective family types usually suppress more and are likely to use drinking as a form of coping (Shimkowski, 2016). Their inability to process emotions effectively may further exacerbate life challenges. College is a place associated with diversity, which provides students with unique opportunities to have meaningful interactions and develop friendships with different people (Bowman, 2013). While this can also offer educational benefits (Bowman, 2013), challenges may also be likely to develop. Thus, to manage unwanted emotions, college students may prefer to engage in suppression where they utilize coping methods they consider effective in alleviating feelings they perceive as undesirable (Shimkowski, 2016). However, further research should explore emotion regulation strategies more in-depth from a cross-cultural perspective (Lavanya & Manjula, 2017) to understand the role of emotion regulation and diverse college students' emotional well-being.

In other studies investigating the extent to which individuals reported hiding or restraining the expression of positive and negative emotions assessed suppression confirming negative feelings, for example, “when I am feeling negative emotions, I am careful not to express them.” (Su et al., 2015). ES includes behavioral expressions such as crying and laughter; there are significant short-term costs associated with engaging with ES, for example, executive functioning depletion (Niermeyer, Franchow, & Suchy, 2016). Previous studies questioning the impact of ES and executive functioning in older adults revealed astounding results. In a study designed to invoke depletion in the ES group but not in the control group among older adults, participants in the ES group were instructed not to reveal any facial expression or other observable signals while watching a video clip. Unlike the ES group, those in the control group were asked to view the videos and naturally react by allowing facial expressions (Franchow & Suchy, 2017). This experiment revealed that it is not the negative effect conferring risk for depletion in executive functioning, but rather the act of suppressing that effect (Franchow & Suchy, 2017).

Summary

Emotions play a pivotal role in human existence as they are associated with thoughts, feelings, and how individuals respond to situations. An individual’s culture and characteristics of emotions may play a role in the link between how one regulates their emotions and overall emotional well-being (Su et al., 2015). Emotions of hope and pride are all said to be critically important to health (Pekrun et al., 2011). Emotions are imperative to student motivation, learning, performance, identity development, interpersonal relationships, and overall health (Pekrun et al., 2011). Having control of one’s emotions is fundamental for overall health and well-being. With the ever-increasing demands for high academic standards and managing daily

routine, college students are constantly challenged. A healthy emotional state helps individuals to effectively cope with stressors related to social life, feelings of guilt, and overall emotional wellness. Students not only face issues of social integration but also financial and personal circumstances (Thomas, 2011); thus, being able to manage their emotions can help college students effectively cope and increase retention rates.

Being emotionally well allows for a healthy and fulfilling life; thus, emotional wellness is said to be the cornerstone of health (Pace et al., 2013). People who are emotionally well control and utilize adaptive coping strategies to manage stress (Costa et al., 2013). When college students are able to use coping strategies like cognitive reappraisal to transform stressful situations and positively reframe, this could enhance overall emotional wellbeing by reducing stress levels (Kinnison & May, 2017). Expressive suppression, however, does not eliminate unwanted feelings but instead masks them while leaving the individual to experience internal emotional disturbance (Shimkowski, 2016).

CHAPTER THREE: METHODS

Introduction

This section details the methodology that was used to study the moderating relationship between emotional regulation and college student's emotional well-being. The research design is also discussed, inclusive of the research question and hypothesis. The methods section consists of participant's detail, intended procedure as well as the various testing tools selected for this study's purpose. Finally, the independent, dependent, and categorical groupings are described, followed by statistical procedures, and issues related to internal and external validity aspects will be considered.

Research Design

Before conducting the study, IRB approval was obtained. The study utilized a quantitative correlational design. Quantitative designs are said to test the research hypothesis and tend to rely on numbers data (Heppner, Wampold, Owen, Thompson, & Wang, 2016); thus, the purpose for such a design was to examine the influence emotion regulation may have on college students' emotional well-being and moderated by testing the established hypothesis, then analyzing the data enabling inferences from the sample to the population (Heppner et al., 2016). This study further expands upon the work of Lavanya and Manjula (2017) as it sought to address their limitations from a cross-cultural perspective.

Research Question

Many psychiatric disorders are characterized by problems with emotion and emotion regulation, with estimates ranging from 40% to more than 75% (Gross & Jazaieri, 2014). In fact, emotion regulation has been linked to a person's overall mental health outcome (Lavanya &

Manjula, 2017). Because young adults are said to have less individual and emotional regulation during middle adolescence (Zimmermann & Iwanski, 2014), it was intriguing to find out how student's regulation of emotions impacted their emotional well-being while attending college and dealing with perceived discrimination. Thus, this proposed study explored the impact of emotion regulation on the emotional well-being among diverse college students when moderated by perceived discrimination. The research question presented was:

Does Emotion Regulation (cognitive reappraisal and expressive suppression) influence diverse college student's emotional well-being when moderated by perceived discrimination and controlled for gender, race, and age?

Hypotheses

Emotions are said to be formed through cultures (Lu & Wang, 2012). Individuals from a very young age are taught to categorize and express their emotions in many different ways (Lu & Wang, 2012). In becoming an adult, adolescents go through many changes, inclusive of neurological and cognitive alterations, in a pursuit to develop their social identity (Verzeletti et al., 2016). Thus, this research hypothesizes that:

H₁: When college students display lower levels of emotion regulation scores (ERQ=CR+ES), they will display lower emotional well-being scores (WEMWBS) as moderated by perceived discrimination.

H₀: When college students display lower levels of emotion regulation scores (ERQ=CR+ES), they will not display lower emotional well-being scores (WEMWBS) as moderated by perceived discrimination.

Participants and Setting

Participants for this study were drawn from a convenience sample of residential and online psychology students from Liberty University Lynchburg, Virginia, during the Summer of 2020-2021 school year.

Recruitment. This study needed to conduct research with a diverse group across different dimensions inclusive of one's gender and ethnicity (Heppner et al., 2016); therefore, it was imperative that participants for this research included various gender identities and ethnically diverse university students drawn from the Liberty University campus. Because heterogeneous populations are more desirable as they contain a vast number of characteristics and decreases the study's limitations (Heppner et al., 2016), participants were asked to specify their ethnicity, for example, A. Caucasian, B. African American, C. Latino Hispanic, D. Asian, E. Native American, F. Native Hawaiian or Pacific Islander, or G. Two or More as well as gender identity for example male, female, a blend of both or neither. Convenience sampling is a more convenient way of sampling (Knight, Kendrick, Bruns, & Gribbin, 2013). Hence, this was the sampling method chosen to select participants and presented a more feasible, reachable, and realistic method for this research. In order to minimize Type I and Type II errors and meet the CI=.95 and Alpha=.05 requirements, the minimum sample size 385 was determined by the following equation (
$$N = (Z\text{-score})^2 * StdDev*(1-StdDev) / (\text{margin of error})^2 \rightarrow (1.96)^2*0.5*(1-0.5)/(.05)^2 = 384.16$$
). The survey was conducted anonymously, and participation was completely voluntary. Participant's decision to participate in the survey did not affect their current or future relationships with the university they attend. If a participant decided not to answer a question, the participant was free to withdraw from the survey at any time before submitting the survey. If a

participant decided to withdraw from the survey, the participant had to exit the survey by closing their internet browser. Responses were not recorded or included in this study.

Inclusion and Exclusion Criteria. To assist in preserving the dignity and welfare of the participants (Heppner et al., 2016), each participant was asked to give consent to take part in the survey providing they met the requirements. Participants must have been willing to provide their age identifying as an adult between the ages of 19-28 years old, currently attending the university where they were enrolled in one or more undergraduate or master level psychology classes. Participants must have identified their sex that is male or female. Gender identity must be determined, for example, male, female, transgender, pangender, genderqueer, or other and specify. And finally, participants had to have been willing to specify their race/ethnicity Caucasian, African American, Latino Hispanic, Asian, Native American, Native Hawaiian, Pacific Islander, or two or more or other and were asked to explain. Not consenting to participate in the survey excluded the participant from the study. Failure to meet any of the following inclusion criteria would have excluded the participant from the study.

Instrumentation

Emotion Regulation Questionnaire (ERQ). This study first measured the respondent's emotion regulation by using the ERQ scale. ERQ was developed by Gross and John (2003) and is a 10-item self-report scale that was designed to measure respondents' tendency to regulate their emotions using two distinct emotion regulation strategies: (1) Cognitive Reappraisal (cognitive change) and (2) Expressive Suppression (response-focused strategy) (Westerlund & Santtila, 2018). Respondents had to answer each item on a 7-point Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree). Example questions for this scale included "when I

want to feel fewer negative emotions (such as sadness or anger), I change what I am thinking about” or “when I am feeling positive emotions, I am careful not to express them” (Gouveia, Moura, Oliveira, Ribeiro, Rezende, & Brito, 2018). Research analysis has established that ERQ shows adequate internal consistency and convergent validity and is a promising tool to measure emotion regulation with teenagers and young adults (Gouveia et al., 2018). In a study using ERQ exploring psychometric properties of the difficulties in the emotion regulation scale, 229 college students participated in this study, and findings revealed ERQ’s reliability and validity, adding to its clinical utility (Weiss, Darosh, Contractor, Schick, & Dixon-Gordon, 2019)

Warwick-Edinburgh Mental Well-Being Scale (WEMWBS). This study measured the respondents’ levels of emotional well-being using WEMWBS, which is a 14-item scale designed to measure respondents’ feelings, thoughts, and functional aspects of mental well-being. WEMWBS has shown to be very useful with reliability, validity, and acceptability in adolescents and adult populations (Maheswaran, Weich, Powell, & Stewart-Brown, 2012). Respondents will answer each item on a 5-point Likert-type scale ranging from 1 (None of the time) to 5 (All of the time). WEMWBS was proven to be a useful tool as a psychometrically robust measure of overall mental well-being and its ability to identify factors that can promote positive mental health (Orgeta, Sterzo, & Orrell, 2013). In a study measuring mental well-being in Norway, 1168 patients completed a survey using WEMWBS. Construct validity and precision were assessed. WEMWBS was shown to be a valid and precise instrument to measure mental well-being. The findings encouraged the use of WEMWBS as an outcome in future clinical, evaluation studies and research and public health practice (Smith, Alves, Knapstad, Haug & Aaro, 2017).

The Everyday Discrimination Scale (EDS): Because there is a large body of evidence documenting poorer health outcomes among individuals who have reported experiences perceived as discrimination (Gonzales, Noonan, Goins, Henderson, Beals, Manson, Acton, & Roubideaux, 2016); this study measured the respondents' levels of perceived discrimination in everyday life. EDS is said to be widely used in public health research. It is one of the most commonly used instruments to assess an individual's perception of discrimination in general and specific discrimination types such as race, weight, or age (Harnois, Bastos, Campbell & Keith, 2019). Williams, Jackson, and Anderson (1997) developed EDS. It has been used in several large-scale surveys, for instance, the 2001-3 National Survey of American Life and the 2002-2 National Latino and Asian American Survey (Harnois et al., 2019). EDS also assesses mistreatment perceptions among minority groups, women, age-related, gender and serves as the principal measure of perceived discrimination (Harnois et al., 2019). It seeks to document the extent to which perceptions of discrimination are linked with poor physical and mental health (Harnois et al., 2019). While EDS has assessed the prevalence and correlations of perceived mistreatment within various settings in the United States of America, it has also been utilized around the world (Harnois et al., 2019).

The scale consists of nine different items with questions related to “you are called names or insulted;” “You are threatened or harassed,” as well as negative stereotypes for example, “People act as if they are afraid of you;” “People act as if they think you are dishonest” and unfair treatment questions consist of “You are treated with less respect than other people;” (Harnois et al., 2019). EDS is said to have high reliability and exhibits good construct validity as indicated by moderate to strong associations with externalizing and internalizing symptoms, perceived

stress, depression, negative affect, and social strain (Harnois et al., 2019). EDS has most frequently assessed among adult blacks, and a growing number of studies also including Latinxs, Asian Americans, Native Americans, multiracial respondents, and Native Hawaiian or Pacific Islanders (Harnois et al., 2019). Previous studies using EDS have also attested to the scale's good psychometric properties, both when mistreatment is explicitly attributed to race/ethnicity (Harnois et al., 2019). EDS was used in a stratified survey among 768 residents of bateyes across the Dominican Republic and perceived discrimination. Results revealed perceived discrimination was common among bateyes residents of all backgrounds (Keys, Noland, Beau De Rochars, Taylor, Blunt, & Gonzales, 2019)

Procedure

Initially, this research was submitted to the Research Ethics Committee for approval to conduct the study. Also, permission was granted by the psychology online and residential heads of department. Hence, immediately after approval, the survey link was sent to the online and residential psychology department heads for dissemination through the Liberty University portal to both residential and online psychology students' emails. Participants came from a convenience sample of students from Liberty University, Lynchburg, Virginia, Psychology department. Data collection was carried out in the Summer during the month of July 2020-2021. Before taking the online survey, students were advised to find a quiet place to delegate the required time to complete the survey. Upon receiving the survey link and clicking on it, students were asked to click on a separate link on the first page of the survey link, which then took them to the informed consent.

Students were then asked to read the consent form and agree or disagree to participate in the survey by clicking yes or no. Students were also able to print a copy of the consent for record-keeping if desired. Participants were advised that participation in the survey was completely anonymous, no personal identifying information was to be collected, and that the survey would take approximately 15 to 20 minutes to complete. No follow-ups were necessary after the completion of the survey. If students did not wish to participate, that would conclude the survey. Information regarding a sweepstake offering a \$100 visa gift card that followed the survey within the consent document was provided to the participants. Participants were informed that there would be a separate link at the end of the survey if they wished to participate. Participants were not compensated for this study. However, they were given the option to take part in the sweepstake as a thank you. Taking part in the sweepstake was completely voluntary. Participants were informed that there would be only one winner and that emails were only required to compensate the winner. Participants were informed that emails would be pulled and separate from the original survey responses to maintain anonymity. After consenting to participate in the survey, participants affirmed they met inclusion criteria. Participants were asked to provide certain demographic information about age, sex, gender, and race/ethnicity to achieve this. Again, this study collected demographic data in the following way:

1. Identify being either a residential or online student at Liberty University enrolled in one or more psychology classes
2. Age: 19-28 y/o
3. Sex (biological): Male or female
4. Gender: 1 (Male), 2 (Female) and 3 (Other). Nominal Data.

5. Race/Ethnicity: White, Hispanic or Latino, Black or African American, Native American or American Indian, Asian/Pacific Islander, Other. Nominal Data

Even though students would have given consent to participate in the study, they were advised that they could end participation at any point and that they were in no way obligated to complete it if they wished not to.

Data Analysis

Dependent, Independent Variables, and Covariates. This present study wanted to see if emotion regulation scores affected the respondent's emotional well-being significantly as moderated by perceived discrimination. This research intended to accomplish this by setting the independent variable to the emotion regulation score. The dependent variable was set as the WEMWBS score. Prior research identified perceived discrimination as a contributing factor in health and mental health disparities, including risky behaviors (Heads, Castillo, Glover, & Schmitz, 2016;2017); thus, perceived discrimination was the moderator. Gender has been said to have a core relationship between emotion regulation (Sancho, De Gracia, Granero, Gonzalez-Simarro, Sanchez, Fernandez-Aranda, & Jimenez-Murcia, 2019), so this research desired to explore what difference exists between various gender identities and their effect on ER and WEMWBS. Earlier research has emphasized the need to consider race when researching emotional functioning among diverse populations (Morelen, Jacob, Suveg, Jones, & Thomassin, 2013), which is why race was considered in this study. Finally, evidence suggests that older adults experience high levels of emotional well-being (Nakagawa, Gondo, Ishioka & Masui, 2017). Thus, this study also wanted to see what relationship exists regarding age differences among students and their emotional wellbeing.

Statistical Procedures. The hypothesis was that ERQ scores are positively correlated and have a causal relationship to WEMWBS scores even when adjusted for gender, age, race, and perceived discrimination. This study wanted to see the effect of gender, age, race, and perceived discrimination on the linear relationship between ERQ and WEMWBS to determine if any of these factors have a significant moderating effect on the expected outcomes. It was intended to show that gender, age, race/ethnicity, and perceived discrimination play an essential role in how a person's ability to regulate their emotions influences their overall levels of healthy emotions and overall mental health. To accomplish this, this study used several tests.

This study used a Multiple-Regression Moderation Model 1 analysis on ERQ scores and WEMWBS scores. Gender, age, and race were covariates, and perceived discrimination was the moderator in the analysis. Further, this study used the PROCESS plugin for SPSS to accomplish this in-depth analysis. SPSS PROCESS provided the analysis with 4 inputs (X, Y, W, XW) and one output (Y) where X = ERQ, Y = WEMWBS, W = perceived discrimination. This research anticipated a positive linear relationship between the ERQ WEMWBS scores, gender, race/ethnicity, and perceived discrimination. However, it was expected that higher perceived discrimination scores would be correlated to lower WEMWBS scores, thus moderating the effect of ERQ on WEMWBS with a negative effect.

Issues Related to Internal and External Validity

Internal Validity. Selection was most likely be a threat to this study's internal validity because the survey was be distributed through university administrators and department heads. This research was unable to select the respondents to ensure proper stratification. Thus, selection may

affect results. This could have possibly been reduced through the use of Survey Monkey's premium targeted audience buying. However, responses that did not meet the criterion was excluded from the analysis.

This study was able to minimize the probability of Type I error by reducing the alpha. Type II error probability was minimized by increasing the sample size. This study intended to use an alpha of .05 and CI = 95%. The minimum sample size needed to satisfy these requirements was 384.16 ($\text{Min } N = (Z\text{-score})^2 * \text{StdDev} * (1 - \text{StdDev}) / (\text{margin of error})^2 - > (1.96)^2 * 0.5 * (1 - 0.5) / (.05)^2 = 384.16$). This study hoped to collect at least 400 survey responses to meet and exceed the requirements for the study.

External Validity. Participants that took part in the study were administered the survey simultaneously and only once. Hence, there was little chance for external validity to be threatened outside of current threats to the components involved in the survey.

CHAPTER FOUR: FINDINGS

Overview

The purpose of this study was to investigate the relationship between emotion regulation and emotional well-being among diverse college students when moderated by perceived discrimination. It was hypothesized that when ERQ in university students increases, so too does WEMWBS. This relationship was moderated by perceived discrimination when gender, race/ethnicity, and age are controlled. This research furthers the study conducted by Lavanya and Manjula (2017).

Descriptive Statistics

A sample of 79 college students was drawn from Liberty University's Psychology department. Of those, there were 12(15%) males and 67(85%) females. The study was heavily skewed towards females potentially because a sample was only taken from the psychology department at Liberty University. Liberty University has a male to female ratio of 41%/59% as a whole, which favors females slightly more than the national average (Liberty University Diversity & Student Demographics, 2020). Females responded to the study in higher numbers than males due to the psychology department gender ratio skew towards females with a male to female ratio of 20.1%/79.9% (Liberty University, 2021). The gender was weighted in SPSS to account for the skew. Weighting the frequency allowed the study to represent the university population vs. the psychology department (Liberty University, 2021). Below find the unweighted and weighted frequency tables:

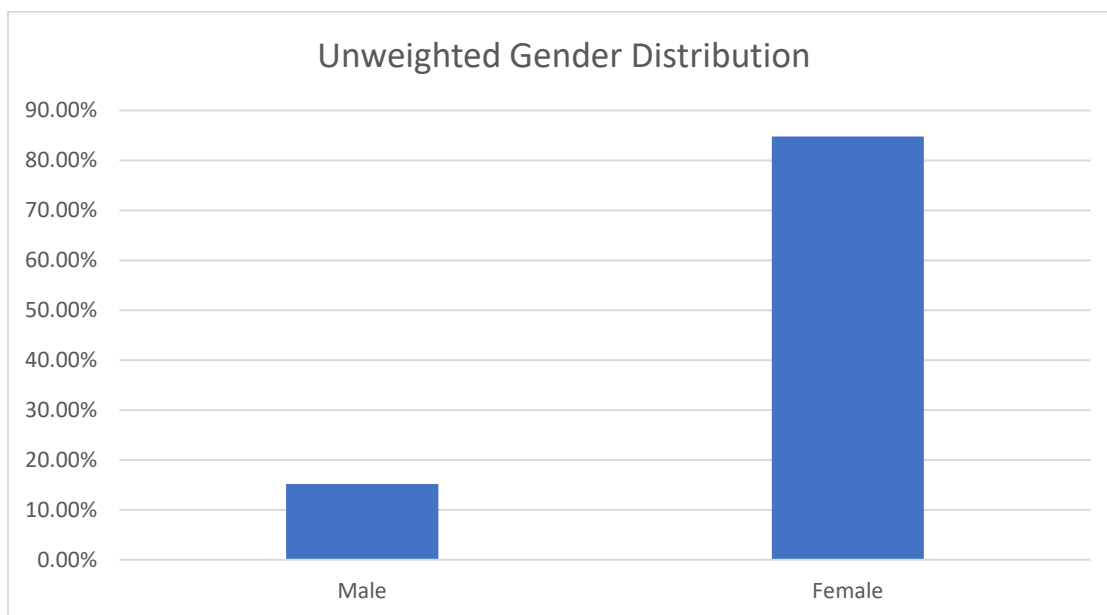


Figure 1 Unweighted Gender

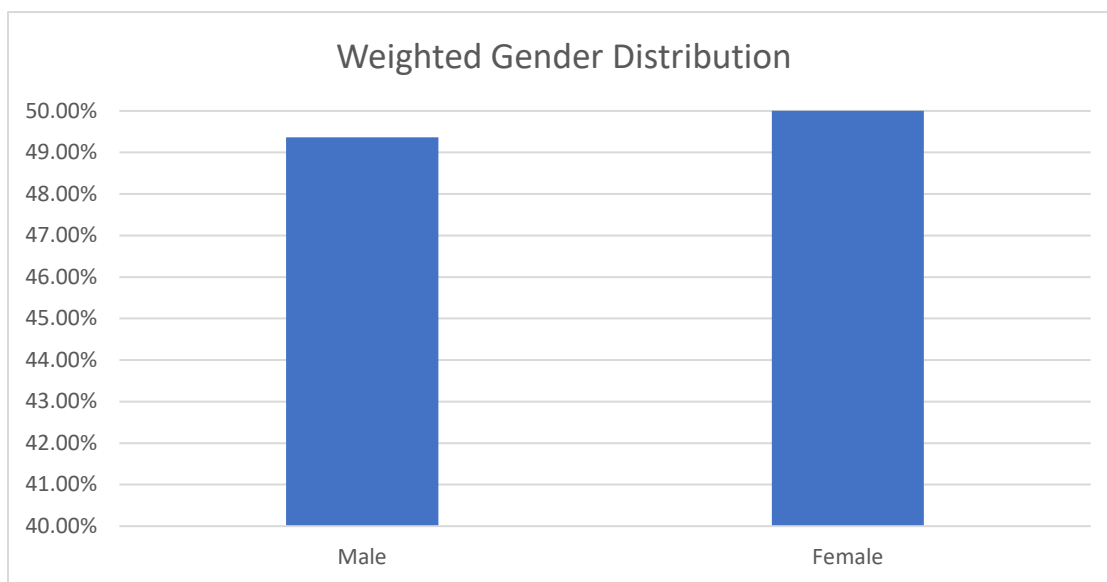


Figure 2 Weighted Gender

There were 8 Latino/Hispanic (10.1%), 52 Caucasian (65.8%), 1 Native Hawaiians/Pacific Islanders (1.3%), 14 African Americans (17.7%), and 4 that identified as two or more races/ethnicities (5.1%). The Race/Ethnicity distribution is within tolerances of normal, which means the racial diversity of the study is in line with the racial diversity of Liberty

University (Liberty University Diversity & Student Demographics, 2020). Below, find the race/ethnicity frequency table:

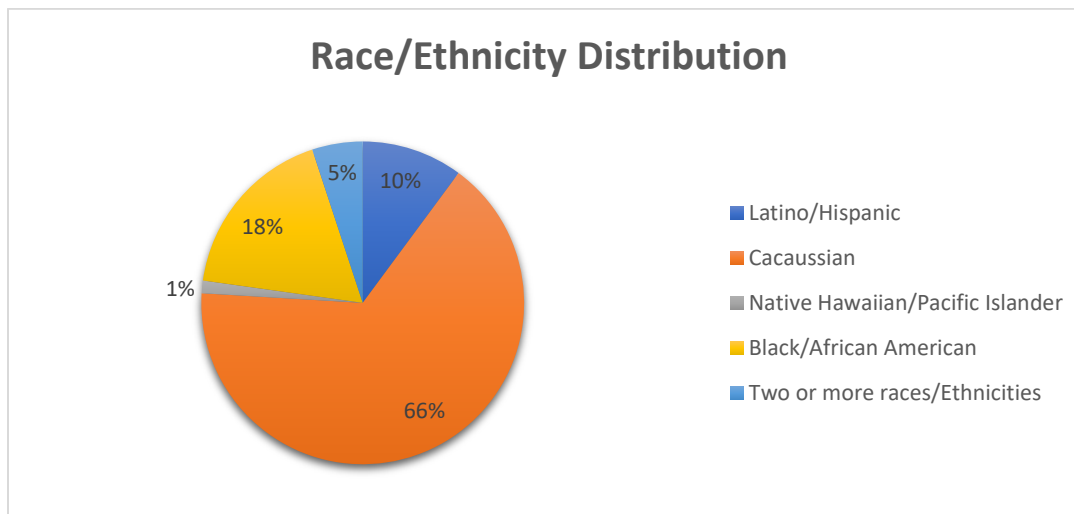


Figure 3 Race/Ethnicity Distribution

The Warwick-Edinburgh Mental Wellbeing Scales (WEMWBS) tested at a $m = 33.6$ with $s = 8.12$ and appeared to present as a normal distribution. In a previous study, respondents to WEMWBS tested at a $M = 48.8$ with $SD = 6.8$ (Clarke et al., 2011). WEMWBS scores range from 14-70. The Emotion Regulation Questionnaire (ERQ) tested at a $m = 43.2$ with a $s = 10.2$. ERQ scores range from 7-70. Cognitive Reappraisal (CR) tested at a $m = 28.4$ with a $s = 7.06$ and Expressive Suppression (ES) tested at a $m = 14.8$ with a $s = 5.15$. Perceived Discrimination tested at a $m = 45.7$ with a $s = 10.9$ and presents a high negative skew = -1.62, which can be interpreted to mean that more of the sample respondents reported high levels of discrimination. Perceived Discrimination also presented a high kurtosis = 2.71, which can be interpreted to mean that there is more weight in the tails of the distribution than the normal distribution. In this case, most of the weight lies in the right tail, which aligns with the negative skewness, which again

shows more respondents reported higher levels of perceived discrimination. The left tail shows that of the 67 respondents that reported perceived discrimination, 2 were in the 12-20 range (3%), 3 were in the 20-28 score range (4.5%), and 6 were in the 28-36 score range (9.1%). The remaining 83.4% of respondents reported within the sample mean and standard deviation. This is to say that a majority of respondents that report experiencing perceived discrimination perceive higher overall levels of discrimination. The Everyday Discrimination Scale scores range from 9-63. It is important to note that the Everyday Discrimination Scale is comprised of several types of discrimination, not just racial discrimination.

Statistics

	WEMWBS	ERQ	CR	ES	DISC	
N	Valid	79	79	79	79	79
	Missing	0	0	0	0	0
Mean	33.60	43.18	28.3577	14.8192	45.65	
Std. Deviation	8.123	10.166	7.05847	5.14560	10.921	
Minimum	13	18	12.00	4.00	12	
Maximum	52	69	42.00	27.00	60	

Table 1 Weighted Averages

Mean

GENDER	WHT_GEN	ERQ	CR	ES	WEMWBS
Male	.5950000000000000	47.75	32.0833	15.6667	36.58
	Total	47.75	32.0833	15.6667	36.58
Female	.5950000000000000	42.29	27.8727	14.4182	32.36
	3.2590000000000000	43.08	28.0833	15.0000	34.08
	Total	42.72	27.9874	14.7349	33.30
Total	.5950000000000000	43.27	28.6269	14.6418	33.12
	3.2590000000000000	43.08	28.0833	15.0000	34.08
	Total	43.18	28.3577	14.8192	33.60

Table 2 Weighted Averages

Results

Hypothesis(es)

The null hypothesis states that ERQ will not significantly affect the value of WEMWBS when moderated by Perceived Discrimination and controlled for by gender, age, and race as covariates.

Andrew Hayes' PROCESS Model 1 regression analysis (2017) was used to analyze the effect of ERQ on WEMWBS as moderated by Perceived Discrimination and controlled for by gender, age, and race as covariates. ERQ comprises two distinct parts, cognitive reappraisal (CR) and expression suppression (ES).

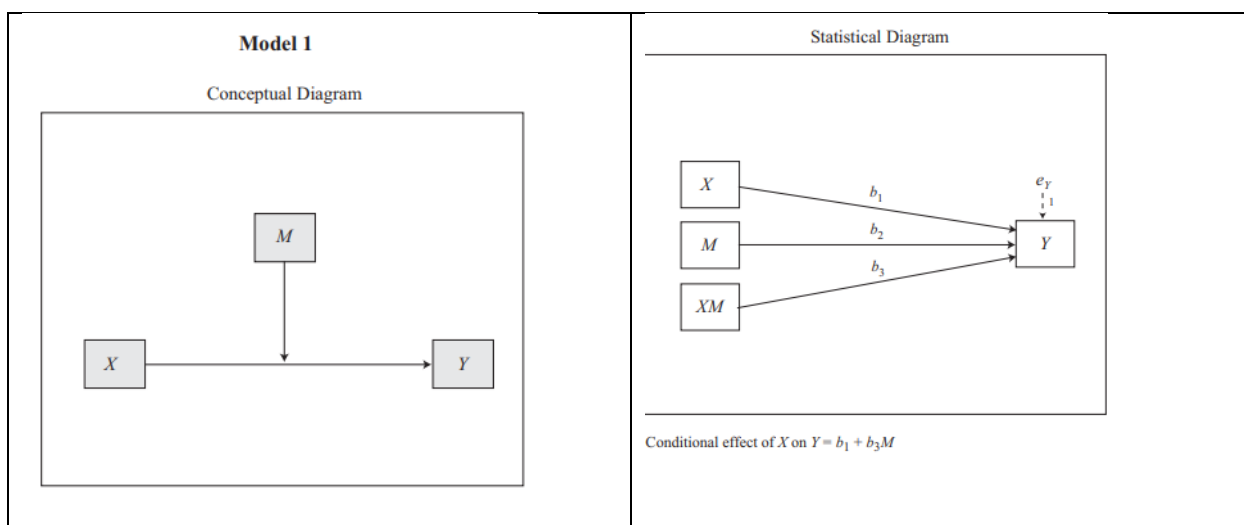


Figure 4 Conceptual and Statistical Diagram

Assumptions and Data Screening

For this study, three categorical variables were chosen (Gender, Race, and Age) and three quantitative variables (WEMWBS, ERQ (CR & ES), and DISC) for data screening. There were no missing values in any of the variables. All variables were tested for normality of shape, kurtosis, skewness, outliers, and impossible answers. No impossible answers were detected during screening for any of the variables.

Due to the small sample size, a combination of Mahalanobis Distances was decided upon, Cooks Distances, and Leverage Distances instead of individual variable analysis to identify multivariate outliers. The Mahalanobis distance accounts for the variance for each variable and the covariance between variables. It provides a way to measure distances that considers the scale of the data (Kim M. G., 2000). Cook's distance is the scaled change in fitted values, which is useful for identifying outliers in the X values (observations for predictor variables). Cook's distance shows the influence of each observation on the fitted response values. An observation with Cook's distance larger than three times the mean Cook's distance might be an outlier (MathWorks, 2020). Leverage is a measure of how far away the independent variable values of an observation are from those of the other observations (Leverage statistics, 2021). A linear regression with WEMWBS was ran as the outcome variable, and ERQ, DISC, Age, and Gender as the predictor variables. The save button was then clicked to select the Mahalanobis Distances, Cooks Distances, and Leverage Distances. In plots, ZPRED was chosen for the Y-axis and ZRESID for X-axis and selected histogram and normal probability plot to test for normality, linearity, and Homogeneity/Homoscedasticity. The following are the data screening results herein:

Gender showed there were several more females than males in the psychology department at Liberty University that responded to the survey. I wanted to represent the University population by sampling the Psychology department students. The skew was corrected to the population standards of the university by weighting the variable. After weighting, the variable was in line with university ratios, kurtosis was flattened due to similarity in frequency, and there were no outliers.

Age was bimodal in shape, meaning that larger percentages of respondents were in the younger and older categories rather than the center category, positive skew due to most respondents presenting at a younger age, and a slightly negative kurtosis due to the flattening of the frequency of ages. There were no outliers.

Race presented as normal in shape and had no significance. The distribution of race was in tolerance of normal race distribution in the Liberty University student body.

WEMWBS showed a normal shape. The skewness was slightly negative due to the higher frequency of respondents reporting higher values. Kurtosis was negative, indicating most of the values centered around the mean and the tails were slim. There were no outliers.

ERQ showed a normal shape. The skew was negative because of the graduated step up on values and the minimal frequency of values to the right of the mean. The kurtosis was positive due to the wider overall distribution of values. There were no outliers.

DISC was normal in shape. The skew was highly negative due to many respondents reporting high values of perceived discrimination. The kurtosis was highly positive, showing that most of the respondents centered around the mean. There were no outliers.

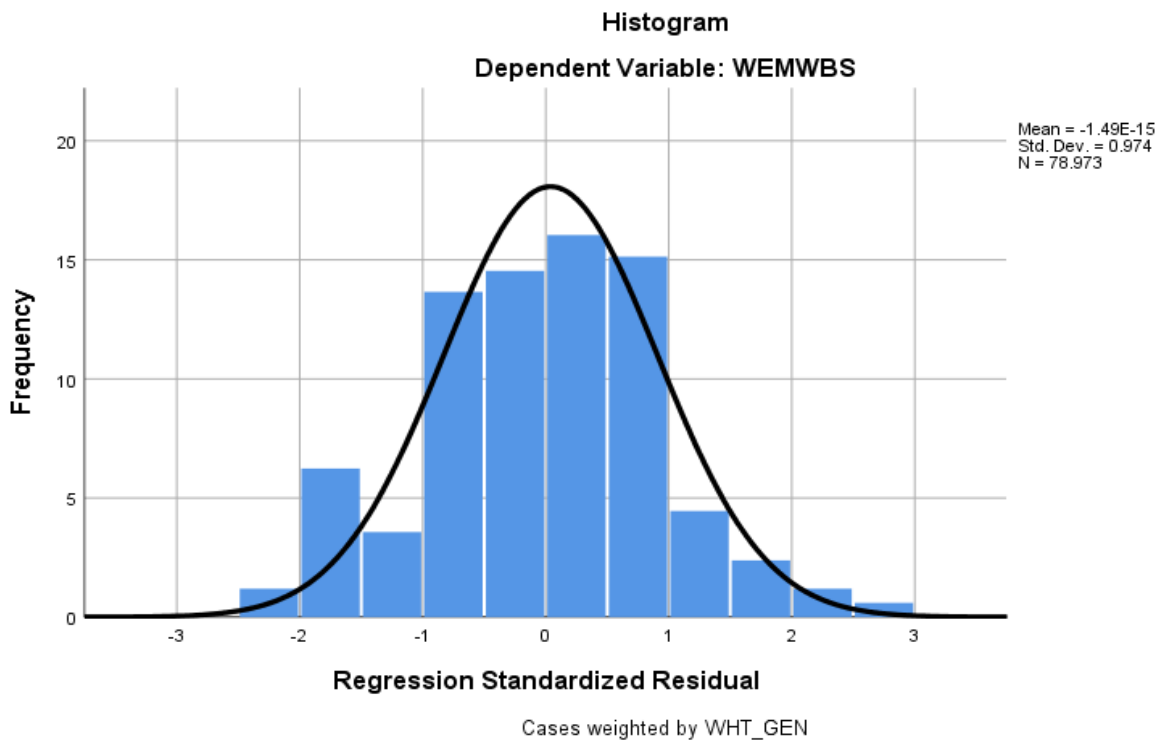


Figure 5 WEMWBS Distribution

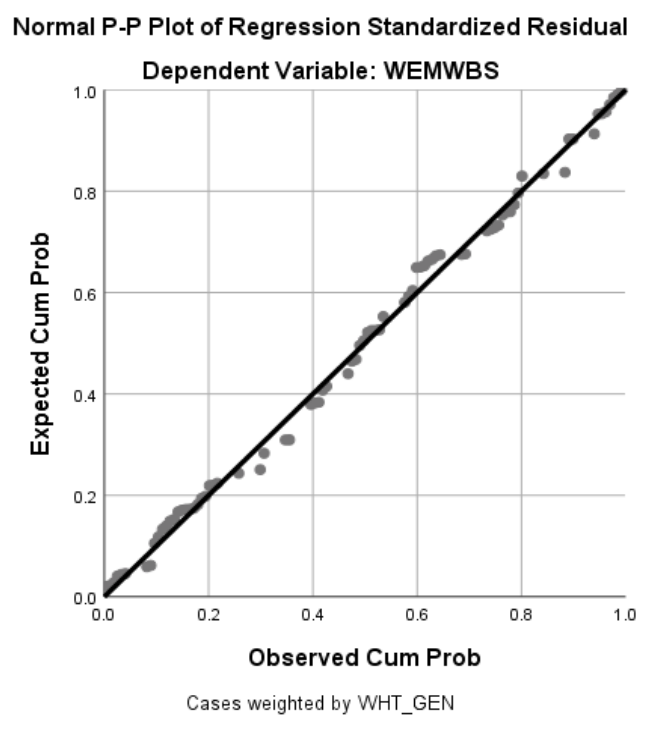


Figure 6 WEMWBS P-P Plot Residual

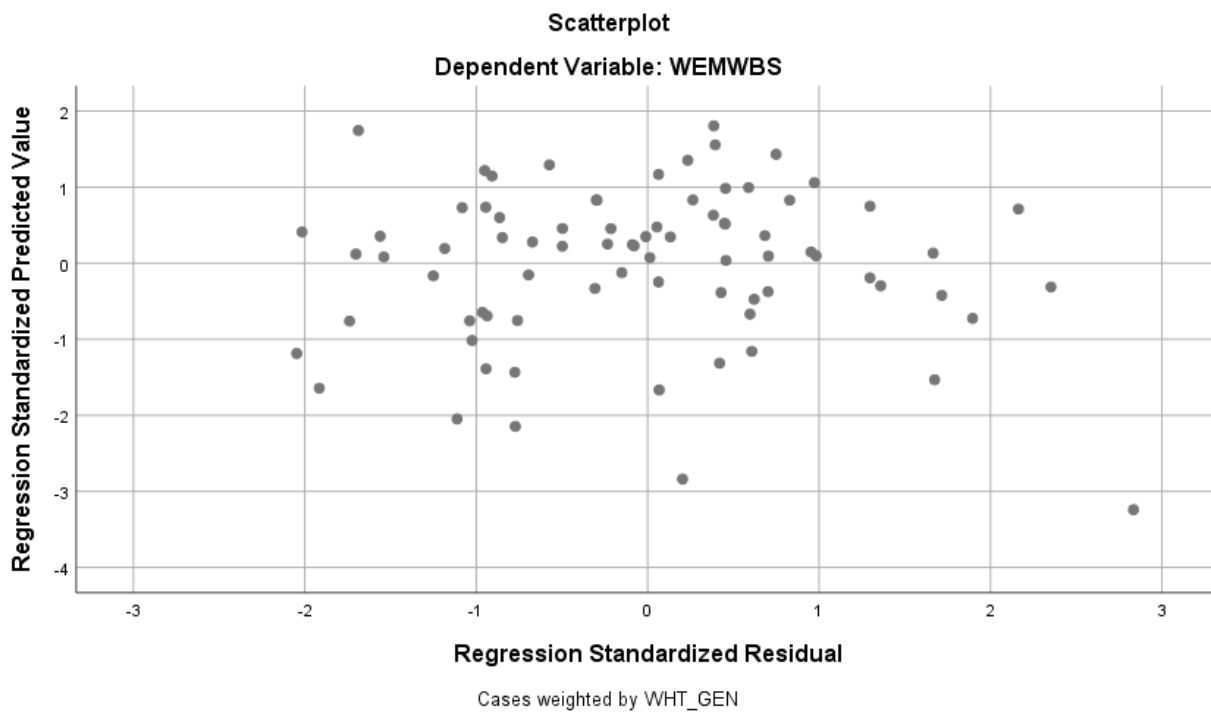


Figure 7 WEMWBS Scatterplot Residual

Analysis**ERQ MODEL**

Model : 1

Y : WEMWBS X : ERQ W : DISC

Covariates:

GENDER AGE RACE

Sample

Size: 79

OUTCOME VARIABLE:

WEMWBS

Model Summary

R	R-sq	MSE	F	df1	df2	p
.5084	.2584	58.9077	4.1819	6.0000	72.0000	.0012

Model

	coeff	se	t	p	LLCI	ULCI
constant	39.9992	2.7102	14.7585	.0000	34.5964	45.4019
ERQ	.1091	.1006	1.0850	.2816	-.0914	.3097
DISC	.3707	.0925	4.0072	.0001	.1863	.5551
Int_1	.0142	.0090	1.5753	.1196	-.0038	.0322
GENDER	-6.6118	2.6008	-2.5422	.0132	-11.7964	-1.4271
AGE	-1.2418	1.0511	-1.1814	.2413	-3.3372	.8536
RACE	-.0888	.2653	-.3349	.7387	-.6176	.4399

Product terms key:

Int_1 : ERQ x DISC

Test(s) of highest order unconditional interaction(s):

	R2-chng	F	df1	df2	p
X*W	.0256	2.4817	1.0000	72.0000	.1196

Focal predict: ERQ (X)
Mod var: DISC (W)

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:

95.0000

NOTE: The following variables were mean centered prior to analysis:

DISC ERQ

Table 3 ERQ Model

CR MODEL

Model : 1
 Y : WEMWBS X : CR W : DISC

Covariates:
 GENDER AGE RACE

Sample
 Size: 79

OUTCOME VARIABLE:
 WEMWBS

Model Summary

R	R-sq	MSE	F	df1	df2	p
.5502	.3027	55.3872	5.2104	6.0000	72.0000	.0002

Model

	coeff	se	t	p	LLCI	ULCI
constant	39.2628	2.6933	14.5780	.0000	33.8938	44.6318
CR	.3540	.1431	2.4745	.0157	.0688	.6392
DISC	.3289	.0923	3.5628	.0007	.1449	.5129
Int_1	.0155	.0148	1.0437	.3001	-.0141	.0450
GENDER	-5.5875	2.6115	-2.1395	.0358	-10.7935	-.3815
AGE	-1.1885	1.0463	-1.1358	.2598	-3.2743	.8974
RACE	-.1559	.2591	-.6019	.5491	-.6724	.3605

Product terms key:

Int_1 : CR x DISC

Test(s) of highest order unconditional interaction(s):

	R2-chng	F	df1	df2	p
X*W	.0105	1.0894	1.0000	72.0000	.3001

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:
 95.0000

NOTE: The following variables were mean centered prior to analysis:

DISC CR

Table 4 CR Model

ES MODEL

Model : 1
 Y : WEMWBS X : ES W : DISC

Covariates:
 GENDER AGE RACE

Sample
 Size: 79

OUTCOME VARIABLE:

WEMWBS

Model Summary

	R	R-sq	MSE	F	df1	df2	p
	.4991	.2491	59.6502	3.9804	6.0000	72.0000	.0017

Model

	coeff	se	t	p	LLCI	ULCI
constant	40.0137	2.6727	14.9714	.0000	34.6859	45.3416
ES	-.1908	.1619	-1.1781	.2426	-.5136	.1320
DISC	.3765	.0903	4.1705	.0001	.1965	.5564
Int_1	.0162	.0151	1.0745	.2862	-.0139	.0463
GENDER	-6.9958	2.5331	-2.7618	.0073	-12.0455	-1.9462
AGE	-.8080	1.0348	-.7808	.4375	-2.8709	1.2549
RACE	-.0499	.2650	-.1882	.8512	-.5782	.4784

Product terms key:

Int_1 : ES x DISC

Test(s) of highest order unconditional interaction(s):

	R2-chng	F	df1	df2	p
X*W	.0120	1.1546	1.0000	72.0000	.2862

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:

95.0000

NOTE: The following variables were mean centered prior to analysis:

DISC ES

Table 5 ES Model

The overall ERQ Model proved to be significant with $F(6,72)=4.18, p<.05, R^2=0.26$ (.026 is the interaction between ERQ and DISC as seen in ΔR^2). The main effect consists of ERQ $b=.109, t(72)=1.09, p=.282$, which shows it is not a significant predictor of WEMWBS. DISC $b=.371, t(72)=4.01, p=.0001$, shows it is a significant predictor of WEMWBS however. Interpretation: As ERQ/DISC increases, WEMWBS increases.

The ERQ Model interaction consists of Int_1 $b=.014, t(72)=1.58, p=.120$, which shows that it is not a significant predictor of WEMWBS. The CR Model interaction consists of Int_1 $b=.016, t(72)=1.04, p=.300$, which shows that it is not a significant predictor of WEMWBS. The ES Model interaction consists of Int_1 $b=.016, t(72)=1.07, p=.286$, which shows that it is not a significant predictor of WEMWBS. This finding shows that perceived discrimination does not moderate the relationship between ERQ and WEMWBS, CR and WEMWBS, or ES and WEMWBS.

The covariate Gender $b=-6.61, t(72)=-2.54, p=.013$, is a significant predictor of WEMWBS, indicating males have higher WEMWBS scores on average than Females. Age $b=-1.24, t(72)=-1.18, p=.241$, shows it is not a significant predictor of WEMWBS. Race $b=-.089, t(72)=-.335, p=.739$, shows it is not a significant predictor of WEMWBS.

The alternate hypothesis was partially supported in that the overall model shows it is significant, yet also shows that ERQ does not have a significant impact on WEMWBS alone; however, regression analysis of the components of ERQ (CR & ES) presented conflicting significance evidence. CR $b=.354, t(72)=2.47, p=.016$, which shows it is a significant predictor of WEMWBS, and ES $b=-.191, t(72)=-1.18, p=.243$, which shows it is not a significant predictor of WEMWBS. The CR & ES components of ERQ offset each other's correlation effect. ERQ presented with Cronbach's Alpha of 0.883, to mean there was high internal consistency and

reliability. WEMWBS presented with Cronbach's Alpha of 0.837, to mean there was high internal consistency and reliability. DISC presented with Cronbach's Alpha of 0.905, to mean there was high internal consistency and reliability. Cronbach's Alpha test shows .465, demonstrating that the items WEMWBS, ERQ (CR and ES), and DISC are not closely related as a group; thus, they do not show high internal consistency. Interestingly, ES showed that if removed from the analysis, it would increase Cronbach's Alpha to 0.535. Additionally, the corrected item-total correlation for ES is 0.05 (extremely low), meaning it would be useful to remove it from the questionnaire; however, ES is part of the ERQ study and cannot be removed.

Reliability

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	78.9729999	100.0
	Excluded ^a	.0000000	.0
	Total	78.9729999	100.0

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.465	.459	4

Table 6 Chronbach's Alpha

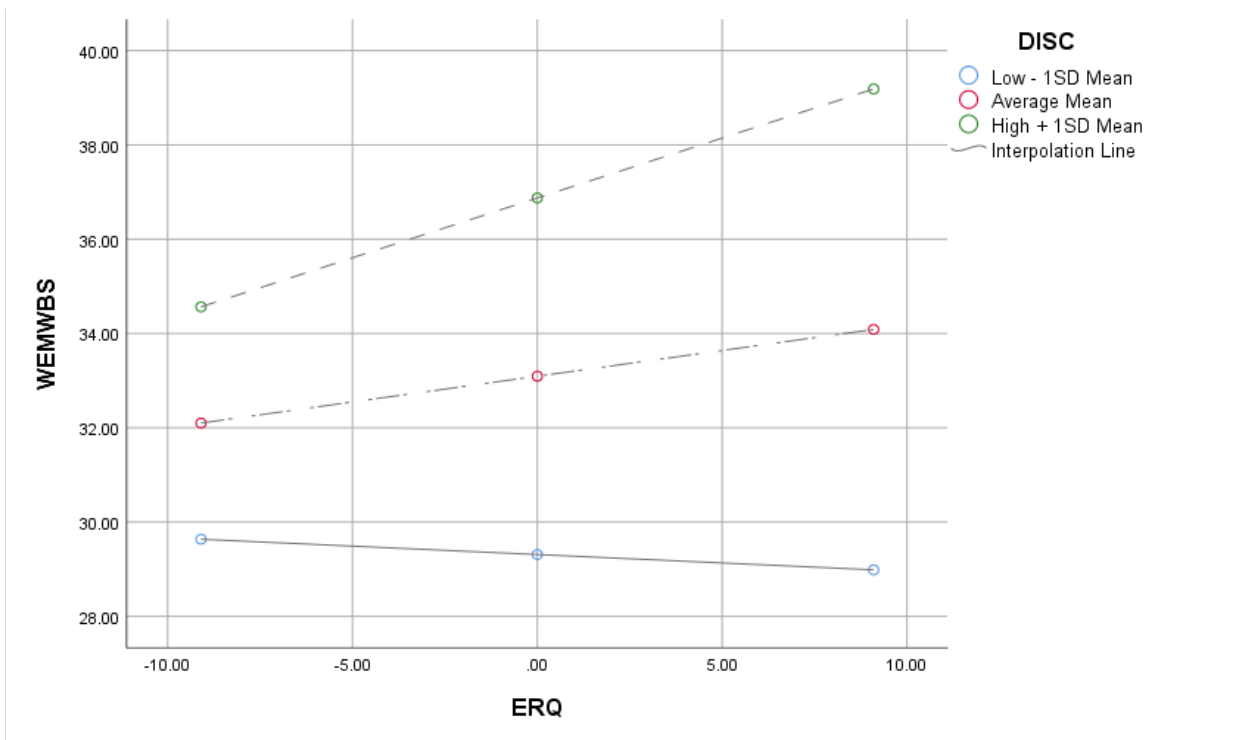


Figure 8 ERQ Effect on WEMWBS moderated by Discrimination

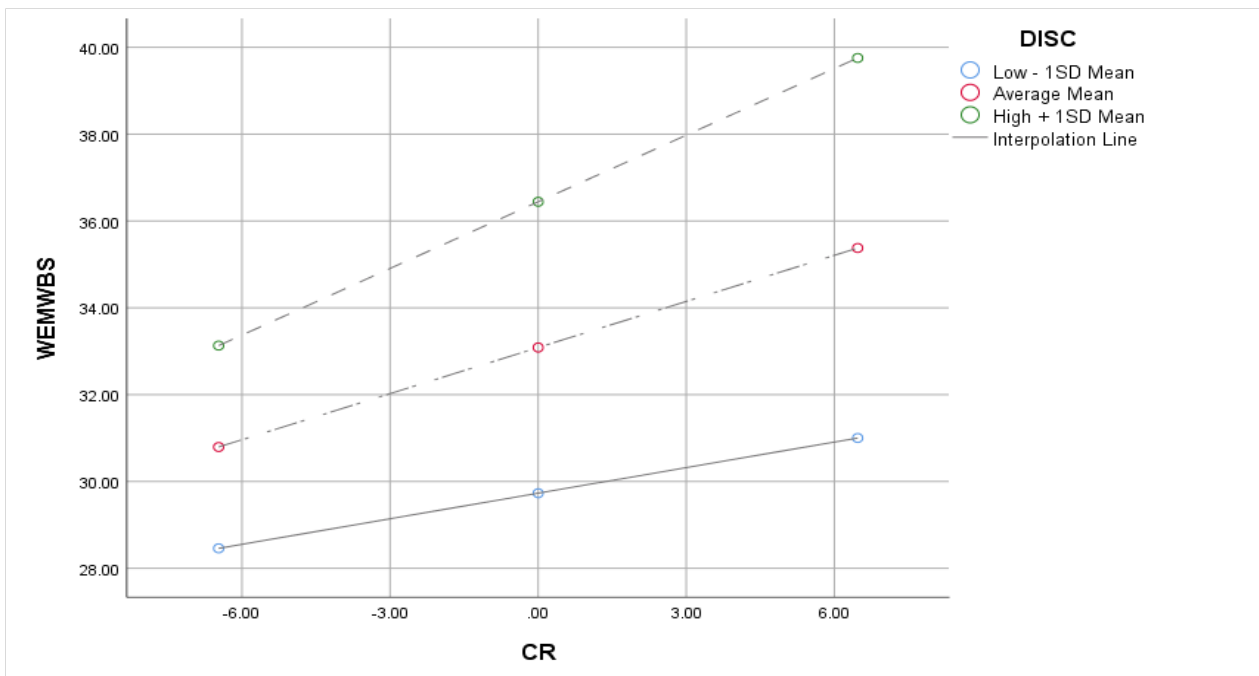


Figure 9 CR Effect on WEMWBS moderated by Discrimination

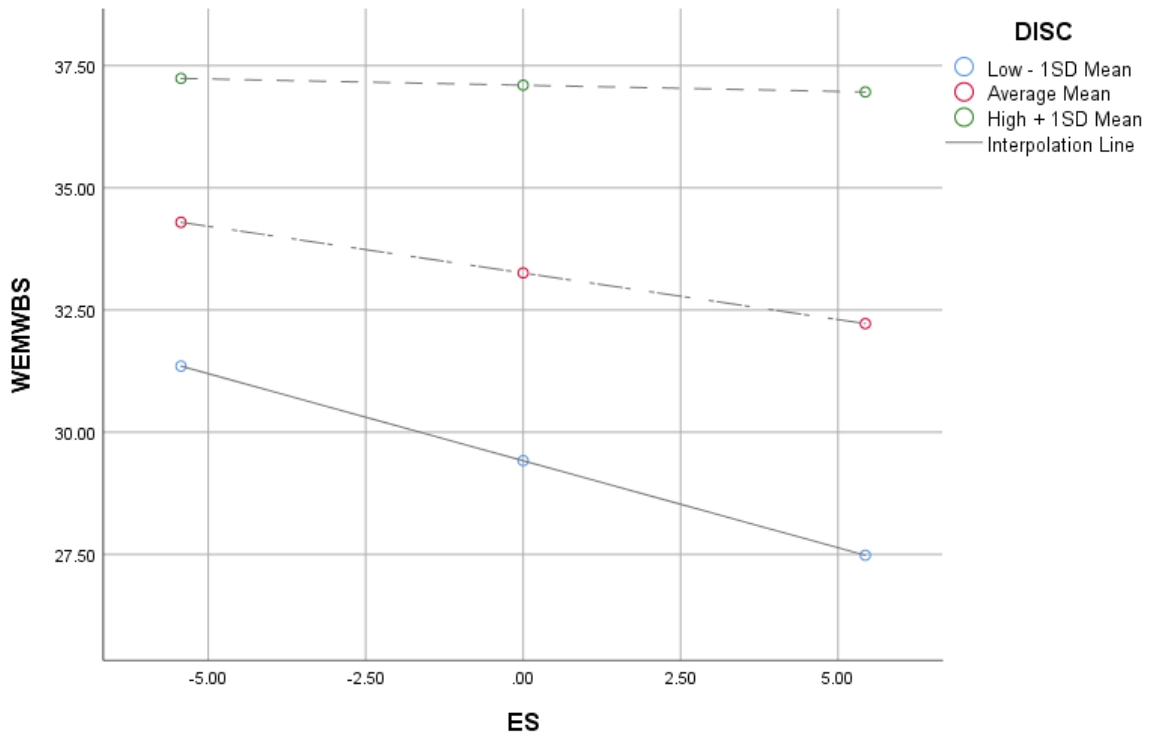


Figure 10 ES Effect on WEMWBS moderated by Discrimination

Reason For Discrimination	Percent
Your Gender	23.23%
Your Age	18.69%
Your Education or Income Level	12.63%
Some other Aspect of Your Physical Appearance	12.12%
Your Race	9.09%
Your Weight	5.56%
Your shade of skin color (NSAL)	5.05%
Your Height	4.55%
Your Religion	3.54%
Your Ancestry or National Origins	3.54%
Your Sexual Orientation	2.02%
Grand Total	100.00%

Table 7 Reason for Discrimination

Summary

Previous studies identified alarming health concerns, with 26% of Americans aged 18 and older, or about 1 in 4 adults, having experienced symptoms associated with a mental disorder (Salzer, 2012). Numbers continue to increase, with 42% of students reporting feelings of depression and 12% presenting with suicidal ideations (ACHA, 2018). Studies by Lavanya and Manjula (2017) focused on college students' ability to regulate their emotions. They looked at the psychological factors; however, Lavanya and Manjula's (2017) research were limited as it only captured a large sample size of Indian college students in Bengaluru city. Lavanya and Manjula (2017) noted this as a limitation of their study that future research could investigate from a cross-cultural perspective. This present study explored the influence of emotion regulation on diverse college student's emotional well-being and whether the outcome was moderated by perceived discrimination with gender, age, and race as the covariates.

The results of the analysis showed that ERQ alone was not a significant predictor of WEMWBS; however, when coupled with DISC and GENDER, the overall model is significant, which can be explained by the gender ratio discrepancy. Liberty University's male-to-female ratio is 49.4/50.6 (Gender1); however, the gender ratio of respondents was 15.2/84.8.

Additionally, the highest frequency answer to the question "*What do you think is the main reason for these experiences?*" was *Your Gender* (DISC_Reason). The gender discrepancy coupled with the reason many feel discriminated against as their gender can help explain why GENDER and DISC were so significant to WEMWBS ($p=0.013$ and $p=.0001$, respectively). ERQ was not a significant predictor of WEMWBS partly because of the offsetting effects of its components CR & ES. Reappraisal and refocusing are adaptive emotion regulation strategies that are considered

commonly used strategies to reduce externalizing problems (Lavanya & Manjula, 2017). Thus, CR had a positive linear relationship to WEMWBS. This indicated that respondents that were better equipped to re-frame, re-focus, and overcome adversity showed higher mental wellbeing. ES had a negative linear relationship to WEMWBS to a lesser degree, indicating respondents that endorsed avoidance and suppression of emotions showed lower mental wellbeing. These two components offset the effect of the other in a way that rendered ERQ non-significant.

CHAPTER FIVE: FINDINGS

Overview

In this fifth and final chapter, a discussion regarding the purpose of the study will be restated as well as the research question and hypothesis. This final chapter further examined the results and whether findings supported or contradicted other studies and theories. Also, an in-depth look at the results of this present study was compared and contrasted to the earlier findings. Other implications were inferred as to how this current study may have added to the existing body of knowledge and theory and can assist college administrators and, at large, the community care and counseling field. In the conclusion of this chapter, the strengths and limitations of this study were discussed, and recommendations for future research.

Summary of Findings

The purpose of this study was to investigate the relationship between emotion regulation and emotional well-being among diverse college students when moderated by perceived discrimination and controlled for gender, age and race. The research question presented was “Does Emotion Regulation (cognitive reappraisal and expressive suppression) influence diverse college student’s emotional well-being when moderated by perceived discrimination and controlled for gender, age, and race? This study hypothesized that when college students display lower levels of emotion regulation scores ($ERQ=CR+ES$), they will display lower emotional well-being scores (WEMWBS) as moderated by perceived discrimination. Previous studies have shown that ERQ significantly affects the outcome of well-being (Kraiss, Ten Klooster, Moskowitz & Bohlmeijer, 2020). However, previous studies have not used subscales of ERQ (CR+ES) to analyze the effect on WEMWBS, so there is no standard from which to compare this analysis to. The null hypothesis stated that when college students display lower levels of emotion

regulation scores ($ERQ=CR+ES$), they will not display lower emotional well-being scores (WEMWBS) as moderated by DISC. The findings revealed that ERQ by itself was not a significant predictor of WEMWBS. However, to determine its overall effect, CR and ES were examined, which are two essential components of ERQ. CR showed significance to WEMWBS, indicating that students who were better equipped to re-frame, re-focus, and overcome adversity displayed higher mental well-being. Whereas ES showed non-significant, students who displayed avoidance and suppression of emotions displayed lower mental well-being. While race and age were determined non-significant to this study, gender and DISC were significant. Findings indicated the ERQ was significant in predicting WEMWBS, and ES was not significant in predicting WEMWBS. DISC interestingly showed enhanced WEMWBS suggesting posttraumatic growth (PTG).

Discussion

The purpose of this study was to investigate the relationship between emotion regulation and emotional well-being among diverse college students when moderated by perceived discrimination and controlling for gender, age and race. An exploratory examination was conducted on the various influences of emotion regulation that is comprised of CR and ES and its effect on diverse college students' emotional well-being. Gender, age, and race were used as covariates in this study. The research question that guided this study was titled "Does Emotional Regulation (cognitive reappraisal and expressive suppression) influence diverse college student's emotional well-being when moderated by perceived discrimination and controlled for gender, age, and race?"

Earlier studies support and emphasize the importance of healthy emotions as they are reliable predictors of motivation, learning, and performance (Pekrun et al., 2011). Thus, avoiding stressful situations is considered a maladaptive strategy (Lavanya & Manjula, 2017) and may promote suppression of one's emotions (Ash & Lira Yoon, 2020). Throughout the literature, emotions are conveyed as being influential to human existence. Darwin (1872) theory of emotions and that it is ever-evolving (Hess & Thibault, 2009) relates to this current study's findings as it highlights the progressive nature of emotions. In this present study, while the sample size collected was below what was desired, it identifies many relationships regarding human emotions as presented in previous studies and how what is perceived can impact one's overall emotional well-being.

This current study's sample size consisted of several more females than males, all located in the psychology department of Liberty University. Gender indicated significance in that it is a predictor of how an individual's emotional well-being is impacted. The results showed that males have 11.8% higher ERQ and 9.9% higher WEMWBS scores than females. Males accordingly had 14.6% higher CR scores and only 6.4% higher ES scores than females. This significance may be because females express themselves differently. Previous studies have observed females displaying more anxiety problems combined with a lower sense of personal control of their lives and dealing with menstrual cycles, unlike males (Lavanya & Manjula, 2017). Age was shown to be bimodal. Most of the respondents were either younger or older and indicated no significance. This was observed to be solely due to the small sample size of respondents as the literature indicates age-related changes being specifically related to emotion regulation strategies used and that changes are expected due to life experiences (Lavanya & Manjula, 2017). This study believed that age would predict emotional well-being, which is also in sync with the literature as

with age, young adults utilize more negative emotional strategies impacting health (Lavanya & Manjula, 2017). This study's results could be attributed to the research sample size as opposed to having a large sampling group like Lavanya and Manjula (2017).

The data also showed that perceived discrimination interestingly had a positive correlation effect on WEMWBS. This correlation may be attributed to the fact that the study was highly skewed towards Caucasian females that related that they felt they were discriminated against for physical traits that are typically thought to enhance one's well-being, such as education and income level, physical appearance, race, and gender. Another possible factor could be that individuals who may have experienced discrimination also choose to pursue a psychology major and have found meaningful ways to overcome adversity.

Race presented normal in shape and indicated no significance to the study. However, the literature acknowledges a special relationship between race and an individual's health. The literature identifies race as a mediating variable in determining one's ability to regulate emotions and students' health outcomes (Lavanya & Manjula, 2017). This current study aimed to explore various races relating to Caucasian, African American, Latino Hispanic, Asian, Native American, Native Hawaiian, Pacific Islander, or two or more or other. However, it was unable to accomplish that due to a lack of diverse respondents and a small sample size.

The literature and the current research are in sync and contribute emotion regulation significantly to an individual's levels of well-being. However, while ERQ was shown to not significantly impact WEMWBS in this study, most likely due to sampling size; however, one of its components, CR, was, while the other component ES was not. The components of ERQ (CR+ES) offset each other's effect on WEMWBS in this study. CR was demonstrated to be a

significant predictor of WEMWBS with a positive correlation effect. At the same time, ES did not show to be a significant predictor of WEMWBS with a negative correlation effect.

Implications

The current study hypothesized that when college students display lower levels of emotion regulation scores ($ERQ=CR+ES$), they will display lower emotional well-being scores (WEMWBS) as moderated by perceived discrimination. Findings indicated that ERQ components CR was significant in predicting WEMWBS, and ES was not significant in predicting WEMWBS. DISC interestingly showed to enhance WEMWBS suggesting posttraumatic growth (PTG). The findings revealed the top types of perceived discrimination were gender, age, education, income level, and physical appearance. One way to interpret this seemingly contradictory finding is to realize that the sample was heavily skewed in favor of females. Those who perceived to be discriminated against the most were Caucasian females. Perceived discrimination related to race was much lower in scale and frequency, partially because of the more significant number of non-minority respondents. Self-conceptualization could be a factor contributing to respondents perceiving discrimination and thus driving their WEMWBS scores higher. People who feel they are doing better than those around them due to inherent traits such as gender, race, and physical appearance may attribute that success to those traits and believe that others discriminate against them for said traits.

The implications of this current study add to the existing body of knowledge and theory and have meaning for community care and counseling. This study further contributes to the field of counseling by bringing awareness and understanding of emotion regulation and its impact on diverse college students, which can be most beneficial to college administrators and counselors.

This study may further assist counselors from all areas to understand the importance of healthy emotions concerning the awareness of one's thoughts, feelings, and behaviors when providing therapeutic treatment. Effective regulating of emotions allows individuals to successfully adapt to changes in their environment, impacting physiological and behavioral effects on health. Understanding and incorporating emotion regulation strategies into the counseling field may help individuals learn and develop healthy emotion regulation skills when faced with stressors.

The research findings significantly impact the field of counseling as it highlights the importance of healthy regulations of emotions through effective implementation of cognitive reappraisal while minimizing expressive suppression tactics. Cognitive reappraisal changes the emotional impact of a situation or event by reinterpreting its meaning (Ertl et al., 2013). Counselors could implement emotion regulation strategies like mindfulness training as it has shown tremendous efficacy for many clinical conditions (Chiesa, Serretti, & Jakobsen, 2013). Emotion regulation in the therapeutic setting is an essential topic in affective neuroscience. It plays a vital role in treating disorders like borderline personality disorder (BPD), depression, and anxiety disorders (Ertl et al., 2013). Christian worldview strongly informs the interpretation of this current study's findings. When looking at the two components that make up ER = (CR and ES), scripture reminds the children of God that when there is doubt, the Lord's comfort will provide hope and cheer (Psalm 94:19). CR may be understood as knowing the Lord will never forsake His children and that children of God should focus on the positive despite when things may not be going as planned. The test is the adversity but being transformed by renewing the mind (Romans 12:2) to think positive instead of negative (ES) and trusting and believing in God.

Limitations

The study's strengths include a comprehensive evaluation of variables, good reliability, and the validity of tools. A few of the limitations this study encountered included small sample size, possibly due to the 2020 Coronavirus pandemic (COVID-19). Social desirability is another possible limitation of this study. Social desirability is said to encourage bias responses in ways that are likely to be most socially sanctioned when reporting social behaviors leading to underreporting behaviors (Adong, fatch, Emenyo nu, Cheng, Muyindike, Ngabirano & Hahn, 2019). Thus, because of the usage of self-report questionnaires, social desirability is likely to have impacted the study, coupled with only sampling Liberty University psychology department students. This may have resulted in a nonrepresentative sample for this population.

Recommendations for Future Research

The findings from this present study contribute to further understanding the role of emotion regulation and its influence on emotional health. However, this study could be replicated using a larger sample size that encompasses a diverse population of Liberty University's entire student body or multiple universities. Also, it could be used to develop on-campus programs focused on educating students on the importance of healthy emotions and how to manage/regulate one's emotions to promote PTG.

Summary

Previous studies have identified unhealthy behaviors college students are exposed to. As the alarming rates of mental disorders continue to rise, research has shown that 1 in 4 adults experience a mental illness (Salzer, 2012). Concerns regarding college student's internalization

of stressful life experiences demonstrated a linkage to emotion regulation deficits (Asberg, 2013). Hence, the purpose of this study was to investigate the relationship between emotion regulation and emotional well-being among diverse college students when moderated by perceived discrimination and controlled for gender, age and race. While the current study did not replicate Lavanya and Manjula's (2017) study entirely, it did explore emotion regulation and its impact on emotional well-being. The present study emphasized the importance of healthy emotions and how emotions may progress over time. Overall, ERQ was shown not significantly to impact WEMWBS; more due to sampling size. However, components on ERQ (CR) demonstrated a significant predictor of WEMWBS while (ES) demonstrated not being a significant predictor of WEMWBS with a negative correlation. This current study's implications further add to the existing body of knowledge and theory and have meaning for community care and counseling. Also, this study further informs the Christian worldview. The Bible speaks regarding positive thinking that we may set our minds on things above and not earthly things (Colossians 3:2). As with CR, it highly aims to foster healthy thinking and not give in to the mind's deceptions. While the findings did present limitations relating to small sampling, possibly due to a pandemic, it provides avenues for future research among a more prominent and diverse population as well as a ground to establish awareness and emotion regulation training programs in universities.

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APPENDIX A

Date: 8-3-2020

IRB #: IRB-FY19-20-480

Title: "The Influence of Emotion Regulation on the Emotional Well-Being Among Diverse University Students."

Creation Date: 6-25-2020

End Date:

Status: Approved

Principal Investigator:

Shandia Gardiner **Review**

Board: Research Ethics

Office Sponsor:

Study History

Submission Type Initial	Review Type Exempt	Decision Exempt
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Key Study Contacts

Member William Bird	Role Co-Principal Investigator	Contact wbird@liberty.edu
Member Shandia Gardiner	Role Principal Investigator	Contact smcgrew1@liberty.edu
Member Shandia Gardiner	Role Primary Contact	Contact smcgrew1@liberty.edu

APPENDIX B

Consent

Title of the Project: The Influence of Emotion Regulation on the Emotional Well-Being Among Diverse University Students

Principal Investigator: Shandia Gardiner Robertson, Ed.D Candidate, MA, BA

Invitation to be Part of a Research Study

You are invited to participate in a research study. In order to participate, you must first meet the inclusion criteria. You must be between the ages of 19-28 years old, attending Liberty University, where you are a residential or online student enrolled in one or more undergraduate or master's levels psychology classes. Taking part in this research project is voluntary.

Please take the time to read this entire form and ask questions before deciding whether to take part in this research project.

What is the study about, and why is it being done?

The purpose of the study is to investigate the correlation between emotion regulation and emotional well-being among diverse university students when moderated by perceived discrimination. This study is being conducted because research is showing alarming rates of emotional distress in college students, with students reporting feeling overwhelming anxiety, depression, and suicidal ideations. Lavanya and Manjula (2017) did a similar study on emotion regulation among Indian students, also showing high emotional and psychological distress. One of their recommendations was that this study is investigated from a cross-cultural perspective, which is what the present study intends to do.

What will happen if you take part in this study?

If you agree to be in this study, I would ask you to do the following things:

1. Complete an online, anonymous survey consisting of demographic questions, the Emotion Regulation Questionnaire (ERQ), Warwick -Edinburgh Mental Well-Being Scale (WEMWBS), and the Everyday Discrimination Scale (EDS). It should take approximately 15- 20 minutes to complete the survey.

How could you or others benefit from this study?

While participants should not expect to receive a direct benefit from taking part in this study, this study offers societal benefits. This study could increase awareness about the influence of emotion regulation and the impact it has on college student's emotional health. Thus, the findings could be useful in helping colleges and universities develop intervention programs to assist students having difficulty in regulating their emotions. Finally, this study may further contribute to the already existing literature.

What risks might you experience from being in this study?

The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

Liberty University
IRB-FY19-20-480
Approved on 7-31-2020

How will personal information be protected?

The records of this study will be kept private. Research records will be stored securely, and only the researcher will have access to the records. Participant responses will be anonymous. Data will be stored on a password-locked computer and may be used in future presentations. After three years, all electronic records will be deleted.

How will you be compensated for being part of the study?

Participants will not be compensated for participating in this study. However, you have the option to take part in a \$100 Visa Gift Card sweepstake as a thank you. Taking part in this sweepstakes is voluntary. Email addresses will be requested for compensation purposes; however, they will be pulled and separated from your responses to maintain your anonymity.

Is study participation voluntary?

Participation in this study is voluntary. Your decision whether to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time prior to submitting the survey without affecting those relationships.

What should you do if you decide to withdraw from the study?

If you choose to withdraw from the study, please exit the survey and close your internet browser. Your responses will not be recorded or included in the study.

Whom do you contact if you have questions or concerns about the study?

The researcher conducting this study is Shandia Gardiner. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at 512-743-2184 or email smcgreww1@liberty.edu. You may also contact the researcher's faculty sponsor, Dr. William Bird, at wbird@liberty.edu.

Whom do you contact if you have questions about your rights as a research participant?

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA 24515 or email at irb@liberty.edu

Your Consent

Before agreeing to be part of the research, please make sure that you understand what the study is about. You can print a copy of this document for your records. If you have any questions about the study later, you can contact the researcher using the information provided above.

APPENDIX C

6/30/2020

Mail - Gardiner, Shandia Sumoon - Outlook

Re: Permission to conduct survey

Stevens, Anna Carroll (Psychology) <astevens3@liberty.edu>

Tue 6/30/2020 2:46 PM

To: Gardiner, Shandia Sumoon <smcgrew1@liberty.edu>

Cc: Bird, William D (Community Care and Counseling) <wbird@liberty.edu>

Thank you, Shandia!

This all look great! The psychology department would love to help you out and send this to our student body. Please let me know when you get approval and we can go from there.

Blessings,

Anna Stevens

Department Chair

Psychology (434) 592-6122

LIBERTY
UNIVERSITY

Liberty University | Training Champions for Christ since 1971

6/26/2020

Mail - Gardiner, Shandia Sumoon - Outlook

Re: Permission to Conduct Survey

Conner, Kevin Wayne (Psychology) <kconner@liberty.edu>

Thu 6/25/2020 11:24 AM

To: Gardiner, Shandia Sumoon <smcgrew1@liberty.edu>

I approve of using residential students. You will want to get approval from the online side.

A sweepstakes is always a great way to go as it still provides a small incentive and keeps the cost down for you. However, it would need to be offered to the entire sample. Maybe a \$50 Visa card? I would talk it over with your chair to see what they think.

Kevin Conner, PhD*Associate Professor & Residential Chair***Department of Psychology****(434) 592-6285***Liberty University | Training Champions for Christ since 1971*

APPENDIX D

6/24/2020

Mail - Gardiner, Shandia Sumoon - Outlook

[External] Submission (ID: 520305872) receipt for the submission of
/fac/sci/med/research/platform/wemwbs/using/register

no-reply@warwick.ac.uk <no-reply@warwick.ac.uk>

Wed 6/24/2020 10:52 AM

To: Gardiner, Shandia Sumoon <smcgrew1@liberty.edu>

[EXTERNAL EMAIL: Do not click any links or open attachments unless you know the sender and trust the content.]

Thank you – this email confirms you have permission to use WEMWBS in accordance with the details entered in your registration shown below. We suggest you bookmark this page for future reference:
<https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwarwick.ac.uk%2Ffac%2Fsci%2Fmed%2Fresearch%2Fplatform%2Fwemwbs%2Fusing%2Fregister%2Fresources&data=02%7C01%7Csmcgrew1%40liberty.edu%7C831ddedfd43144e1589708d8184e39c8%7Cbaf8218eb3024465a9934a39c97251b2%7C0%7C1%7C637286071550507872&data=aKuKx9%2Fs8Nhp1OcNZkXafIVtjXuZr%2Fjq6S0Yf3DRMA%3D&reserved=0>
If you have any questions please feel free to contact us via email: ventures@warwick.ac.uk

Question: Organisation name

Answer:
Liberty University

Question: Type of Organisation

Answer:
University

Question: Size of Organisation (no. of employees)

Answer:
501-5000

Question: If public sector (other), please detail

Answer:

Question: Organisation Address

Answer:
1971 University Blvd, Lynchburg, VA 24515

Question: Country of Organisation

Answer:
United States

Question: Website

Answer:

6/24/2020

Mail - Gardiner, Shandia Sumoon - Outlook

Question: Contact Name

Answer:

Shandia Robertson

Question: Email address

Answer:

smcgrew1@liberty.edu

Question: Job Title

Answer:

Doctoral Student

Question: Planned start date

Answer:

01/07/2020

Question: Planned finish date

Answer:

30/09/2020

Question: Countries of Use (Territories):

Answer:

Local

Question: Preferred version of

Answer:

WEMWBS - 14 item scale

Question: In which language(s) are you planning to use ?

Tick all that apply

Answer:

English

Question: If other, please specify

Answer:

Question: Settings (Field of Use):

Tick all that apply

Answer:

University or college

Question: If other, please specify

Answer:

Question: Type of use:

Answer:

Cohort study

6/24/2020

Mail - Gardiner, Shandia Sumoon - Outlook

Question: If other, please specify

Answer:

Question: Type of intervention (if applicable) Tick all that apply

Answer:

Question: If other, please specify

Answer:

Question: Number of participants (Scale of Use):

Answer:

201-500

Question: Age of participants (Tick all that apply)

Answer:

18-64

Question: I have read and agreed to the terms of the Non-Commercial licence

<https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwarwick.ac.uk%2Ffac%2Fsci%2Fmed%2Fresearch%2Fplatform%2Fwemwbs%2Fusing%2Fregister%2Ftcs.pdf&data=02%7C01%7Csmcgrew1%40liberty.edu%7C831ddedfd43144e1589708d8184e39c8%7Cbaf8218eb3024465a9934a39c97251b2%7C0%7C1%7C637286071550507872&sd ata=7PhwPMe7fF55y5M19aYd7kmhwcp3xHkyNpg9TgmhszQ%3D&reserved=0>

[url=https%3A%2F%2Fwarwick.ac.uk%2Ffac%2Fsci%2Fmed%2Fresearch%2Fplatform%2Fwemwbs%2Fusing%2Fregister%2Ftcs.pdf&data=02%7C01%7Csmcgrew1%40liberty.edu%7C831ddedfd43144e1589708d8184e39c8%7Cbaf8218eb3024465a9934a39c97251b2%7C0%7C1%7C637286071550507872&sd ata=7PhwPMe7fF55y5M19aYd7kmhwcp3xHkyNpg9TgmhszQ%3D&reserved=0](https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwarwick.ac.uk%2Ffac%2Fsci%2Fmed%2Fresearch%2Fplatform%2Fwemwbs%2Fusing%2Fregister%2Ftcs.pdf&data=02%7C01%7Csmcgrew1%40liberty.edu%7C831ddedfd43144e1589708d8184e39c8%7Cbaf8218eb3024465a9934a39c97251b2%7C0%7C1%7C637286071550507872&sd ata=7PhwPMe7fF55y5M19aYd7kmhwcp3xHkyNpg9TgmhszQ%3D&reserved=0)

Answer:

Yes

Question: I agree to being contacted with regard to the results of your study?

Answer:

Yes

Question: I agree to my contact details being shared with third parties for the purposes of product development of

Answer:

Yes

APPENDIX E

Warwick Edinburgh Mental Wellbeing Scale (WEMWBS)

Below are some statements about feelings and thoughts.

Please circle the box that best describes your experience of each over the last 2 weeks.

	<i>None of the Time</i>	<i>Rarely</i>	<i>Some of the Time</i>	<i>Often</i>	<i>All of the Time</i>
I've been feeling optimistic about the future	1	2	3	4	5
I've been feeling useful	1	2	3	4	5
I've been feeling relaxed	1	2	3	4	5
I've been feeling interested in other people	1	2	3	4	5
I've had energy to spare	1	2	3	4	5
I've been dealing with problems well	1	2	3	4	5
I've been thinking clearly	1	2	3	4	5
I've been feeling good about myself	1	2	3	4	5
I've been feeling close to other people	1	2	3	4	5
I've been feeling confident	1	2	3	4	5
I've been able to make up my own mind about things	1	2	3	4	5
I've been feeling loved	1	2	3	4	5
I've been interested in new things	1	2	3	4	5
I've been feeling cheerful	1	2	3	4	5

APPENDIX G

The Everyday Discrimination Scale

The Original and Still Recommended Scale

- Measure:

In your day-to-day life, how often do any of the following things happen to you?

1. You are treated with less courtesy than other people are.
2. You are treated with less respect than other people are.
3. You receive poorer service than other people at restaurants or stores.
4. People act as if they think you are not smart.
5. People act as if they are afraid of you.
6. People act as if they think you are dishonest.
7. People act as if they're better than you are.
8. You are called names or insulted.
9. You are threatened or harassed.

Recommended response categories for all items:

Almost everyday

At least once a week

A few times a month

A few times a year

Less than once a year

Never

- Follow-up Question (Asked only of those answering “A few times a year” or more frequently to at least one question.): What do you think is the main reason for these experiences? (CHECK MORE THAN ONE IF VOLUNTEERED).

RECOMMENDED OPTIONS

1. Your Ancestry or National Origins
2. Your Gender
3. Your Race
4. Your Age
5. Your Religion
6. Your Height
7. Your Weight
8. Some other Aspect of Your Physical Appearance
9. Your Sexual Orientation
10. Your Education or Income Level

OTHER POSSIBLE CATEGORIES TO CONSIDER

1. A physical disability
2. Your shade of skin color (NSAL)
3. Your tribe (SASH)

Other (SPECIFY) _____