EXPLORING THE BARRIERS COLLEGES FACE IMPLEMENTING POSITIVE PSYCHOLOGY INTERVENTIONS TO REDUCE DEPRESSION, ANXIETY, OR STRESS IN COLLEGE STUDENTS

by

Margaret U. Williams

Liberty University

A Dissertation Presented in Partial Fulfillment

of the Requirements for the Degree

Doctor of Philosophy

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APPROVED BY:

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Dr. Laura Beiler, Ph.D., Committee Chair

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Dr. Laura Rolen, Ph.D., Committee Member

ABSTRACT

The purpose of this qualitative collective case study was to understand the barriers that colleges face implementing positive psychology interventions (PPIs) to reduce depression, anxiety, or stress (DAS) in college students. The problem was the lack of utilizing PPIs to reduce DAS in college students, despite increased reports of symptoms among this population. Several research studies have supported the use of PPIs to reduce DAS in college students. However, no prior research was identified regarding barriers to initiating these interventions. The three research questions that guided this study were fueled by previous empirical studies that revealed three barriers to implementing sustainable mental health programs on college campuses. Funding, knowledge, and structure barriers were identified in this study. This qualitative research methodology approach involved 11 participants. The participants were selected using purposeful sampling methods that pinpointed the specific population of individuals required for the study. The setting for this study was 4-year colleges/universities on the U.S. East Coast. The states represented were North Carolina, South Carolina, Virginia, Maryland, and Pennsylvania. Multiple sources of data collection were utilized, including in-depth interviews, a focus group, and document analysis. This study identified specific barriers, such as funding barriers, -100% knowledge barriers regarding poor access to information, - 92%, and structural barriers associated to space and other constraints, -80%. The implications of abolishing the identified barriers will increase PPI use and reduce DAS.

Keywords: depression, anxiety, stress, college students, positive psychology

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Dedication

This manuscript is dedicated to my Lord and savior, who led and guided me throughout this entire process. This manuscript is for His glory. I also devote this manuscript to my late father, Ernest Williams, Jr, and my late mother, Geneva Williams. In addition, I commit this typescript to my late maternal grandmother, Mattie Mae Maddox, and my beautiful, smart, funny, and loving daughter, Geneva Victoria Richardson. My father consistently provided structure, love, and a foundation built on "doing what is right." He taught me how to "Stand on your own two." My mother would consistently reiterate, "Once you get your education, no one can take it away from you." She always encouraged me to return to college to obtain a Ph.D. More than 28 years after earning a Bachelor of Science in Nursing (BSN) degree, I have fulfilled our desire. My grandmother, who never learned to read or write, repeatedly ensured that I was prepared for school. She would ask, "Did you get your lesson?" By her hand, my clothes were clean, ironed, and tailored. Only then, I was deemed appropriate to report to school. My daughter has been my number one motivation to be successful in life. Even before her birth, I attempted to make choices that would support her future achievements. She has supported and encouraged me during my master's and doctoral programs. Geneva consistently states, "I am so proud of you, Mommy." I am proud of her as well. She is my heart and my love. I am honored to be called "Geneva's mom."

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CHAPTER 1: INTRODUCTION TO THE STUDY

Introduction

Positive psychology interventions (PPIs) have been shown to reduce depression, anxiety, or stress (DAS) among college students (Khanjani, 2018; Waters et al., 2022), while promoting well-being (Howell & Passmore, 2019; Neuhaus et al., 2022). A report from a university mental health clinic revealed that the three most common mental health symptoms that college students contend with and seek assistance for are depression (60%), anxiety (13%), and stress (11%; Sirisankaeo, 2020). To combat this, PPIs have successfully reduced symptoms of depression in clinical and non-clinical users (Chakhssi et al., 2018; Jeong et al., 2023). Over 85% of college students who are enrolled in demanding academic programs, such as medicine, reported symptoms of DAS and utilized PPIs as coping measures (Steiner-Hofbauer & Holzinger, 2020). A research study on college students who participated in positive interventions of emotional training techniques reported reduced symptoms of depression and anxiety, in addition to increased overall well-being (Machado et al., 2019).

From a psychological perspective, PPIs were shown to be an effective means of prevention to cultivate flourishing in a research study conducted by Neuhaus et al. (2022). These interventions can promote and maintain well-being and prevent debilitating symptoms of DAS in college students (Howell & Passmore, 2019; Neuhaus et al., 2022). In a research study by Chui and Chan (2020), college students used positive thinking and optimism as a buffer to protect against depression and stress; in turn, the students reported increased feelings of well-being. Although a plethora of research studies have been conducted to support the use of PPIs, many colleges have faced significant barriers

to implementing these interventions. Pharmacological interventions (Morton et al., 2020; Zhang et al., 2020) and other therapies, such as traditional counseling with cognitive behavioral therapy (CBT), group psychotherapy, and interpersonal behavior therapy (Zhang et al., 2020) have continued to be the interventions of choice. The terms college and university were used interchangeably throughout this manuscript. This qualitative exploratory case study sought to identify barriers that colleges face when implementing PPIs for college students. Chapter 1 provides a background summary of the research conducted with PPIs in college students, the integration of biblical foundations, a statement of the problem, the purpose of the research, and a list of research questions. Assumptions with study limitations, theoretical foundations, definitions of terms, significance of the study, and a summary are also included. The background of positive psychology (PP) can illuminate history and guide future processes.

Background

This section describes the historical evolution of PP and explains how current professionals in the field continue to extend the work of those who laid the foundation. An identity of how critics have elevated practice norms, thus impacting PP and its interventions, is also evaluated. A biblical perspective of PP can support the empirical research conducted in the field. This section explores ways in which the suggested interventions have established a foundational purpose of this study. The culmination of each sector provides support for the existence of the problem and the need for this research study.

Positive psychology is a scientific field of study concerned with positive processes and conditions that cultivate optimal flourishing in individuals, groups, and society and improves the quality of life (Gable & Haidt, 2005). These interventions can also provide a barrier to pathologic symptoms of distress in life when life seems to be meaningless (Seligman & Csikszentmihalyi, 2014). The concepts of PP began in 1906 when Dr. William James, a medical doctor and psychologist, sought new approaches to cure the mind by utilizing the power of positivity. He studied these processes until 1968 with literature reviews of PP and its interventions (Gable & Haidt, 2005; Jeste et al., 2015). In 1998, Dr. Martin Seligman, who was the president of the American Psychological Association (APA) and named the father of PP (Seligman, 2019), began to create PPIs with the purpose of distinction from clinical psychology by building well-being within individuals. Dr. Seligman (2019) also expanded the traditional tasks that were essentially focused on reducing ill-being. While traditional psychiatry and the field of psychology concentrated on the evaluative and treatment measures for behavioral health issues (Jeste et al., 2015; Lutz et al., 2022), PP's focal point emphasized the positive aspects of life (Seligman, 2011, 2019). Nevertheless, the science of PP has endured criticisms and opposition regarding the credibility of its practices and interventions (van Zyl & Rothmann, 2022; Wong & Roy, 2018). Historical psychology methods versus PP methods are shown in Table 1.

Table 1

Historical Psychology Methods vs. Positive Psychology Methods

Characteristics	Historical Psychology Methods	Positive Psychology Methods
Patient Population	Mental ill-being	Acute or high-risk of ill-being
Center of Assessment	Evaluation and treatment	Positive aspects of life
Aim of Results	Reduce symptoms	Obtain well-being, growth, and prevention
Primary Interventions	Medications, group therapy, and cognitive behavior therapy	Utilizing positive emotions, relationships, meaning, and accomplishments to flourish and obtain well-being
Future Deterrence Goals	Not a focus	Salient use for daily living

Note. Adapted from Jeste et al. (2015, p. 676).

According to Efendic and van Zyl (2019), the previous decade has prompted fundamental oppositions toward psychology that have influenced a confidence crisis in the integrity of this scientific field. Criticisms in the field have been linked to previous questionable practices, such as the failure to repeat previous research studies and allegations of fraud in academia (van Zyl et al., 2024). These critiques have been influential to the change that transformed the field (van Zyl et al., 2024). Utilizing the critiques and criticisms identified in the field of PP has created an opportunity to express nuanced growth in these and other areas (Engber, 2017). The growth in PP has been presented to critics in terms of phases called waves (Lomas et al., 2021). The feedback gained from the flaws identified in previous waves established robust practices and literature, which facilitated change that has transformed the connotation and utilization of PPIs and practices (van Zyl & Rothmann, 2022).

Consequently, PPIs are empirical processes used to build positive cognition, actions, and mental affects (Kotsoni et al., 2020; Schueller et al., 2014). A previous study

by Krifa et al. (2022) posited that PPIs are integral in promoting quality of life and to maintain flourishing in mental health. As mental health issues are becoming more prevalent in institutions of higher learning (Baik et al., 2019), PPIs can have a positive impact on this population (Krifa et al., 2022). Research conducted by Khanjani (2018) used these interventions with college students who reported symptoms of DAS; PPIs were found to reduce their symptoms and increase their well-being. Likewise, a systematic review of evidence-based interventions to reduce the symptoms of DAS in college students was conducted by Worsley et al. (2022), and similar findings resulted. Moreover, historical treatment measures to support symptom reduction of DAS have been effective using CBT. Additionally, PPIs have been found to be as effective and offer extended positive effects in the reduction of these symptoms (Halladay et al., 2018; Worsley et al., 2022). However, few have offered PPIs. Barriers suggested to impact mental health resources on campuses have included a nationwide shortage of qualified mental health professionals, federal funding, and space (James, 2022; Simon, 2017).

During the 2021–2022 academic year, a report from the Healthy Minds Study surveyed over 96,000 students across 130+ campuses (Cook, 2023). The findings determined that 44% of students reported depression symptoms, 37% reported anxiety, and 15% reported considerations of suicide. One-third of those students received traditional therapy or counseling (Cook, 2023) to reduce their symptoms. However, there were no reports of implementing PPIs to aid in reducing these symptoms.

To address the challenges of the growing mental health crisis on college campuses, the American Council on Education (ACE) released five recommendations to faculty leaders on campus: 1) a regular assessment of population needs based on

priorities and progress, 2) substantial investments in effective strategies that have been proven, 3) a revision or discontinuation of failed strategies, 4) modest investments in evidenced-based practices with evaluation and reassessment strategies, and 5) movements toward a larger approach to mental health practices based on evidence (Abelson et al., 2023). A systemic literature review and meta-analysis by Lattie et al. (2019) explained that students reported barriers in seeking support for traditional mental health services on college campuses to reduce symptoms of DAS. There was a total of 89 students who participated in the study and sought support to reduce their symptoms. Of those students, 80% used a website, 31% used internet-based CBT, and 33% used mental health coaching. The reported effectiveness of those modalities was described as 47% effective and 34% helpful (Lattie et al., 2019). However, a study by Morton et al. (2020) determined that induction therapy used to reduce symptoms of DAS in college students continued to be pharmacological interventions and other traditional methods. Although interventions utilizing PP and Christianity have had a negative historical intersection (Hodge et al., 2022; Nurula, 2017) and relationship, these two entities can support reducing DAS in college students.

Historically, there has been tension and division between modern psychology and Christianity. Modern psychology has been referred to as “psychology without a soul” by some Christians (Kemp, 1982; Myers et al., 2010). A framework of western thought, which strengthened during the 1600s and gained more notoriety in the 1800s, was modernism (Myers et al. 2010). During the 20th century in the West, modernism became dominant (Myers et al., 2010). Philosophers, including Sigmund Freud, viewed Christianity as infantile and seeking a male authoritative figure for acceptance; thus,

Freud's views projected a negative light on faith and Christianity (Neeleman & Persaud, 1995; Stulp et al., 2019). According to his view, Christianity and faith would pose negative restrictions from authoritative rules and promote fear and guilt (Stulp et al., 2019). Although there have been negative associations between psychology and Christianity, there have also been positive views. These views have argued the benefits of Christianity and individuals who utilized the attributes of God to gain strength for individual growth (Rizzuto, 1979; Stulp et al., 2020).

Nelson and Slife (2017) posited that leaders of Christian thought have provided positive aspects of life through explanations of sanctification or divination many centuries prior to modern psychology. The positive framework of PP's focal point was the need for a "good life" (Nelson & Slife, 2017). The Bible also provided a framework for living "a good life" in 2 Peter 1:3: "For as you know him better, he will give you, through his great power, everything you need for living a truly good life" (*New Living Translation [NLT]*, 1996/2015).

In a qualitative study by Kern and Benecchi (2019), many concepts were shared between PP and the Bible, such as meaning and purpose, forgiveness, strength, and gratitude. Thus, the concepts of PP and Christianity can work in unison to promote living "a good life" (Nurula, 2017). This case study addressed the problem of barriers that colleges face when implementing positive PPIs to reduce increased rates of DAS among their students.

Problem Statement

The problem addressed in this research study was the lack of utilizing PPIs to reduce DAS in college students, despite increased reports of symptoms in this population.

This case study assisted in identifying barriers to aid colleges with implementing these interventions in the future. The facilitation of research efforts to gain an understanding of recurrent issues was also utilized (Conrad & Riba, 2021; Downs et al., 2019). As college students with symptoms of DAS have continued to increase, colleges have utilized screening, telehealth, and campus health centers with borrowed healthcare professionals. However, many colleges have not had the capacity to offer adequate mental health services (Conrad & Riba, 2021; Goodwin et al., 2016). Colleges that offer mental health services to reduce DAS have often used traditional methods of CBT or antidepressants (Lattie et al., 2019; Morton et al., 2020). While various colleges have attempted other innovative techniques to assist this population, including courses for instructors to learn mental health strategies (Coleman, 2022) and other trainings, a gap in the research has remained regarding the utilization of PPIs to reduce DAS in this population.

Several studies have been conducted to support the use of PPIs to reduce the increased rates of DAS in college students. Nonetheless, those studies have not identified challenges that colleges face to implement PPIs. No historical research on barriers that colleges encounter for the implementation of PPIs and the reduction of DAS among college students was found. Thus, this case study explored those barriers to fill the current gap in the literature.

Purpose of the Study

The purpose of this qualitative exploratory case study was to understand the barriers that colleges face when implementing PPIs to reduce DAS among college students. Research has been conducted to support the concept of utilizing PPIs to reduce the symptoms of DAS among college students (Khanjani, 2018; Waters et al., 2022).

However, many colleges do not use PPIs (Duffy et al., 2019; Jaisoorya, 2021). Instead, numerous colleges have continued to use pharmacological interventions (Morton et al., 2020) and other traditional therapies (Zhang et al., 2020) to mitigate DAS. The following research questions were utilized to enhance the comprehension of challenges that colleges encounter to implement PPIs and reduce DAS in their students.

Research Questions

RQ1: What are the funding barriers that colleges face that prohibit implementing positive psychology interventions to reduce depression, anxiety, or stress in their students?

RQ2: What are the knowledge barriers that impede colleges from utilizing positive psychology interventions in this high-mental-health-risk population?

RQ3: What are structural barriers that interfere with initiating positive psychology intervention initiatives for students experiencing depression, anxiety, or stress?

Assumptions and Limitations of the Study

It was assumed that this research study recruited an adequate number of educational leaders at the collegiate level to participate in the study. The leaders were from various colleges and had influence in making decisions regarding the mental health of students on their campuses. A presumption was that the participants in the research study answered the questions truthfully and to the best of their knowledge. The researcher constructed the best craftwork design by ensuring efficacy, reliability, and validity of the study (Priya, 2021). It was also anticipated that information shared was raw data obtained through the identified research methods without personal bias. Furthermore, the limitations encountered during the case study were presented and discussed.

Limitations that were encountered during this multiple-case study included the chosen methodology, geography, and sampling method. This qualitative research study was a case study. Due to the unique context of many case studies, the generalizability was thought to be limited (Priya, 2021). The geographical aspects of the participants included in the study were confined to one region. An example was interviewing participants from the East Coast versus the Midwest. The sampling method utilized purposeful sampling. Purposeful sampling was aimed at recruiting a population that met the criteria for the study. This method had the potential to limit other participants who could have added value to the study.

Theoretical Foundations of the Study

The theory used to guide this case study was the positive emotion, engagement, relationships, meaning, accomplishment (PERMA) model of well-being theory (PMoWBT; Goodman et al., 2018; Seligman, 2011). This theory model was created by Dr. Seligman (2011), who was certain that individuals seek the five PERMA elements to obtain well-being (Khaw & Kern, 2015). The understanding of the PERMA model has been linked to increased learning and productivity and decreased negative individual feelings (Przybylko et al., 2022; Schotanus-Dijkstra et al., 2017). The concept of flourishing has also been identified as a member of this pathway, leading to reduced negative effects (Przybylko et al., 2022). Thus, the use of this model supported the utilization of PPIs to reduce DAS in college students and investigate the barriers that colleges face to implement these interventions. Furthermore, the APA (2002) posited that anxiety and depression were associated with negative cognition and emotions (Ramón-Arbués et al., 2020). A research study during the pandemic was conducted to investigate

associations between DAS and the elements of the PMoWBT (Wąsowicz et al., 2021). The findings supported the theory of the connection between negative experiences and its influence on flourishing and well-being (Wąsowicz et al., 2021; Wong, 2021). Biblical support for the PMoWBT was found in Philippians 4:8:

> Finally, brethren, whatsoever things are true, whatsoever things are honest, whatsoever things are just, whatsoever things are pure, whatsoever things are lovely, whatsoever things are of good report: if there be any virtue, and if there be any praise, think on these things. (*King James Bible [KJB]*, 1769/2017)

Definition of Terms

The following terms were used in this study.

Anxiety – A persistent feeling of stress that lingers after the stressor has been removed (Ramón-Arbués et al., 2020).

Case Study – An approach used to collect detailed information concerning an event or topic of interest (Crowe et al., 2011).

Cognitive Behavioral Therapy (CBT) – A form of psychological intervention used to treat various mental illnesses (APA, n.d.).

Depression – Despair or a state of sadness that lasts beyond a few days and disrupts an individual's ability to conduct activities of daily living and produce thoughts of self-harm (APA, 2002).

Fidelity – The degree to which a process or program provides services and interventions as expected or described consistently to obtain the desired goal (Substance Abuse and Mental Health Services Administration [SAMHSA], 2021).

PERMA Model – The core elements of well-being: positive emotion, engagement, relationships, meaning, and accomplishment (Seligman, 2011).

Positive Experiences – Utilizing negative thoughts and feelings to invoke well-being and optimism while using forgiveness and gratitude as the foundation (Khanjani, 2018).

Positive Individual Traits – The ability of an individual to display affection, talent, wisdom, uniqueness, and other positive attributes to reduce the possibility of future depression, anxiety, or stress symptoms (Klussman et al., 2020; Vella-Brodrick et al., 2022).

Positive Institutions – Formal environments that embody and instruct individuals on how to cultivate accountability, charity, and amiability and to practice kindness, positive social interactions, and positive emotions (Sin & Lyubomiirsky, 2009).

Positive Psychology Interventions (PPIs) – A scientific study that focuses on the examination and promotion of individual, group, and societal flourishing to enhance optimal outcomes and function (Seligman & Csikszentmihalyi, 2000; Trom & Burke, 2022). These resources and programs promote thankfulness, forgiveness, and awareness of self and others, adding to personal attributes, improving positive cognition practices, and seeking to understand life (Chakhssi et al., 2018; Chui & Chan, 2020).

Positive Psychotherapy – A positive psychology intervention used to decrease ill-being and promote well-being through talk therapy that focuses on forgiveness, gratitude, positive relationships, and awareness (Khanjani, 2018; Seligman et al., 2005).

Qualitative Research Study – Research aimed at providing in-depth insight and comprehension into real-life concerns and problems (Tenny et al., 2022).

Stress – A frame of mind utilized by an individual to determine personal success and the necessary adjustments required to meet societal demands (Bhujade, 2017).

Subsyndromal Symptoms – Chronic, excessive worry and feelings of generalized anxiety (Stallman, 2010).

Third Wave of Positive Psychology – A phenomenological ontology scientific approach to understanding experiences of others (Lomas et al., 2021; Wissing et al., 2022).

Significance of the Study

The identification of obstacles that prevent colleges from implementing PPIs to reduce DAS in college students found in this case study created awareness surrounding the challenges of implementation. A unique perspective from the educational leaders from college campuses provided an analysis of the barriers and allowed these leaders to discuss changes in areas that were identified. The knowledge acquired from this study can be a preventative tool to future obstacles. Furthermore, this study has created an opportunity to assist college students, families, communities, and the healthcare industry with decreasing the undesirable effects of DAS symptoms and associated costs. Additionally, the findings in this study supported the future use of PPIs to reduce the symptoms of DAS in college students (Khanjani, 2018; Waters et al., 2022). Finally, these findings will be useful to sway the trajectory of the future in mental health on college campuses and society.

Summary

Chapter One introduced the topic of this research study, identifying the barriers that colleges encounter when implementing PPIs to reduce DAS in college students. The background section provided the foundation of this case study and integrated a biblical

aspect. The biblical worldview offered a comprehensive foundation for the purpose of this study. The problem statement identified the lack of utilizing PPIs and the struggle that colleges face when implementing PPIs to reduce DAS in college students. The purpose of this case study was to understand the barriers that colleges face implementing PPIs in college students to reduce DAS. These factors were identified, and three research questions were introduced. Assumptions and limitations were presented, along with the theoretical foundation of the PMoWBT. A brief discussion of the biblical perspectives of the constructs was presented. Several definitions of terms were provided, along with the significance of the study regarding impacts on future implementations.

In Chapter Two, a comprehensive integrative literature review on using PPIs to reduce the symptoms of DAS in college students will be explored. In addition, a description of the search strategy and a review of relevant literature with sub-topics will be presented. Furthermore, the intersection of a biblical foundation and PPIs will be assessed and evaluated.

CHAPTER 2: LITERATURE REVIEW

Overview

Positive psychology interventions (PPIs) have been utilized to reduce depression, anxiety, or stress (DAS) in college students (Krifa et al., 2022; Machado et al., 2019). The prevalence of DAS among college students has been one of the primary mental health concerns in this group and continues to grow in commonality (Liu et al., 2023; Ooi et al., 2022). The problem was the lack of utilizing PPIs to reduce DAS in college students, despite increased reports of symptoms. Some colleges have been confronted with various barriers that prevent the implementation of PPIs, while other colleges have struggled to offer any mental health support for their students (Conrad & Riba, 2021; Goodwin et al., 2016). However, implementing PPIs to reduce symptoms of DAS for college students has been lacking. Thus, the purpose of this study was to understand the challenges that colleges encounter in utilizing PPIs to decrease DAS in their students. An exhaustive review of the literature has been conducted to identify barriers to implementing PPIs for college students with DAS. However, no prior research was found. Thus, the current research study aimed to fill this gap in literature. The significance of this study influences the future mental health of college students, society, and other institutions who are stakeholders in the success of college students. Each of these factors will be identified in this section through a comprehensive integrative literature review. The history and evolution of positive psychology (PP), a biblical perspective of PPIs, and the benefits and disadvantages will be elucidated. Finally, a summary of the chapter's contents will be presented. During this literature review, several search strategies were utilized to obtain the most significant data.

Description of Search Strategy

The literature search strategy databases utilized for this research study included Google, Google Scholar, Liberty University's library, ProQuest, EBSCO Essentials, the National Library of Medicine (NLM), the American Psychology Association (APA), and Research Gate Net. The search terms utilized to conduct research on this topic included: "why colleges do not offer mental health resources on campus," "what barriers do colleges face when offering PPIs for DAS," "what mental health issues currently plague college students," "how have PPIs been utilized to help reduce the symptoms of DAS in students," "what current initiatives are offered to students with symptoms of DAS on college campuses," and "how can colleges help their students reduce symptoms of DAS with PPIs?" The only delimitations used in the search were articles published between years of 2019–2023 regarding the presence of DAS symptoms among college students. The biblical research was conducted in a Google search with the use of keywords from the context. Bible Gateway was accessed utilizing the Google search engine. The versions of the Bible used were the *King James Bible* (KJB) and the *New Living Translation* (NLT). The scripture that supported the concept of PPIs and the reduction of DAS symptoms was applied in the literature review.

Review of Literature

Positive psychology has acquired various definitions since its inception. Sheldon and King (2001) posited PP as the study of humanity scientifically to understand one's virtues, nature, and strengths. Gable and Haidt (2005) described PP as the study of methods and procedures that aided individuals, groups, and institutions in having positive outcomes, such as flourishing and well-being. Seligman and Csikszentmihalyi (2000)

illustrated the importance of comprehending triumph in times of adversity to enhance living and resilience as the essence of this discipline. The science of PP, according to Jeste et al. (2015), was to assess, obtain knowledge, and promote mental wellness in individuals, groups, and society. These defining elements and attributes created a secure foundation in the historical review of PP.

A Historical Review of Positive Psychology and the Foundation

The concept of PP has historical tentacles that extend from the 1900s to the 21st century (Rathunde, 2001). The archival concept of humanistic psychology has been influenced by existentialism and phenomenology (Misiak & Sexton, 1973). However, humanistic psychology gleaned its basic approach from phenomenology and was the foundation of this scientific approach (Misiak & Sexton, 1966, 1973). Humanistic views of psychology can be traced to these leaders of thought: Dr. William James, Dr. John Dewey, Dr. G. Stanley Hall (Froh, 2004; Shaffer, 1978), and Dr. Abraham Maslow (1954). Dr. James was concerned with treating individuals holistically (Jeste et al., 2015). This subjective consideration of individual personal encounters led to Dr. James being referred to as America's first positive psychologist (Taylor, 2001). Dr. Hall has been credited with establishing psychology as an educational field of study (Practical Psychology, 2023), and Dr. Dewey utilized the process of science to solve challenging issues in ethics and society (Rathunde, 2001). Dr. Maslow continued the work of his predecessors in humanistic PP, but his focus was geared toward the existentialism aspect and less toward phenomenology. According to Froh (2004), the leaders of PP in the 21st century appeared to practice humanistic psychology that aligned with the teachings of Dr. James but fewer teachings of Dr. Maslow.

21st Century Leaders

The current thought leaders of PP have persisted with the historical works of their predecessors to advance knowledge and understanding (Seligman, 2019). Extending the comprehension of the value of life and the essential elements necessary to achieve these goals enhanced the facilitation of adequate processes (Froh, 2004; Seligman & Csikszentmihalyi, 2000). Dr. Seligman has been credited as the founder of PP (Gable & Haidt, 2005; Jeste et al., 2015). Consequently, further research revealed influences by thought leaders in the 1900s. Dr. Seligman and Csikszentmihalyi have been respected as 21st century thought leaders whose work extended the knowledge in this field while analyzing pathways to optimal human functioning (Froh, 2004). Dr. Park and Dr. Seligman (2013) posited Dr. Christopher Peterson as one of the 21st century founders of PP who extended the efforts and guided the field to its present state. The benefits of PPIs have not been confined to one discipline but have been disseminated to other scientific entities (Jeste et al., 2015).

The Evolution of Positive Psychology

The concept of PP has evolved into a context utilized by diverse groups of professionals (Jeste et al., 2015). This sub-field of psychology has emphasized the importance of individual value enhancements. Moreover, biology, medicine, psychiatry, and education have each shared the salient essential concepts of this scientific discipline (Jeste et al., 2015; Seligman, 2019).

In addition, PPIs and education have expanded to the areas of risk management, health, and artificial intelligence (van Zyl & Salanova, 2022). The basic elements of PPIs have been used by students who matriculate through medical programs with reports of

ameliorated outcomes (Machado et al., 2019). Those elements have likewise been suggested to improve communication among individuals and groups in communities (Montiel et al., 2021). Like waves in the ocean, elements and interventions of PP are expected to sustain motion and utilize the preceding concepts to strengthen future movements (Lomas et al., 2021).

Current and Future State of Positive Psychology

The impetus of the metaphor between PP and the ocean have pertained to progress. As waves in the ocean build upon the waves that came before them, the elements build from previous concepts in the field (Wissing et al., 2022). The coupling of prior concepts with current elements has yielded expansion (van Zyl & Salanova, 2022). As the waves of PP multiply, detailed strategies and blueprints have been intricate additions to this scientific process (van Zyl & Rothmann, 2022). According to Lomas et al. (2021), like waves in the ocean, the waves of PP are distinct and vary from each preceding wave.

The Progression of Waves

The progression of phases in PP has been illustrated by waves (Hofmann et al., 2010; Lomas et al., 2021). The first wave extended from 1998 to 2010, the second expanded from 2010 to 2015, and the third wave has stretched from 2015 to the present and beyond (Wissing et al., 2022). The primary focus of the first wave was to identify and advocate for the positive aspects of humanity versus concentrating efforts on the negative facets of repairing broken lives (Seligman, 2019). The second wave acknowledged that humanity experienced disappointments, sufferings, and evil; nevertheless, those factors were realities, and each dynamic should be utilized to obtain

well-being and optimal living (Lomas et al., 2021; Wong et al., 2018). A phenomenological ontology scientific approach to comprehending the experiences of individuals was the focal point of the third wave (Wissing et al., 2022). In other words, offering opportunities for individuals to share personal experiences and beliefs about their environment under the auspices of an empirical scientific process has been the current PP wave. Evidence-based research offered additional insight into DAS and the growing symptoms found in college students. The progression of psychology waves is shown in Figure 1.

Figure 1

Three Primary Waves of Positive Psychology Elucidating the Current Wave

Note. Adapted from Lomas et al. (2021).

Wave 1- Positivity, Wave 2- Polarity, and Wave 3- Complexity.

Empirical Research, Depression, Anxiety, Stress, and College Students

Empirical research has supported findings that have suggested that college students are a population at high risk for several mental health issues and other emotional stressors (Baik et al., 2019; Stallman, 2010). A research study by Stallman was conducted with over 6,000 college student participants to assess anxiety and other stressors

experienced in college. Utilizing the K10 (Kessler et al., 2003), the findings revealed that 19% of college students reported well over 66% of feelings of generalized anxiety or subsyndromal symptoms. These findings were far above reports from the general population (Stallman, 2010). In 2000, 274 directors of campus counseling centers were surveyed regarding student reports of severe mental health problems (Pedrelli et al., 2015). More than 85% of the counselors surveyed reported an increase in college students who communicated self-harm, learning disabilities, and traumatic experiences (Pedrelli et al., 2015).

Gallagher (2015) revealed that, according to college counseling centers, students had an 89% increase of anxiety and a 58% increase of depression (Coleman, 2022). During the 2020–2021 academic year, data was retrieved from over 300 colleges regarding the mental health of their students (Abrams, 2022). An upwards of 60% of students met the criteria of individuals who require mental health services (Abrams, 2022). In September 2020, during the pandemic, the American Council on Education (ACE) surveyed several college presidents to assess their primary concerns with students (Coleman; Vasquez, 2020). The mental health status of the students was listed as their main concern (Coleman, 2022; Vasquez, 2020). Furthermore, Ramon-Arbues et al. (2020) conducted a cross-sectional study to determine the prevalence of DAS in college students. A sample of 1,074 students was evaluated using the Depression, Anxiety, and Stress Scale (DASS-21). The findings determined that over 18% of students experienced depression, 23% experienced anxiety, and over30% experienced stress. The causes and susceptibility to DAS ranged from childhood history to robust academic assignments (Ramón-Arbués et al., 2020).

Causes and Vulnerabilities to Depression, Anxiety, or Stress

The World Health Organization (WHO; 2024) named mental health issues as the primary source of disabilities (Ramón-Arbués et al., 2020; Wainberg et al., 2017). Previous research studies have suggested that the mental health issues experienced in college continue to exist years later (Kessler et al., 2007; Pedrelli et al., 2014). Researchers have identified countless distinct causes of DAS in tertiary students (Baik et al., 2019). Those sources have been placed into four primary categories: academic pressure, biological factors, financial concerns, and environmental impacts (Abrams, 2022; Bhujade, 2017; Long et al., 2021; Ramón-Arbués et al.; Zhang et al., 2020). Academic pressures have included robust course schedules with challenging mental demands, diminished personal free time, heightened fears of failure, family pressure to excel in educational endeavors, and inadequate educational programs (Abrams, 2022; Bhujade, 2017; Ramón-Arbués et al., 2020; Zhang et al., 2020).

Age and Gender

Biological factors, such as age and gender, have had a significant impact on DAS among college students (Bhujade, 2017; Stallman, 2010). Research has suggested that 28% of college females and 13% of college males have received treatment and a diagnosis of anxiety, while 23% of females and 12% of males have been seen by a mental health professional for depression (American College Health Association [ACHA], 2019). A study conducted by Ramon-Arbues et al. (2020) revealed that students under the age of 21 years likely experience more emotional distress regarding uncertainty than their older peers on campus, and they also reported more symptoms of DAS. Of note, the study also posited that female students experience more frequent episodes of DAS than their

male counterparts (Ramon-Arbues et al., 2020). The prevalence of DAS in females was increased by concerns regarding physical appearance, traumatic sexual experiences, failures with romantic relationships, and low self-esteem (Bhujade, 2017).

Finances and Environment

Financial concerns and the impact of DAS on college students have pertained to securing financial resources to continue education, depending upon parents for assistance, and nontraditional students providing for their families while in school (Long et al., 2021; Pedrelli et al., 2014). Environmental factors that have contributed to symptoms of DAS have included being away from family and the primary support system, issues with adjusting to a new living space, conflict with roommates, safety concerns, reduced interpersonal communication opportunities, lack of sleep, increased attrition, and overindulgence in illicit drugs and alcohol (Abrams, 2022; Long et al.; Zhang et al., 2020). The introduction of this section on "causes of DAS" was led by findings from the WHO, which named mental health issues as the primary cause of disability (Stallman, 2010). Previous research studies posited that college students will most likely experience symptoms of DAS more significantly than the public (Bhujade, 2017; Stallman, 2010). Thus, the effects of DAS on students can conceivably transpose to other students, the institution, local communities, and society (Long et al., 2021; Stallman, 2010).

Impact Beyond Campus

The mental health of college students and the growing prevalence of DAS in recent years have become public health concerns (Baik et al., 2019; Long et al., 2021). Nevertheless, the impact of these mental health issues has not been confined to those who contend with the symptoms and the effects of their disabilities (Stallman, 2010). Fellow

students, faculty members, families connected with the students, local communities, and society have also been affected (Suicide Prevention Resource Center [SPRC], 2020). According to the WHO (2024), over $1 trillion globally is used in the economy to support mental health services. Moreover, research has posited that 5% of students who experience mental health issues are lost to attrition. This means that over four million students exit tertiary study programs without obtaining a degree (SPRC, 2020). Several college presidents and other stakeholders have noticed the upward trend of DAS in their students. Thus, realizing that they have a responsibility in this crisis (Abrams, 2022; Baik et al., 2019).

Responsibility of Colleges

As the campus mental health crisis (Lipson et al., 2021) becomes more prevalent in tertiary education, presidents and leaders have a responsibility to students to support their quest of securing adequate assistance that will facilitate prevention and reduce DAS and other stressors (Substance Abuse and Mental Health Services Administration [SAMHSA], 2021). A survey of college presidents conducted by Vasquez (2020) revealed that student mental health on college campuses was their most pressing concern. Likewise, a subsequent survey by Turk et al. (2020) polled college leaders to determine their most immediate concerns with their students. Overwhelmingly, the presidents agreed that the growing mental health needs of their students were salient and of most concern (Turk et al., 2020). In addition to responsibility, these leaders also possessed an ethical obligation to the success of each student enrolled in their prospective colleges (Abrams, 2022; Baik et al., 2019). Additionally, presidents and faculty are ethically accountable for cultivating a safe environment that will encourage instruction and

learning, produce consistent graduation rates, and promote well-being among students (Abrams). Consequently, each of the responsibilities and obligations are aligned with the positive emotion, engagement, relationships, meaning, accomplishment (PERMA) model of well-being theory (PMoWBT), This model has roots extending from the three pillars of PP—positive experiences, positive individual traits, and positive institutions—created by Dr. Seligman (Seligman & Csikszentmihalyi, 2014). In fact, the PMoWBT was the impetus of the concept for this current research and will be detailed in the proceeding sections. Several presidents and leaders have accepted their roles in providing access to mental health resources for students with symptoms of DAS and other mental health concerns (Abrams, 2022). Mental health promotion, prevention, and maintenance of well-being has gained momentum during the growing mental health crisis with college students (Baik et al., 2019) as mitigation strategies.

Mitigation of Depression, Anxiety, or Stress Symptoms

From the Fall 2009 semester through the Spring 2015 semester, counseling centers on college campuses were visited by over 31% of students, while the enrollment statistics only grew by less than 6% (SAMHSA, 2021). The expansion in numbers surrounding the necessity of mental health services has ignited more concern for access and the need for interventions (Jaisoorya, 2021; Worsley et al., 2022). The alarming rates for students who require mental health assistance has suggested that those issues were organic and should be mitigated utilizing strategically planned processes (Worsley et al.). Mere mental health interventions that solely satisfy acute symptom relief will not be adequate to reduce the chronic debilitating symptoms of organic mental health manifestations (Jaisoorya, 2021; Worsley et al., 2022). To distinguish between acute and

chronic mental health manifestations, researchers have posited that students should be comfortable discussing their need for assistance (Harris et al., 2022). Harris et al. suggested that increased communication efforts and normalization of the topic of mental well-being are the primary factors in reducing the stigma of mental health. Open communication was named as the first step to mitigating DAS in college students (Rossetto & Martin, 2022). Experts have also suggested that communication efforts to aid college students should be presented by various modes and methods of transmission to connect with more students (Harris et al., 2022).

Communication to Reduce Symptoms

Modes utilized to transmit and facilitate open communication concerning mental well-being have been enhanced through student clubs, mass campus emails, professors, advisors, and sports leaders (Harris et al., 2022). Overarching factors that affect the reduction of DAS symptoms in college students have included campus-wide initiatives of mental health promotion and prevention of negative symptoms (Harris et al.). Other components have included health fairs, events that raise awareness of the prevalence of mental health concerns, and resources on campus (Seidel et al., 2020). Validating services, completing surveys, and employing trained educated personnel could have a positive influence for college students with DAS symptoms (Wesley, 2019). The integration of mental health learning with coursework (Dobkins et al., 2023) and building community support for students beyond the campus (Abrams, 2022; Harris et al., 2022) have been shown to reduce DAS in this population. In addition to comprehensive collective factors utilized to mitigate DAS in college students, research also has suggested specific interventions (SAMHSA, 2021).

Specific Interventions of Reduction

Interventions used to reduce DAS among college students have ranged from comprehensive collective factors to clear-cut distinctive interference mediation. Of note, specific interventions have included expanding counseling services (SAMHSA, 2021; Wesley, 2019), offering life-skills courses as part of the curriculum (Dobkins et al., 2023), providing text-based support for students who need to contact counselors for time-now assistance (Abrams, 2022), and reviewing historical clinical practices (SAMHSA). These interventions can be separated by non-clinical and clinical approaches. The non-clinical approaches have included programs, such as gatekeeper training. This training program is aimed to prevent suicide. In addition the program teaches students, professors, family, and friends to be cognizant of warning signs and actions that may warrant immediate attention from a mental health professional (SAMHSA, 2021). Other non-clinical approaches have included screening, telehealth, campus health centers with borrowed mental healthcare professionals, consistent efforts to comprehend recurrent issues, and the use of research to incorporate the best evidence-based practice methods was also described (Conrad & Riba, 2021; Downs et al., 2019).

Clinical and historical interventions utilized to mitigate DAS in college students have included medication therapy (Morton et al., 2020), acceptance and commitment therapy (A&CT), dialectical behavior therapy (DBT), cognitive behavior therapy (CBT), and mindfulness-based stress reduction (MBSR; SAMHSA, 2021). SAMHSA has elucidated each intervention. While teaching students to practice psychological malleability, A&CT helps students to understand current cognition, effects, and behaviors during a situational encounter. As a type of psychotherapy, DBT is used to treat

populations at increased risk of suicide, depression, and stress. The goal of this therapy is to bring opposition to those current thoughts and foster change. Typically utilized for acute mental health barriers to change current thought patterns in individuals, CBT is effective with depression, generalized anxiety disorders (GAD), and thoughts of self-harm. Utilizing self-awareness methods, MBSR helps to diminish and control symptoms of DAS when they initially appear. Institutions of higher learning have been warned that all mental health implementations should be conducted under the auspices of fidelity (SAMHSA, 2021).

The Foundation of Fidelity

Fidelity is the degree to which a process or program provides any services and interventions consistently to obtain the declared outcome (SAMHSA, 2021). The utilization of fidelity as the foundation to implement mental health programs on college campuses may guide leaders and prompt them to create sustainable programs that are not subject to barriers. Common barriers have included finances, professional employment of mental health individuals, structural limitations, or other challenges that could negatively impact consistent mental well-being methods and practices (SAMHSA, 2021). Subsequent mitigation practices to reduce DAS symptoms in college students have included support services, stress management, relaxation techniques, problem-solving, and crisis intervention training (Jaisoorya, 2021). In addition to these practices, colleges have also employed professors as a first-line mental health assessment strategy (Coleman, 2022). Ramon-Arbues et al. (2020) posited that college classroom environments can be influential for mental health promotion and the prevention of contrary cognition and behaviors that cultivate adverse mental well-being. Researchers have suggested that

professors can assist in reducing DAS by acknowledging changes in behavior, communicating available mental health services, and creating a syllabus that reflects the professors' willingness to assist with mental well-being (Coleman). Other reduction methods have included sharing resources and properly identifying subject materials that could be triggers for students (Cares et al., 2019). However, several professors on college campuses have disagreed with accepting the additional responsibility of being the first-line strategy for the mental well-being of their students (Coleman, 2022).

Professors are Not Trained Therapists

In 2017, a research study was conducted to determine the role of professors in the mental health of their students (Albright & Schwartz, 2017). An upwards of 90% of the professors polled voiced their obligation to assist students with obtaining mental health services (Albright & Schwartz; Coleman, 2022). The other 5% raised concerns regarding the lack of training as a therapist, fear of invading their student's privacy, and reluctance to ask questions that may ignite suicidal thoughts or actions (Albright & Schwartz). The professors also voiced concerns about bandwidth, increased potential for burnout, and the possible negative impact on their own well-being (Coleman, 2022). According to Albright and Schwartz (2017), several professors commented on the additional concerns of liabilities in lawsuits; they desired to assist their students, but not at their own demise.

As indicated in the *Higher Education Handbook of Theory and Research* (Abelson et al., 2022), five major risk and protective factors that have a positive or negative impact on student mental health have included: individual, interpersonal, community, institutional, and public policy (Abelson et al., 2022; Dweck, 1999; Hefner & Eisenberg, 2009; Lipson et al., 2021). Consequently, these factors have aligned with

the pillars of PP (Seligman, 2011, 2019). The inclusion of these factors, in unison with other programs on campus, could reduce the primary responsibility of student mental health well-being from professors to other college faculty leaders (Hammoudi Halat et al., 2023). Baik et al. (2019) suggested that alternative projects and programs, such as health promotion and prevention initiatives, early interventions, and self-awareness of one's mental health state, should be offered as learning activities. These programs could cultivate and transform a college campus into a positive institution, which was one of the pillars of PP (Seligman & Csikszentmihalyi, 2000) that supported the topic of this current research study. Notwithstanding, the current state of the challenges that colleges encounter implementing PPIs to reduce the symptoms of DAS in their students will be addressed. However, understanding the currently most-used mental health programs and resources can offer the necessary tools to successfully reduce symptoms in this high-risk population.

Contemporary Common Mental Health Services

The most common types of mental health services offered to students with DAS and other mental health indicators have been psychotherapy counseling, couples counseling, group-clinic sessions, special individual counseling, and group workshops (Center for Collegiate Mental Health [CCMH], 2023; SAMHSA, 2021). The CCMH suggested that a critical need was for colleges to focus on minimizing academic tensity and enhancing social and cultural support to improve the mental health of students (SAMHSA, 2021). Asif et al. (2020) provided alternative solutions to reduce DAS in this high-risk population. These solutions included initiating preventative measures and promoting mental well-being (Abelson et al., 2022). Program examples of these

suggestions offered by CCMH (2023), Asif et al., and Abelson et al. (2022) included student involvement in extracurricular activities, increased interactions with community and social gatherings, and interventions that center around individualized coping measures, comprehension, and learning new skills. Although the mitigation efforts to reduce DAS in college students have continued to evolve, rates have persisted (Asif et al., 2020), and barriers to implement PPIs have continued. In a research study by Oswalt et al. (2020), it was revealed that there was an increase in college students who reported symptoms of depression from 9.3% to almost 15% between the academic years of 2009–2015 and an increase from 9% to over 12% of depression within the same academic school years. According to the Counseling Center Assessment of Psychological Symptoms, anxiety and depression increased in the 2021–2022 academic school year for college students (CCMH, 2023). Although the rates of DAS have continued to rise among college students, challenges to implement PPIs have remained.

Challenges to Implement Mental Health Interventions for College Students

During the literature review concerning the barriers that colleges encounter while implementing PPIs to reduce DAS in college students, no current literature was available. The available literature offered challenges for implementing the current interventions utilized to reduce DAS in students. According to Dobkins et al. (2023), several colleges in the United States currently offer mental health resources to their students. However, many of those colleges contend with barriers, such as staffing, knowledge constraints from students and support staff, and concerns regarding payment for services (Dobkins et al., 2023). Another factor that multiplied the barriers that colleges experience in implementing mental health assistance to students was the impact of the pandemic

(Wagner et al., 2023). When the WHO identified COVID-19 as a pandemic, tertiary institutions in over 180 countries were transformed into solitary isolation rooms (Wagner et al., 2023).

A research study was conducted to determine whether there is a relationship between isolation and stress. Upwards of 21% of students reported experiences of isolation leading to feelings of traumatic stress (Giusti et al., 2020; Wagner et al., 2023). While the mental health needs of students grew at tremendous rates, colleges were limited in the services offered, due to isolation and distancing guidelines (Wagner et al., 2023). Nevertheless, various colleges attempted to meet the mental health needs of their students by utilizing telehealth strategies. However, those services were eventually canceled, due to inadequate funding (Giusti et al., 2020).

In addition to the absence of fidelity, which enhances barriers to implementing interventions that reduce DAS in students, additional challenges were identified. For example, the SAMHSA (2021) suggested that schema failed to incorporate spacing, education, communication, support, funding, and personnel considerations and may also expand challenges and enforce unsuccessful processes. These processes diminished opportunities to decrease DAS symptoms in college students. In addition to a framework for mental health services that lacked essential foundational constructs of fidelity, several programs have omitted a precise strategic plan and methodology to deliver mental health services (Sontag-Padilla et al., 2023). These omissions have enhanced the effects of major barriers that supported implementing services (SAMHSA). The primary barriers to executing interventions that could minimize the effects of DAS in college students have

included funding, knowledge, education, and space and structural deficits (Cohen et al., 2022; Conrad & Riba, 2021; SAMHSA, 2021; Sontag-Padilla et al., 2023).

Funding Barriers

Funding barriers have had a significant impact on implementing mental health strategies. These hurdles have been connected to several diverse factors, such as financial aid policies (Abelson et al., 2022; SAMHSA, 2021), restricted funding allocations (Coleman, 2022), and finite resources (Sontag-Padilla et al., 2023). Financial aid policies that have a negative effect on implementing mental health services for college students have included the release of funds and the type of funds released (Abelson et al., 2022). Another funding challenge has been insufficient seeking of grants and philanthropic avenues (Sontag-Padilla et al., 2023). Each of these factors has been salient and had strong impacts on the quality and quantity of mental health resources available for students (MacDonald et al., 2022; SAMHSA, 2021). In addition to those barriers, funding constraints can have a negative impact on implementing mental health initiatives.

Lean funding allocations have been identified as another obstruction to implementing mental health programs for college students (Coleman, 2022). Lean funding is constraints placed on funds that only allow mental health programs to assist those students who seek resources and meet predetermined criteria (Coleman, 2022). Finite resources have included sparse college staff and faculty employed and assigned to a particular department but tasked to alternate departments, such as the campus counseling center (Albright & Schwartz, 2017; Sontag-Padilla et al., 2023). Restrictive plans to seek philanthropic grants were identified as another issue. The lack of providing funding to initiate or extend mental health programs has also contributed to barriers to

implementing necessary programs (Abelson et al., 2022; Sontag-Padilla et al., 2023). Several barriers that colleges encounter have often been intertwined with knowledge deficits (SAMHSA, 2021).

Student Knowledge and Education Barriers

Knowledge has had a significant influence on the implementation of mental health and well-being initiatives for college students (SAMHSA, 2021). These knowledge barriers have not been confined to interrupting the execution of mental health programs. These issues have been manifested by students who reported their experiences of minimal access to mental health services (Harris et al., 2022; Vankar, 2023). A research study by Vankar revealed that the most-reported barrier that college students experienced in their quest to access mental health assistance on campus was the lack of knowledge. Consequently, most of their challenges have been rooted in educational deficits regarding availability, location, and factors to support their need for mental health interventions. Over 23% of students expressed that challenges to obtain mental health services have included the lack of belief of need; over 23% cited time restrictions; and 21% elucidated the use of alternate forms of support, such as reliance on personal support systems and themselves. Another 21% of students identified financial restrictions, and almost 16% claimed the lack of knowledge of where to access services on their campus as the primary barrier. Other factors ranged from no barriers to misunderstanding the counselors' ability to comprehend their personal issues (Vankar, 2023).

Education and Knowledge Challenges of Leadership

Leadership challenges of education and knowledge have extended from qualified educated mental health professionals to myths and stigmas regarding mental health needs

to preconceived notions regarding individuals who seek assistance (Harris et al., 2022; SAMHSA, 2021). Moreover, other barriers have included unfamiliarity with services that met the request of the target population of students and the sustainability of mental health programs through designated school breaks, such as holidays, semester conclusions, and graduations (Abelson et al., 2022; Cohen et al., 2022; Coleman, 2022; Harris et al., 2022; MacDonald et al., 2022; Weissinger et al., 2024).

The accumulation of these essential factors has been required for open access to campus mental health services. These elements are also critical knowledge that should be obtained by college leaders (Hyseni Duraku et al., 2023). According to Ajzen (1991), the theory of planned behavior has a significant influence on how individuals respond to information. Thus, negative educational experiences regarding access to mental health resources has significantly added to the barriers that students encounter to utilize those services (Khombo et al., 2023). Knowledge of this theory could be beneficial to leaders as they build mental health services for their student population.

Weissinger et al. (2024) administered a research study of 1,662 college students to identify barriers to mental health services on campus. The most common barriers have included lack of knowledge regarding access, time constraints, personal belief systems, and stigmas surrounding mental health services and those who elect to utilize those services (Weissinger et al.). The knowledge barriers reported by the students have revealed areas that failed in collaborative education and communication practices. These primary areas were regarding resources geared toward reducing symptoms of DAS and other mental health challenges among this population (MacDonald et al., 2022; SAMHSA, 2021; Weissinger et al., 2024). This information may be salient for leaders to

acknowledge and could also aid with developing programs that meet the needs of their students. Other oppositions have included federal funding, policies, and restrictions that prohibit adequate hiring of professionally trained psychiatrists, psychologists, and counselors (Coleman, 2022; Conrad & Riba, 2021; Sontag-Padilla et al., 2023). Foundational obstacles that colleges encounter that prohibit the execution of successful mental health programs have included unfamiliarity or scarcity of knowledge based on the needs of their students and the stability of those programs (Harris et al., 2022). It will be imperative for leaders to understand the needs of their students and obtain information to ascertain the programs' sustainability in the future (SAMHA, 2021; Sontag-Padilla et al., 2023). Knowledge of those factors will also be salient during the planning phases to identify space and other structural challenges (MacDonald et al., 2022).

Space and Structure Barriers

Beyond the barriers of funding, education, and physical space, structural barriers can also introduce apparent adversities to implementing mental health resources for college students (Cohen et al., 2022; Weissinger et al., 2024). The physical obstacles of buildings on campus, staffing, staffing hours, and the proximity to students have been primary concerns (Coleman, 2022; SAMHSA, 2021). Additional structural interferences have included hours of operation for students to visit with staff, wait times, and transportation insecurities (MacDonald et al., 2022). Subsequent elements that have posed a negative impact on implementing mental health programs for college students have included the lack of agreement from faculty and unmet mental health challenges of faculty members (Coleman). Other concerns were in reference to the lack of a structured, generalized plan of care with instructions and guidelines for all colleges to follow

(Coleman, 2022). Abelson et al. (2022) elucidated the need of future research for effectual practices. The practices should enhance mental well-being, promote the prevention of mental ill-being, diminish the limited awareness of stakeholders, reduce adverse conceptions of mental health needs, and decrease negative thoughts of those who partake in these services (Harris et al., 2022; SAMHSA, 2021). Abelson et al. (2022) also suggested that building social relationships and developing a pragmatic cognitive resolve pertaining to self and others will be critical needs for future research.

Research Based Solutions: Positive Psychology Interventions

Overwhelmingly, several suggestions from other research studies concerning key elements that should be explored to implement sustainable mental health programs have mirrored the PMoWBT (Cohen et al., 2022; Conrad & Riba, 2021). The three pillars of PP, positive events, positive individual traits, and positive institutions have been suggested to be the foundation to erect mental health programs for college students (Seligman, 2019; Seligman & Csikszentmihalyi, 2000). The five elements of the PMoWBT, were designed to advance the concept of psychological thriving and development (Bhardwaj, 2022; Seligman, 2011). Seligman (2011) believed that flourishing and psychological thrive and development can be obtained through PERMA (Bhardwaj, 2022).

Elements of the PERMA Model of Well-being Theory

Bhardwaj (2022) and Butler and Kern (2014) suggested that positive emotions propel individuals toward factors that will produce satisfaction, happiness, or pleasure. Each component is unique and has a distinct role. The element of engagement pertains to a cognitive association between a group, individual, or society with events and

institutions. Positive relationships facilitate and include supportive bonds and affection from others (Bhardwaj, 2022; Butler & Kern, 2016; Seligman, 2011). This component is a personal evaluation of the value that an individual places upon themselves linked to their reason for living (Butler & Kern, 2014; Seligman, 2011). Butler and Kern (2014) elucidated accomplishment as the final element, being described as a private impression, sense of achievement, and ability to conquer an intent or a specific objective.

Researchers have suggested that well-being is not primarily the absence of poor mental health symptoms, such as DAS, but instead, conjointly includes the presence of PERMA (Butler & Kern, 2016). Individuals who capitalize on the five elements of the PERMA model may experience less DAS and other mental health symptoms compared to those who possess minimal attributes of these elements (Bhardwaj, 2022). A study of 260 Indonesian college students was conducted by Hidayat (2020) to determine a relationship between obtaining goals, elements of the PMoWBT, and one's satisfaction with life. The results revealed that students with characteristics that aligned with the PERMA model were more satisfied with life in general and had fewer derogatory cognitive expressions of DAS (Hidayat, 2020). In addition to the PMoWBT being identified as an effective means to promote and enhance mental well-being, PPIs have also been cited for reducing DAS in college students when implemented (Chui & Chan, 2020; Pan et al., 2022).

Positive Psychology Interventions

The primary intent of implementing PPIs is to heighten well-being, reduce ill-being, and enhance the quality of life in individuals who utilize these interventions (Seligman, 2019; Yurayat & Seechaliao, 2021). These interventions have included resources and programs that promote thankfulness, remittal, and awareness of self and

others. These virtues have been built upon displaying personal attributes, seeking and understanding life, and strengthening positive cognition practices (Chakhssi et al., 2018; Chui & Chan, 2020). In addition to utilizing PPIs as a tool to enhance and promote well-being, several interventions can be implemented without oversight from special consultants (Duan et al., 2022; Pienaar et al., 2022).

Of note, one program instructed students to identify and record factors in their lives for which they were thankful, areas of expertise, and three positive things about life (Seligman et al., 2005). The activity prompted the students to create novel positive approaches to cognitive processing, develop solutions to difficult life barriers, and build upon individual qualities (Seligman et al., 2005; Yurayat & Seechaliao, 2021). Those concepts promoted well-being and prevented languishing. A research study led by Chiu and Chan (2020) revealed that PPIs of positive thinking can be utilized as a buffer against stress and adjustment challenges in college students. Other PPIs used to reduce DAS in college students have included peers, social support initiatives, and educational courses (Neuhaus et al., 2022; Wang & Lv, 2020). Moreover, implementing PPIs can be empowered by the three pillars of PP—positive experiences, positive individual traits, and positive institutions (Vella-Brodrick et al., 2022)—to reduce DAS symptoms.

Pillars, Positive Psychology, and Depression, Anxiety, or Stress

Seligman and Csikszentmihalyi (2000) posited that the scientific study of positive singular experiences, positive individual traits, and positive institutions could strengthen one's quality of life. In addition to the effect that PPIs have on quality of life, they may also work as a buffer to prevent acute antagonistic life challenges from evolving into chronic debilitating mental health issues and pathologies (Seligman, 2011, 2019). The

three pillars of PP are also the major domains of PP (Meyers & Rutjens, 2022; Seligman & Csikszentmihalyi, 2000). Utilizing PPIs under the auspices of these pillars has been effective in reducing DAS in college students (Chui & Chan, 2020; Khanjani, 2018). Seligman and Csikszentmihalyi (2000) defined positive personal experiences as singular exploits from the past, present, and future. Past events of satisfaction and well-being, present actions of happiness, and future quests of optimism are examples of those experiences.

Positive Experiences

The PPI of positive psychotherapy has been found to reduce ill-being symptoms in individuals by considering the negative symptoms that a student is experiencing but invoking the promotion of well-being and optimism (Jeste et al., 2015; Seligman et al., 2005). That process was conducted through talk therapy sessions focused on forgiveness, gratitude, awareness of self and others, and positive relationships (Khanjani, 2018; Seligman et al., 2005). Of note, a research study by Khanjani revealed a significant difference between the pre- and post-test results of students with DAS. The students reported fewer symptoms of DAS after participating in the positive psychotherapy sessions. The participants in the study detailed how they were affected by the outcome of the treatment in the present, preparation for the future, and understanding of past events (Khanjani, 2018).

Positive Individual Traits

Individual traits are one's ability to display affection, talent, positive attributes, wisdom, and uniqueness (Jeste et al., 2015; Seligman & Csikszentmihalyi, 2000). Personality traits impact positive emotions, agreement with others, persistence, intensity

of negative emotions, and curiosity (Ali, 2019). Individuals with more interoceptive awareness have a higher degree of self-connection. These individuals understand the essence of self (Klussman et al., 2020; Vella-Brodrick et al., 2022). Using PPIs to reduce the symptoms of DAS in individual students could strengthen their unique abilities, personal goals, and self-awareness with an optimistic approach (Yurayat & Seechaliao, 2021). Educational programs that focus on positive personality development, positive interpersonal relationships, concepts of happiness, and personal resiliency prevent DAS and reduce symptoms in students who reported those manifestations (Seligman et al., 2005; Zhou, 2022).

Positive Institutions

Positive institutions cultivate virtues that build their students, employees, and other stakeholders in the areas of nurture, accountability, charity, and amiability (Seligman & Csikszentmihalyi, 2000). Oades et al. (2011) defined positive education as the evolution of an educational setting that promotes learning based on a specified curriculum. That curriculum entailed skills and wisdom to facilitate personal and social well-being (Oades et al.). Positive education practices that support the birth of positive institutions have included formal instruction environments that teach positive emotions and mindfulness practices, encouraging opportunities for kindness gestures. Additional positive practices included positive social groups, and extending those strategies throughout local communities (Sin & Lyubomirsky, 2009). A meta-analysis revealed that those interventions strengthened mental well-being and reduced DAS in college students who utilized those interventions (Oades et al., 2011; Sin & Lyubomirsky, 2009).

Numerous analyses also suggested that PPIs enhance cognitive well-being and decrease DAS with benefits lasting for over 5 months (Carr et al., 2021; Hobbs et al., 2022).

Benefits of Implementation

The benefits of implementing PPIs to reduce DAS in college students have been explored from individual, societal, and environmental perspectives. There were several individual benefits identified in each succeeding study. Students who employed these elements reported diminished DAS symptoms (Khanjani, 2018; Waters et al., 2022) and a greater sense of well-being (Howell & Passmore, 2019; Neuhaus et al., 2022) These benefits were especially evident in students with demanding courses of study (Steiner-Hofbauer & Holzinger, 2020). Future prevention of DAS in students was an additional favorable outcome (Neuhaus et al., 2022). Subsequent benefits included flourishing in life (Neuhaus et al., 2022; Seligman & Csikszentmihalyi, 2014) and buffering against depression and stress (Chui & Chan, 2020; Gable & Haidt, 2005) by creating positive cognitive pathways and actions (Kotsoni et al., 2020; Schueller et al., 2014). These interventions can also encourage a positive quality of life, maintain flourishing (Krifa et al., 2022).

The benefits from a societal aspect have included extended results of therapy lasting longer than the historical therapy of CBT (Halladay et al., 2018; Worsley et al., 2022) and the provision of additional or primary solutions to address mental health concerns for this population (Worsley et al., 2022). Environmental perspectives of PPIs have included assisting with the barriers of personnel constraints, standardization among various programs, and physical space barriers (James, 2022; Simon, 2017). These interventions will be significant for the future well-being of students who will enter the workforce

(Stallman, 2010; Suicide Prevention Resource Center [SPRC], 2020;). These implementations will also be critical to promoting safe learning environments that create well-being, instruction, and consistent graduation rates (Abrams, 2022; Baik et al., 2019). Nonetheless, the benefits of these interventions have not been confined to individuals, society, and environment, as the effects can be far reaching.

In addition to the previous diverse aspects, PPIs can reduce DAS in students in other ways as well. Of note, these benefits encourage students to focus on positive events, positive individual traits, and positive institutions (Seligman, 2019; Seligman & Csikszentmihalyi, 2000). Students implement the learned elements of the PMoWBT (Bhujade, 2017; Seligman, 2011) to create positive aspects of the individual, society, and institution (Hobbs et al., 2022; Khanjani, 2018). Although there has been a multitude of reports, research studies, statistics, and student accounts regarding the beneficial impacts of implementing PPIs to reduce DAS in college students, an essential detail has not been explored: the barriers that colleges face when implementing PPIs.

Gap in Literature

Several benefits for implementing PPIs to reduce DAS in college students have been established. Previous research studies have determined the effectiveness of other interventions to decrease symptoms of DAS in college students. However, no research has been conducted on the challenges that colleges face when implementing PPIs to reduce DAS symptoms in this population. This research study aimed to close this gap. Biblical instructions regarding DAS, PPIs, PMoWBT, and the three pillars of PP can offer a spiritual perspective of comprehension.

Biblical Foundations of the Study

Positive psychology researchers influenced by Christian values have posited that the Bible is the foundation that guides a Christian lifestyle, and PP provides the road map and methodology to biblical living (Hodge et al., 2022). In fact, Dr. Martin Luther King, Jr. expressed the same contextual framework as the PP Christian researchers. Dr. King (2019) posited that science protects religion from being stagnant and uncertain, while religion paralyzes science and protects it from the context that all facts must equal physical substance. Isaiah 26:3 stated: “Thou wilt keep him in perfect peace, whose mind is stayed on thee: because he thrusted in thee” (*KJB*, 1769/2017). Furthermore, DAS has been associated with academic pressure, biological factors, financial concerns, and environmental impacts (Abrams, 2022; Bhujade, 2017; Long et al., 2021; Ramón-Arbués et al., 2020; Zhang et al., 2020). The science of PP is not physical, but the religious aspect of DAS becomes more certain, due to scripture. Thus, PPIs rooted in the PMoWBT aim to cultivate psychological thrive and development through PERMA in its users (Bhujade, 2017; Seligman, 2011). Additionally, PPIs utilize and promote thankfulness, awareness of self and others, forgiveness, personal growth, seeking the meaning of one's life, and reinforcing positive cognitive pathways (Chakhssi et al., 2018; Yurayat & Seechaliao, 2021). Scripture that provided support for the fundamental objectives of PP was found in Galatians 5:22–23: “But the fruit of the Spirit is love, joy, peace, forbearance, kindness, goodness, faithfulness.” The three pillars of PP are the substructure on which the elements and objectives of well-being have been cultivated. Philippians 4:8 stated: “Finally brothers whatever is true, whatever is honorable, whatever is just, whatever is pure, whatever is lovely, whatever is commendable, if there

is anything worthy of praise, think about these things." This scripture covered each of the pillars of PP by providing positive articles of thoughts, hope, and examples. Although history has revealed opposition between psychology and Christianity, both entities have sought to create hope for whom they serve (Sain, 2020).

Positive Psychology Interventions from a Biblical Worldview

Several of the foundational elements of PPIs can be incorporated into a biblical worldview (Rye et al., 2013). While pessimism, hopelessness, and negative thinking patterns fuel depression and stress in college students (Chui & Chan, 2020; Neuhaus et al., 2022), hope, optimism, and resilient cognitive processes cultivated well-being (Howell & Passmore, 2019; Sain, 2020). The biblical worldview of PP describes the essential traits and presences of hope and expectation in individuals and society to reduce ill-being and promote flourishing through God and grace (Sain, 2020; Seligman, 2019). Thus, PPIs from a biblical perspective consist of forgiveness, self-compassion, gratitude, and hope (Rye et al., 2013). The second of three pillars of PP, positive individual traits, includes the same virtues of forgiveness, gratitude, awareness of self, and hope for the future (Meyers & Rutjens, 2022; Seligman & Csikszentmihalyi, 2000). Although PPIs and PPIs from a biblical worldview perspective have identified the same virtues as significant elements of well-being, most of the empirical research has focused on forgiveness, while omitting the biblical aspect of its salience (Rye et al., 2013; Wade & Worthington, 2005). Epistemology, empirical research, and the scientific method have been utilized as naturalistic study methods that support reliable and valid knowledge of cognitive processes and behaviors in social science (Forbes et al., 2021; Keller, 2022). However, when human conduct and natural laws appear to be inconsistent, the primary

methods of the research have mentioned disqualified human experiences that could add comprehension to unknown behaviors (Keller). A Christian epistemology framework forms a bridge between truth and life (Rowlands et al., 2020). While an externalist framework describes how knowledge can exist beyond cognitive means outside of one's mind (Rowlands et al.,). Thus, interpretations that connect credence and reality are salient. These interpretations are important because knowledge is obtained by understanding, examination, and logic (Hathaway, 2004; Keller, 2022). Therefore, PPIs, the pillars of PP, and the PMoWBT each align with biblical virtues and truths (Rye et al., 2013; Sain, 2020; Seligman & Csikszentmihalyi, 2000). Biblical support was found in Proverbs 4:7: "Wisdom is the principal thing; therefore get wisdom; and with all thy getting get understanding" (*KJB*, 1769/2017)

Summary

The problem in this study was the lack of using PPIs and the challenges that colleges face when implementing PPIs to reduce DAS in college students. The purpose of the study was to identify these barriers and determine solutions. The significance of this study can help college administrators understand the mental health needs of their students, create awareness surrounding the challenges of implementation, and support the future use of PPIs to reduce DAS in college students (Khanjani, 2018; Waters et al., 2022). The literature review and scripture that supported utilizing PPIs to decrease DAS in college students has been shown. However, no research studies have been conducted to identify the barriers that colleges encounter when implementing those interventions. Thus, this qualitative exploratory case study sought to close that gap. An overview and a

description of this study will assist with the comprehension of methods and procedures in Chapter Three.

CHAPTER 3: RESEARCH METHOD

Overview

A case study is a design or strategy utilized to study a unit, most often from a social perspective (Priya, 2021; Yin, 2009). This qualitative strategy explored issues within events, individuals, groups, processes, or specific settings (Creswell & Poth, 2017; Priya, 2021). The concept and approach to case studies were guided by Stake (1995) and Yin (2014). A collective or multiple-case study consisted of several designs or strategies that illustrate an issue or area of concern to be explored (Creswell & Poth, 2017). The cases explored in the current study were interconnected by discrete and separate analysis (Stake, 1995). This collective case study design used a cross-case analysis amid the 11 cases in the study.

The purpose of this research study was to explore and understand the barriers that colleges face implementing positive psychology interventions (PPIs) to reduce depression, anxiety, or stress (DAS) in college students. According to Patton, (2015), case studies are utilized to aid in the comprehension of a subject of interest. Utilizing a qualitative collective case design can foster detailed research (Priya, 2021). The data can be collected from several organizations and by multiple bounded methods (Creswell & Creswell, 2017; Priya, 2021).

Recent statistics surrounding the mental health needs of college students have revealed that the three most common mental health symptoms reported were depression (60%), anxiety (13%), or stress (11%; Sirisankaeo, 2020). Although PPIs have been shown to reduce DAS in college students (Khanjani, 2018; Waters et al., 2022), no research has been conducted on the barriers that colleges face to implement these positive

interventions. Thus, this study addressed these concerns to close that gap. Chapter Three contains the research questions, an in-depth description of the research design, and participants. Chapter Three also provided study procedures, instruments and measurements to be used, data analysis, delimitations, assumptions, limitations, and a summary.

Research Questions

This research study used a qualitative collective case study design led by the following three questions to explore the barriers that colleges encounter when implementing PPIs to reduce DAS in college students.

RQ1: What are the funding barriers that colleges face that prohibit implementing positive psychology interventions to reduce depression, anxiety, or stress in their students?

RQ2: What are the knowledge barriers that impede colleges from utilizing positive psychology interventions in this high-mental-health-risk population?

RQ3: What are structural barriers that interfere with initiating positive psychology intervention initiatives for students experiencing depression, anxiety, or stress?

Research Design

This study utilized a collective case study design with a cross-case analysis of 11 participants in the study. The methodology was qualitative rather than quantitative. Qualitative research is a multi-method inquiry that entails malleable naturalistic opportunities for individuals, groups, and organizations to share experiences and phenomena from their perspective (Creswell & Poth, 2017; Hall, 2023). The data was collected from in-depth interviews, a focus group, and document analysis. Each of these

methods assisted with answering the questions pertaining to this topic and can be utilized as the foundation to construct future research.

The primary differences between quantitative and qualitative research study methods include the types of questions posed, data collection, instruments used for data collection, and the presence or lack of flexibility (Mack et al., 2005). Quantitative methodologies pose questions that are closed-ended and utilize data collection tools with a numerical focus within strict perimeters (Mack et al., 2005; Patton, 2014). Qualitative research studies ask open-ended questions, such as what, how, or why, with data collection tools that are pliable and connect with participants in a natural setting (Creswell & Creswell, 2017; Hall, 2023). Additionally, another significant contrast is the type of data produced. Quantitative studies produce data to support or reject a predetermined thought or hypothesis regarding a topic, while qualitative studies seek to comprehend supplemental insight about a specific inquiry (Hall, 2023; Prosek & Gibson, 2021). Since the goal of this research study was to explore the barriers that colleges face when implementing PPIs to reduce DAS in college students, a qualitative case study design was selected. Qualitative research includes several designs. These designs can be useful to study, explore phenomena, and provide strategies to collect data (Creswell & Poth, 2017; Priya, 2021).

In addition to case studies, which are designed strategies to study a unit of interest (Priya, 2021; Yin, 2009), other approaches include narrative, phenomenological, grounded theory, and ethnographic research studies. A narrative approach to research shares stories described by an individual to the researcher. A phenomenological approach seeks to capture the core of experiences lived by participants in a study. The grounded

theory creates a concept from the data collected from individuals in the study, while ethnographic research seeks to analyze shared perspectives of a culture (Creswell & Poth, 2017). The case study design offered an in-depth analysis and understanding of the multiple cases being studied (Alpi & Evans, 2019; Creswell & Poth, 2017). Priya (2021) and Yin (2014) posited that case studies can be explanatory, seeking to explain the why and how of a phenomenon; descriptive, describing the context; or exploratory, which is used to identify new concepts to understand phenomena and to provide a foundation for future research. The current research study aimed to explore, identify, understand, and provide a foundation for future research into the barriers that colleges face when implementing PPIs to reduce DAS in college students. Considering the details provided, an exploratory pathway best aligned with this current study.

According to Stake (1995), case studies are categorized by the analysis of the focal point in a set perimeter of time and intent (Creswell & Poth, 2017). The types of case study intentions include intrinsic, instrumental, and collective or multiple studies (Alpi & Evans, 2019). Intrinsic case studies are exclusively focused on the case and presentations of unknown phenomenon. Instrumental case studies are centered around illustrating a specific issue to understand details encompassing an event or situation. Lastly, a collective or multiple study explores several cases to gain various perspectives on a particular area of interest (Creswell & Creswell, 2017). A collective design strategy fulfilled the purpose of this current study. The participants in the study elucidated their perspectives on the challenges that they faced as college campus counseling center directors and implementing PPIs to reduce DAS in their students.

Participants

One of the most debated aspects of qualitative research has been to determine the number of participants to recruit for a study (Bekele & Ago, 2022). According to Morse (2000), some of the primary factors that influence the number of participants necessary for a qualitative research study include data quality, the nature of the subject, scope, how many times the participants will be interviewed, and whether the saturation level has been reached. Data quality depends on the ability of the participant to express themselves effectively. The nature and scope referred to the clarity of information and how specific or narrow the breadth of the study. While the saturation level depends on the similarities and differences between the participants (Bekele & Ago, 2022). The number of participants necessary to achieve saturation can range from one to over 90 (Mocanasu, 2020).

When the sample population is homogeneous with a less-defined scope, more data is required from various participants to obtain saturation levels, as there are more similarities within the groups of participants (Kindsiko & Poltimae, 2019). However, a heterogeneous group of participants with a smaller scope would warrant fewer participants, as there are more differences among them (Bryman, 2012). This research pursued to understand the barriers of implementing PPIs to reduce DAS in college students. As an aid to recognize those challenges, leaders who make decisions regarding mental health resources on college campuses provided an additional perspective. The nature and scope of the study was narrow, the data quality was envisioned to be excessive with minimal interviews, and a saturation level was met with 11 participants (Bekele &

Ago, 2022). Thus, this study utilized a heterogeneous group of participants (Bryman, 2012; Kindsiko & Poltimae, 2019).

This study included both male and female professionals who were currently employed at a 4-year college for a minimum of one year. These directors possessed the authority to make decisions regarding mental health resources on campus. The leaders also had access to generic documents that cited criteria utilized to establish mental health services on campus. Each of the participants was willing to grant access to those documents for research study purposes. Next, the setting and process to recruit participants was determined (Creswell & Poth, 2017). Since the goal of this study was to seek information regarding challenges that colleges encounter to initiate PPIs and to assist college students to reduce DAS, the participants in the study were college administrators. These leaders were individuals who created guidelines regarding mental health resources for their students on campus. The setting for this study was 4-year colleges primarily on the East Coast of the United States. The specific states included North Carolina (NC), South Carolina (SC), Virginia (VA), Maryland (MD), and Pennsylvania (PA). The type of recruitment was purposeful and directed toward a specific group (Mack et al., 2005). The initial closed-ended questions guided the questionnaire to ensure that the participants met the criteria to participate in the study (Creswell & Poth, 2017). Appendix A contains the questionnaire to determine eligibility for participation. The participants were recruited utilizing multiple methods and techniques.

There were 11 participants chosen to participate in this study. The process of recruitment utilized a purposeful sampling approach. When the purposeful sampling

strategy was unsuccessful or exhausted, a snowball sampling approach was implemented. Social media outlets, such as Facebook, geared toward college leaders were used to solicit participants. The institutional review board (IRB)-approved flyer was also distributed to individuals who were familiar with the researcher and met the criteria for participation. Those individuals received the flyer by email and text messages. Participants were also contacted by phone before the flyer was shared by email or text message. Examples of the relevant recruitment materials distributed can be found in Appendix B. Each question, design, participant, and recruitment process stemmed from empirical research that supported the transferability and dependability of this study (Priya, 2021).

Study Procedures

The executive search for participants in this research study consisted of three distinct phases. The initial phase, recruitment, followed by screening and informed consent (Jackson, 2016; Villasenor, 2023). The recruitment phase enlisted individuals who met the criteria to participate in the study. The questionnaire also assisted with this determination during the screening phase. Finally, the informed consent phase provided the participants with specific details regarding the research. The recruitment phase included various forms and methods to solicit participants.

Recruitment Phase

The recruiting process began by utilizing the developed flyer, approved by Liberty University's IRB (see Appendix C), via a social media outlet, Facebook, to find participants (see Appendix D). On the social media platform, recruiting efforts concentrated on specific professional pages, such as Liberty University's Doctoral

Cohort, First-Generation Doctoral Community, Student Affairs and Higher Education Professionals, and Positive Psychology pages. Other forms of recruiting included emails (see Appendix E), text messages, phone calls, and face-to-face visits (Punch, 2005). The recruitment flyer was emailed (see Appendix E) and texted to individuals familiar to the researcher who were employed by colleges and willing to complete the questionnaire to determine eligibility. Phone calls and face-to-face visits were executed. The participants were given six weeks to respond to the QR code on the flyer (see Appendix B), complete the questionnaire, and return the questionnaire via email for review to participate in the study.

Screening Phase

The screening phase identified individuals who met the criteria to participate in the study (Mack et al., 2005). The candidates answered the initial questionnaire accessed via the QR code on the research study flyer (see Appendices A and B). Then, a review of the screenings was completed. If the candidate was unable to answer "yes" to the initial closed-end questions, they were given gratitude for their time and interest by the researcher via email (see Appendix E), but they were not permitted to participate in the study. Individuals who answered "yes" to each question were eligible to participate in the study. A congratulatory email was sent to these participants to explain that they were identified as eligible (see Appendix E). An informed consent form (see Appendix F) was also attached to the email. When more than the estimated point of saturation level of participants was met, a determination was made regarding who would be included in the study based on other factors, such as geographical location and needs of the study.

Informed Consent Phase

In this phase, the participants received an email with an in-depth description of the study (see Appendix E). The consent form (see Appendix F) explained the potential risks involved, instructions regarding withdrawal, and time necessary to complete the study. Opportunities to ask questions regarding the study were permitted. Then, participants were asked to read, sign, and return the signed consent form (see Appendix E). Signed informed consent forms were obtained from each participant (Jackson, 2016) by email before participation.

Instrumentation and Measurement

According to Stake (1995), the utilization of various methods of data collection can assist with obtaining triangulation. Furthermore, this has been salient in research to increase the validity of qualitative research designs. Yin (2017) and Cherilien (2020) elucidated that various methods of data collection also have a positive impact on the dependability and credibility of the study being researched. Thus, this research study included three forms of data collection: individual interviews, a focus group, and document analysis. Each participant was interviewed for 30–60 minutes virtually and recorded by audio and video. Then, six participants were selected to join the focus group (only three participated). The focus group was held for 90 minutes. Finally, the documents on the college websites were reviewed to determine the mental health resources utilized in the campus counseling centers. The open-ended research questions were in accordance with the three primary research questions of the study:

RQ1: What are the funding barriers that colleges face that prohibit implementing positive psychology interventions to reduce depression, anxiety, or stress in their students?

RQ2: What are the knowledge barriers that impede colleges from utilizing positive psychology interventions in this high-mental-health-risk population?

RQ3: What are structural barriers that interfere with initiating positive psychology intervention initiatives for students experiencing depression, anxiety, or stress?

The research questions were geared toward facilitating conversations that spurred in-depth conversation (Mack et al., 2005; Patton, 2014). The questions from the focus group were generated from the research questions, which benefited from supplementary discussions of insight and experience (Patton, 2014). Reviewing previous processes and procedures assisted in the provision of additional data for comprehension of the topic being explored (Creswell & Poth, 2017). Interviews were conducted first to build a rapport with the participants, identify participants for the focus group, and collect information that assisted the researcher with understanding the participants' (Priya, 2021) perspectives on implementing PPIs to reduce DAS in college students.

Interviews

Mack et al. (2005) posited that qualitative research methods utilize the experiences of individuals to obtain answers for specific phenomena. One of the primary design strategies to study a topic of interest is the case study (Priya, 2021; Yin, 2009). The most prominent tool used for data collection is interviews (Creswell & Poth, 2017). Consequently, this collective case study utilized three forms of data collection: interviews, a focus group, and document analysis. Incorporating various forms of data

collection increased the validity, reliability, and credibility of the research (Eyisi, D. 2016). The interview questions aligned with the three primary research questions identified during the literature review. The interview questions were as follows.

Open-Ended Interview Questions

1. What steps have been taken by leaders to understand the mental health needs of their students?
2. Explain how understanding the mental health needs of students on campus can be beneficial.
3. What knowledge barriers can influence utilizing PPIs to reduce DAS in students on campus?
4. Can you describe any funding barriers that your college faces that prohibit implementing positive psychology interventions (PPIs) to reduce depression, anxiety, or stress (DAS) among the students on campus?
5. What are your thoughts concerning financial aid and implementing PPIs on campus?
6. How do financial aid policies impede the implementation of PPIs to reduce DAS in students?
7. What thoughts do you have on the number of psychologists, psychiatrists, and other trained mental health professionals employed on campus and PPIs?
8. What structured generalized plans and guidelines have been established on campus regarding times and locations for students to access mental health resources?
9. What are the campus mental health fidelity plans to sustain the mental well-being of students during scheduled breaks?

10. Can physical obstacles on campus interfere with initiating PPIs to reduce symptoms of DAS in students? If so, how?
11. What future building plans have been approved to address current issues of space on campus?
12. Name the criteria utilized to determine how mental health services will be provided to students on campus.
13. Describe any strategies other colleges have utilized to implement PPIs to reduce DAS symptoms in their students.
14. What other information would you like to contribute?

Open-ended questions are utilized in qualitative research studies to invoke how or why dialogue (Mack et al., 2005; Patton, 2014). This open dialogue can facilitate conversations that require more in-depth communication (Mack et al., 2005). The participants received an email with dates and times to schedule initial interviews within the subsequent 2–3 weeks (see Appendix E). In addition, the participants chose to complete the initial interview in a virtual or in-person setting, depending upon their geographical location. The participants were prompted to select interviews from Monday–Friday between 8:00 am (EST)–6:00 pm (EST). Once the interviews were scheduled and the virtual option to conduct the interviews was established, the interviews were initiated.

During virtual interviews, notes were scribed, in addition to recorded audio and video sessions. Each participant was interviewed for 30–60 minutes. Questions 1–3 pertained to knowledge barriers that prohibited implementing PPIs to reduce DAS in students. Questions 4–7 aimed to address the funding barriers that impede colleges from

utilizing PPIs. The final set of questions, Questions 8–12, explored structural barriers that impede PPI initiatives on college campuses to reduce DAS symptoms. Questions 13 and 14 included two open-ended questions to encourage participants to describe strategies and facilitate open discussion (Patton, 2014). Following the completion of all interviews, the interviews were transcribed; reviewed by comparing the notes, transcription, and video/audio data; and emailed to the participants for member checking. Upon verification, the data was prepared for analysis.

Focus Group

The selection process to form a focus group was based on the initial interviews with the participants. Participants with more knowledge of the subject and succinct explanations, who were leaders of colleges in diverse locations and agreed to participate in the focus group, were asked to engage (Sargeant, 2012). Focus groups utilize a unique process of data collection; these multi-individual units are one of the few data collection sources that obtain valuable information on a topic being explored from various perspectives in a single setting (Flynn et al., 2018). This data collection method also promoted time savings, which can impact the cost-effectiveness of research studies (Flynn et al., 2018). Participants selected to join the focus group were confirmed by email and asked to confirm available times and dates to participate in the virtual focus group (see Appendix E). Once confirmed, the focus group was scheduled. The questions presented in the focus group were as follows.

Open-Ended Focused Group Interview Questions

Please introduce yourselves to the other members of the group.

1. What influence have depression, anxiety, or stress (DAS) symptoms had on the student body on campus?
2. Describe any mental health interventions implemented to reduce DAS in those students.
3. Describe the most significant barrier to implementing positive psychology interventions (PPIs) to reduce DAS symptoms in students.
4. How can funding challenges be addressed to remove any barriers that impede implementing PPIs?
5. What is the primary knowledge deficit regarding the implementation of PPIs?
6. How could the barriers of space and structure be resolved on your campuses?
7. What other barriers not addressed in this group influence implementing PPIs and the reduction of DAS symptoms in students?

The semi-structured Questions 1–6 addressed topics that were detailed during the literature review and identified as common concerns (Patton, 2014). The focus group also answered one close-out question, Question 7. This question allowed participants to submit their final thoughts regarding this topic. Following the completion of the focus group interview, the interviews were transcribed; reviewed by comparing the notes transcription, and video/audio data; and emailed to each individual participant for member checking. Upon verification, the data was prepared for analysis. The participants provided the requested documents on their college websites.

Document Analysis

The final source of data collection for this study was document analysis. Document analysis and documentation review are critical to the case study design (Creswell & Poth, 2017). These historical resources can provide a road map for future endeavors and practices. Both units of participants provided documents detailing the process used or would be potentially used to initiate mental health services to reduce DAS in their students. As one of the criteria for participating in this study, the candidates were asked if they could provide documents regarding current or previous plans to implement mental health services on their campuses. The analysis assisted with answering the research questions. The inspection of the data also identified barriers to implementing PPIs to reduce DAS in college students in terms of funding, knowledge, and structural challenges. In addition to offering answers to the three research questions, the analysis assisted in determining the criteria used as the foundational objectives to implement mental health resources on campus (Substance Abuse and Mental Health Services Administration [SAMHSA], 2021). Those blueprints of the campus mental health programs were compared to the other data received from each participant to identify similarities, differences, and potential plans for PPIs. Finally, the documentation was reviewed to identify the presence of fidelity (Sontag-Padilla et al., 2023), as fidelity has been determined to be an indicator of sustainable mental health programs (Abelson et al., 2022). The documentation was requested by emails sent to the participants, to be retrieved for analysis. The findings will be presented in the results section of this research study.

Data Analysis

The interpretation of the data, criteria, and details extracted from participants in this study was evaluated and presented based on the protocol of the qualitative method of the study. The collected data assisted to understand the barriers that colleges face when implementing PPIs to reduce DAS in college students. Utilizing a collective case study design with cross-case analysis generated copious amounts of data for analysis (de Vries, 2020). These strategies of study and data collection also added credence to the confirmability and dependability of the study (de Vries, 2020). Stake (1995) and Halkias et al. (2023) suggested that utilizing multiple modes of data collection would increase credibility. The data analysis processes in this study obtained data from interviews, a focus group, and document analysis, which increased the trustworthiness of the study.

The first step of data analysis was to collect the data from the interviews, focus group, and documents, which was transcribed into text form during the interviews on Zoom and Teams (Halkias et al., 2023; Stake, 1995). Next, an examination of the entries to verify accuracy was conducted. The entries were analyzed multiple times to ensure accuracy. Following the analysis, the transcription authenticity was confirmed with the participants via member checking (Creswell & Poth, 2017).

Utilizing a collective case study design with cross-case analysis involved two phases (Halkias et al., 2023): data analysis among the individual participants and analysis to determine parallels and differences in the themes and categories (Yin, 2017). While collective case studies provided various perspectives from the participants regarding a specific topic, cross-case analysis can improve the dependability of the study (Halkias et al.). Following the verification of accuracy, the coding process began. Creswell and Poth

(2017) posited the process of coding, or separating the data into categories, is critical for data synthesis. This process was conducted for data retrieved from the individual interviews and the focus group. An exploratory manual descriptive coding strategy was utilized to identify common phrases and words from the data, which aligned the same category or theme (Creswell & Poth, 2017). The fourth step included the analysis of documents. This analysis pinpointed similar and different plans (Yin, 2009) used by colleges regarding the mental health services on their college campuses. Finally, the documents provided by each participant, located on the university websites, were analyzed. The documents were compared against the literature review and the data obtained from the interviews and focus group (Halkias et al., 2023; Stake, 1995). The final analysis of all data was documented and elucidated.

Delimitations, Assumptions, and Limitations

Delimitations

This research study used a purposeful approach to recruiting participants. Purposeful recruiting methods seek potential participants who possess specific characteristics determined by the topic of a research study (Mack et al., 2005). These characteristics are delimitations. Delimitations are boundaries established for a research study (Coker, 2022).

The delimitations in the study were professionals currently employed at a 4-year college who had the authority to make decisions regarding mental health programs for students on their campuses. These leaders were employed in their current positions for a minimum of one year. The participants had access to documents that described plans for initiating or that would be used for initiating mental health resources on campus. These

individuals provided access for documents to be analyzed, on the college websites. Since the participants possessed the set requirements of the study, it was assumed that the individuals met the delimitation standards.

Assumptions

In addition to the researcher assuming that the delimitations standards were met, a mutual understanding and trust was established. The presumption that the candidates answered the questions to the best of their ability and truthfully was trusted. It was assumed that the researcher utilized the most-appropriate study design to answer the research questions. In a case study, the determination of the method used is based on the researchers' aim to describe, explore, or explain a phenomenon (Priya, 2021). This increases the dependability and transferability of the study (Yin, 2014), and the assumption that the limitations in the study were expressed.

Limitations

Limitations of this research study included the restrictive delimitations, transferability challenges, and dependability confines attributed to the population of the study (Mack et al., 2005). Halkias et al. (2023) elucidated that transferability, the way in which research findings can be repeated in future studies, and dependability, the accuracy of data collection and its processes, could be complex in collective case study designs. Another limitation was the lack of meticulousness (Priya, 2021), due to time constraints. Case study designs require in-depth analysis and interactions with the participants. This requirement indicated extended time schedules not allotted in the study. This process also involved a deep commitment from the researcher and challenged time constraints

(Halkias et al., 2023). Each process, unit, and group analysis impacted the instrumentation and measurement of this section, as well as the study.

Summary

This qualitative research study utilized a case-study designed strategy, which is most often applied in research studies seeking answers to social issues (Priya, 2021; Yin, 2009). This design explored the barriers that colleges face when implementing PPIs to reduce DAS in college students. The participants were recruited using a purposeful sampling strategy (Mack et al., 2005) and the snowball method. Per Bekele et al.'s (2022) guidelines, the saturation level of the number of participants in the study was expected to be reached at a maximum of 20 participants. The participants were asked to complete a screening questionnaire to determine if they met the delimitations to be involved in the study (Jackson, 2016). The proper signatures were obtained to authorize consent to participate in the study. Data was retrieved via in-depth interviews, a focus group, and document analysis (Priya, 2021). The data was analyzed and evaluated against previous studies. Chapter Four will provide an overview of the purpose of the study and data collection processes. The chapter will also describe the demographics of the sample and include the presentation of the questionnaires. An in-depth analysis of the study findings, analytical processes, relevant codes, themes, and data organization will also be presented.

CHAPTER 4: RESULTS

Overview

The purpose of this qualitative exploratory case study was to understand the barriers that colleges face when implementing positive psychology interventions (PPIs) to reduce depression, anxiety, or stress (DAS) among college students. According to Stake (1995), the use of divergent methods of data collection assists with obtaining triangulation. Yin (2017) suggested that the use of various methods of data collection equally have a positive impact on the dependability and credibility of the research study. Consequently, three data collection processes were utilized in this study, including in-depth interviews, a focus group, and document analysis. The research study was guided by the following research questions:

RQ1: What are the funding barriers that colleges face that prohibit implementing positive psychology interventions to reduce depression, anxiety, or stress in their students?

RQ2: What are the knowledge barriers that impede colleges from utilizing positive psychology interventions in this high-mental-health-risk population?

RQ3: What are structural barriers that interfere with initiating positive psychology intervention initiatives for students experiencing depression, anxiety, or stress?

Chapter Four provides the descriptive results obtained from the collected data. The study findings describe the analytical process, codes, and themes generated from the responses to the research questions. This section concludes with a summary to encapsulate the key results of the study, which are discussed in Chapter Five.

Descriptive Results

This research study involved 11 participants. Two of the criteria for engaging in the study were to possess the authority to make decisions regarding the mental well-being of students on campus and current employment at four colleges in five states. The selected states were, South Carolina (SC), North Carolina (NC), Virginia (VA), Maryland (MD), and Pennsylvania (PA). There were three participants from SC, four from NC, one from VA, two from MD, and one from PA. The participants were assigned pseudonyms to protect their identity. The assigned names were generated based on the state in which the college was located and the number of individuals in that state who participated in the study (e.g., NCU#1). Each of the 11 participants was a director of their campus counseling centers. Thus, they possessed the authority to make decisions related to the mental well-being of their students. Additionally, the participants had to be employed in their current positions for a minimum of one year. Nine of the directors had been in their current positions from two to more than six plus years. The remaining two participants served in their positions for one year-three months to one year-six months.

In the following section, study findings and the collected data are shared. The analytical process is also described briefly. Finally, the coding and theme development obtained from the interviews, focus group, and document analysis is elucidated. Table 2 exhibits a background demographic description of the participants, including their assigned pseudonyms, current position, number of years in their position, and use of PPIs.

Table 2

Interview Participants' Background Demographics

Name	Position	Years in Position	Use of PPIs
NCU#1	Director	4+	No
NCU#2	Director	6+	No
MDU#1	Director	5+	Yes
VAU#1	Director	5+	No
NCU#3	Director	2+	Yes
PAU#1	Director	1+	Yes
NCU#4	Director	5+	Yes
SCU#1	Director	4+	Yes
MDU#2	Director	5+	No
SCU#2	Director	1+	Yes
SCU#3	Director	6+	No

The directors who participated in the focus group were also participants from the individual interviews. The three participants in the focus group represented the states of NC and SC. Two of the directors were from NC, while one participant resided in SC. Table 3 provides a background demographic description of the focus group participants.

Table 3

Focus Group Participants' Background Demographics

Name	Position	Years in Position	Use of PPIs
NCU#2	Director	6+	No
NCU#3	Director	2+	Yes
SCU#2	Director	1+	No

The final form of data collection was document analysis. The participants were asked to provide documents regarding the current or previous plans to implement mental health services on their campuses. To access the requested information, the participants

provided guidance to retrieve the data from the university websites. The sites were assessed for six documents or forms of information. Those documents were the type of counseling services provided, PPIs offered, hours of service, days of service, physical location, and the availability of alternate 24-hour counseling options. The document analysis of the counseling services provided, and PPIs offered assisted with answering RQ2, regarding knowledge barriers. Analyzing the documents pertaining to hours of service, days of service, and physical location, provided data to answer RQ3, regarding structure barriers to using PPIs. Finally, the document analysis related to 24-hour counseling availability yielded data to address RQ1, regarding funding barriers that impede the implementation of PPIs to reduce DAS in college students. A detailed analysis of the findings will be elucidated in the document analysis portion of this chapter.

Study Findings

This study utilized a collective-case study design with a cross-case analysis of the 11 participants. Qualitative research is a multi-method inquiry that involves malleable naturalistic opportunities for groups, individuals, and institutions to express experiences and phenomena from their viewpoint (Creswell & Poth, 2017; Hall, 2023). This systematic approach was salient to the current research study, as well as future studies. The analytical process of collection began by retrieving data from the interviews, focus group, and documents.

Participant Interviews

The interviews were transcribed into text during the meetings on Zoom and Teams (Halkias et al., 2023; Stake, 1995). Then, the accuracy of the data was verified by

multiple analysis. The collected data was compared to the transcripts, audio recordings, and video recordings from the in-depth interviews. Each participant was interviewed for 30–60 minutes utilizing open-ended questions. Questions one to three pertained to knowledge barriers that prohibited implementing PPIs to reduce DAS in students. Questions four to seven addressed the funding barriers, while the final series of questions, Questions eight to 12, explored the structural barriers. Questions 13 and 14 encouraged the participants to describe strategies and elicited an opportunity for open discussion (Patton, 2014).

Following the analysis, the transcription authenticity was confirmed with the participants via member checking (Creswell & Poth, 2017). Succeeding the verification of accuracy, the open coding process began, which was followed by axial coding. Creswell and Poth (2017) suggested that the process of separating data into categories was critical for data synthesis retrieved from the individual interviews. An exploratory descriptive coding strategy was utilized to identify common phrases and words from the data. This process is categorical aggregation (Stake, 1995).

Participant Interview Findings

The total sum of the initial open-coding process from the 11 participant interviews yielded a grand total of 295 codes. The open codes were analyzed and placed in categories (Creswell & Poth, 2017) to coincide with the three research questions identified during the literature review, which included knowledge, funding, and structure barriers that colleges face implementing PPIs to reduce DAS in college students. The responses to the last two interview questions, Questions 13 and 14, regarding described strategies and open discussion, created an unexpected code category. Those codes are

described in the study findings section. The total of the open codes were knowledge barriers: 116, funding barriers: 99, and structure barriers: 80. Table 4 shows the open-coding process from the participant interview findings.

Table 4

Interview Open Coding

Funding Barriers	Knowledge Barriers	Structure Barriers
11 Lack of Funding	11 Lack of Understanding	9 Planning Deficits
11 Insufficient Staff Funding	11 Student Mental Health Needs	8 Physical Limitations
10 Deficient Financial Aid Resources	11 How PPIs Impact Students	5 Lack of Knowledge-First Time Students
8 Scarce Sources	10 Knowledge Deficit PPI	4 Lack Space In-Person Visits
8 Inadequate Funds Hire Psychologist/Psychiatrists	10 PPI Development	4 Conflict Business Hours
6 Decrease Student Flourishing	10 Positive Thinking Barriers	2 Lack of Guidance-Space
5 Cap on Mental Health Sessions	8 Culture Differences	2 Reduce Student Engagement
3 Limits on Information Sharing	5 Impact of COVID-19	2 Poor Event Space
3 Barriers to Basic Needs	5 Assessment	2 Limited Licensure
2 FAFSA Web-Site Issues	5 Counseling Design	1 Deficient Full-Time Staff
1 Short Fall of Financial Aid	5 PPI Terms	
1 High Cost of Telemedicine	4 PPI Information	
1 Deficient PPI Education Funds	3 Stigma	
1 Lack of Psychology Research	2 Ableism	
1 Low Focus Character Strengths	1 Limited Psychology Education	
	1 Psychologist/ Psychiatrists Medication Management	
	1 Cannabis Use	
	1 Limited Referrals	

1 Class Disruption
1 Reduced Student Socialization

Following the open-coding analysis, axial coding was initiated. According to Stake (1995), using the frequency of data in analysis corresponds with detecting patterns. Utilizing cross-case analysis and axial coding reduced the grand total of 295 open codes to 36 axial codes and 10 themes. The axial codes were knowledge barriers: 16 with four themes; funding barriers: 12 with 3 themes; and structure barriers: 8 with three themes. Table 5 exhibits the axial coding findings.

Table 5

Interview Axial Coding

Funding Barriers	Knowledge Barriers	Structure Barriers
Lack of Funding	Lack of Understanding	Planning Deficits
Scarce Sources	Student Mental Health Needs	Lack of Guidance-Space
Cap on Mental Health Sessions	How PPIs Impact Students	Deficient Full-Time Staff
Limits of Information Sharing	Psychologist/Psychiatrists Medical Management	Physical Limitations
High Cost of Telemedicine	Limited Psychology Education	Lack Space In-Person Visits
Deficient PPI Education Funds	Knowledge Deficit PPI	Conflict Business Hours
Insufficient Staff Funding	PPI Development	Reduced Student Engagement
Inadequate Funds Hire Psychologist/ Psychiatrists	Positive Thinking Barriers	Poor Event Space
Lack of Psychology Research	Positive Thinking Barriers	Physical Location
Low Focus Character Strengths	PPI Terms	Lack of Knowledge-First Time Students
Deficient Financial Aid Resources	PPI Information	Limited Licensure
Decreased Student Flourishing	Culture Differences	
Barriers to Basic Needs	Stigma	
FAFSA Web-Site Issues	Ableism	
Short Fall of Financial Aid	Cannabis Use	
	Class Disruption	
	Impact of COVID-19	
	Counseling Design	
	Limited Referrals	
	Reduced Student Socialization	

The next data processing analysis was categorical aggregation. Knowledge, funding, and structure barriers showed 10 themes. Knowledge barriers included: 1) lack of understanding, 2) knowledge deficit PPI, 3) culture differences, and 4) impact of COVID-19. Funding barriers included: 1) lack of funding, 2) insufficient staff funding, and 3) deficient financial aid resources. Finally, the structure barriers included: 1) planning deficits, 2) physical limitations, and 3) physical location. Table 6 displays the categorical aggregation findings.

Table 6

Interview Categorical Aggregation

Funding Barriers	Knowledge Barriers	Structure Barriers
Lack of Funding	Lack of understanding	Planning Deficits
Insufficient Staff Funding	Knowledge Deficit PPI	Physical Limitations
Deficient Financial Aid Resources	Culture Differences	Physical Location
	Impact of COVID-19	

Funding Barriers

Each participant interviewed described funding barriers as a significant challenge faced that prohibited the implementation of PPIs to reduce DAS in their students. The percentage of participants who agreed with funding barriers as a major challenge was 90%–100%. The most common barriers to funding included: 1) lack of funding, 2) insufficient staff funding, and 3) deficient financial aid resources. Lack of funding was named as a primary concern.

Lack of Funding

One factor with the largest impact on prohibiting the implementation of PPIs to reduce DAS in college students was described as the lack of funding. Upwards of 9%–73% of the participants reported five areas that were affected by the lack of funding: 1)

scarce sources, 2) caps on mental health sessions, 3) limits on information sharing, 4) high cost of telemedicine, and 5) deficient PPI education funds. NCU#1 explained, “Finances and funding would be the number one barrier for us developing.” PAU#1 described, “Funding is a large issue.” NCU#3 detailed, “Need more funding resources.” MDU#1 shared, “We also have, like sought out grants, which are phenomenal, but grants are so limited in what you can do with them.” NCU#4 agreed, “There is no funding available.” SCU#1 expressed, “I can only speak from the private sector because I’ve only worked in private schools, has been difficult to get adequate funding.” In reference to the cap on the number of sessions, VAU#1 shared: “We were seeing that we’re averaging probably about five, four to six sessions per active, umm, I’m sorry, per semester, students will receive services if they’re utilizing timely care.” SCU#2 stated, “Lack of funding limits additional forms of access to mental health resources.” NCU#2 described limits of information sharing concerns: “Limited funding prevents sharing of information comprehensively.” SCU#1 shared experiences with telemedicine cost: “For a private school to get the telemed, it was just a cost that was too high.” MDU#2 explained, “Positive psychology needs to be taught at a doctoral master level.”

Insufficient Staff Funding

The lack of funding also impacts staffing. Insufficient staff funding was reported to be the second-highest barrier to implementing PPIs to reduce DAS symptoms in students on campuses in SC, NC, VA, MD, and PA. The participants explained the major factors that had a negative effect on insufficient staff funding: 1) inadequate funds to hire psychologists/psychiatrists, 2) lack of psychology research, and 3) low focus on character strengths. NCU#1 explained, “I would love to provide the capacity to meet the mental

health needs anxiety, stress and have a counselor in place. Funding and finances is the number one challenge." NCU#2 commented on inadequate funds to hire psychologists/psychiatrists: "That'd be great to have that resource, historically, that was kinda how counseling departments operated. but not a lot of resources in this city." SCU#2 stated, "There is a lack of research in the psychology department." SCU#3 explained, "Many mental health professionals chose the traditional mental health treatment, less focus on character strengths."

Deficient Financial Aid Resources

The final funding barrier expressed by the participants was deficient financial aid resources, as 91% of the directors interviewed disclosed that the lack of financial aid resources limited utilizing PPIs to reduce DAS symptoms in students on campus. Four of the main factors included: 1) decreased student flourishing, 2) barriers to basic needs, 3) free application for federal student aid (FAFSA) website issues, and 4) shortfall of financial aid. MDU#1 explained how the lack of financial aid resources impacted mental well-being: "Students' needs are unmet, impedes flourishing." NCU#2 explained the barriers to meet basic needs regarding lack of financial aid resources: "I think when they're struggling with those core kinds of basic needs, it's a lot harder to be able to do other things that might help them be successful." MDU#2 described the FAFSA issues: "I know there's been a lot of issues with financial aid across the board." PAU#1 described the shortfall of financial aid: "Those things are going directly to the student. I know how important that is enabling our students to get the funding needed just to go to school."

Knowledge Barriers

The participants reported how knowledge or the lack of understanding was a barrier to implementing PPIs to reduce DAS in their students on campus. All participants involved in this research study expressed experiences regarding knowledge barriers as they related to implementing PPIs to reduce DAS symptoms in their students on campus. The directors cited four notable elements of interest: 1) lack of understanding, 2) knowledge deficit of PPIs, 3) culture differences, and 4) the impact of COVID-19.

Lack of Understanding

Lack of understanding was described to contain several segments, and 100% of the participants detailed lack of understanding as one of the central barriers that impede colleges from utilizing PPIs to reduce DAS in this high-risk population. Four of the challenges that supported lack of understanding included: 1) students' mental health needs, 2) how PPIs impact students, 3) psychologist/psychiatrists medication management, and 4) limited psychology education. The directors stated that one of the lowest areas of understanding, at over 92%, was student mental health needs. SCU#1 stated, “We have quite a few first-generation students and they have not had access to counseling [word] so for us, our biggest barrier is helping them to understand the importance of it.” MDU#2 explained, “Oh um, I think part of the process could be you know, just not knowing what it is, right.” MDU#1’s response was, “Um, I would say there’s more of a cultural barrier [at] my institution [than] it is like an intellectual barrier.” SCU#2 shared, “Not getting out socializing with the students on campus can be a barrier to understand the mental health needs of the students.” Several of the participants expressed their lack of knowledge of how PPIs impact their students. In fact,

SCU#3 stated, “Hmm lack of knowledge of the services.” NCU#4 expressed concerns regarding the lack of knowledge regarding student scheduling for PPIs. NCU#3 explained, “There is a different way of thinking of positive psychology, and it is an educational piece.” PAU#1 shared, “Well, I think even in our own field sometimes there is an emphasis on just reducing symptoms.” VAU#1 described, “I am not well versed in that, so I guess that can be a barrier.” The lack of understanding psychologists/psychiatrists and medication management was a concern. NCU#2 stated, “They [are] no longer here on campus.” The last knowledge barrier under the auspices of lack of understanding was limited psychology education. NCU#1 expressed, “We’re all trained in the Bible and being quote, unquote, biblical counselors’ and have limited knowledge in the area of psychology or secular helps.” The lack of understanding and knowledge deficits were described as salient concerns regarding the implementation of PPIs and DAS symptom reduction.

Knowledge Deficit of PPIs

Of those interviewed, 46%–91% elucidated five areas of concern that were directly influenced by the knowledge deficit of PPIs, including: 1) PPI development, 2) positive thinking barriers, 3) assessment, 4) PPI terms, and 5) PPI information. The concerns regarding PPI development were described by PAU#1 as “the ease of implementation of campus.” NCU#1 described, “Mindset/focus is on Biblical education.” Positive thinking barriers were another example of knowledge deficits of PPIs. SCU#3 explained, “If you’re knocked down, you feel like there’s no way of solving the problem. You got to be resilient. Get back up. We show them techniques as to what to do.” The lack of PPI information was also a significant concern. SCU#2 explained, “And just like

some ways people are kind of just stuck in they don't wanna accept the benefits of something like positive psychology." Lack of knowledge regarding PP and assessment was also described. SCU#2 stated that there was a "lack of knowledge of the proper terms or processes, but we are actually using the tools." MDU#2 explained that there was a "knowledge deficit across campus."

Culture Differences

Several of the participants were employed at colleges with historical ties to minorities. Others were employed at colleges with a high enrollment rate of minority students. Over 45% of the participants named culture differences as a knowledge barrier to implementing PPIs. Four primary concerns included: 1) stigma, 2) ableism, 3) cannabis use, and 4) class disruption. In reference to stigma and the role it had in knowledge barriers and culture differences, NCU#2 explained, "There's certainly still stigma associated with it. There are culture differences that might be reasons why people are not willing to talk about it." NCU#2 stated, "There is a lack of knowledge about positive psychology and stigmas." Another concern was ableism. MDU#1 explained that "different cultures have different challenges against ableism." PAU #1 added how "Culture breeds knowledge barriers in regard to cannabis use." The final concern in the realm of knowledge barriers and culture was class disruption. SCU#1 explained, "The lack of planning and preparation in the classroom setting causes disruption for the student." The participants agreed that culture was a salient factor in the conversation of knowledge barriers and circumstances outside the control of the student. An example was the impact of COVID-19.

Impact of COVID-19

According to the directors, COVID-19 affected the students, as well as staff. The pandemic increased the barriers that challenged the understanding of utilizing PPIs to reduce the increased symptoms of DAS. Three points of misunderstanding included: 1) counseling design, 2) limited referrals, and 3) reduced student socialization. Following the COVID-19 pandemic, VAU#1 explained, “There was a negative impact to mental health from COVID-19. The students had a low stress tolerance.” NCU#4 explained how the pandemic caused “limited referrals” for students who sought counseling. SCU#2 described a “reduced student size,” predominantly due to the social distancing mandates. Those mandates also influenced structure barriers that affected physical limitations, physical location, and issues with planning.

Structure Barriers

The final group of components that interfered with initiating PPI initiatives for students experiencing DAS was structure barriers. Over 80% of the participants expressed dilemmas in their ability to implement PPIs to reduce DAS in their students because of structure barrier interferences. The three primary barriers included: 1) planning deficits, 2) physical limitations, and 3) physical barriers. The challenges ranged from the lack of proper planning guidance to licensure limited by state lines. As stated by NCU#3, “Real estate is prime around here.”

Planning Deficits

Planning deficits were named as one of the areas with the most significant interference to implementing PPIs. Two units of interference were discussed: 1) a lack of guidance regarding space, and 2) deficient full-time staff. NCU#4 described “no future

plans for building." SCU#2 shared, "We're actually going to be renovating an old building. But we have been waiting for the [word] to be changed, but they have not told us when." VAU#1 stated, "There has been talk of a wellness building, but I'm not sure, if it's been signed off on, but it's just been one of the projected hopes." The second deficit in planning was the lack of full-time staff. NCU#1 explained, "There is nothing really rewritten, preset." The barriers of planning were, unfortunately, shared with physical limitations.

Physical Limitations

Various concerns regarding physical limitations were expressed. Four of the most compelling included: 1) lack of space for in-person visits, 2) conflict with business hours, 3) reduced student engagement, and 4) poor event space. In fact, VAU#1 explained, "As of now, everyone has their own office, which is good. We're gonna have to be sharing the office, so I know we're gonna be busting at the seams pretty soon." MDU#1 explained, "Many students prefer face-to-face sessions, with the structural barriers of office space, telework is opium." PAU#1 added that "space to see students' athletes separately" was needed.

Conflict Business Hours

Another barrier discussed was conflict over business hours. Most of the directors elucidated that standard business hours had been established and posted. However, other factors influenced a conflict with business hours. SCU#3 explained, "After hours, there is a full-time residence manager living in the dorm with students. Students also have access to 24/7 telephonic services. After business hours, staff is available for emergent needs, based on a call schedule." NCU#2 explained, "Sometimes posted times for services

change.” The participants also expounded on other disturbing factors regarding barriers that interfered with initiatives to utilize PPIs to reduce DAS in their students. Reduced student engagement was one of those facets.

Reduced Student Engagement

Over 18% of those interviewed discussed reduced engagement from the students. VAU#1 offered a cause for the reduced engagement. VAU#1 suggested that “time constraints and student schedules impact engagement.” NCU#2 explained the challenges of “getting students to engage and participate.” NCU#2 also discussed potential ways to “make sessions engaging and interactive.” In addition to the dilemmas with reduced student engagement, concerns were voiced about poor event space.

Poor Event Space

A significant number of participants relayed their unsettled thoughts regarding inadequate space to host events. SCU#1 shared the current process used to improve spatial challenges, while continuing to assist students on campus: SCU#1 explained. Over 55% of our students receive Pell grants. To assist students with trying new things, I open new avenues to get students to step out of their comfort zone. While these activities would support more students in a larger space, students are encouraged to visit the counseling center throughout the day during those special offers.

MDU#1 added, “[We] lack locations for large events.” Physical limitations and physical locations had an uncomplimentary relationship. The barriers of physical location and PPI implementation are assessed in the final section.

Physical Location

The last challenge identified as structure barriers was physical location. Of those interviewed, over 73% associated physical location as a barrier to PPIs being utilized to reduce DAS in college students, with two primary elements including: 1) lack of knowledge of first-time students, and 2) limited licensure of the counselors on campus. The colleges placed signage around campus to provide information regarding the location of the campus counseling center. It was also shared on the websites. VAU#1 stated, “So there are times when students don’t know where we are or what we are, until they actually need us because our counseling center is located on the first floor of a residence hall.” NCU#4 added, “At our previous location there was a problem, but not at this one, I think we are in a good location.” PAU#1 stated, “There were some students that thought they couldn’t get access to counseling because they didn’t think their card would swipe them into the building.”

Limited Licensure

Limited licensure of the counselors was also described. The directors elucidated that licensure was a physical limitation with far-reaching consequences. NCU#2 stated, “[We are] only licensed in the state where the college is located.” VAU#1 explained, “From what I understand, with us being licensed in VA, we’re only able to practice in the state of VA.” The participants continued to offer insight to answer the final questions of the individual interviews. The answers to those questions and the recently developed combination column of unexpected codes will be described in the next section.

Unexpected Codes

This section of study findings describes the analysis retrieved from Questions 13 and 14 of the individual interviews with the participants. Question 13 involved strategies regarding other colleges and the utilization of PPIs to reduce DAS in college students. Question 14 provided an opportunity for the participants to expound on other issues or concerns. The data collected from these two questions was integrated to create a new category, unexpected codes. The individual interview's findings are detailed next.

Unexpected Code Findings

Five categorical aggregation codes were identified: 1) PPI staff education, 2) PPI website, 3) increased PPI therapy, 4) college alliance, and 5) therapist wellness. The participants shared their concerns. MDU#1 expressed concerns about PPI education as: "Other colleges have first year training programs" and "processes to teach students." NCU#2 explained, "The roles of the campus counseling center should extend to providing education for faculty and staff with knowledge to support PPI and incorporating more online PPI with mental health resource therapy." SCU#1 provided an in-depth overview of various strategies utilized by their team to foster a calm environment, SCU#1 explained the use of different activities to create a calm and welcoming environment: "A plant library, we provide teas and flavored coffees for students to try, and a feel-good display. Creating opportunities for students to share common interests and build relationships is important to their mental health and personal growth." College alliance was a popular topic among the directors. NCU#1 shared this about an alliance: "Possibly get an awareness of other colleges and possibly become partners." VAU#1 explained, "Schools in the state have similar guidance." MDU#2

described how an alliance with other colleges helps by "assisting other sister universities with resources." The wellness of the counselors and therapists was important to the participants. NCU#1 explained, "I know part of the challenge in this area is that, you know, we sort of, you know, we fear lawsuits."

Focus Group Interviews

Participants with a strong knowledge of the subject and succinct explanations to the questions, who were employed at colleges in diverse locations and agreed to participate in the focus group, were asked to participate in the focus group (Sargeant, 2012). Six of the 11 participants agreed to participate in the focus group. However, due to scheduling changes, family emergencies, and technical difficulties, only three participants were included in the focus group. One of the three participants had a scheduling conflict and was excused from the group early.

Focus Group Findings

The sum of the initial open-coding process from the three focus group participants was 27. An analysis was conducted to categorize the codes (Creswell & Poth, 2017). The data obtained from the focus group interview mirrored the research questions identified in the literature review. The three research questions centered around: 1) funding, 2) knowledge, and 3) structure barriers that colleges face implementing PPIs to reduce DAS in college students. The focus group questions with emphasis on the three research questions included Questions three, four, five, and six. Questions one, two, and seven did not involve the identified barriers from the research questions. Thus, the data from those questions were categorized as unexpected codes. The analysis for the unexpected codes will be discussed later in this section. The open-code findings included: funding barriers:

seven, knowledge barriers: 11, and structure barriers- nine. Table 7 identifies the open-coding findings from the focus group.

Table 7

Focus Group Open Coding

Funding Barriers	Knowledge Barriers	Structure Barriers
2 Lack of Funding Partners	3 Lack of PPI Knowledge	2 Lack of Physical Space
2 Grant Writing	3 Knowledge Deficit of Benefits	2 Embedded Spaces
2 Data Informed Decisions	2 Lack of Understanding	2 Scheduling Conflicts
2 Lack of Research Funding	2 Stigma	2 Lack of Student Participation
2 Inadequate Resources	2 Associated with Disability	1 Meditation Rooms
1 Lack of Sustainment	2 Staff/Faculty Resistant to Change	1 Relaxation Center
1 Home Depot Program	2 Lack of Understanding	1 Mental Health Pods
	2 How to Use PPI	1 Space Conversation
	2 How to Challenge Negative Thoughts	1 No Event Calendar
	1 What is PPI	
	1 Benefits of Use	

The next step following the open coding was axial coding. Analyzing the frequency of data was correlated with pattern detection (Stake, 1995). Cross-case analysis and axial coding was used to decrease the sum of open codes from 27 to 22 axial codes and five themes. The axial coding and theme totals were: funding barriers: five two themes; knowledge barriers: eight with two themes; and structure barriers: nine with one theme. Table 8 displays the axial code findings from the focus group interview.

Table 8

Focus Group Axial Coding

Funding Barriers	Knowledge Barriers	Structure Barriers
Lack of Funding Partners	Lack of Understanding	Lack of Physical Space
Grant Writing	How to Use PPI	Embedded Spaces
Lack of Sustainment	How to Challenge Negative Thoughts	Meditation Rooms
Home Depot Program	What is PPI	Lack of Student Participation
Inadequate Resources	1 Benefits of Use	Relaxation Center
Lack of Research Funding	Lack of PPI Knowledge	Mental Health Pods
Data Informed Decisions	Knowledge Deficit of Benefits	Space Conversation
	Stigma	Scheduling Conflicts
	Association with Disability	Lack of Student Participation
	Staff/Faculty Resistant to Change	No Event Calendar

Categorical aggregation was the final data processing analysis for the focus group interview. There were five themes generated from the research questions on topics of funding, knowledge, and structure barriers. Funding barriers included: 1) lack of funding partners, and 2) lack of research funding. The knowledge barriers included: 1) lack of understanding, and 2) lack of PPI knowledge. Finally, the theme for structure barrier was lack of physical space. Table 9 exhibits the categorical aggregation.

Table 9

Focus Group Categorical Aggregation

Funding Barriers	Knowledge Barriers	Structure Barriers
Lack of Funding Partners	Lack of Understanding	Lack of Physical Space
Lack of Research Funding	Lack of PPI Knowlwdge	

Funding Barriers

The participants 100% agreed that funding barriers prohibited the implementation of PPIs to reduce DAS in the college students on their campuses in SC and NC. Two of the primary negative impacts on funding were: 1) lack of funding partners, and 2) lack of research funding. The lack of funding partners revealed four factors: 1) grant writing, 2) lack of sustainment, 3) Home Depot program, and 4) inadequate resources. The lack of research funding included one factor: data-informed decisions.

Lack of Funding Partners

Various examples of how barriers to adequate funds can prohibit the implementation of PPIs to reduce DAS in their students were provided. NCU#3 stated the importance of those partnerships, "We look at cost sharing opportunities with our partners. We look at those barriers as opportunities to support and provide education as well." SCU#2 explained how grant writing assisted their college with funding and the importance of access to continual funding to sustain the current programs and build new ones. SCU#2 explained:

> Funding gets a little special with the funding resources we have and don't have. I have inherited a grant and wrote one. Partnering with people who do have funds already [word] collecting data so that I can present it also a way for us to kinda show them the efficacy of what we are doing.

Participants in this study partnered with Home Depot to share the cost of campus mental health projects for their students. This sharing of resources has been instrumental to expanding resource partners.

Lack of Research Funding

However, the lack of research funding has remained. SCU#2 explained that the use of "qualitative and quantitative research can show the effectiveness of our program." NCU#3 explained the salience of utilizing data to make informed decisions:

> I would just echo the data piece having data informed decisions is helpful. And I recognize that there are some folks that still use the language of data driven. But we are student-centered, and we want to be data-informed, and even pushing back with using that language, I think, is helpful because we want to keep students at the center of what we do.

Both directors agreed that the lack of research due to funding prohibited PPI implementation on campus.

Knowledge Barriers

Knowledge barriers also had a significant impact on implementing PPIs to reduce DAS in college students. Knowledge barriers and the influence that they had on the utilization of PPIs to reduce DAS in college students encompassed many factors. The focus group identified lack of understanding as one of the most-inclusive factors, under the auspices of knowledge barriers. Other factors that supported lack of understanding included: 1) how to use PPIs, 2) how to challenge negative thoughts, 3) what are PPIs, and 4) the benefits of use. Additionally, the participants' explanation of the lack of understanding was a significant factor that influenced the use of PPIs to reduce DAS in their students.

Lack of Understanding

It was concurred that the lack of knowledge regarding PPIs was shared among students, faculty, and some counselors. SCU#2 expressed:

> I just mentioned earlier, it's more like an intuitive kind of practice. Especially with my cultural lens winding and like different things happening, you just kind of realize what makes sense and what does not. I think we are all doing components of positive psychology and just don't know [it]I am learning from you, even from our first conversation, what this is, and so I think that's for me. I would say that's probably the biggest.

NCU#3 explained, "I am a proponent of positive psychology. I have used it and would want our staff and students to use it more. It is a different way of thinking; our students can benefit."

Lack of PPI knowledge

The group identified lack of PPI knowledge as another barrier to implementation of PPIs on campus. Additional factors that supported the challenge of use were knowledge deficit of benefits, stigma, association with disabilities, and staff/faculty resistance to change related to the lack of PPI knowledge. To reduce stigma, NCU#3 shared, "We are using framing that aligns with PP. We use the term student accessibility services, focuses on building positive strengths that students have." SCU#2 stated, "People don't want to be labeled as disabled on my campus, the ADA office is associated with counseling services. Some faculty and staff can be [word] and don't want to touch the mental health thing."

Structure Barriers

Structure barriers have been identified as an additional challenge to implement PPIs. Although numerous reported efforts had been attempted to secure adequate physical space, the requirement for sufficient space had not been fulfilled. The lack of physical space was succeeded by eight factors: 1) embedded spaces, 2) meditation rooms, 3) a relaxation center, 4) mental health pods, and 5) space conversion, 6) scheduling conflicts, 7) lack of student participation, and 8) no event calendar.

Lack of Physical Space

Space insecurities and the lack of physical space on college campuses have continued to be a challenge. SCU#2 explained, "We have [word] rooms that we barely use, so we get creative." NCU#3 explained:

> We are looking for other opportunities for embedded spaces we have not given up on that. We have utilized at different times and this is changing again for office space. We have not been able to build out our relaxation rooms, but another center has meditation rooms.

SCU#2 stated, "We are going to convert our[word] and have mental health [word] throughout the campus."

Scheduling conflicts, lack of student participation, and no event calendar were factors identified that supported the knowledge deficit of benefits related to PPIs. NCU#2 discussed scheduling conflicts and lack of participation: "Encouraging students to participate. I think is a challenge is getting students to join, 50–60% of our students are athletes." SCU#2 stated, "If I can add to that, that is a challenge on our campus too. I want to implement a calendar." In addition to conversations directed by funding,

knowledge, and structure barriers that impede the use of PPIs, other questions were posed to obtain more data on the challenges that colleges face regarding their ability to implement those interventions.

Unexpected Codes

The focus group answered three questions that were identified as unexpected findings. The questions aimed to generate more data related to PPIs and reducing DAS in college students were: 1) the influence of depression on their campuses, 2) mental health interventions implemented on campus, and 3) other barriers not addressed in the group. The participants' remarks are described next.

Unexpected Code Findings

Each participant agreed that there had been an increase in DAS reports by their students. The primary factor was an increase in deficient coping skills. NCU#2 explained, "Many students dealing with stress diagnosis. Also, many without a diagnosis." Three factors were discussed regarding the use of mental health interventions to reduce DAS currently on campus: 1) CBT interventions, 2) strength focused counseling, and 3) narrative therapy. SCU#2 stated, "CBT, one of the run of the mill basic approaches to most things. In my personal career, I have been more intuitive and eclectic. I use more strength based; highlight they already have; we use narrative therapy." The participants described the most-significant barrier to implementing PPIs to reduce DAS symptoms in students as being lack of PPI knowledge and knowledge deficit of benefits. NCU#3 shared, "We are using framing that aligns with positive psychology. We use the term student accessibility services, focuses on building positive strengths that students

have." NCU#2 discussed scheduling conflicts and lack of participation: "Encouraging students to participate. I think is a challenge is getting students to join."

Other barriers not addressed that influenced implementing PPI and the reduction of DAS symptoms in students included: 1) lack of staff faculty participation, 2) exclusion from the university written plan, and 3) knowledge deficit of impact. SCU#2 explained needing "buy-in from leadership." NCU#3 described, "One of the barriers for us is not having a focus of health and wellness within the written plan for our university [word] already aligns with communication [and] teaching PPIs to decrease DAS." SCU#2 added, "First generation college students there are a lot of things to know, when you don't know what resources are available."

Document Analysis

The next step included the analysis of documents. This analysis pinpointed similar and different plans (Yin, 2009) utilized by the colleges as a blueprint for the mental health services utilized on college campuses. The documents provided were analyzed and compared to the literature review and the data obtained from the interviews and focus group (Halkias et al., 2023; Stake, 1995). The inspection of the data assisted with understanding barriers to implementing PPIs to reduce DAS in college students in terms of funding, knowledge, and structure challenges. Similarities, differences, fidelity, and plans for PPIs were reviewed.

The blueprints for the current campus counseling programs were established in the 1940s. Counseling centers formally evolved in the mid-to-late 1940s (American Psychological Association [APA], 2018). After World War II, soldiers who served sought educational opportunities at local colleges. Those new students also required counseling

and mental health services (APA, 2018). These services continue to assist students presently. The directors who participated in this study offered data and awareness of current practice models.

Document Analysis Findings

The participants were instructed to provide documents for analysis that would define future or present plans regarding the mental health resources available for students on campus. The participants in the research study provided information to access their respective college websites to obtain the requested documents. Each of the websites contained the colleges' purpose statement regarding mental health, a mission statement, services provided, the location of the campus counseling center, and hours of operation. The websites also listed information regarding additional services, including 24/7 telehealth services, campus security contact numbers, prevention services, and 24-hour crisis and emergency response numbers.

Upon document analysis, the data related to counseling options offered to the students were reviewed to determine the level of knowledge regarding PPIs and it's use during counseling sessions. The documents concerning the hours of service, days of the week that services were provided, and physical location aided to understand the structure of those entities. The last document analyzed was the 24-hour availability of counseling services. This analysis offered data in reference to funding.

One of most significant findings during the document analysis was the difference between the participants who confirmed having knowledge of PPIs versus those who did not express having knowledge. Another finding was participants utilizing PPIs compared to the listing of PPIs used on the website as a counseling tool. Over 55% of the

participants acknowledged comprehension of PPIs and their use during student counseling sessions. However, none of the 11 colleges represented posted PPIs as a counseling option.

Another finding upon analysis of the documents was inadequate information listed on the website. Over 82% of the colleges represented in this study presented adequate information on the college website. The days of the week for available counseling services at VAU#1 were not listed. In addition to that finding, contrasting guidance of counseling services was discovered.

MDU#2 established two websites with inconsistent documents regarding the types of counseling services provided and the hours of operation. The first website listed counseling services provided as couples counseling, group counseling, individual psychological counseling, and prevention education. The second website identified individual counseling, group counseling, and LGBT-affirming counseling as the available counseling services. Additionally, MDU#2 listed dissimilar hours of operation on the two websites. The initial website printed the hours of operation as 8:30 a.m.–5:00 p.m. In contrast, the other website advertised the hours of operation as 8:00 a.m.–5:00 p.m. Fidelity, which is a process or program that provides any services and interventions consistently to obtain the declared outcome (SAMHSA, 2021), is salient and increases with consistent adequate knowledge to access counseling services.

According to Worsley (2022), having more students who require mental health assistance suggests that those issues are organic. A strategically planned process assists with mitigating these concerns (Worsley et al.). Mental health interventions that solely satisfy acute symptom relief will not be adequate to reduce the chronic debilitating

symptoms of organic mental health manifestations (Jaisoorya, 2021; Worsley et al., 2022). The data findings concluded that 100% of the campus counseling centers in this research study provided short-term counseling services. Students who require in-depth counseling are referred to community mental health partners.

Each individual interview, focus group interview, and document analysis assisted with obtaining the salient data. This data was utilized to answer the research questions around which this study was centered. The initial literature review prompted the construction of the three central research questions. All questions were designed to enhance the comprehension of the challenges that colleges encounter with implementing PPIs to reduce DAS in their students. Table 10 displays the documents analyzed.

Table 10

Document Analysis

College	Counseling Provided	PPI Offered	Hours of Service	Days of Service	Physical Location	24-Hour Counseling
SCU#1	Individual Counseling Crisis Intervention Psychiatric Services Telehealth Appointments Private Support	No	9:00 a.m.-4:00 p.m. 9:00 a.m.-12:00 p.m.	Monday–Friday	Listed	Available
SCU#2	Individual Counseling Couples Counseling Group Counseling Crisis Intervention Alcohol Assessment Drug Counseling	No	8:30 a.m.-5:0 p.m.	Monday--Friday	Listed	Available
SCU#3	Confidential Consultations Therapeutic Interventions	No	8:3 a.m. -5:00 p.m.	Monday-Friday	Listed	Available
NCU#1	Informal Individual Counseling	No	8:00 a.m.-4:00 p.m. 8:00 a.m. -1200p.m.	Monday-Friday	Listed	No
NCU#2	Cognitive Based Therapy (CBT) Dialectical Behavioral Therapy (DBT)	No	8:0 a.m.-5:00 p.m. (Closed for 1 hr. Lunch Break)	Monday - Friday	Listed	Available
NCU#3	Individual Counseling Group Counseling Psychoeducation Alcohol Assessment/Evaluation Drug Assessment/Evaluation Prevention Education	No	8:00 a.m. -5:00 p.m.	Monday-Friday	Listed	Available
NCU#4	Individual Therapy Group Therapy Substance Use Assessment Individual Psychotherapy Substance Use Counseling	No	8:00 a.m. 4:30 p.m. 5:00 p.m. 8:00 a.m. (Weekly) Closed 1 hr. for Lunch	Monday - Friday	Listed	Available

College	Counseling Provided	PPI Offered	Hours Of Service	Days Of Service	Physical Location	24-Hour Counseling
MDU#1	Psychoeducation Targeted Student Group Interventions Topic Specific Psychoeducation	No	9:00 a.m. 5:00 p.m. 9:00 a.m. 12:00 p.m. (Weekly)	Monday-Friday	Listed	Available
MDU#2	Couples Counseling Individual Psychological Counseling Prevention Education Group Counseling Second Website Individual Counseling Group Counseling LGBT Affirming Counseling	No Second Website No	8:0 a.m. 5:00 p.m. Second Website 8:00 a.m. 5:0 p.m.	Monday-Friday (Both Websites)	Listed (Both Websites)	Available (Both Websites)
PAU#1	Individual Counseling Group Counseling	No	9:00 a.m. 7:00 p.m. 9:00 a.m. 3:00 p.m. & 9:00 a.m.4:30 p.m. (Based on the semester)	Monday-Thursday Friday Appointment (Only) Monday-Friday	Listed	Available

Research Questions

This research study consisted of 14 open-ended individual interview questions and seven semi-structured focus group questions. The 21 questions were designed to collect data that would assist with understanding the barriers that colleges face implementing PPIs to reduce DAS in college students. The 11 participants were directors of their campus counseling centers. During the individual interviews and focus group, the participants were encouraged to elaborate on each question asked to provide a concise awareness of the challenges of implementing PPIs to reduce DAS in their students. The analysis of the documents was utilized to obtain data and identify additional barriers of implementation.

Research Question One

The participants interviewed described funding barriers as a significant barrier that prohibited the implementation of PPIs to reduce DAS in their students. The percentage of participants who agreed with funding barriers as a primary challenge was 91%–100%. The most common barriers to funding were: 1) lack of funding, 2) insufficient staff funding, and 3) deficient financial aid resources. In fact, lack of funding was identified to have the largest impact on prohibiting the implementation of PPIs to reduce DAS in college students.

Interviews

The participants offered an array of financial factors that impacted the implementation of PPIs on their campuses. NCU#1 explained, “Finances and funding would be the number one barrier for us developing.” PAU#1 stated, “Funding is a large issue.” Insufficient staff funding was reported to be the second-highest barrier to implementing PPIs to reduce DAS symptoms in students on their perspective campuses. NCU#1 described, “I would love to provide the capacity to meet the mental health needs [word] and have a counselor, funding and finances is the number one challenge.” NCU#2 commented on inadequate funds to hire psychologists/psychiatrists: “That’d be great to have that resource. Historically, that was kinda how counseling departments operated but not a lot of resources in this city.” Furthermore, 91% of the directors interviewed disclosed that the lack of financial aid resources limited utilizing PPIs to reduce DAS symptoms in students on campus. MDU#1 explained how the lack of financial aid resources impacted mental well-being: “Students' needs are unmet [which] impedes flourishing.” NCU#2 explained the barriers to meet basic needs regarding lack of

financial aid resources: “I think when they’re struggling with those core kinds of basic needs, it’s a lot harder to be able to do other things that might help them be successful.”

Focus Group

The focus group provided other funding barriers that interfered with implementing PPIs. SCU#2 explained, “Funding gets a little special with the funding resources we have and don’t have.” NCU#3 explained, “Understanding includes needs.” SCU#2 explained the importance of utilizing different opportunities to obtain funding. NCU#3 explained, “Collecting data to support claims related to how many students are being services; surveys.”

Document Analysis

The review of documents related to funding was the option for colleges to offer 24-hour counseling services. The document analysis revealed that each of the colleges represented in the study offered a 24-hour counseling service for their students. Although the literature review supported the high cost of 24-hour counseling services, those options were available. The next research question was regarding knowledge barriers and implementing PPIs to reduce DAS in college students.

Research Question Two

The directors identified four major elements of interest related to knowledge barriers that impeded the use of PPIs for this high-risk population: 1) lack of understanding, 2) knowledge deficit of PPIs, 3) culture differences, and 4) the impact of COVID-19. Over 92% of directors stated that one of the lowest areas of understanding was comprehending student mental health needs. The participants agreed that a solid understanding was essential to meeting the needs of their students.

Interviews

SCU#1 stated, “I think that is our biggest barrier with our students is helping them understand the importance of it. And even though their parents may not believe in it promote it, it’s okay for them to come.” MDU#2 described, “Lack of understanding/knowing the mental health needs of the students does not provide opportunities to meet their needs.” Of the participants interviewed, 45%–91% expressed five of their concerns that were directly influenced by the knowledge deficit of PPIs. NCU#3 discussed a “Lack of knowledge regarding positive psychology” and assessment. SCU#2 explained that there was “lack of knowledge of the proper terms or processes, but we are actually using the tools.” NCU#2 stated, “There is a lack of knowledge.” Another concern was ableism. MDU#1 explained that different cultures have different challenges against ableism: “If there’s like an identity connected with their mental health concerns, umm, I also think that in their efforts to maybe challenge ableism that keeps them maybe in the same place.” PAU #1 added how culture bred “knowledge barriers in regard to cannabis use.” The directors explained that COVID-19 affected the students, as well as staff. The pandemic increased the barriers that challenged the understanding of utilizing PPIs to reduce the increased symptoms of DAS. VAU#1 explained, “There was a negative impact to mental health from COVID-19. The students had a low stress tolerance.” NCU#4 explained how the pandemic caused “Limited referrals for students who sought counseling.”

Focus Group

The focus group expressed their thoughts on the impact that knowledge barriers had on barriers to implementing PPIs to reduce DAS in students. The lack of

understanding was identified as the most-inclusive factor, under the umbrella of knowledge barriers. SCU#2 expressed: “I just mentioned earlier, it’s more like an intuitive kind of practice. Especially with my cultural lens winding and like different things happening, you just kind of realize what makes sense and what does not. I think we are all doing components of PP and just don’t know. I am learning from you, even from our first conversation, what this is, and so I think that’s for me. I would say that’s probably the biggest.”

NCU#3 explained, “I am a proponent of PP. I have used it and would want our staff and students to use it more. It is a different way of thinking; our students can benefit.”

Document Analysis

There were two documents analyzed to seek understanding regarding knowledge barriers to implementing PPIs to reduce DAS in students. Those documents were the types of counseling offered and whether PPIs were offered to the students as a counseling option. The analysis supported various types of traditional counseling tools that were offered. However, PPIs were not offered or listed on the websites.

Research Question Three

The final research question discussed structure barriers to implementing PPIs in the reduction of DAS in students. Over 80% of the participants expressed significant issues in their ability to implement PPIs to reduce DAS in their students. Many of those barriers were restricted by structure. The three primary structure barriers were: 1) planning deficits, 2) physical limitations, and 3) physical barriers. Planning deficits were named as one of the primary areas of concern.

Interviews

The participants shared discussions regarding their experiences and concerns. NCU#4 stated, “No future plans for building.” SCU#2 shared, “We’re actually going to be renovating an old building. But we have been waiting for the [name] to be changed, but they have not told us when.” VAU#1 stated, “There has been talk of a wellness building, but I'm not sure, if it’s been signed off on, but it’s just been one of the projected hopes.” Various concerns regarding physical limitations were addressed. VAU#1 explained, “As of now, everyone has their own office, which is good. We’re gonna have to be sharing the office, so I know we’re gonna be busting at the seams pretty soon.” PAU#1 added that “Space to see students’ athletes separately” was needed. Another barrier discussed was conflict over business hours. Of those interviewed, over 73% described physical location as a barrier to PPIs being utilized to reduce DAS in college students. VAU#1 stated, “So there are times when students don’t know where we are or what we are, until they actually need us.” NCU#4 added, “At our previous location there was a problem, but not at this one, I think we are in a good location.” SCU#1 explained how “Some students were confused and thought they could not receive counseling services.”

Focus Group

The focus group shared the following insight related to structure barriers. Notwithstanding the various efforts to secure adequate physical space, the requirement for sufficient space had not been fulfilled. SCU#2 explained, “We have [word] rooms that we barely use, so we get creative.” NCU#3 explained, “We are looking for other opportunities for embedded spaces. We have not given up on that.”

Document Analysis

Three documents were included in the document analysis review. The documents analyzed were the hours of service, days that services were available, and a listing of the physical location of the campus counseling center. Each college listed the physical address of their campus counseling center. One finding of concern was from MDU#2. MDU#2 owned two websites. The websites listed inconsistencies in counseling services available, times of service, and days of service. Lastly, VAU#1 did not list the days of service on their website.

The individual interviews, focus group interview, and document analysis detailed barriers that impeded the utilization of PPIs to reduce DAS in their students on campus. The most significant barriers were under the auspices of funding, knowledge, and structure. Each of the identified areas occupied a primary role in the challenges of implementation of PPIs.

Summary

Chapter Four provided an overview of the purpose of the study and data collection processes. This chapter described the relevant descriptive results and included the research findings. The study findings illustrated the analytical process, codes, and themes presented by the three research questions. To assess an understanding of the barriers that colleges faced implementing PPIs to reduce DAS in college students and obtain triangulation, three data collection processes were utilized in this study, including in-depth interviews, a focus group, and document analysis. This research study involved 11 total participants from SC, NC, VA, MD, and PA. Each of the participants were directors of their prospective campus counseling centers. The directors answered

questions related to funding, knowledge, and structure barriers, as identified in the literature review, that impeded the use of mental health resources by their students. Ten themes were identified during the individual interviews. Knowledge barriers included: 1) lack of understanding, 2) knowledge deficit PPI, 3) culture differences, and 4) impact of COVID-19. Funding barriers included: 1) lack of funding, 2) insufficient staff funding, and 3) deficient financial aid resources. Finally, structure barriers included: 1) planning deficits, 2) physical limitations, and 3) physical location.

The focus group findings revealed five themes generated from the research questions on topics of funding, knowledge, and structure barriers. Funding barriers included: 1) lack of funding partners, and 2) lack of research funding. Knowledge barriers included: 1) lack of understanding, and 2) lack of PPI knowledge. Finally, the theme for the structure barrier was lack of physical space. The analysis assessed six factors: 1) counseling provided, 2) PPI offered, 3) hours of operation, 4) days of operation, 5) presence of the listed location, and 6) availability of 24-hour counseling services. To conclude the study, Chapter Five provides an overview, summary of findings, and a discussion of the study. The implications, limitations, and recommendations for future research will also be discussed.

CHAPTER 5: DISCUSSION

Overview

The purpose of this case study was to understand the barriers that colleges face implementing positive psychology interventions (PPIs) to reduce depression, anxiety, or stress (DAS) in college students. Researchers have identified PPIs as an effective means to enhance the development of well-being (Neuhaus et al., 2022). Furthermore, college students have used optimism and positive cognition practices as a buffer to protect against depression and stress, which has resulted in fewer reports of feelings connected to ill-being (Chui & Chan, 2020). Chapter Five provides a summary of the key findings collected from this study and a discussion of those findings compared to the literature review in Chapter Two. The ways in which this research study contributed to the comprehension of positive emotion, engagement, relationships, meaning, and accomplishments (PERMA) model of well-being theory (PMoWBT) is also discussed. The biblical foundations from Chapter Two and the connection to PPIs and DAS in college students are evaluated and discussed. In addition, the implications of this study, its impact on empirical research, limitations, and future recommendations are debated. In conclusion, the summary encapsulates the central results and significance of this current study. Finally, the collection of information from the individual interviews, focus group, and document analysis produced a significant amount of data that was essential to answering the research questions posed in the study. A detailed summary of those findings was presented.

Summary of Findings

The key findings in this research study were obtained through three forms of data collection. Eleven participants completed individual interviews, three participants engaged in the focus group, and document analysis was conducted by retrieving documents located on the university websites of each college represented in the study. The data collected from the individual interviews and the focus group provided key findings. Moreover, the presence or absence of specific information on the college websites assisted with capturing the required data requested for analysis. All data was obtained and categorized to align with the three research questions pertaining to funding, knowledge, and structure barriers that impede implementing PPIs to reduce DAS in college students. The findings from the data collection revealed the following 10 themes related to knowledge barriers.

Knowledge Barriers

The research question regarding knowledge barriers to implementing PPIs assessed the following: What are the knowledge barriers that impede colleges from utilizing positive psychology interventions in this high-mental-health-risk population? The knowledge barriers identified from the individual interviews were: 1) lack of understanding, 2) knowledge deficit of PPIs, 3) culture differences, and 4) impact of COVID-19. The focus group pinpointed two other barriers to knowledge that interfered with using PPIs to reduce DAS. Those factors were lack of understanding and lack of PPI knowledge. The document analysis revealed additional barriers related to knowledge. The document analysis related to counseling options, and PPIs offered to the students was reviewed to determine the level of knowledge. The findings were the difference between

the participants who confirmed having knowledge of PPIs versus those who did not express knowledge. The difference between participants who confirmed their use of PPIs was compared to the listing of PPIs shared on the website, and being defined as a counseling tool was also assessed.

Funding Barriers

The research question used to identify funding challenges to implement PPIs to reduce DAS asked the following: What are the funding barriers that colleges face that prohibit implementing positive psychology interventions to reduce depression, anxiety, or stress in their students? There were three funding barriers described in the individual interviews: 1) lack of funding, 2) insufficient staff funding, and 3) deficient financial aid resources. In addition, the focus group discussed other funding barriers to utilizing PPIs to reduce DAS in their students. The barriers disclosed were lack of funding partners and lack of research funding. The last form of data collection for funding barriers was document analysis. The document analyzed on the university website concerning funding was the 24-hour availability of counseling services. Although the participants described the high cost of access to 24-hour counseling services for their students, each college represented in the study offered this service, while funds were available.

Structure Barriers

The final research question was related to structure barriers of implementing PPIs to reduce DAS in college students: What are structural barriers that interfere with initiating positive psychology intervention initiatives for students experiencing depression, anxiety, or stress? The directors from the individual interviews identified the primary structure barriers to implement PPIs as: 1) planning deficits, 2) physical

limitations, and 3) physical location. The focus group identified another barrier that challenged the use of PPIs to reduce DAS in this population: lack of physical space. The document analysis on the university websites concerning the hours of service, days of the week that services were offered, and the physical location was utilized to understand additional structure barriers. The findings highlighted: 1) inadequate information listings on the websites regarding the days of the week for available counseling services, 2) contrasting guidance of counseling services, and 3) the times of service were different for one college with two separate websites. Each finding revealed intricate details that contributed to the implications of this research study. The comparison between the data obtained from the participants and document analysis versus the literature review in Chapter two, understanding PMoWBT, and the connection of the data to the biblical foundations established in Chapter Two will be discussed.

Discussion of Findings

This research study utilized a qualitative collective case study design that generated comprehensive data collection by various bounded methods (Creswell & Creswell, 2017; Priya, 2021). The 14 open-ended interview questions were used to invoke conversations to initiate why or how dialogue, which guided understanding (Patton, 2014) the barriers of implementing PPIs to reduce DAS in college students. The participants in the focus group were asked seven open-ended, semi-structured questions. Using a focus group fostered the ability to collect significant data from multiple sources in one setting (Flynn et al., 2018). The document analysis contributed to the assessment of information in written format.

Current Findings Versus Chapter Two

The literature review from Chapter Two discussed vulnerabilities to DAS in college students. Those factors were placed into four primary categories: academic pressure, biological factors, financial concerns, and environmental impacts (Abrams, 2022; Bhujade, 2017; Long et al., 2021; Ramón-Arbués et al., 2020; Zhang et al., 2020). Academic pressures included robust course schedules with challenging mental demands, diminished personal free time, heightened fears of failure, family pressure to excel in educational endeavors, and inadequate educational programs (Abrams, 2022; Bhujade, 2017; Ramón-Arbués et al., 2020; Zhang et al., 2020). However, the findings from the current study revealed additional factors that were not identified in the literature review. Those factors included food insecurities, lack of funds to continue education, cultur differences of students not being considered, a history of mental health issues related to counseling, and the environment in which the students were raised. SCU#3 explained the salience of meeting the needs of their students holistically: “Maslow’s Hierarchy scale, if we wanna make sure we treat the whole individual, we got to start at the bottom. We all work together to fight food insecurity on [location] various college campuses.” Relating to DAS, caused by the lack of funds to continue with education goals, PAU#1 explained how their school “has a great deal of like Pell Grant eligible students. So, we serve, that’s kind of [our] niche. They don’t come with wealthy families. Generous financial aid policies reduce some financial stress for students.” Regarding DAS in college students, and culture differences were salient. NCU#2 stated, “One size does not fit all.” When culture differences are not valued, students are more vulnerable to DAS. SCU#1 explained how a history of family counseling views and the students’ home environment

influence DAS: “Helping them understand the importance of it, and even though their parents may not believe in it.” Many students did not know “people who talked with a counselor because in that community they were in, it wasn’t something that people did.”

Knowledge Barriers Findings

Knowledge barriers were identified as a significant challenge to implementing PPIs to reduce DAS in college students. The knowledge barriers that colleges face implementing PPIs to reduce DAS in college students were assessed by collecting data utilizing three distinct methods (Stake, 1995) in-depth interviews, a focus group, and document analysis. The knowledge barriers identified in this study that impede the use of PPIs were: 1) lack of understanding, 2) knowledge deficit of PPIs, 3) culture differences, 4) impact of COVID-19, 5) counseling services provided to students omitted PPIs, and 6) PPIs not advertised on the university websites. These findings indicated a severe knowledge deficit regarding PPIs and how to apply them to assist students with reducing DAS. MDU#1 explained the importance of understanding the mental health needs of the students: “So, understanding the specific needs allows us to allocate resources and the correct resources.” NCU#1 explained: “Uh, so we are extremely challenged in this area. On one hand, we’re a Bible college, and so you want our expertise to be in Bible theology. Being Biblical counselors. And have very limited knowledge in this area of psychology or secular helps that are not anti-scripture and could be of help if we were just aware of them.”

VAU#1 shared, “Well, I’m gonna be transparent and saying that I’m not well versed in positive psychology.” Furthermore, the findings demonstrated that the participants did

not comprehend how to use PPI methods to meet the needs of each individual student. NCU#2 explained:

> "I mean, I think one of the barriers is I think really just sort of maybe lack of information, lack of knowledge. I think we have to be mindful of this is a work in progress that we need to make sure we're responsive to different groups of individuals and different groups have different needs."

Thus, PPI practices were not included as an option for counseling services or advertised on the university websites, as shown in Table 10.

Knowledge Findings Versus Chapter Two

The knowledge barrier deficits revealed in the literature review were based on barriers related to the lack of student and leadership knowledge. In fact, a research study by Vankar (2023) revealed that the most-reported barrier that college students experienced in their quest to access mental health assistance on campus was the lack of knowledge. Consequently, most of their challenges have been rooted in education deficits regarding availability, location, and factors to support their need for mental health interventions. While other factors were based on leadership, challenges of education and knowledge extended from qualified educated mental health professionals to myths and stigmas regarding mental health needs. Other knowledge barriers were reported as preconceived notions regarding individuals who seek assistance (Harris et al., 2022; Substance Abuse and Mental Health Services Administration [SAMHSA], 2021).

The current study revealed additional knowledge barriers that were not described in the literature review. These findings were specifically based on knowledge deficits to implementing PPIs to reduce DAS in college students. Those findings included lack of

knowledge related to PPIs, limited psychology education, barriers to positive thinking, culture differences, and lack of understanding PPIs. SCU#2 explained "Like not really knowing what it is" regarding the knowledge of PPIs. Limited knowledge related to psychology education was also identified as a barrier. NCU#1 explained, "[We] have very limited knowledge in the area of psychology." NCU#3 explained the barriers to positive thinking: "There is a different way of thinking of positive psychology, it is an educational piece." NCU#3 also shared information on the culture differences: "A lack of direct resources that are culturally competent." VAU#1 explained, "I am not well versed in positive psychology."

Funding Barriers Findings

Funding barriers also had a significant impact on PPI implementation. The 11 participants in this study identified six funding barriers that interfere with the implementation of PPIs as an aid to reduce DAS in their students on campus. Those factors were: 1) lack of funding, 2) insufficient staff funding, 3) deficient financial aid resources, 4) lack of funding partners, 5) lack of research funding, and 6) 24-hour counseling availability. These factors displayed a monetary inability to obtain required sources and staff to provide PPIs for their students. NCU#4 explained:

> "Yeah, there is none. There is no funding. So, for example, our counseling center has two full-time staff. Everyone else is either a grant position or interns. So, that's one ADM and one director. That's not a lot of hours.

Although 91% of the colleges represented in the study offered 24-hour counseling service access to their students, the directors discussed the high cost of this service. SCU#1 stated:

> "The telemed tele-companies fees just came down to a reasonable level where we can start to add that. But when they first came out for our private school to get telemed, it was just a [cost] that it was too high. With those costs coming down, we're now able to add that the extra on."

The lack of adequate financial aid resources, funding partners, and research funds are affected by capital. SCU#3 noted, "[Many] kinds of things that would cause financially problem of financial issues. Financial aid sometimes does not cover enough." NCU#3 added, "I think, particular with vendors, they are serving other institutions across the nation. They are [striving], sometimes corporations and other companies too, most of them are not focused on people of color." SCU#2 explained, "Benefits we could get if we like hire someone [for] research opportunities." Each of these entities has been identified to have decreased access to limited alternate funding. Furthermore, the available sparse dollars have been earmarked for specific purposes and cannot be applied to establishing PPI programs. PAU#1 elucidated:

> Well, I would say our financial aid dollars are accounted for. Those are like things going directly to students and yeah, in fact, I wouldn't even venture to tap into that because I just know how important that is enabling our students to get the funding they need just to go to school.

Funding Findings Versus Chapter Two

Chapter Two revealed some of the findings related to funding issues and implementing programs to reduce DAS in college students. These hurdles have been connected to several diverse factors, such as financial aid policies (Abelson et al., 2022; SAMHSA, 2021), restricted funding allocations (Coleman, 2022), and finite resources

(Sontag-Padilla et al., 2023). A financial aid policy that had a negative effect on implementing mental health services for college students involved the release of funds and the type of funds released (Abelson et al., 2022). Another funding challenge was insufficient seeking of grants and philanthropic avenues (Sontag-Padilla et al., 2023). Each of these factors were salient and had strong influences on the quality and quantity of mental health resources available for students (MacDonald et al., 2022; SAMHSA, 2021). Lean funding allocations had been identified as another obstruction to implementing mental health programs for college students (Coleman). Lean funding are constraints placed on funds that only allow mental health programs to assist those students who seek resources and meet predetermined criteria (Coleman, 2022).

In addition to the parallel findings in Chapter Two, this research study collected data to support funding barriers that directly interfere with utilizing PPIs to reduce DAS in college students. Those barriers were limits of information sharing, deficient PPI education, decreased student flourishing, and barriers to basic needs. NCU#2 shared, "Limited funding prevents sharing of information comprehensively." MDU#4 explained, "Positive psychology needs to be taught at a doctoral master level," but funding would be salient. In reference to decreased flourishing and barriers to basic needs, NCU#2 explained, "I think when they are struggling with those, it's a lot harder to be able to do other things that might help them be successful."

Structure Barriers Findings

Structure barriers were a salient obstacle to implementation as well. The discussion of findings related to structure barriers pinpointed six challenges implementing PPIs to diminish DAS in college students: 1) planning deficits, 2) physical

limitations, 3) physical location, 4) lack of physical space, 5) hours of service, and 6) days of service. These findings yielded an inability to provide PPIs, due to poor forethought, access, proximity to students, and the quantity of available space to provide PPIs efficiently and effectively. NCU#1 expressed:

> We have the largest, uh, facilities we've ever had in history of the college before, and yet we're still uh, would be somewhat limited on office space. We don't have a decision or approval, but that's a dream we and we could really meet some of those needs intentionally."

NCU#2 described:

> I think the challenge of getting people to join and finding the right time, to be able to provide education. Sometimes, you know it is a little difficult to get space reserved on campus, and so, like finding the right space to be able to do some larger kinds of group kinds of sessions can be difficult.

NCU#3 stated, "We have utilized, at different times, office space in different spaces. We are looking for other opportunities for embedment spaces." MDU#2 explained, "We just relocated [because], and we weren't in the center of campus."

Structure Findings Versus Chapter Two

Previous research studies and the literature review identified various structure barriers related to obstacles to reduce DAS in college students. The physical obstacles of buildings on campus, staffing, staffing hours, and the proximity to students were primary concerns (Coleman, 2022; SAMHSA, 2021). Subsequent structural interferences were hours of operation for students to visit with staff, wait times, and transportation insecurities (MacDonald et al., 2022). Other elements that posed a negative impact on

implementing mental health programs for college students were the lack of agreement from faculty and unmet mental health challenges of faculty members (Coleman). Moreover, other factors of concern were the lack of a structured, generalized plan of care with instructions and guidelines for all colleges to follow (Coleman, 2022). In addition to these barriers, consistent times and days of counseling services were essential.

The current study identified additional barriers regarding conflicting times of services being offered and listed on the university website, conflicting days of service, poor event space, and the lack of an event calendar. In fact, a document analysis of the university websites revealed that 18% of the participants in this study listed information that was inconsistent or omitted (see Table 10). VCU#1, MDU#2, and VAU#1 omitted listing the days of service on their college website. In fact, MDU#2 published two separate websites that offered inconsistent counseling services, different days of service, and times of services, which were contradictory. Thus, it decreased the students' ability to successfully obtain counseling. MDU#2 described barriers related to event space: “[No] locations for large events.” The lack of planning in terms of event space was identified. SCU#2 explained, “[I] need an event calendar.” In addition to the new findings revealed in the current study and the literature review from Chapter Two, contributions were made to enhance comprehension related to the PMoWBT and the use of PPIs to reduce DAS in college students.

Theoretical Framework

The theory used to guide this case study was the PMoWBT (Goodman et al., 2018; Seligman, 2011), designed by Dr. Seligman. The foundation of this model was created on the concepts of PERMA (Seligman, 2019). Understanding of the PERMA

model has been connected to increased learning, flourishing, and productivity. Furthermore, this pathway reduces negative individual feelings (Przybylko et al., 2022; Schotanus-Dijkstra et al., 2017). Seligman and Csikszentmihalyi (2000) posited that the scientific study of positive singular experiences, individual traits, and institutions increases enhancements related to the quality of life. Moreover, PPIs have also been identified as a potential buffer to prevent acute negative life challenges from evolving into chronic debilitating mental health issues and pathologies (Seligman, 2011, 2019).

The findings from this current research supported the utilization of the PMoWBT. NCU#3 explained, "It also allows us to build on a skill that our students have. We want them to recognize that even when they encounter challenges, they [still] have strength. Positive Psychology is a great way to do that." NCU#4 shared another aspect of using the PERMA model:

> [If] Dr. Jones is going to have a test that she knows that her class is really anxious about, a [trained mental health leader] can come to that class and do like breathing. You know, technique with them before the test to get them to, you know, kinda be present.

MDU#1 described ways that the counseling center utilized the PMoWTB: "Umm, so in the past we have something that's called the happiness [look]. So, when you talk, we're talking about positive psychology. It was like, oh this is wonderful. We try to [have] a theme each year." PAU#1 shared, "I find that positive psychology builds on people's inherent strengths that everybody has, but that may not be fully aware of or fully utilizing."

Biblical Foundations and Findings

The biblical worldview of PP describes the basic traits of hope and expectation present in individuals and society to reduce ill-being and promote flourishing through God and grace (Sain, 2020). Additionally, PPIs utilize and promote thankfulness, awareness of self and others, forgiveness, personal growth, seeking the meaning of one's life, and reinforcing positive cognitive pathways (Yurayat & Seechaliao, 2021). Scripture that provided support for the fundamental objectives of PP was found in Galatians 5:22–23: "But the fruit of the Spirit is love, joy, peace, forbearance, kindness, goodness, faithfulness" (*King James Bible [KJB]*, 1769/2017). The foundational objectives of PP were parallel to the scripture.

The three pillars of PP are the substructures on which the elements of well-being are cultivated. Philippians 4:8 stated: "Finally brothers whatever is true, whatever is honorable, whatever is just, whatever is pure, whatever is lovely, whatever is commendable, if there is anything worthy of praise, think about these things" (*KJB,* 1769/2017). This scripture covered each of the pillars of PP by providing positive articles of thoughts, hope, and examples. Positive psychology initiatives declare that the exposure and practices of these objectives will produce flourishing (Seligman, 2019). Philippians 4:8 supported PP by reiterating the importance of productive thoughts. SCU#3 provided insight regarding the actions taken by their campus counseling center to assist their students to obtain and maintain awareness of self, self-compassion, and hope for the future:

> I said, well, look if you're knocked down, you feel like you, you there's no way of solving the problem. You gotta to be a resilient person, you know? Get back up,

> we show them techniques. [Many counselors] go the mental health route, and they there's not enough focus on the individual and character. That's why I said we, we, we, we, treat, we bring trauma counseling. And then trying to teach that the help I [give] students reach the highest point where they're feeling great about themselves and, and, and, and, trying to reach the goals that they are supposed to reach here as a student scholar and trying to remove an barriers and obstacles as possible.

Isaiah 26:3 stated: "Thou wilt keep him in perfect peace, whose mind is stayed on thee: because he thrusted in thee" (*KJB*, 1769/2017). Furthermore, DAS has been associated with academic pressure, biological factors, financial concerns, and environmental impacts (Abrams, 2022; Bhujade, 2017; Long et al., 2021; Ramón-Arbués et al., 2020; Zhang et al., 2020). PAU#1 explained:

> I think the biggest thing that we see is that attending to students' mental health has a very big impact on retention of students in college. That if there're stressed out and have unmet mental health needs their ability to perform well in school or even to just stay in school, is going to be compromised. And, so, we find that this is an important area to address for students so that they can continue doing the things that they are doing.

The participants in this study identified various obstacles the interrupted their students' ability to align with Isaiah 26:3.

Positive psychology researchers influenced by Christian values have posited that the Bible was the foundation that guides a Christian lifestyle, and PP provides the road map and methodology to biblical living (Hodge et al., 2022). Of note, Dr. King expressed

the same contextual framework as the PP Christian researchers. Dr. King (2019) elucidated that science protects religion from being stagnant and uncertain, while religion paralyzes science and protects it from the context that all facts must equal physical substance. The science of PP is not physical, but the religious aspect of DAS becomes more reliable related to scripture.

A Christian epistemology framework forms a bridge between truth and life (Rowlands et al., 2020). While an externalist framework describes how knowledge can exist beyond cognitive means outside of one's mind (Rowlands et al.,). Thus, interpretations that connect credence and reality were salient. These interpretations are important because knowledge is obtained by understanding, examination, and logic (Hathaway, 2004; Keller, 2022). Therefore, PPIs, the pillars of PP, and the PMoWBT each align with biblical virtues and truths (Rye et al., 2013; Sain, 2020; Seligman & Csikszentmihalyi, 2000). Biblical support was found in Proverbs 4:7: "Wisdom is the principal thing; therefore, get wisdom; and with all thy getting get understanding" (*KJB*, 1769/2017). This scripture supported the importance of gaining knowledge to obtain an understanding of phenomena that impacts the well-being of all individuals. This study supported the PMoWBT, as described by NCU#1:

> So, the steps we take is to encourage our faculty to take that personal interest and be willing to serve, so to speak, above and beyond the call of duty. And almost all of the professors who teach and Bible and theology, they, they are also pastors, or in my case, we passed it for about 25 years. [We] encourage their ongoing connections with their local church. Maintain relationships there in that regard, we remain at their disposal.

Implications

Mental health issues have continued to increase and cause concern on college campuses (Baik et al., 2019). The current study confirmed those findings. NCU#2 explained, "[There are] many students dealing with stress diagnosis and also [many] without the diagnosis." This qualitative exploratory case study was conducted to understand the barriers that colleges face implementing PPIs to reduce DAS in college students. The literature review revealed three primary challenges that affect the implementation of successful mental health programs on college campuses: knowledge, funding, and structure barriers. In fact, according to this current research, these were the same three barriers that impede the use of PPIs to reduce DAS in college students. NCU#3 discussed a "Lack of knowledge regarding positive psychology" and assessment. SCU#2 stated, "[There is] lack of knowledge of the proper terms or processes, but we are actually using the tools." The funding barriers were discussed by NCU#1: explained, "Finances and funding would be the number one barrier for us developing." The structure barriers were explained, as VAU#1 suggested, "Time constraints and student schedules impact engagement." The implications of the findings from this research study were beneficial in both theory and practice. The basic concepts that guided this current study were PERMA.

Theory Implications

The PMoWBT was the foundation of this present research study. In addition to the PMoWBT and its connection to increasing productivity, this framework has also been identified as a catalyst to diminish negative emotions (Przybylko et al., 2022; Schotanus-Dijkstra et al., 2017). Although many research studies have been conducted to support the

use of PPIs, several colleges have face significant barriers to implementing these salient interventions.

Pharmacological interventions (Morton et al., 2020; Zhang et al., 2020) and other therapies, such as traditional counseling with group psychotherapy, cognitive behavioral therapy (CBT), and interpersonal behavior therapy (Zhang et al., 2020), have continued to be the primary interventions utilized. The findings of this study revealed the following when the participants were asked to describe any mental health interventions implemented to reduce DAS in those students. SCU#2 stated, "CBT, in that I my staff and I'll try to make sure that we are helping our students understand why they have and how they are thinking." NCU#3 explained:

> Let's say umm intervention for us are a collaborative care model as opposed to a traditional counseling center. Model intervention does include the outreach opportunities where we are providing psychoeducation, training that we provide to our faculty and staff and support of our students.

The document analysis of each university website confirmed the use of traditional counseling methods (see Table 10), such as dialectical behavioral counseling, CBT, drug and alcohol assessments, psychotropic medication management, talk therapy, and private support. The results of the current study provided a concise understanding of the barriers that impede the implementation of PPIs to reduce DAS in college students in theory and practice, while providing benefits to the scientific community.

The empirical research of the present study had numerous tentacles. The current thought leaders of PP have persisted with the historical works of their predecessors to advance knowledge and understanding in this field (Seligman, 2019). NCU#3 agreed that

more emphasis and education related to PPIs were required to increase utilization: “I will say one of the resources I’ll reflect the [PI] website, comprehensive resources, worksheets, and other opportunities [inaudible] in how to integrate into innovations.” SCU#1 explained:

> One of the things that I am [word] started to implement here is focusing on the dimensions of wellness. To help students understand in order to be helping your social, physical, you’re emotional, you’re spiritual, so helping since understand it’s a complete package.

This current study provided further empirical findings to support prior research regarding the use of PPIs to reduce DAS in college students. Moreover, this study revealed new data related to barriers of implementing PPIs in this high-risk group. In addition to the empirical findings, the present study provided practical implications to support the utilization of PPIs to reduce DAS in college students. The discipline of psychological practice/counseling will benefit immensely from the implications defined by this study.

Practice Implications

The purpose of this research study was to explore the barriers that colleges face implementing PPIs to reduce DAS in college students. A concise understanding of the barriers allowed the directors who were included in this study to identify those barriers. In this study, 90%–100% of the participants identified funding barriers as a significant challenge to implementing PPIs on campus. NCU#1 explained, “Finances and funding would be the number one barrier for us developing.” PAU#1 stated, “Funding is a large issue.” NCU#3 detailed that they “need more funding resources.” MDU#1 shared, “We also have, like, sought out grants, which are phenomenal, but grants are so limited in

what you can do with them." NCU#4 shared, "There is no funding available." SCU#1 expressed, "I can only speak from the private sector because I've only worked in private school… has been difficult to get adequate funding." The participants (100%) confirmed that knowledge barriers were a significant obstacle regarding the implementation of PPIs to reduce DAS in their students. MDU#2 explained, "Lack of understanding/knowing the mental health needs of the students does not provide opportunities to meet their needs." MDU#2 explained how a knowledge deficit of PPI information "Leads to resistance to change." This resistance extends to various areas across campus.

The last knowledge barrier under the auspices of lack of understanding was limited psychology education. While 80% defined structure barriers as a significant challenge of implementation. VAU#1 stated, "There has been talk of a wellness building, but I'm not sure, if it's been signed off on, but it's just been one of the projected hopes." NCU#1 explained, "There is nothing really rewritten, preset." As PPIs have been shown to reduce the symptoms of DAS among college students (Khanjani, 2018; Waters et al., 2022), implementation of these practices in campus counseling centers was salient to reducing DAS.

A report from a university mental health clinic revealed that the three most common mental health symptoms that college students contend with and seek assistance for are depression (60%), anxiety (13%), and stress (11%; Sirisankaeo, 2020). To combat this, PPIs have successfully reduced symptoms of depression in clinical and non-clinical users (Chakhssi et al., 2018; Jeong et al., 2023). The participants in the present study confirmed the use of narrative therapy, CBT, group therapy, and individual counseling measures to reduce DAS in their students. SCU#2 stated:

> CBT, one of the run-of-the-mill basic approaches to most things. In my personal career, I have been more intuitive and eclectic. I use more strength based [to] highlight [what] they already have. We give them a voice and choice to see themselves objectively.

Moreover, upwards of 55% of the participants acknowledged understanding PPIs and confirmed use during counseling sessions. However, PPIs were not listed on the university websites as an option for counseling services provided. Various research studies have identified how PPIs reduce DAS in college students. This current research study identified new findings related to the knowledge, funding, and structure barriers that impede the implementation of these PPI tools.

Successful implementation of PPIs to reduce DAS in college students will need to address the knowledge barriers not cited in the literature review, but those identified in this present study. Those findings included lack of knowledge related to PPIs, limited psychology education, barriers to positive thinking, culture differences, and lack of understanding PPIs. Educational programs and training for campus counseling staff to learn how to use and implement PPIs to reduce DAS should be implemented.

The funding barriers identified in this study that directly interfered with utilizing PPIs to reduce DAS in college students included limits of information sharing, deficient PPI education, decreased student flourishing, and barriers to basic needs. Colleges need to create additional efforts to access funding to implement PPI initiatives. An increase in funding will provide more communication opportunities to discuss and build relationships to provide the basic needs of college students. An increased awareness of

PPIs and their utilization increases student flourishing and creates alliances for future funding access to meet the needs of the students holistically.

The structure barriers that prevent using PPIs to reduce DAS in students were conflicting times of services offered compared to those listed on the university website, conflicting days of service, poor event space, and the lack of an event calendar. Each of these barriers has been associated with fidelity deficits. The SAMHSA (2021) described fidelity as the degree to which a program or a process provides any services or interventions consistently to achieve a declared outcome. Inconsistent times of services and days of available services increased a failed fidelity rate, which minimized the ability for students to obtain resources to reduce DAS. Poor event space and the lack of a calendar to assemble and share information regarding PPIs and the reduction of DAS also interfered with fidelity. Colleges should ensure that advertised service times and days are accurate. Space needs should be predetermined and appropriate to seat massive numbers of students. Finally, an event calendar should be created, published, and shared with the student body, faculty, and staff. This information would alert all stakeholders to future presentations on topics of PPIs and DAS symptoms. Each of these factors increased fidelity and reduced DAS utilizing PPIs in college students. Although this current research study defined the barriers to implementing PPIs, limitations were encountered during the study.

Limitations

During this research study, multiple limitations were identified. Those limitations included the chosen methodology, geography, and sampling method. This qualitative research study was a case study. Due to the unique context of many case studies, the

generalizability was thought to be limited (Priya, 2021). The geographical aspects of the participants included in the study were confined to one region. The participants were selected from five states on the East Coast. Limiting participants from those selected states diminished the pool of participants.

The sampling method utilized purposeful sampling. Purposeful sampling was aimed at recruiting a population that met the criteria for the study. This method limited other participants who had added value to the study. In fact, during the initial data collection from individual interviews, the criterion was changed for the length of time that the participants served in their current capacity as director. The years of service was reduced from two years to a minimum of one year. Altering the number of years in their current position allowed two directors, who offered significant insight, to participate in this study.

One of the most significant limitations was the time of year for data collection. The data was collected from directors of campus counseling centers during the summer. Coordinating and navigating the directors' vacation schedules, board meetings, transitions to new spaces, illnesses, and preparation for the fall semester was challenging. Many of the directors were not on campus while summer school was in session. During the data collection, analysis, and reported findings, recommendations for future research studies evolved. Those findings are discussed in the next section.

Recommendations for Future Research

The findings from this present research study generated various recommendations for future research opportunities, regarding the barriers that colleges face implementing PPIs to reduce DAS in college students. These future recommendations ranged from

simple construct changes utilized in this study to soliciting participants during the fall or spring semesters instead of over the summer. Specific recommendations included replicating this current study using participants who served as directors on the West Coast instead of the East Coast. This would assist in determining if the findings were related to a general region or generalized.

This study identified other barriers to implementing PPIs on college campuses: 1) PPI staff education, 2) PPIs on the website, 3) increased PPI therapy, 4) college alliance, and 5) therapist wellness. Moreover, PPI staff education was the central concern and will be optimal for future studies. Future research regarding the strategies that other colleges utilize to successfully implement PPIs to reduce DAS in their students was another recommended area of study. In addition, an alternate study to determine the importance of the well-being of the directors of campus counseling centers should be conducted. Future research should be considered regarding the continued use of CBT interventions, strength-focused counseling, and narrative therapy to reduce DAS, in addition to implementing PPIs. Other recommendations included research to determine the lack of faculty participation to use PPIs. Future studies should be conducted to identify barriers to campus counseling centers being included in the university-written plan. Moreover, future research studies should be considered to understand the implications of knowledge deficits regarding the utilization of PPIs to reduce DAS in college students. Future studies should also consider utilizing various populations to understand other indications for PPIs besides reducing DAS. An example would be utilizing PPIs to enhance one's spiritual relationship. The final recommendation for future research studies was to understand the

impact of individual resistance or unwillingness to change from traditional therapies to using PPIs to reduce DAS in college students.

Summary

The campus mental health crisis (Lipson et al., 2021) has continued to be more prevalent in colleges. The purpose of this case study was to understand the barriers that colleges face implementing PPIs to reduce symptoms of DAS in college students. The problem addressed in this research study was the lack of utilizing PPIs to reduce DAS in college students, despite increased reports of symptoms among this population. The importance of this case study identified barriers that interfered with implementing PPIs and how to avert those barriers.

The theory used to guide this case study was the PMoWBT (Goodman et al., 2018; Seligman, 2011). The identification of obstacles that prevent colleges from implementing PPIs to reduce DAS in college students found in this case study created awareness surrounding the challenges of implementation. A unique perspective from the educational leaders from college campuses provided an analysis of the barriers and allowed these leaders to discuss changes in areas that were identified. The significance of this study provided knowledge to be utilized as a preventative tool for future obstacles. Furthermore, the findings in this study supported the future use of PPIs to reduce the symptoms of DAS in college students.

The participants in this study were directors of their campus counseling centers. The five states represented on the East Coast were: SC, NC, VA, MD, and PA. The research questions retrieved data and answered questions regarding the funding, knowledge, and structure barriers that interfered with implementing PPIs to reduce DAS

in college students. The key findings in this research study were obtained through three forms of data collection; all participants completed individual interviews, three participants engaged in a focus group, and document analysis was conducted on the university websites of each participant in the study (encompassing four different universities).

The results of this present study provided a concise understanding of the barriers identified by the participants. In this study, 90%–100% of the participants identified funding barriers as a significant challenge to implementing PPIs on campus. Additionally, 100% of the participants confirmed that knowledge barriers were a significant obstacle regarding the implementation of PPIs to reduce DAS in their students. Moreover, 80% of the participants defined structure barriers as a significant challenge of implementation of PPIs efficiently and effectively. Furthermore, this study has generated empirical evidence to college leaders, students, families, communities, and the healthcare industry with processes to assist with decreasing the undesirable effects of DAS symptoms and associated costs. The knowledge, funding, and structure barriers findings in the present research study specifically addressed the obstacles to implementing PPIs to reduce DAS in college students. Those findings and solutions are detailed next.

Knowledge barriers related to PPIs to reduce DAS in college students were described as limited psychology education, barriers to positive thinking, culture differences, and lack of understanding PPIs. Educational programs and PPI training for campus counseling staff should be implemented. The counselors should have access to PPI websites to obtain other techniques regarding the implementation of PPIs in reference

to culture differences, positive thinking initiatives, and access to materials to test their understanding of PPIs.

The funding barriers identified in this study included limits of information sharing, deficient PPI education, decreased student flourishing, and barriers to basic needs. Colleges should create additional efforts to access funding to implement PPI initiatives. Increased funding would provide more communication opportunities to discuss and build relationships to provide the basic needs of college students. An increased awareness of PPIs and their utilization would increase student flourishing and create alliances for future funding access to meet the needs of the students.

Finally, this study pinpointed structure barriers that prevent using PPIs to reduce DAS in these students. Those barriers included conflicting times of services offered compared to those listed on the university websites, conflicting days of service, poor event space, and the lack of an event calendar. Each of those barriers has been associated with fidelity deficits. The SAMHSA (2021) described fidelity as the degree in which a program or a process provides any services or interventions consistently to obtain a declared outcome. Inconsistent times of services and days of available service increased the fidelity of poor outcomes. Poor event space and the lack of a calendar reduced opportunities to share information regarding PPIs. This lack also reduced fidelity. Colleges should ensure that advertised service times and days of service are accurate. In addition, space needs should be predetermined, and appropriate seating should be confirmed. Finally, an event calendar should be created, published, and shared with the student body, faculty, and staff. Each of these factors increases fidelity and the latitude to utilize PPIs to reduce DAS in college students. Future research recommendations ranged

from simple construct changes utilized in this study to soliciting participants during fall or spring semesters instead of the summer to collect more participants. Future research studies will extend this current research and create opportunities for subsequent studies on this salient topic.

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APPENDIX A: QUESTIONNAIRE

The following questions will indicate if you meet the criteria to participate in this research study. Please answer the questions to the best of your ability and return the questionnaire to [redacted] If eligible, you will receive a congratulatory email with instructions and next steps.

1- Are you currently employed at a four-year college located in North Carolina, South Carolina, Virginia, Maryland, or Pennsylvania?

Yes

No

2- Have you held your current position for a minimum of two years?

Yes

No

3- Do you have authority to make decisions regarding the mental health resources available to the students on campus where you are employed?

Yes

No

4- Do you have access to documents that reflect the criteria used, or that will be used, to establish mental health programs on campus?

Yes

No

5- Are you willing and able to share those documents?

Yes

No

APPENDIX B: RECRUITMENT FLYER

Research Participants Needed

Exploring the Barriers Colleges Face Implementing Positive Psychology Interventions to Reduce Depression, Anxiety, or Stress in College Students

- Are you currently employed at a four-year college located in North Carolina, South Carolina, Virginia, Maryland, or Pennsylvania?
- Have you held your current position for a minimum of one year?
  Do you have authority to make decisions regarding the mental well-being of students on campus where you are employed?
- Do you have access to documents that reflect the criteria used or that will be used to establish mental health programs on campus?
- Are you willing and able to share those documents?

You may be eligible to participate in a research study!

The purpose of this research study is to understand the barriers colleges face implementing positive psychology interventions (PPIs) to reduce depression, anxiety, or stress (DAS) among college students. PPIs focus on using resources that promote positive thinking processes, awareness of self and others, thankfulness, and forgiveness. These elements are believed to promote individual, group, and societal flourishing to enhance well-being.

Participants will be asked to do the following:

- Take part in a one-on-one in-person or virtual interview (60 minutes).
- Take part in a focus group for selected participants (90 minutes).
- Complete a participant review of interview transcripts for accuracy (10 minutes).

Names and other identifying information will be requested as part of this study, but participant identities will not be disclosed.

If eligible, a consent document will be emailed to you within 3 days of receiving your completed questionnaire. Instructions to schedule initial interviews will be explained in an additional email following receipt of the signed consent form.

Margaret Williams, a doctoral candidate in the Department of Psychology, School of Behavioral Sciences at Liberty University, is conducting this study. For more information, please scan the QR code and complete the questionnaire. Please email the completed questionnaire to [redacted]

Liberty University IRB – 1971 University Blvd., Green Hall 2845, Lynchburg, VA 24515

APPENDIX C: IRB APPROVAL

LIBERTY UNIVERSITY.
INSTITUTIONAL REVIEW BOARD

June 12, 2024

Margaret Williams
Laura Beiler

Re: IRB Exemption - IRB-FY23-24-1817 Exploring the Barriers Colleges Face Implementing Positive Psychology Interventions to Reduce Depression, Anxiety, or Stress in College Students

Dear Margaret Williams, Laura Beiler,

The Liberty University Institutional Review Board (IRB) has reviewed your application per the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data-safeguarding methods described in your IRB application, and no further IRB oversight is required.

Your study falls under the following exemption category, which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:104(d):

Category 2.(iii). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met:
The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by §46.111(a)(7).

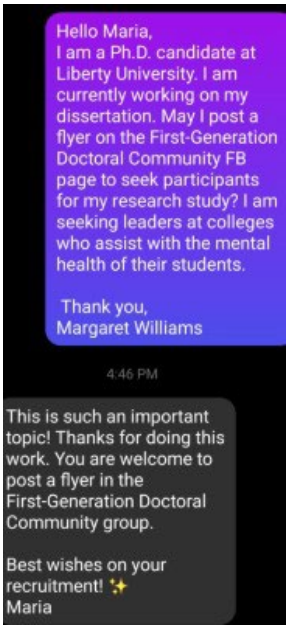
For a PDF of your exemption letter, click on your study number in the My Studies card on your Cayuse dashboard. Next, click the Submissions bar beside the Study Details bar on the Study Details page. Finally, click Initial under Submission Type and choose the Letters tab toward the bottom of the Submission Details page. Your information sheet and final versions of your study documents, **which you must use to conduct your study,** can also be found on the same page under the Attachments tab.

This exemption only applies to your current research application, and any modifications to your protocol must be reported to the Liberty University IRB for verification of continued exemption status. You may report these changes by completing a modification submission through your Cayuse IRB account.

If you have any questions about this exemption or need assistance in determining whether possible modifications to your protocol would change your exemption status, please email us at irb@liberty.edu.

Sincerely,
G. Michele Baker, PhD, CIP
Administrative Chair
Research Ethics Office

APPENDIX D: PERMISSIONS



Approved, yes you can.

On Sunday, April 14, 2024, Williams, Margaret U <[redacted]> wrote:

Good morning Dr. [redacted],

I am a Ph.D. candidate at Liberty University currently working on my dissertation. May I post a flyer on your Liberty University's Doctoral Cohort page to seek participants for my research study? I am seeking college leaders who assist with mental health resources and programs for their students on campus.

Thank you,

Margaret Williams
--
Dr. [redacted]
Executive Director, [redacted]
Education Specialist
[redacted]

APPENDIX E: EMAIL CORRESPONDENCE

Email to individuals following text messages and face-to-face visits:

Hello Mr./Ms./Mrs.,

Thank you for meeting with me today/responding to the text message regarding potential participants needed for a research study. Please find the attached research study flyer and follow the instructions. If you have any questions, please contact me at [redacted].

Sincerely,

Margaret Williams
Liberty University
Ph.D. Candidate

Email to individuals not eligible to participate in the research study:

Hello Mr./Ms./Mrs.,

Thank you for your interest in this research study. However, you are not eligible for participation.

Sincerely,

Margaret Williams
Liberty University
Ph.D. Candidate

Congratulatory email:

Hello Mr./Ms./Mrs.,

Congratulations! You have been identified as eligible to participate in the research study: Exploring the Barriers Colleges Face to Implementing Positive Psychology Interventions to Reduce Depression, Anxiety, or Stress in College Students. Please save a copy of the consent form to your computer. Then type your name and the date on the form, save the completed form, and return the form as an emailed attachment to [redacted]. If you have any questions, please contact me at this email address.

Sincerely,

Margaret Williams
Liberty University
Ph.D. Candidate

Email to schedule the initial interview:

Hello Mr./Ms./Mrs.,

Thank you for submitting the signed consent form. This email is to schedule our initial interview. Please choose from the following days, dates, and times. All times are based

on Eastern Standard Time (EST). Please indicate if you prefer to meet in person or virtually. Once you have chosen the requested information, please return it to [redacted]

- Monday through Friday between 4:00 pm (EST) to 8:00 pm (EST)
- Saturday between 1:00 pm (EST) to 5:00 pm (EST)

Dates - To Be Determined

- In-person
- Virtually

Sincerely,

Margaret Williams
Liberty University
Ph.D. Candidate

Email(s) request to review comments for authenticity from interviews and focus group:

Hello Mr./Ms./Mrs.,

Thank you for the interview. It was a pleasure speaking with you and gaining more insight regarding your perspective of this topic. Please review your comments that were captured during the interview/focus group. If you identify any errors, please place the correction next to the comment in error. Please return this document and any corrections to [redacted].

Sincerely,

Margaret Williams
Liberty University
Ph.D. Candidate

Email to schedule focus group:

Hello Mr./Ms./Mrs.,

Thank you for agreeing to participate in the focus group. Your perspective on this topic offered much insight! The opportunity to collect additional information from you in a

virtual group setting with other professionals is monumental! Please select the date, day and time you are available. All times are Eastern Standard Time (EST). Once you have chosen the requested information, please return to [redacted].

- Monday through Friday between 4:00 pm (EST) to 8:00 pm (EST)
- Saturday between 1:00 pm (EST) to 5:00 pm (EST)

Dates - To Be Determined

Sincerely,

Margaret Williams
Liberty University
Ph.D. Candidate

Email to request documents for analysis:

Hello Mr./Ms./Mrs.,

Could you please provide documentation regarding current or previous plans to implement mental health services for the college students on campus where you are employed? The ability to secure and provide these documents was previously agreed to as part of the participation criteria in this study and confirmed during the signed consent. Please email those documents to [redacted]. Thank you for your participation in this research study.

Sincerely,

Margaret Williams
Liberty University
Ph.D. Candidate

Script for verbal recruiting to participate in the research study:

Hello Mr./Ms./Mrs.,

My name is Margaret Williams. I am a Ph.D. Candidate at Liberty University. I am seeking participants for my research study which explores the barriers colleges face

implementing positive psychology interventions to reduce depression, anxiety, or stress in college students. Are you interested in participating? If not, thank you for your time. If so, I will email or text the research study questionnaire flyer to you for completion. May I please have your email address or phone number? Please follow the instructions on the flyer. I will follow-up with you after I determine your eligibility for participation.

APPENDIX F: INFORMED CONSENT

Consent

Title of the Project:

Exploring the Barriers Colleges Face Implementing Positive Psychology Interventions to Reduce Depression, Anxiety, or Stress in College Students

Principal Investigator: Margaret Williams, a doctoral candidate in the Department of Psychology, School of Behavioral Sciences at Liberty University

Invitation to be Part of a Research Study

I. You are invited to participate in a research study. To participate, you must be currently employed at a four-year college in North Carolina, South Carolina, Virginia, Maryland, or Pennsylvania, have held your current position for a minimum of two years, have authority to make decisions regarding the mental well-being of students on campus where you are employed, have access to documents that reflect the criteria used or that will be used to establish mental health programs on campus, and be willing to share those documents with the researcher. Taking part in this research project is voluntary.

Please read this entire form and ask questions before deciding whether to participate in this research.

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

The purpose of the study is to understand the barriers that colleges face when implementing positive psychology interventions (PPIs) to reduce depression, anxiety, or stress (DAS) among college students.

What will happen if you take part in this study?

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

II. 1. Participate in a one-on-one in-person, or virtual audio and video recorded interview (per participant's choice) that will take no more than 1 hour.
2. Selected participants will take part in a virtual audio and video-recorded focus group that will take no more than 1 hour, 30 minutes.
3. All participants will review individual interview transcripts for accuracy via email, taking no longer than 10 minutes.

How could you or others benefit from this study?

Participants in this study can benefit from sharing their experiences to add insight into reducing depression, anxiety, or stress in college students.
Benefits to society include the potential of preventing obstacles that impede positive psychology interventions in the future. These interventions can reduce mental health costs to society, and strengthen community, campus, and individual relationships.

What risks might you experience from being in this study?

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

How will personal information be protected?

The records of this study will be kept confidential. Published reports will not include any information that will make it possible to identify a participant. Research records will be stored securely, and only the researcher will have access to the records.

- Participant responses will be kept confidential by replacing names with pseudonyms.
- Interviews will be conducted in a location where others will not easily overhear the conversations.
- Confidentiality cannot be guaranteed in focus group settings. While discouraged, other focus group members may share what was discussed with individuals outside of the group.
- Data collected from you may be used in future research studies or shared with other researchers. If data collected from you is reused or shared, any information that could identify you, if applicable, will be removed beforehand.
- Data will be stored on a password-locked computer in a secure location. The researcher and members of her doctoral committee will have access to the data. After 3 years, all electronic records will be deleted, and all hardcopy records will be shredded.
- Recordings will be stored on a password-locked computer. The researcher and members of her doctoral committee will have access to the recordings. After 3 years, the recordings will be deleted.

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

Participants will not be compensated for participating in this study.

Is study participation voluntary?

Participation in this study is voluntary. Your decision whether to participate or not 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 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 contact the researcher at the email address/phone number in the next paragraph. Should you withdraw, data collected from you apart from focus group data, will be destroyed immediately and not included in this study. Focus group data will not be destroyed, but your contributions to the focus group will not be included in the study if you choose to withdraw.

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

The researcher conducting this study is Margaret Williams. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at [redacted] You may also contact the researcher's faculty sponsor, Dr. Laura Beiler, at [redacted]

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 want to talk to someone other than the researcher[s], **you are encouraged** to contact the IRB. Our physical address is Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA, 24515; our phone number is 434-592-5530, and our email address is irb@liberty.edu.

Disclaimer: The Institutional Review Board (IRB) ensures that human subjects research will be conducted ethically as defined and required by federal regulations. The topics covered and viewpoints expressed or alluded to by student and faculty researchers are those of the researchers and do not necessarily reflect the official policies or positions of Liberty University.

Your Consent

By signing this document, you are agreeing to be in this study. Make sure you understand what the study is about before you sign. You will be given a copy of this document for your records. The researcher will keep a copy with the study records. If you have any questions about the study after you sign this document, you can contact the study team using the information provided above.

I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

☐ The researcher has my permission to audio-record/video-record me as part of my participation in this study.

_____
Printed Subject Name

_____
Signature & Date