Sabbath-keeping and Mental Health: The Influence of Weekly Sabbath-keeping on Stress, Anxiety and Well-being

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A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

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Abstract

The purpose of the current study is to explore the effectiveness of a psychoeducational Sabbath intervention. Using a multiple baseline design, subsets of participants were assigned the psychoeducational intervention at varying times and completed a series of mental health questionnaires before, during, and after the intervention to assess its benefits. After receiving the psychoeducational intervention, participants began a weekly Sabbath-keeping practice. This study added to the limited existing literature on Sabbath-keeping and health, specifically mental health, by assessing the impact on anxiety, stress, and well-being. Results of this study indicated a potential connection between the practice of Sabbath-keeping and positive impact on anxiety, stress, and well-being. Rises in reported anxiety and stress amongst adults in the United States call for more cost-effective ways to both prevent and alleviate a variety of symptoms related to psychological distress. Weekly Sabbath-keeping has the potential to meet the demand.

Keywords: Psychological Distress, Mental Health, Anxiety, Stress. Psychological Well-being, Sabbath-keeping, Religious Coping

Dedication

This study is dedicated to Robert E. McNichol Jr., my father, mentor, and inspiration to work hard and achieve my goals. He believed in me at the times I didn't believe in myself to complete the program. He wanted to see me achieve this goal almost more than I did myself and it made him so proud to tell people I was studying for my doctorate. Sadly, he passed away in August of 2021, but I know that he would have loved nothing more than to hear me say I passed. I love you dad!

Acknowledgments

First, I would like to acknowledge Dr. Jeremiah Sullins who understood what I was trying to accomplish in my research and was willing to be my chair. I am grateful for the laughs and wisdom in creating a manuscript and study that I am proud of and believe contributes to the mental health community. You encouraged me to press on even when it got hard. Thank you!

Also, Dr. Mark Myers, who provided valuable feedback on my proposal helping shape some of the key aspects of the study. I appreciate your believing in the content and its importance to the world of self-care and lifestyle medicine.

Finally, to my friends and family who have heard me groan for the last four and a half years about the coursework, research, and writing. Despite all the events I missed and nights I stayed home to work on this project, you were always supportive and encouraging of my work. I am excited to get back to some freedom with all of you!

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Abbreviations

Center for Disease Control (CDC)

Anxiety and Depression Association of America (ADAA)

American Psychological Association (APA)

National Alliance on Mental Illness (NAMI)

Complimentary and Alternative Medicine (CAM)

Cognitive Behavioral Therapy (CBT)

Single Subject Research Design (SSRD)

Generalized Anxiety Disorder 7 Item (GAD-7)

Penn State Worry Questionnaire (PSWQ)

Perceived Stress Scale (PSS)

Warwick-Edinburgh Mental Well-being Scale (WEMWBS)

Big Five Inventory (BFI)

Socio-Economic Status (SES)

Generalized Anxiety Disorder (GAD)

Chapter One: Introduction

Overview

The pursuit of psychological well-being as the remedy for psychological distress is an estimated $121 Billion market in which individuals seek to alleviate the physical, mental and emotional stress in their lives (GWI Finds Mental Wellness Is a $121 Billion Market, n.d.). People are experiencing the effects of anxiety at epidemic proportions (Davey, 2020). Now considered the leading form of mental illness, anxiety is commonly activated by stress (Stress | Anxiety and Depression Association of America, ADAA, n.d.). Coping with stress is a skill all must learn and develop for themselves. According to the latest Gallup poll, Americans are reporting significant daily stress and unprecedented increases in worry (Gallup Inc, 2020). 60% of Americans report the increase in stress and worry with approximately 53 million Americans acknowledging their stress levels have increased considerably in the last twelve months (Gallup Inc, 2020). People turn to a variety of physical, emotional and/or spiritual practices to help deal with a wide range of life stressors and improve their mental health and psychological well-being such as prayer, nutrition, yoga, hobbies, time in nature, meditation, serving others to name a few (Walsh, 2011). What if the Creator in His divine order gifted man a tradition from the beginning of time to ease the tension of everyday life and promote psychological well-being? Could it be this ancient practice is designed to establish a rhythm that allows the mind, body and spirit to restore each week and ultimately improve one's mental health? This chapter will discuss the effects of psychological distress, specifically anxiety and stress, in American culture. It will present an ancient religious discipline, Sabbath, as a modern-day method for the promotion of psychological well-being. The proposed study discussed in this chapter highlights the problem,

purpose, and significance of expanding the literature on the use of Sabbath to support mental health.

Background

Psychological Distress in America

The problem of psychological distress in the United States of America is substantial. In recent studies, the Center for Disease Control found 11.2% of U.S. adults report consistent feelings of nervousness, worry or anxiety and at least 4.8 million emergency room visits due to mental or behavioral health concerns (CDC Mental Health FastStats, 2020). Serious psychological distress is characterized by social, occupation and educational impairments which typically require treatment. Serious psychological distress effects 3.4% of American adults with women in every age group the most likely to suffer with psychological distress (Weissman et al., 2015). The Substance Abuse and Mental Health Services Administration estimates 51.5 million Americans report suffering with mental illness within the last year and approximately 44.8% received some type of formalized treatment (Lipari, 2019). Although many ask for help it is still estimated that at least 50% of those who are suffering do not receive any type of treatment (Lipari, 2019).

To be human is to be stressed and our stress levels have taken a toll on our health, especially our mental health. Stress and anxiety are two of the most frequently reported mental health concerns with mutual interaction (Hart, 2001; Pereira-Morales et al., 2019; Stress | Anxiety and Depression Association of America, ADAA, n.d.). In their annual report on the state of stress in the United States, the American Psychological Association (2020) describes the problem as a “national mental health crisis” (p. 2). Anxiety disorders are now the most common mental health concern in the United States and are considered an emotional response to stress

(Anxiety Disorders | NAMI: National Alliance on Mental Illness, n.d.; Facts & Statistics | Anxiety and Depression Association of America, ADAA, n.d.-a; Hart, 2001). Hart (2001) describes anxiety as the "disease of stress" (p. 3). Americans self-report stress as a primary concern for general health and well-being citing multiple factors of finances, crime/violence, relationships, work and the future as primary causes for concern (Stress in America™ 2019, n.d.). Accounts of stress vary by gender, ethnic group and socio-economic status (SES) in the United States (Gender and Stress, n.d.). Women report higher levels of stress then men and are more likely to struggle with anxiety because of the stress (Hammen et al., 2009). African-Americans report the highest levels of psychological distress in America with African-American women ranking highest of all minorities (Williams, 2018). In essence, stress is a lifestyle problem that can have devastating physical, emotional, spiritual, relational and psychological effects (Braun et al., 2016; Noordsy, 2019). Today's Western culture of productivity and 24/7 instant access has created a demand for individuals to accomplish more leading to a variety of social, emotional, spiritual, physical and mental stressors (Comer, 2019; Sleeth, 2012; Superville et al., 2014).

Psychological Well-Being

Life satisfaction, contentment, happiness, fulfillment, peace, and balance are just a few of the buzz words surrounding the construct of well-being. The search for meaning and purpose to find contentment dates to the beginning of time as man has tried to understand human suffering, an ongoing existential crisis. Frankl (2006) emphasized that in our search for meaning, each of us develops an internal tension to the world around us and we assign meaning to our suffering based on how we respond. Our sense of well-being is directly correlated to the perception of our life past, present and future (IsHak, 2020). Viktor Frankl introduced the convergence of

philosophy and psychology in his founding of Logotherapy (Schulenberg et al., 2008). This framework established a link that would shift the field of psychology to consider the mind-body-spirit connection as a significant factor in psychological well-being. With an emphasis on the meaning-dimension of humanity, Frankl established the relationship between meaning and psychological well-being as a central function in future theory and therapy (Schulenberg et al., 2008). The humanistic school of thought emphasized adaptive constructs such as faith, hope, humor, and meaning with the intention of enhancing therapeutic techniques, not replacing them, making the collaborative approach appropriate in a variety of therapeutic settings (Schulenberg et al., 2008).

Current methodologies of mental health and psychological well-being are traceable to the ancient Greeks, hedonic (pleasure, feelings, satisfaction) and eudaimonic (purpose, autonomy, growth, relationships, mastery, acceptance) perspectives of psychological well-being (Ryff, 2014). When people begin to evaluate their satisfaction with life, so-called “happy” people will consider their circumstances, work/career life, community, time spent in nature, community, physical health and the personal fulfillment of material, physical, relational and spiritual resources (Diener et al., 2018). Mental health is frequently correlated with psychological well-being (Ryff, 2014; Schotanus-Dijkstra et al., 2017; Trudel-Fitzgerald et al., 2019; Weiss et al., 2016) and recent shifts in mental health consider not just treatment and prevention but a goal for psychological well-being (Weiss et al., 2016). Positive psychological well-being directly relates to stress and one’s ability to buffer the overall effects including how an individual experiences stress (Kubzansky et al., 2018). Coping with psychological distress is complex. Evidence is beginning to demonstrate that a combination of factors provides a more comprehensive approach to treatment (Asher et al., 2017; Trudel-Fitzgerald et al., 2019).

Psychological Distress Coping

In the evaluation of specific mental health treatments and interventions, psychological well-being is commonly measured in conjunction with stress and other affective disorders (Ruini & Fava, 2009; Schotanus-Dijkstra et al., 2017; Wersebe et al., 2018). Coping comes in many forms from medication, counseling, life coaching, stress management, complementary and alternative medicine (CAM), spirituality and various lifestyle changes (Bandelow et al., 2017; Hart, 2001; Shepardson et al., 2017; Stress | Anxiety and Depression Association of America, ADAA, n.d.). More specifically, the improvement of an individual's positive psychological well-being may be dependent on a diversity of interventions which include life events, environmental influences, education, lifestyle habits, and positive psychology skills (Trudel-Fitzgerald et al., 2019). The mind, body, spirit connection continues to evolve in mental health care treatment and coping specifically related to anxiety, stress and psychological well-being (Boynton, 2014; Lee, 2009).

The stigma of mental health treatment and prevention has shifted with the Millennial generation creating greater awareness, acceptance and understanding of what mental health and psychological well-being means to society. This is the first generation to openly acknowledge the need for counseling and stress management changing the attitude from secrecy and shame to preventative wellness, personal growth and self-improvement (Drexler, 2019). From formalized treatment interventions with trained psychotherapists to pastoral counselors and self-help, people have sought a variety of ways to cope with mental health. Traditional approaches have focused on evidence-based treatments such as Cognitive Behavioral Therapy (CBT) to help individuals manage stress and overcome anxiety (Bandelow et al., 2017; Hart, 2001). Contemporary approaches are beginning to consider a more holistic approach that not only addresses thoughts,

behaviors and emotions but considers physical and spiritual health as significant influences on mental health and psychological well-being.

Religious Coping and Mental Health

Religiosity and spirituality have traditionally been a means in which people find a sense of psychological well-being, cope with a variety of life stressors and practice as a foundation for mental health care (Dilmaghani, 2018; Hart, 2001). Kenneth Pargament created a theoretical framework for religious coping with seven essential features which cohere suitably in a discussion on mental health (Xu, 2016). The seven features include: 1) a search for significance related to the sacred which helps define ways of coping with negative life events and stressors; 2) those with stronger religious affiliation will find greater satisfaction in religious coping; 3) religion moves beyond a defense mechanism into a coping ability at all stages in life; 4) it helps one find meaning, become closer to God, gain a sense of control, find closeness to others and find comfort; 5) religious coping helps an individual conserve in times of distress to create new meaning and purpose; 6) religious coping may provide both positive or negative effects depending on the context and 7) religious coping may act as a protective factor for stress effects (Xu, 2016). This perspective on religious coping offers religious oriented individuals validation of their practices to aid in psychological distress.

The body of literature continues to grow in the correlation of religiosity/spirituality and psychological health/well-being, specifically in relation to affective disorders such as anxiety and depression. Approximately three-fourths of the U.S. population claim affiliation with a religious belief system and of that group 70% identify as Christian (Religious Landscape Study / Pew Research Center. n.d.) Spirituality is on the rise in the U.S. including those who do not identify as religious (Lipka & Gecewicz, 2017). It is now argued that the integration of

spirituality/religiosity and psychotherapy provides better mental health outcomes (Anderson et al., 2015; Captari et al., 2018; Dein, 2018). Many studies continue to advocate for the use of faith-adapted techniques to improve psychological well-being. Specific spiritual disciplines such as meditation, prayer, religious attendance, fasting and rest have been associated with better mental health outcomes and positive psychological well-being (Captari et al., 2018; Dein, 2018; Sutton et al., 2016; Verghese, 2008). Although many spiritual disciplines and practices (i.e., prayer, meditation, church attendance) have been examined in the context of mental health benefits, Sabbath-keeping is an under-observed practice that has received little acknowledgement regarding its impact on psychological well-being.

Sabbath-keeping

The practice of Sabbath-keeping, setting aside dedicated time each week for rest and renewal (physical, emotional, relational and spiritual) is a central spiritual discipline and practice in both Judaism and Christianity (Diddams et al., 2004; Hough et al., 2019). This ancient, thousands of years old practice and spiritual discipline dates to the books of Genesis and Exodus where God commanded his people to rest from work, declaring the time to be set-apart and holy (Swoboda, 2018). Fundamentals of relaxation, meditation/reflection, community, delight and abstinence of regular activities are hallmark features of Sabbath practice, as well as recommended preventative care approaches for psychological distress (Superville et al., 2014). Sabbath-keeping has been proposed as the remedy or prevention of human restlessness (Kessler, 2012), burnout (Hough et al., 2019), general health (Superville et al., 2014) and ecological neglect (Hartman, 2011). Little attention has been given to the direct impact of Sabbath-keeping on mental health and psychological well-being.

The existing literature in regard to Sabbath-keeping predominately investigates it's use among religious leadership (pastors, Rabbi's) or specific religious groups that practice Sabbath-keeping as a core tenet of their faith (i.e., Judaism, Seventh-day Adventist). There is a large gap in the literature regarding the mental health impacts. Several existing studies argue for the investigation of Sabbath-keeping and mental health. In one of the only direct studies on mental health and Sabbath-keeping, Dein and Lowenthal (2013) examined the benefits and costs to mental health in Orthodox Jews with positive results and explicitly state the need for further investigation of specific religious experiences and mental health. Goldberg (1986) proposed the use of Sabbath as a solution to numerous mental health problems describing the ability to restore an everyday life rhythm of rest and work that is often disrupted in American consumerism culture. Speedling (2019) suggests further examination within the general population would be beneficial in considering Sabbath-keeping as a holistic health practice.

Problem Statement

Sabbath-keeping is a spiritual discipline in the Christian faith yet not frequently discussed or practiced despite the numerous spiritual, physical and emotional benefits (Wirzba & Berry, 2006). According to Pew Research (n.d.) approximately 70% of the U.S. population identifies as Christian. It would be fair to argue that if the predominate religious belief system accepts the ten commandments from the Bible as valid and Sabbath-keeping is the 4th commandment, then exploring the overall benefits to the practice of Sabbath-keeping, including mental health would have merit. Modern western culture, particularly in the United States is hurried, stressed out and anxiety ridden (Comer, 2019). Now more than ever relief and coping strategies are needed to deal with the health crisis Americans are facing due to stress. Despite the lack of research on Sabbath-keeping as a remedy to this problem, several modern authors have

suggested the specific use of Sabbath-keeping to help (Comer, 2019; Sleeth, 2012; Swoboda, 2018).

Interestingly, studies on Sabbath-keeping and its effects on general health and wellness are limited. Researchers have observed some correlation between psychological well-being and Sabbath-keeping primarily within specific religious affiliations (i.e., Christianity, Catholicism and Orthodox Jews) and as a subset observation of additional variables (Gallagher, 2019; Kessler, 2012; Speedling, 2019). Practicing Jews, Seventh-day Adventists and clergy comprise most populations studied, predominately men and all of whom Sabbath-keeping is a central tenet of their faith. The consideration of women in further studies is recommended (Speedling, 2019). To date no study has observed the effects of non-Sabbath-keeping participants (those with no established Sabbath-keeping practice) who begin a Sabbath-keeping practice. Also, there is no direct exploration of specific mental health concerns such as anxiety or stress as they relate to Sabbath-keeping. Van Daele et al. (2012) argues the need for more cost-effective mental health approaches to stress management, specifically via psychoeducation. The problem of psychological distress has limited to no research on Sabbath-keeping as an approach for psychological well-being, particularly in those who do not consistently practice Sabbath.

Purpose Statement

The purpose of this study is to examine the mental health benefits related specifically to the psychological well-being, stress and anxiety amongst a general population of adults with no consistent Sabbath-keeping practice who become educated on the benefits via a psychoeducational intervention and begin a Sabbath-keeping practice. Previous research demonstrated a correlation to improved general mental health and well-being in those who practice Sabbath-keeping, however a gap in the literature exists for its use with a general

population of non-practicing Sabbath-keeping, as well as a gap in specific mental health variables such as anxiety and stress. This study will further the conversation about the use of spiritual disciplines in therapeutic practice as the literature is well-established for prayer, meditation, scripture reading, religious involvement, etc… yet lacks investigation about Sabbath. Using a psycho-educational intervention on the mental health benefits of Sabbath-keeping as the independent variable, dependent variables of anxiety, stress and psychological well-being will be measured to determine the effectiveness of the intervention. This exploratory study will address the demographic gaps and specific mental health concerns such as anxiety and stress in relationship to the use of Sabbath-keeping. The intent is to demonstrate how consistent Sabbath-keeping could benefit the field of mental health by providing a spiritual practice with therapeutic benefits.

Significance of the Study

Contemporary views of mental health and psychological well-being acknowledge the importance of a holistic view of people, that is mind-body-spirit. The integration of physical and spiritual into the discussion around mental wellness has created opportunity for researchers to examine specific spiritual disciplines and their effectiveness in helping people cope with a variety of mental health concerns and stressors. Psychological well-being, religiosity and spirituality are well-documented as having positive correlations (Galen & Kloet, 2011; Villani et al., 2019; Yotter & Swank, 2017). Researchers now argue for the assimilation of religiosity and spirituality into direct mental health care as the effects are both preventative and curative (Anderson et al, 2015; Captari et al., 2018; Gonçalves et al., 2015; Koenig, 2009). The evidence for specific spiritual disciplines (i.e., prayer, meditation, reading of scriptures, religious

involvement) and their positive impact on mental health in both clinical and non-clinical practice continues to strengthen (Captari et al., 2018; Smith et al., 2007; Stewart-Sicking et al., 2017).

This study will address an under-observed spiritual discipline, Sabbath-keeping. This researcher intends to expand the discussion around Sabbath-keeping and the potential mental health benefits that people who are not practicing might find useful should they begin. I specifically want to consider its use in reducing symptoms of anxiety, as well as stress management to improve overall psychological well-being. This fills the gap in regard to specific mental health variables. Also, the chosen participants will have no or limited experience with Sabbath-keeping thus originating a study with the general population. This plays a significant role in broadening the research demographically. In conducting a pilot study that considers the mental health benefits regarding the spiritual discipline of Sabbath-keeping, its use may be a positive coping tool in the use of stress management. This specific research may help validate the need for additional tools to fight against burnout.

Research Questions

The proposed study will consider the positive effects of participating in a psychoeducational intervention which focuses on the psychological benefits of a weekly Sabbath. More specifically:

RQ1- Do participants who receive a Sabbath psychoeducational intervention have lower levels of anxiety compared to participants that do not receive the Sabbath psychoeducational intervention?

RQ2 – Do participants who receive a Sabbath psychoeducational intervention have lower levels of stress compared to participants that do not receive the Sabbath psychoeducational intervention?

RQ3 – Do participants who receive a Sabbath psychoeducational intervention have higher psychological well-being compared to participants that do not receive the Sabbath psychoeducational intervention?

Definitions

Sabbath-keeping – Sabbath-keeping is defined as a time period of twelve to twenty-four consecutive hours that is intentionally set aside to stop work both professionally and personally to rest, contemplate and do activities that foster delight and joy (Scazzero, 2015; Wirzba & Berry, 2006).

Rest – The ceasing of work (paid and unpaid) related activities and usual daily patterns for leisure and spiritual practices that are restorative to an individual (White et al., 2015).

Anxiety – Excessive worry, fear, apprehension and/or nervousness about a number of daily life events and activities that is accompanied by physical concerns such as sleep disturbance, gastrointestinal distress, muscle tension, headaches, fatigue, restlessness, feeling hot or difficulty breathing (Crocq, 2017).

Stress – An individual's perception of life as uncontrollable, overwhelming, unpredictable and/or overbearing and their inability to cope with these perceptions (Nielsen et al., 2016).

Well-being – A concept rooted in both hedonic (positive emotion, feelings, life satisfaction and affect) and eudaimonic (high functioning, positive mindset, meaningful relationship) perspectives (IsHak, 2020; Koushede et al., 2019).

Psychoeducational Intervention – A two-phase, 30-minute video-based delivery of education regarding the mental health benefits of Sabbath-keeping. Phase one is the teaching delivered virtually and phase two is the subsequent implementation of weekly Sabbath-keeping for the duration of the study (Van Daele et al., 2012).

Summary

Anxiety and stress levels are now reported at alarming rates causing the mental health field to consider a variety of sources for prevention and care. Many established interventions are costly, and researchers are seeking more affordable options to treatment and supplemental care such as psychoeducation. The mind-body-spirit approach to mental wellness continues to strengthen and spiritual practices are becoming an acceptable approach to treatment and care, even requested by clients. The use of Sabbath-keeping as a method for improving psychological well-being is an under-observed spiritual discipline that may offer a variety of mental health benefits. The purpose of this study is to examine its use with specific mental health variables of anxiety, stress and psychological well-being in a general population.

Chapter Two: Literature Review

Overview

The following chapter will discuss essential literature regarding the problem of psychological distress, specifically anxiety, stress, and psychological well-being in the United States. As part of that discussion, religious coping for mental health will be investigated and the spiritual discipline of Sabbath-keeping will be proposed as a holistic strategy for coping with psychological distress. The rise in complementary and alternative medicine (CAM) approaches to mental health (Asher et al., 2017) warrants an exploration of how an ancient spiritual discipline, Sabbath-keeping, may afford clinicians and their clients a new method for the alleviation and management of psychological distress. The following conceptual framework will articulate the relevant theories in the discussion of psychological distress, psychological well-being, and religious coping for mental health. The related literature will integrate the key concepts constructing the case for Sabbath-keeping as a practice for improved mental health with an emphasis on what is lacking in the literature and how this study will contribute to the limited body of research.

Conceptual Framework

The anxiety epidemic that plagues modern times is consistently challenging mental health professionals to identify cost-effective, practical methods of prevention and care for the relief of psychological distress. The concept of psychological well-being and how to manage it is now considered a public health issue as there is growing evidence linking physical and mental health (Trudel-Fitzgerald et al., 2019). Holistic approaches to mental health incorporating an individual's physical, mental and spiritual health have become widely accepted methods to support well-being and increasingly advised among healthcare practitioners, including mental

health counselors to provide services and treatment within this framework (Moe et al., 2012; Witt et al., 2017). Chidarikire (2012) described spirituality as the "neglected dimension of holistic mental health" (p.298) and is a critical element to well-being which should be included in mental health dialogues. As such the proposed study considers the use of Sabbath-keeping as a viable practice for individuals to manage their psychological well-being. The conceptual framework for this discussion is grounded in hedonic and eudaimonic theories of well-being and a holistic model to mental healthcare which includes the relevance of spirituality in the support of psychological well-being. Sabbath-keeping, traditionally viewed as a spiritual discipline, can now be exercised as a holistic practice for improved mental health.

Psychological Well-being

The counseling community, rooted historically in a variety of theories and philosophies related to psychology, has dedicated itself to the exploration, understanding and relief of human psychological pain, suffering and unhappiness (Ryff, 1989). Ancient philosophers Aristotle, and Aristippus debated the construct of well-being, attempting to understand what drives human psychological functioning (Huta, 2015). Aristippus surmised a simplistic view of maximizing pleasure while minimizing pain in reference to well-being while Aristotle conceptualized well-being to focus on authenticity and personal growth (Disabato et al., 2016). The two primary views of these philosophical beginnings are based in either hedonic or eudaimonic orientations. Hedonic standpoints emphasize pleasure, satisfaction, comfort, enjoyment and happiness while eudaimonic views consider meaning, value, growth, quality and authenticity (Huta, 2015; Ryff, 1989). Ryan and Deci (2001) investigated well-being from both orientations concluding that, "well-being is probably best conceived as multidimensional phenomenon that includes aspects of both hedonic and eudaimonic conceptions of well-being" (p. 148). Their observation is that both

orientations offer valid assumptions yet differ in who defines well-being, the individual subject being studied via their subjective experience or the researcher attempting to establish concrete parameters. Ryff and Keyes have led the investigation to establish a more concrete definition and understanding of well-being (Ryff, 1989; Ryff & Keyes, 1995).

Ryff's (1989) six-factor model of psychological well-being is accepted and widely used in research today. In her development of the model, she highlights the early discussions around the conceptualization of psychological well-being explaining its formation:

> The extensive literature aimed at defining positive psychological functioning includes such perspectives as Maslow's (1968) conception of self-actualization, Rogers's (1961) view of the fully functioning person, Jung's (1933; V on Franz, 1964) formulation of individuation, and Allport's (1961) conception of maturity. A further domain of theory for defining psychological well-being follows from life span developmental perspectives, which emphasize the differing challenges confronted at various phases of the life cycle. Included here are Erikson's (1959) psychosocial stages model, Buhler's basic life tendencies that work toward the fulfillment of life (Buhler, 1935; Buhler & Massarik, 1968), and Neugarten's (1968, 1973) descriptions of personality change in adulthood and old age. Jahoda's (1958) positive criteria of mental health, generated to replace definitions of well-being as the absence of illness, also offer extensive descriptions of what it means to be in good psychological health. (Ryff, 1989, p.1070)

A unified definition of the term well-being has been difficult due to the variety of theories regarding what attributes comprise well-being. As research has developed, the two primary notions of happiness and life satisfaction stood out as the most influential to psychological well-being (Ryff, 1989).

An individual's experience of happiness is commonly associated with their psychological well-being. Warr (1978) an original researcher of psychological well-being, looked exclusively at its connection to happiness, investigating positive and negative affect related to everyday life expanding on Bradburn's (1969) affective responses to psychological well-being. Affect was impacted by social experience, anxiety, fear, poor health, personal success, dissatisfaction and new experiences. He concluded that happiness is a component of psychological well-being not an equivalent. An opinion that remains today (Diener et al., 2018; Ryff & Singer, 2006). In conjunction with the notion of happiness and psychological well-being the idea of life satisfaction began to rise as a component as well. Michalos (1980) examined the literature and found a strong correlation between satisfaction and happiness in psychological well-being. Diener et al. (1984) determined life satisfaction to be a cognitive-judgmental process combined with positive and negative affect to provide a more comprehensive view on psychological well-being.

Diener (1984) considered the philosophers view that happiness plays a critical role in human motivation and as such began to study and define well-being based on how an individual evaluates their life in terms of satisfaction and happiness. In an attempt to understand how one evaluates their life in positive or negative terms, Diener considered the existing literature on well-being and began to operationalize the concept of subjective well-being into the counseling literature. He concluded that three variables comprise well-being including life satisfaction, positive affect and negative affect. From this examination Diener's triparte model was established and is still considered in much of the literature today as an important component of the discussion on well-being. Busseri (2015) argues that more investigation into Diener's model is necessary as there continues to be a gap in understanding how the three components work

together. It has also left some researcher's questioning if the concept of subjective well-being is sufficient in offering a complete picture.

It was from these early beginnings that Ryff (1989) determined they were insufficient in explaining the complete picture of psychological well-being and thus forged a six-factor model that extracted key elements of theory and research that were not limited to happiness and satisfaction. In a macro examination of the existing literature, Ryff (1989) considered what makes one mentally well or to have good mental health and resolved the following dimensions as critical underlying factors in good mental health. These include: 1) self-acceptance – a positive attitude towards self; 2) positive relations with others – feelings of empathy, love and a warm relating to others with an ability to connect on deeper levels; 3) autonomy – an internal locus of evaluation with an ability to develop personal standards and not seek consistent approval from others; 4) environmental mastery – one's ability to create or choose an environment suitable for positive psychological functioning and personal advancement; 5) purpose in life – an individual believes there is purpose and meaning in life thus creating goals, intention and a sense of direction; and 6) personal growth – continual development of character, potential and openness to experience as well as the process of becoming.

Ryff's model integrates key theoretical perspectives of development and personality with the six dimensions of well-being to create a framework that is frequently used today in objective studies of well-being outcomes (Weiss et al., 2016). Figure 1 below, provides a clear picture of the six-dimensions and theories that influenced their development.

Figure 1.

Ryff Six-Factor Model of Psychological Well-being

Note: Core dimensions of psychological well-being and their theoretical foundations (Ryff, 2014). Removed for copyright.

Although often viewed as opposing arguments, hedonic and eudaimonic perspectives in combination may provide a more complete picture of optimal psychological functioning (McMahan & Estes, 2011). Disabato et al. (2016) sought to determine if hedonic and eudaimonic orientations had stronger correlations then suggested by existing literature. Their assessment of a two-factor model using both hedonic and eudaimonic characteristics as defined by Diener's (1984) tripartite model and Ryff's (1989) six-factor model demonstrated high validity and correlation strengthening the discussion on the combination of orientations to provide a more complete picture of well-being.

Holistic Approach

Holistic psychology, emphasizes a whole-person theory of mind, body and spirit, paying particular attention to the spiritual (Edwards, 2013; Moe et al., 2012). It finds its roots in spiritual domains of Christianity, Buddhism, Islam, Judaism, etc… and is seen as "a major alternative approach to modern, scientific, academic and professional forms of psychology" (Edwards, 2013, p. 536). A holistic counseling approach considers two primary objectives including 1)

holism – which views individuals as unified, whole-persons (mind, body, spirit) and 2) optimal functioning across social, emotional, spiritual, physical and mental domains (Moe et al., 2012). Individuals are seen as complex systems affected by each part shaping the whole. For example, issues of stress affect the physical self and psychological distress may impact one's overall sense of well-being (Moe et al., 2012). An early advocate for a holistic approach to mental health Gordon (1990) describes the following in regard to holistic care,

> Holistic medicine includes an appreciation of patients as mental and emotional, social and spiritual, as well as biological and physiological beings. It respects their uniqueness and regards them as active and responsible partners in, rather than passive recipients of, their health care. Holistic medicine views health as a positive state-not simply the absence of disease-and emphasizes approaches which promote health and prevent illness. (p.358)

Gordon (1990) argues the need for a holistic counseling approach that views people as dynamic whole-persons which integrates a spiritual perspective incorporating self-knowledge and growth. This approach also brings a broad range of therapeutic techniques that enhance health (i.e., nutrition, exercise, relaxation, rest, meditation, etc.) simply beyond cognitive methods. The educational component is a foundational element to a holistic model as is the development of new techniques that extend beyond the counseling sessions and provide support to the therapeutic process. Latorre (2000) supports the integrated approach to psychiatric care, with the belief that treating the entire system of mind, body spirit allows individuals to utilize a variety of environments, tools, practices and approaches within the therapeutic process. When clients weave these into their lives it strengthens their sense of self and ability to grow. Jasubhai (2019) states, "A holistic approach is considered to be more effective as it brings positive and long-

lasting changes and improves individual's overall health and quality of life. Thus, a multi-system imbalance requires holistic care which brings remarkable transformations" (p. 23).

Complementary and Alternative Medicine

Complementary and alternative medicine (CAM) is a modern approach to holistic and/or integrative mental healthcare (Barić et al., 2018; IsHak, 2020). The National Institutes of Health (2018) clarifies the terminology when considering a variety of healthcare practices, including mental health, that are not typically part of traditional medical care stating, "if a non-mainstream practice is used together with conventional medicine, it's considered "complementary." If a non-mainstream practice is used in place of conventional medicine, it's considered "alternative" (para 3). The Anxiety and Depression Association of America (ADAA) agrees that CAM approaches are growing in popularity with stress and relaxation techniques, meditation, yoga and acupuncture as the most popular current methods (Stress | Anxiety and Depression Association of America, ADAA, n.d.).

Much of the current research on CAM and mental health involves anxiety and depression as these forms of psychological distress currently rank highest within the general population (CDC Mental Health FastStats, 2020). It is estimated that over half of individuals with a GAD diagnosis use some combination of CAM and traditional medicine for the treatment of anxiety and that approximately 38% of U.S. adults use some form of CAM to help with general mental illness (Barić et al., 2018). Identifying specific CAM approaches and their use for mental health benefits is limited in scope yet shows promising results (Asher et al., 2017; Barić et al., 2018). Gureje et al. (2015) have suggested CAM options for mental health would fill an affordability and accessibility gap, allowing more individuals to receive treatment and care.

Identifying mental health treatment options that complement existing care or potentially offer a preventative resource would benefit the counseling community. Developing techniques, tools and practices that mitigate or minimize the effects of psychological distress such as anxiety, depression, stress or other mental concerns while improving psychological well-being would help individuals find relief and cope with daily life. A framework that is founded on a complete picture of psychological well-being as discussed above, combined with a holistic approach emphasizing mind, body and spirit creates a structure that allows for a multimodal practice to manage and improve mental health.

Related Literature

Mental Health

Global healthcare is projected to reach $10 trillion in costs by 2022 and is the one of the fastest growing industries in the United States ("The State of Health Care Industry (2020)," 2020). The World Health Organization (1948) defines health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmary" (Official Records of WHO, no. 2, p. 100). Terms such as burnout, stress, anxiety, depression, emotional fatigue, etc… continue to make headlines and challenge healthcare professionals (Koutsimani et al., 2019). Behavioral health refers to a variety of specialized treatments, professionals and programs that focus on one's mental health and seek to prevent, manage or terminate a continuum of psychological and emotional disorders often linked to burnout, stress and emotional fatigue (Koutsimani et al., 2019).

Mental health has finally become a mainstream conversation and newly accepted concept in the primary care of one's health (Ritchie et al., 2020). C.S. Lewis (1940) wrote about the stigma of mental illness and space between the acceptance of physical and emotional pain

stating, “Mental pain is less dramatic than physical pain, but it is more common and also harder to bear. The frequent attempt to conceal mental pain increases the burden: it is easier to say, ‘My tooth is aching’ than to say, ‘My heart is broken’ (p.102). Healthcare practitioners, specifically integrative mental health clinicians, are helping bridge the gap of conventional and non-conventional treatment modalities in healthcare that consider the whole person (Edwards, 2013; Lake, 2009). These efforts are paving the way for future healthcare workers to provide more comprehensive and practical care for mental health.

Psychological Distress

The experience of mental illness has steadily increased and effected a substantial number of individuals in the United States. It is currently estimated that 1 in 5 Americans will experience a mental illness episode in a given year and that over 50% of all Americans will experience difficulty with mental illness in a lifetime (CDC Mental Health FastStats, 2020). According to the APA (n.d.) psychological distress is defined as:

> a set of painful mental and physical symptoms that are associated with normal fluctuations of mood in most people. In some cases, however, psychological distress may indicate the beginning of major depressive disorder, anxiety disorder, schizophrenia, somatization disorder, or a variety of other clinical conditions. It is thought to be what is assessed by many putative self-report measures of depression and anxiety (para 1).

Arvidsdotter et al. (2015) maintain that psychological distress is frequently correlated with anxiety, depression, worry, sleep-disturbances, stress and other physical ailments. People struggling with psychological distress frequently report difficulties in everyday life, comparison of life to others as less then, negative outlooks and that psychological distress may precede

burnout and exhaustion. Holistic, person-centered approaches are suggested to help support those struggling gain healthier perspectives.

Psychological distress and stress are often used interchangeably in the literature yet there are some minor distinctions. In an attempt to understand the relationship between psychological distress and stress as they relate to lifestyle, McKenzie and Harris (2013) state,

> Psychological distress results from the internal response to external stressors. When individuals encounter a stressful situation, they perform an internal and usually subconscious appraisal of the situation and depending on their beliefs, sense of control, situational demands or constraints, resources such as social network/s, perceptions of harm and coping styles, they will either develop positive or negative feelings and associated physiological changes, with longer term sequelae being somatic health/illness, morale/well-being and social functioning (pp. 1-2).

A complex web of thoughts, behaviors and emotions which impact an individual's perceptions and experiences of stress often resulting in psychological distress has been identified. Stress is both experienced externally and internalized (McKenzie & Harris, 2013).

Stress

A basic definition of stress involves notions of influence, pressure, tension, emphasis, weight and strain (Definition of STRESS, n.d.). In mental health, something that causes distress is often the primary assumption when referring to stress, associating negative feelings or emotions with an external or internal disturbance, pressure or demand (What Is Stress, n.d.). Sapolsky (2004) describes it in the following manner, "A stressor is anything in the outside world that knocks you out of homeostatic balance, and the stress-response is what your body does to reestablish homeostasis" (p.6). A stress response to threats sets in motion a number of

physical and psychological responses (Daviu et al., 2019). Described as “a core lifestyle issue” (Braun et al. 2016, p. 235), stress is slowly killing us (Prior et al., 2018). Stress is increasingly common with most people experiencing some level of stress in their lifetime and it has become a health issue that is now showing up in primary medical care due to the variety of physical and emotional symptoms that are affecting individuals at home, work and in most areas of their lives (Prior et al., 2018).

The American Institute of Stress (Marksberry, n.d.) references fifty signs and symptoms of stress ranging from the physical (i.e., headaches, digestive problems, heart palpitation, difficulty breathing, weakened immune system, sleep problems, etc…) to a diversity of cognitive and emotional indicators (i.e., racing thoughts, easily agitated, overwhelmed, loneliness, worthlessness, numb, defensiveness, communication problems, etc…). The symptoms of stress vary per individual however the most frequently reported symptoms include irritability, fatigue, lack of motivation, worry, headaches, muscle tension and appetite changes (Hull, 2020). Problems related to weight, heart disease, sleep disturbances, concentration problems, depression, anxiety, economic impacts, relationship distress and spiritual disconnect are also cited as stress related obstacles (Hull, 2020; What Is Stress, n.d.). It is clear that stress has moved from an abstract concept to a very real health crisis.

The annual APA (2020) Stress in America report considers a variety of factors affecting American’s levels of stress. Not surprising the COVID-19 pandemic has shifted the world of mental health and how people are coping with often radical changes to economics, politics and health. The report indicates 49% of adults state increased physical and emotional responses to stress such as tension, mood swings, anger and verbal aggression. Fear related to the future, especially in uncertain times, has escalated to 77% of adults with specific stress related concerns

to future. Gen Z adults (ages 18-23) reported the highest numbers of mental health decline in the last year at 34% and 51% feel it is impossible to plan for their future. 21% of Gen X (ages 42-55) report mental health is worse in the last year with 19% of Millennials (21-41) and 12% of Boomers (56-74). Stress in our current culture is clearly a problem and one that is directly impacting mental health.

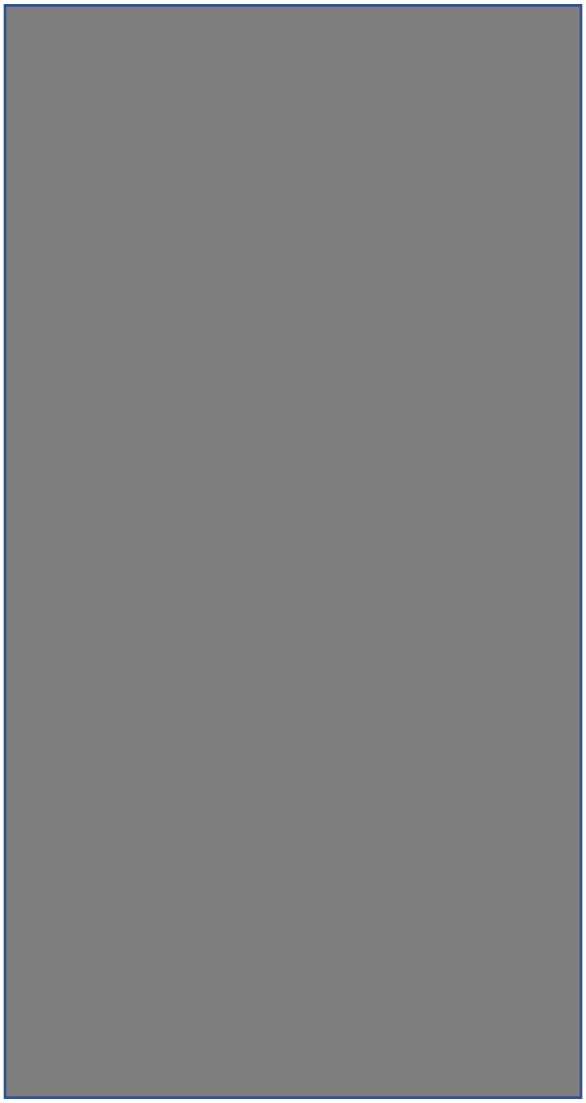
It also appears that gender plays a role in stress levels and responses to stress. The APA (2012) studied gender roles specifically as they relate to stress and determined that 28% of women report high levels of stress compared to 20% of men. Women report greater emotional and physical symptoms of stress and their perceptions of achieving success in areas of work and family are lower than men resulting in higher reports of overall stress. Married women report higher levels of stress compared to singles and women in general report sleep problems as a primary indicator of stress. In terms of stress management, men and women choose different methods. Women tend to choose activities of reading, eating, time with family and religious involvement while men choose exercise, sports, music and doing nothing to try to manage their stress as their top methods for stress management.

The concept of stress is directly correlated with a threat, both perceived or real (Daviu et al., 2019). One's mental response to these threats often triggers internal "systemic stressors" (p.1) that activate the body to respond to the threat (Daviu et al., 2019). The stress response is very physical thus the strong connection to physical health complaints and very often frequent visits to primary care offices and emergency rooms (Sapolsky, 2004). Stress hormones are quickly dispersed, and the body goes into "fight or flight" (What Is Stress, n.d.). Fight or flight is a common term but one that is not often understood in terms of how stress is affecting the whole

person, especially from a mental health perspective. The following is helpful example of how stress effects the entire body.

Figure 2

The Effects of Stress on Your Body



Note: An overview of the general health effects of stress on the body https://www.stress.org/daily-life. Removed for copyright.

Perception is a critical factor when it comes to how an individual responds to stressors. Often it is the perception of stress that is initiating the fight or flight system. Phillips (2015) best sums it up in the following description,

> Perceived stress is the feelings or thoughts that an individual has about how much stress they are under at a given point in time or over a given time period.
>
> Perceived stress incorporates feelings about the uncontrollability and unpredictability of one's life, how often one has to deal with irritating hassles, how much change is occurring in one's life, and confidence in one's ability to deal with problems or difficulties. It is not measuring the types or frequencies of stressful events which have happened to a person, but rather how an individual feels about the general stressfulness of their life and their ability to handle such stress.
>
> Individuals may suffer similar negative life events but appraise the impact or severity of these to different extents as a result of factors such as personality, coping resources, and support. In this way, perceived stress reflects the interaction between an individual and their environment which they appraise as threatening or overwhelming their resources in a way which will affect their well-being (Lazarus and Folkman, 1984). Perceived stress is commonly measured as the frequency of such feelings via a questionnaire such as the Perceived Stress Scale (Cohen et al., 1983) (p. 1).

How stress is linked to anxiety is bi-directional (Daviu et al., 2019). In considering the above description of perceived stress what often makes the difference in determining stress and anxiety is the anticipation element of stress. Davui et al. (2019) explains,

> The concept of anticipation in the stress response is critical in understanding the relationship between stress and anxiety. In that regard, stress as a physiological reaction

> to a stimulus is accompanied by a concomitant emotional response. That emotional response is determined in part by the perception of the threat imminence (Anderson & Adolphs, 2014; Davis et al., 2010). According to the definition of The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) (American Psychiatric Association, 2013) "Fear is the emotional response to a real or perceived imminent threat, whereas anxiety is the anticipation of a future threat". Thus, the emotional state that our body experiences differs between fear when we encounter an aggressive dog, and anxiety when we know we will visit a friend which has an aggressive dog. Anxiety is defined as a temporally diffused emotional state caused by a potentially harmful situation, with the probability or occurrence of harm being low or uncertain (pp.1-2).

Stress and anxiety are often used interchangeably but as we are discussing there are important distinctions. Pereira-Morales et al. (2019) examined perceived stress as a moderator between neuroticism, depression and anxiety and found that maladaptive ways of responding to stress increased anxiety symptoms and that when individuals are more sensitive to stress, their likelihood of experiencing anxiety increases.

Anxiety

One of the greatest effects of stress on mental health is the growing anxiety epidemic (Davey, 2020). Anxiety is a characteristic response to stress and experienced by almost everyone at some point in their lifetime. Daviu et al. (2019) highlight the connection between stress, fear and anxiety. They also emphasize anticipation. Anticipation of a threat in the future is a critical distinction in the understanding of anxiety. Fear is clear, present and immediate, while anxiety is a narrative about the future encompassing uncertainty, estimation, anticipation and worry. Anticipation of a threat in itself can be beneficial cognitively and physically when the treat is

likely to occur (i.e., a hurricane is coming; I've been late to work five times in the last month I may get fired) however for most individuals the anxiety based threat response is distorted, inaccurate, excessive or extreme in anticipation despite any predictability that the worrisome threat could or would occur (i.e., she is mad at me because she did not text back immediately; I am thinking it so it must be true) (Bennett et al., 2018). In today's anxiety epidemic people are struggling with excessive worry and concern over future threats creating a heightened sense of awareness that has individuals on edge, reactive and emotional, triggering a variety of hypervigilance physical responses such as startling, staring, heart racing, headaches, etc…(Bennett et al., 2018; Davey, 2020; Geng et al., 2018). Anxiety although highly cognitive and originating from ultimately a false narrative, results in behavioral problems and influences performance.

Modern-day anxiety is largely rooted in stress (Davey, 2020; Hart, 2001). People are experiencing a wide variety of stressors in comparison to our past. Food, shelter and basic poverty are no longer the primary concerns (Hart, 2001). In today's world the economy, employment, divorce, death, loneliness, health, technology, FOMO (fear of missing out), climate change, moral values and mental health rank the highest in what stresses American's out (Davey, 2020; Hart, 2001; Marksberry, n.d.; Stress in America™ 2019, n.d.). These worries and concerns about the future are fueling the narrative creating anticipation of threats. People are exhausted, stressed and reaching high rates of burnout (Koutsimani et al., 2019).

On the moderate to extreme end of anxiety, we are seeing a significant increase in anxiety disorders (Anxiety Disorders | NAMI: National Alliance on Mental Illness, n.d.; Davey, 2020; Facts & Statistics | Anxiety and Depression Association of America, ADAA, n.d.-a). Anxiety is proposed as the most common mental illness with over 40 million Americans struggling with an

anxiety disorder each year and although highly treatable, only 39% of those who suffer will ask for help (Facts & Statistics | Anxiety and Depression Association of America, ADAA, n.d.-b). Generalized Anxiety Disorder (GAD) is the most prevalent anxiety disorder experienced by Americans (Anxiety Disorders | NAMI: National Alliance on Mental Illness, n.d.; Facts & Statistics | Anxiety and Depression Association of America, ADAA, n.d.-a; Newman & Przeworski, 2018). GAD as defined by the DSM-5 (American Psychological Association of America, 2013) states,

A. Excessive anxiety and worry (apprehensive expectation), occurring more days than not for at least 6 months, about a number of events or activities (such as work or school performance).

B. The individual finds it difficult to control the worry.

C. The anxiety and worry are associated with three (or more) of the following six symptoms (with at least some symptoms having been present for more days than not for the past 6 months): Note: Only one item required in children.

    1. Restlessness, feeling keyed up or on edge.

    2. Being easily fatigued.

    3. Difficulty concentrating or mind going blank.

    4. Irritability.

    5. Muscle tension.

    6. Sleep disturbance (difficulty falling or staying asleep, or restless, unsatisfying sleep).

D. The anxiety, worry, or physical symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

> E. The disturbance is not attributable to the physiological effects of a substance (e.g., a drug of abuse, a medication) or another medical condition (e.g., hyperthyroidism).
>
> F. The disturbance is not better explained by another medical disorder (e.g., anxiety or worry about having panic attacks in panic disorder, negative evaluation in social anxiety disorder [social phobia], contamination or other obsessions in obsessive-compulsive disorder, separation from attachment figures in separation anxiety disorder, reminders of traumatic events in posttraumatic stress disorder, gaining weight in anorexia nervosa, physical complaints in somatic symptom disorder, perceived appearance flaws in body dysmorphic disorder, having a serious illness in illness anxiety disorder, or the content of delusional beliefs in schizophrenia or delusional disorder (p. 222).

Newman and Przeworski (2018) believe 6.2% of the population in the United States will suffer with GAD over their lifetime, noting it is chronic and unlikely to be cured. Mineka and Zinbarg (2006) state the following regarding anxiety disorders, specifically GAD,

> people who have a history of uncontrollable and unpredictable life stress may be especially prone to developing GAD. Worry about possible bad outcomes or dangerous events, the central characteristic of GAD, seems to serve as a cognitive avoidance response that is reinforced because it suppresses emotional and physiological responding. Because attempts to suppress or control worry may lead to more negative intrusive thoughts, perceptions of uncontrollability over worry may develop, which is in turn associated with greater anxiety, leading to a vicious cycle (p. 20).

Asher et al. (2017) address the healthcare concerns related to GAD stating,

> 5% to 8% of primary care visits are estimated to be associated with GAD. In addition to impairments in mental health, patients with GAD often experience chronic pain, impaired

> physical function, and difficulty with activities of daily life. Together this accelerates the need to reconsider the management of this disorder and expand upon the traditional medical model to a more integrative approach, focusing on self-care (p. 853).

The connection between stress and anxiety is clear with an individual's level dependent on a variety of factors and exhibiting a wide range of symptoms. The anxiety epidemic, driven by a multitude of stressors is clearly a serious health concern and that identifying ways of coping is imperative.

Mental Health Coping

A brief Google search of "coping with mental health" yields over eighty-two million results and at quick glance a key theme is related to the management of stress. A brief search of "coping with stress" yields over one billion results. This indicates that not only is the subject a prominent issue, figuring out how to cope is clearly of personal interest. Coping with mental health, in particular stress and anxiety, is an individual journey that requires an assortment of tools, strategies, techniques and practices learned through an array of resources including books, counselors, teachers, programs, videos, religion and more (Biringer et al., 2016). There are literally thousands of ideas related to mental health management, specifically for stress and anxiety, yet for the purposes of this study we are going to consider several of the evidence-based ideas that are often applied to a wide range of individuals economically, culturally and demographically. They are briefly discussed below due to their flexibility and adaptability in both formal and informal mental health treatment and practices.

Regarding this study, Cognitive Behavioral Therapy (CBT) techniques and Mindfulness Based Stress Reduction (MBSR) techniques are integrated into the Sabbath-keeping intervention. These common approaches help support the framework for the principles included in Sabbath-

keeping (stop, rest, contemplate, delight), validating the potential effectiveness of Sabbath-keeping as an alternative or supportive approach to mental health. Rest is a key component of Sabbath-keeping practice that relates to both CBT and MBSR and is discussed separately below. A discussion on mental health coping should also consider personality factors that could impact the implementation of such coping skills.

Cognitive Behavioral Therapy (CBT)

Depending on the level of psychological distress one is experiencing it is often recommended that an individual seek some level of professional care for the treatment and coping of their mental health (Managing Stress | NAMI: National Alliance on Mental Illness, n.d.). Professional care incorporates a variety of specialists including counselors, psychologists, psychiatrists, social workers, primary care physicians, nurse practitioners, certified specialists and pastoral counselors, all of whom play a critical role in helping individuals assess, treat and cope with a variety a mental health distress (Types of Mental Health Professionals | NAMI: National Alliance on Mental Illness, n.d.). These professionals are uniquely trained in therapeutic assessment and techniques that teach individuals specific coping skills on how to manage their stress, particularly from a cognitive, emotional and behavioral stance. Once techniques are taught, clients are able to continue the use individually without aid. A variety of support materials are available.

In reviewing the literature on the most common methods for coping with stress, anxiety and improving one's sense of well-being a number of themes emerged. Regardless of the evidence-based therapies and techniques, concepts of cognition, behavior, mindfulness, meditation, rest, breath and relaxation presented. For example, one of the most prevalent treatments used for both stress management and anxiety despite the intensity or severity is the

use of Cognitive Behavioral Therapy (CBT). CBT has a long history within the counseling and psychology community for treating a wide range of mental health problems and has been titled the "Gold Standard" (p.1) for psychotherapy (David et al., 2018). It has been researched and tested more than any other form of treatment and is the foundational model for several others forms of therapy (i.e., Dialectical Behavioral Therapy (DBT) and Acceptance and Commitment Therapy (ACT) are just a few (David et al., 2018).

The fundamentals of CBT help individuals identify and change distorted cognitive thoughts and beliefs that affect their emotional state and ultimately influence behavioral choices. Self-awareness of how one's thoughts, feelings and behavior affect their life and those around them helps develop specific tools and techniques to make changes that ultimately reduce their stress. CBT is now so mainstream that its basic principles are taught in a variety of courses, books and programs across settings such as schools, online, religious environments and more (Gillihan, 2016). Developed by Judith and Aaron Beck of the Beck Institute for Cognitive Behavioral Therapy, the basic tenets of CBT hold that individuals have maladaptive beliefs about the world and themselves that affect their emotions and ultimately their behavior and interactions with others (Hofmann et al., 2012). Individuals become active participants in their "treatment" and use a variety of techniques and approaches to help solve the problematic cognitions (Hofmann et al., 2012). In taking time to review their beliefs, they ultimately adjust behavior that can reduce stress. The Beck institute provides a wealth of resources for professionals and individuals to practice CBT in both formal and informal settings.

Mindfulness-Based Stress Reduction (MBSR)

Mindfulness-based treatments for stress reduction (MBSR) and other various mental health concerns such as anxiety are becoming very popular in the professional therapeutic

community. Jon Kabat-Zinn is considered the leading expert in the practice of mindfulness meditation, developing the study of MBSR. He has written numerous publications and crafted several group-based programs that teach individuals to help manage suffering due to physical and psychological distress in everyday life (Crane et al., 2017). Crane et al. (2017) outlines the key aspects:

> MBSR is informed by theories and practices that draw from a 1) confluence of contemplative traditions, science, and the major disciplines of medicine, psychology and education. 2) Is underpinned by a model of human experience which addresses the causes of human distress and the pathways to relieving it. 3) Develops a new relationship with experience characterized by present moment focus, decentering and an approach orientation. 4) Supports the development of greater attentional, emotional and behavioral self-regulation, as well as positive qualities such as compassion, wisdom, equanimity. 5) Engages the participant in a sustained intensive training in mindfulness meditation practice, in an experiential inquiry-based learning process and in exercises to develop insight and understanding (p. 993).

MBSR is a widely accepted both formal and informal practice in which individuals suffering with everyday distress including anxiety have found relief (Crane et al., 2017; Kabat-Zinn, 2001; Parsons et al., 2017; Santorelli et al., 2017). Key tenants of MBSR such as slowing down, becoming present and creating greater self-awareness have proven to be beneficial in stress reduction and overall increased sense of well-being (Crane et al., 2017. Sabbath-keeping encourages these practices. Individuals can study these in more depth to improve their Sabbath-keeping practice to find increased benefit. Spending weeks, even months in therapeutic treatment is not always feasible and professionals are developing new more affordable and time efficient

methods to help individuals ease the burden of stress and anxiety. In this study, participants are taught the basic principles related to mindfulness and contemplation and educated on how self-implementation can be of benefit.

Rest

The concept of rest is one of the most common solutions to the problem of burn-out and stress (Helvig et al., 2015, Kessler, 2012, Wirzba & Berry, 2006, comer, 2019, Chan et al., 2019; Ishak, 2020; White et al., 2015). For years, the notion of sabbatical has been used in a variety of employment settings, indicating an employee or individual needed respite, a break from work (Davidson et al., 2010). Sabbatical leave intends to improve psychological well-being and positive psychology to ultimately improve workplace productivity (Davidson et al., 2010). Rooted in the Sabbath, sabbaticals are mainstream in current culture in comparison to the idea of Sabbath, yet at their core the intention is a rest from work (Kimball, 1978). Rest is not just associated with sleep but tied to relaxation encompassing feelings of peace, restoration, comfort, stillness, and positive emotions (Ishak, 2020). Rest is affiliated with concepts of time in nature, meditation, and a variety of activities that invoke a mental state of rest (Scazzero, 2015, Jabr, 2013, Muller, 2013).

In the study of rest, it has been observed that two key elements exist, it is individual including a variety of activities and involves a change of state (Asp, 2015). The notion of work-life balance is frequently discussed and taught yet many are often afraid to take the necessary breaks one might need to find true rest (Kessler, 2012). Rest is considered a radical act in the hustle culture of today (Comer, 2019). In Maslow's hierarchy of needs, at the physiological level, rest is considered a basic need for humanity (Nurit & Michal, 2003). Taking regular breaks has shown to improve general health and well-being, including the reduction of anxiety and

stress (Swoboda, 2018; Ishak, 2020, Kessler, 2012, Noordsy, 2019; White et al., 2015). An argument can be made that the brain needs downtime, periods of rest or retreat to improve memory, attention, motivation, creativity, and production (Jabr, 2013).

Personality

An individual's mental health is impacted by personality (McCrae & Costa, 1996). Mental health is frequently determined by how an individual copes with a variety of stressors (Park & Iacocca, 2014). Personality may play a role in coping. McCrae and Costa (1996) developed the most widely used Five Factor Model of personality which includes the five traits: extroversion, agreeableness, openness to experience, conscientiousness, and neuroticism. In the assessment of personality, individuals typically score in a low to high range within each of the five factors. Low scores in neuroticism may be described as calm, stable, satisfied, and even tempered whereas higher scores may be described as worrisome, emotional, self-conscious, and temperamental. Low scores in Extroversion may be described as quiet, reserved, passive, and loner whereas higher scores described as passionate, talkative, social, and affectionate. Low scores in openness to experience may be described as uninventive, routine, conventional and pragmatic whereas high scores may be described as liberal, creative, curious, and imaginative. Low scores in agreeableness may be described as critical, suspicious, irritable, and antagonistic whereas high scores may be described as generous, trusting, flexible and understanding. Low scores in conscientiousness may be described as lazy, disorganized, negligent, and senseless whereas high scores may be described as organized, ambitious, hardworking, and punctual.

John et al. (2008) wrote about the taxonomy of the Big Five with the introductions of a variety of Big Five assessments developed from the 1980's through 2009. Further descriptions regarding the specific traits are discussed in Figure 3 (see below).

Figure 3

Big Five Personality Domains Described

	Extroversion	Agreeableness	Conscientiousness	Openness	Neuroticism
Labels & Traits	Energy, sociability, enthusiasm, assertive, enthusiasm, activity	Modesty, affection, altruism, trust, tender-minded	Impulse control, constraint, delayed gratification, planning, organizing, prioritize tasks	Originality and open-minded, learning	Nervousness, negative emotions, tension, anxiety
Behavioral examples	approach strangers, leadership roles, takes initiative, positive expression of emotion, many friends.	Comforts others, emphasize good qualities in others, let people borrow things, compliance	Arriving early, double-checking, completing tasks, high job performance, treatment compliance	Stimulating activities, joy of learning, educated,	Poorer coping, higher burnout, inability to relax, suspicious

Note: Summarized information from John et al. (2008)

As one starts to look deeper at the connection between personality and mental health, specifically anxiety and stress, there are a few key personality traits that affect an individual's ability to specifically cope with these concerns and ultimately have a negative impact on well-being. As mentioned above, Ryff and Keyes are premier investigators of well-being. Joshanloo and Nostratabadi (2009) investigated the Ryff and Keyes research in comparison to personality factors that may impact one's sense of well-being. In their examination of the literature and own research it was determined that affective components of well-being are more strongly correlated to personality than cognitive. Extroversion is correlated to pleasant affect; both neuroticism and Extroversion influence life satisfaction affecting happiness; openness is related to increased positive emotional states; Extroversion and conscientiousness are related to self-acceptance, mastery of environment and life purpose; autonomy was related to Extroversion but strongly correlated to neuroticism. Their study noted that participants scoring higher in Extroversion, agreeableness and conscientiousness were defined as flourishing in comparison to those who scored lower and defined as languishing. Lamers et al. (2012) had similar findings in an

assessment of Big Five personality traits, psychopathology, and positive mental health. They agree that higher levels of neuroticism are correlated with lower levels of well-being and higher levels of agreeableness, conscientiousness and openness relate to an overall positive sense of well-being. One's level of emotional stability is directly linked to psychopathology and personality factors of Extroversion and agreeableness are considered significant attributes to positive mental health.

Stress and anxiety responses are connected to specific personality traits (Brandes & Bienvenu, 2006; Ebstrup et al., 2011). According to Brandes and Bienvenu (2006), the two main personality factors related to anxiety are Extroversion and neuroticism. Directly related to poor emotional coping, those with higher levels of neuroticism tend to report more anger, sadness, anxiety, and insecurity. Those with lower levels of extroversion (i.e. introversion) may experience more anxiety including social anxieties. In a study of perceived stress, coping and personality, Ebstrup et al. (2011) found high neuroticism to be the strongest correlation to poor coping and a moderate effect size for lower extroversion and lower conscientiousness. The consensus in the existing literature on anxiety and personality is the primary association between high neuroticism, lower Extroversion, and anxiety (Brandes & Bienvenu, 2006; Ebstrup et al., 2011, Karsten et al., 2012, Lamers et al., 201).

Religious and Spiritual Coping

Religiosity and spirituality although similar are not synonymous. Religiosity typically refers to the practice and participation of an organized belief system which includes gatherings, worship, practices and rituals while spirituality denotes a sense of meaning and purpose by means of connection to self, environment and a higher power or source (Villani et al., 2019; Yotter & Swank, 2017). In the field of mental health, religious and/or spiritual coping has

become more widely accepted and adapted to many of the existing evidence-based treatments such as CBT and MBSR (Anderson et al, 2015; Captari et al., 2018). It has been noted that both religious and spiritually minded individuals who seek treatment for mental health concerns such as stress and anxiety seek to integrate their beliefs and coping practices within both the alleviation of symptoms and their specific religious/spiritual framework (Captari et al., 2018). They seek to integrate practices of prayer, meditation, church attendance, scripture-reading and various other traditions to support mental health (Anderson et al, 2015; Gonçalves et al., 2015). Several studies have investigated the effectiveness of the use or integration of relevant spiritual or religious practices in mental health care with positive results indicating the adaption of such practices do benefit those who seek this type of consideration (Anderson et al, 2015; Fabricatore et al., 2004; Gonçalves et al., 2015; Koenig, 2009; Krok, 2008).

Sabbath-keeping

Religiosity and spirituality have distinct characteristics used for coping which may include rituals, practices, prayer, gatherings, worship and contemplation (Hofmann et al., 2012). These traditions have been assessed for their effectiveness in assisting with a variety of mental health concerns including anxiety, stress and well-being. A general consensus of the literature indicates that individuals who utilize religious and spiritual coping practices for preventative and curative care frequently report increased life satisfaction, positive well-being and overall better mental health (García et al., 2017; Ismail, 2012; Peres et al., 2018; Swoboda, 2018; Villani et al., 2019). One particular spiritual discipline that is used among a variety of religious groups is the practice of Sabbath-keeping.

Although an ancient practice as established in the biblical Creation story and Ten Commandments, Sabbath-keeping is not only utilized in various religious communities but has

recently become a suggested discipline for work-life balance and stress management (Kessler, 2012; Sleeth, 2012). The practice of Sabbath-keeping has been minimally researched, especially outside the context of spirituality in domains such as emotional or mental health. If America is in state of national mental health crisis as it relates to stress, identifying new ways to prevent or treat stress related mental illness outside the traditional models could be helpful. The spiritual discipline of Sabbath-keeping may assist in the overall management of stress.

The practice of slowing down to rest, taking a break from work and the routine of everyday life to contemplate, gather in community and nourish one's soul as a method for coping is not a new age concept but a principle taught in the story of Creation. Genesis 2:2-3 (NIV) states, "By the seventh day God had finished the work he had been doing; so on the seventh day he rested from all his work. Then God blessed the seventh day and made it holy, because on it he rested from all the work of creating that he had done"; and Exodus 20:8-10 (NIV) states, "Remember the Sabbath day by keeping it holy. Six days you shall labor and do all your work, but the seventh day is a sabbath to the LORD your God. On it you shall not do any work, neither you, nor your son or daughter, nor your male or female servant, nor your animals, nor any foreigner residing in your towns. For in six days the LORD made the heavens and the earth, the sea, and all that is in them, but he rested on the seventh day. Therefore, the LORD blessed the Sabbath day and made it holy". These two passages of scripture are foundational to the principle of Sabbath and are frequently examined in depth within the entire context of the Bible as evidence for the significance of Sabbath practice.

In traditional Sabbath-keeping study and religious implication, weekly Sabbath-keeping is considered a commandment from the Lord with intent and purpose to establish a work-rest rhythm to life (Sleeth, 2012; Wirzba & Berry, 2006). Religious scholars believe the fourth

commandment of Sabbath practice is designed to strengthen one's connection to God, self and others through mental and physical rest, celebration and communion. The underlying framework of stop, rest, contemplate and delight is designed by God to give man the necessary pause throughout the week to maintain a sacred rhythm (Scazzero, 2015). In Genesis 2, God specifically chooses one day out of seven to cease work related activity, declaring it "holy" (vs. 3). Jesus in Mark 2:27 (NIV) states, "The Sabbath was made for man, not man made for the Sabbath" which indicates not only a gift to man, but a practice designed to specifically help man. Sabbath creates the space for active reflection and perspective of one's life, providing the gift of both time and rest to strengthen spiritual, emotional, mental, physical and relational well-being.

Based on the aforementioned biblical scriptures and statistical review of stress and anxiety in the United States, it seems obvious that one specific discipline that may provide assistance in the reduction of anxiety and overall management of stress is the practice of weekly Sabbath-keeping. Sabbath-keeping has a variety of meanings and definitions depending on the practitioner, however common principles used to distinguish the custom include stopping all paid and unpaid work, resting, spiritual contemplation and activities that bring an individual delight for a designated period of time typically ranging 12-24 hours (Muller, 2013; Scazzero, 2015; Speedling, 2019). These leisure activities emphasis the practice of self-care integrating emotional, physical, spiritual and relational health (Muller, 2013; Scazzero, 2015; Speedling, 2019). The ritual use of Sabbath-keeping today is typically found in religious communities such as Judaism, Christianity and Seventh Day Adventist (Superville et al., 2014), however the concept of Sabbath-keeping has become a point of discussion in the business community as more and more individuals are finding themselves on the brink of burn-out feeling overwhelmed, stressed and anxious (Comer, 2019; Scazzero, 2015; Sleeth, 2012; Swoboda, 2018).

Sabbath-keeping and Mental Health

The existing literature and discussion on Sabbath-keeping outside of theological discussions is limited. In the eighties Dr. Alan Goldberg (Goldberg, 1986) began to make the case for perceived mental health benefits associated with Sabbath-keeping. It was his observation that the mental health community was looking for new programs and avenues to prevent mental health problems and identify ways to enhance well-being. These approaches would entail mixed groups of people who are both well and struggling to expose and promote healthy relationships, groups that promote overall life wellness and opportunities for individuals to structure time to enhance better self and other awareness. He proposed Sabbath-keeping as a weekly means to rest from the everyday strain of life thus reducing overall stress and psychological distress. He states, "the Sabbath reintroduces a rhythm into the cycle of everyday life which restores "the lost dialectic of action and response, of interaction and letting be" (p.238). Goldberg viewed Sabbath-keeping as a time for connection to others, for community, to rest and to disengage in the normal activities to enjoy other forms of renewal and restoration thus creating an ideal solution to mental health prevention (Goldberg, 1986).

In one of the few studies that specifically addresses mental health and Sabbath-keeping Hough et al. (2018) investigated existing clergy members who consistently practice Sabbath-keeping and demonstrated with statistical significance that a connection to regular Sabbath-keeping was correlated with better mental health outcomes of reported lower stress, anxiety and depression, as well as increased well-being. It is their suggestion that more studies consider mental health and Sabbath-keeping correlations. Dein and Lowenthal (2013) also explored the mental health benefits of Sabbath-keeping in Orthodox Jews with the belief that Sabbath-keeping would provide a resource for coping with stress. Their results indicate an increased positive

mood and overall sense of well-being however for some participants anxiety was reported higher due to the increased time to think and weekly preparations for Sabbath-keeping. Worry specifically was found to increase in some participants but not all.

In a mediational analysis of Sabbath-keeping to health and well-being, Superville et al. (2014) examined the limited existing research and noted the promotion of a healthier lifestyle via Sabbath-keeping, specifically in Seventh-day Adventists, makes a viable case for Sabbath-keeping as a coping resource. A connection between consistent Sabbath-keeping was correlated to religious coping which in turn was correlated to increased support, better dietary choices, increased exercise which all impacted mental health positively. It is their suggestion that Sabbath-keeping as religious coping be further investigated for its potential mental health impacts. Speedling (2019) took a stronger position in considering Sabbath-keeping as a holistic health practice assessing the overall self-care, relationships self-awareness and spiritual impacts of consistent weekly Sabbath-keeping. In her interviews of a variety of Sabbath-keepers, various clergy and individuals who choose to practice Sabbath-keeping, common themes of well-being and improved mental health emerged. There was general consensus that intentional Sabbath-keeping had significant positive impacts on their overall health. It was the researcher's belief that more studies on Sabbath-keeping and well-being on diverse populations would provide further evidence for the use of Sabbath-keeping as a holistic health practice.

Summary

Despite numerous approaches to mental health care, people in the United States continue to struggle with psychological distress, in particular anxiety and stress. Mental health providers have specific tools to assist clients in creating personalized self-care plans to prevent and find relief from such afflictions, however the cost is often high and many who need help simply do

not ask and do not receive. The Bible, an ancient text that many believe holds the answers to deeper life questions and problems, provides a spiritual discipline designed to address humanity's problem of burnout, fatigue, stress and laboring called Sabbath. The practice of Sabbath-keeping provides individuals a weekly reprieve from everyday life to connect with God, self and others. It is designed to give the body and mind a time of rest in order for one to continue their daily work-life responsibilities. This under-observed and under-utilized discipline has demonstrated through other studies that it may hold the key to dealing with our culture of stress and worry by simply practicing the core principles each week.

Chapter Three: Methods

Overview

The intent of this study is to examine the efficacy of a psycho-educational Sabbath-keeping intervention on levels of stress, anxiety, and psychological well-being. Stress exacerbates a variety of mental health conditions (Managing Stress | NAMI: National Alliance on Mental Illness, n.d.). Understanding the possible link between psychological well-being and Sabbath-keeping would provide an additional coping skill in the mental health community, which is continually looking for new ways to help people find relief. This single-subject multiple baseline design assesses the education and use of Sabbath-keeping on the impact of stress, anxiety and well-being. The following chapter will discuss the methods and procedures used in the construction of the study. A detailed account of the design, setting, participants, data collection, analysis, validity and ethical considerations is provided.

Design

This quantitative study used a single-subject multiple baseline research design to explore the mental health benefits (i.e., anxiety, stress, psychological well-being) associated with weekly Sabbath-keeping. Eighteen subjects were chosen to participate in a psychoeducational Sabbath-keeping intervention which included assessment at multiple points throughout the study. Participants were randomly assigned to three cohorts (A, B or C), staggering start times for participation in the intervention. Three variables including anxiety, stress and well-being were measured using structured questionnaires. The single-subject research design was chosen as the preferred method because of the across subject multiple baseline structure.

Single-subject research design (SSRD) is frequently used for research purposes in the fields of psychology, social work and counseling due to its compatibility with a clinical setting

and effective evaluation of interventions and treatment (Bouwmeester & Jongerling, 2020; Engel & Schutt, 2016; Foster, 2010). Determining the helpfulness of an intervention can be applied to either an individual or group and is often defined by its ability to allow the group to be treated as a single entity (Engel & Schutt, 2016; Foster, 2010). Four essential elements in SSRD include a targeted goal, repeated measurements of the dependent variable, a baseline phase (A) and a treatment phase (B) which allow researchers to observe the direct impact of an intervention on the subject (Engel & Schutt, 2016; Heppner et al., 2008). With no formal control group, the individual subject acts as their own experimental control and baseline measurements are employed to establish a clear pattern of the subject pre-intervention.

Participants in this study were assessed at week one for baseline measurements across four scales measuring physical and cognitive traits of anxiety, stress, and psychological well-being. A fifth measure was used at baseline for secondary analysis of personality and its impact on study results. The initial baseline assessment is crucial to the study so the researcher can clearly identify if a change has occurred (Heppner et al., 2008). The baseline phase is typically described as phase A within the SSRD structure and provides researchers the data needed pre-treatment. Phase B is commonly referred to as the treatment phase in which researchers administer the intervention and then measure subjects creating what is universally described as an A-B configuration (Foster, 2010). To enhance the validity and strength of the study, an across subject's multiple baseline design was chosen. This framework is a series of A-B designs replicated by either same individuals across behaviors or settings, or the same behavior across varying individuals (Foster, 2010; Price et al., 2017). This study measured the use of Sabbath-keeping (behavior) across subjects, addressing the targeted problem of psychological distress.

Each participant received an identical psychoeducational intervention (independent variable) at staggered start times and assessed at multiple times throughout the treatment phase.

Introducing the intervention at varying times across subjects strengthens the validity of this model, as does repeated measurements by allowing researchers to help guard against threats to internal validity such as maturation, history, testing, instrumentation and statistical regression (Bouwmeester & Jongerling, 2020; Engel & Schutt, 2016). When dependent variables are measured in conjunction with participants receiving the intervention at varying times, the likelihood of coincidence is decreased (Price et al., 2015). Due to the lack of a control group, in this study, the multiple baseline design with the intervention given at three differing starts allowed the researcher to identify if there is a possible connection between the intervention and the dependent measures. Having a targeted outcome allows the researcher to determine if the applied treatment and independent variable is meeting the targeted goal. In the case of this study, the targeted goal is improved mental health by the reduction of perceived stress and anxiety, as well as the improved sense of well-being.

Assessing the use of Sabbath-keeping for psychological well-being offers the counseling community an opportunity to test new methodology and therefore new or more helpful information for clinicians (Heppner et al., 2008). Foster (2010) argues that SSRD is easily adapted into clinical practice and helps further evidence-based treatments for understanding and addressing human behavior. Foster also believes the SSRD, specifically a multiple baseline construction, should be utilized more in counseling practices with clients to not only improve interventions but to evaluate the effectiveness of the practice of counseling.

Research Questions

RQ1- Do participants who receive a Sabbath-keeping psychoeducational intervention have lower levels of anxiety compared to participants that do not receive the Sabbath-keeping psychoeducational intervention?

RQ2 – Do participants who receive a Sabbath-keeping psychoeducational intervention have lower levels of stress compared to participants that do not receive the Sabbath-keeping psychoeducational intervention?

RQ3 – Do participants who receive a Sabbath-keeping psychoeducational intervention have higher psychological well-being compared to participants that do not receive the Sabbath-keeping psychoeducational intervention?

Hypothesis(es)

H_a1: Participants who receive a Sabbath-keeping intervention will report reduced anxiety symptoms upon completion of a Sabbath-keeping intervention.

H_a2: Participants who receive a Sabbath-keeping intervention will report reduced stress upon completion of a Sabbath-keeping intervention.

H_a3: Participants who receive a Sabbath-keeping intervention will report improved psychological well-being upon completion of a Sabbath-keeping intervention.

Participants & Setting

Recruitment

Previous research has focused primarily on adult men in pastoral roles or participants in which Sabbath-keeping is a fundamental practice of their religious belief system (i.e. Judaism) or an established spiritual discipline practice. This study utilized a general adult (ages 18 and over)

population of men and women with no or inconsistent (i.e., they may have tried to establish Sabbath-keeping in the past or on occasion but do not practice Sabbath-keeping currently) Sabbath-keeping experience. Using a non-probability snowball sampling method, participants were recruited via social media and word of mouth. The snowball sampling method was chosen for its frequent use in sociological studies and smaller populations (Etikan et al., 2015). Specifically, an exponential non-discriminative snowball sampling was used to allow participants who are willing to recruit other potential subjects for the study but were not required to do so (Etikan et al., 2015). Social media methods of Facebook and Instagram were selected for advertisement of the study. This methodology was chosen due to its word-of-mouth approach. Once the sample was recruited, a clearer representation of the demographics (i.e., gender, ethnicity, age, residence, religious affiliation) of the sample was established. This study was comprised of 17 females and 1 male, with an average participant age of 43. Most participants identified as Christian and lived in Florida.

Participants were given the opportunity to receive compensation for their adherence to the study. All volunteers who completed the study were entered into a raffle to receive one of four $100 Amazon gift cards. Participants were notified via email and gift cards were mailed directly to them.

Setting

The intervention and study occurred virtually through the study's webpage using Teachable.com as the primary platform for administration of the intervention. Assessments were administered via Qualtrics and email using a secured access link for each assessment. Participants watched the video-series at their convenience via a weblink. Participants Sabbath-keeping practice was conducted in the environment of their choice. Traditionally this is done in a

home environment but may incorporate time spent outside in nature, visiting someone else's home, participating in a spiritual service or going to a specific location unique to the individual (Diddams et al., 2004).

Instrumentation

Participants completed four scales on three separate occasions to measure anxiety, stress, and well-being. The Generalized Anxiety Disorder 7 Item Inventory (GAD-7) was used to measure anxiety in combination with the Penn State Worry Questionnaire (PSWQ). To measure stress, the Perceived Stress Scale (PSS) was selected as it considers one's perception of their life stress. The fourth measure is the Warwick-Edinburgh Mental Well-being Scale (WEMWBS) which measures subjective well-being and overall psychological functioning. A fifth measure, The Big Five Inventory (BFI) was administered once at baseline for secondary analysis of personality traits.

The Generalized Anxiety Disorder 7 Item (GAD-7)

Generalized Anxiety Disorder (GAD) is considered one of the most common anxiety disorders in the general population with approximately 3.1% affected (Facts & Statistics | Anxiety and Depression Association of America, ADAA, n.d.). According to Rutter and Brown (2017), "The Generalized Anxiety Disorder Scale-7 (GAD-7) is a 7-item, self-rated scale developed by Spitzer and colleagues (2006) as a screening tool and severity indicator for GAD. It is easily scored and initially was created to increase recognition of GAD in primary care settings (p.1)". Their review of the measure in the general population indicates "good reliability, and good criterion, factorial, and procedural validity (p. 1)". Scores for the GAD-7 are categorized into the following groups: 0-4 *minimal*, 5-9 *mild*, 10-14 *moderate* and 15-21 *severe* (GAD-7 Anxiety Updated, ADAA, n.d.).

In the development of the GAD-7, Spitzer et al. (2006) determined the internal consistency of the GAD-7 to be excellent with a Cronbach a score of .92 and the test-retest reliability to be good with an intraclass score of 0.83. Their assessment is one of few that directly correlates to the DSM criteria for GAD and it demonstrated high construct validity by exhibiting increasing GAD-7 scores with increased reports of functional impairment and increased healthcare use. The GAD-7 asks about anxiety symptoms experienced in the last two weeks. Using a four-point Likert scale ranging from 0 = *not at all,* 1 = *several days,* 2 = *more than half the days* to 3 = *nearly every day*, sample questions from the GAD-7 include, "feeling nervous anxious or on edge", "becoming easily annoyed or irritable", worrying too much about certain things" and "feeling afraid as if something awful might happen" (Spitzer et al., 2006). A copy of the GAD-7 can be found in Appendix A.

The Penn State Worry Questionnaire (PSWQ)

Worry is a central component of anxiety and occurs in all of the anxiety disorders to the extent that researchers have now determined it to be an "independent construct of anxiety" (van Rijsoort et al., 1999. p.297). The Penn State Worry Questionnaire (PSWQ) was developed to understand the nature and development of worry in anxiety by measuring the excessiveness and controllability of worry across time and situation (Meyer et al., 1990). The 16-item self-report measure uses a Likert scale of 1 to 5 ranging from *1 = not at all typical of me* to 5 = *very typical of me* with possible outcome scores of 16 to 80 (Meyer et al., 1990). Interpretation of the scores range from 29 or less as *not anxious or worrisome*, 30-52 *bothered by worries but not clinical*, 52-65 *some problematic worry with treatment beneficial* and 66 or higher as *chronic worry and in need of treatment* ("Penn State Worry Questionnaire (PSWQ)," 2021)

Items 1, 3, 8, 10 and 11 are reversed scored with sample questions such as “If I do not have enough time to do everything, I do not worry about it”, “I do not tend to worry about things”, “When there is nothing more I can do about a concern, I do not worry about it anymore”, etc… The remaining items ask questions such as “I know I should not worry about things, but I just cannot help it”, “As soon as I finish one task, I start to worry about everything else I have to do”, “I have been a worrier all my life”, etc…(Meyer et al., 1990).

The PSWQ is a commonly used measure of worry severity and provides sound psychometric properties across a variety of populations and settings including, students, adults, clinical and nonclinical samples (Wuthrich et al., 2014). In a study of the psychometric properties of the PSWQ, RiJsoort et al. (1999) indicated satisfaction in regard to internal reliability using Chronbach’s alpha, scoring the PSWQ a = 0.88. Additionally, the researchers determined high construct validity reporting correlations between the PSWQ, and other existing measures related to worry including the STAI-Trait (tendency to experience anxiety), BDI and PI-R (rumination subscale). There were no significant differences between gender reported. Davey and Wells (2006) also reviewed existing literature regarding the PSWQ and reported the scale to have a two-factor structure with Chronbach’s alpha ranges from a = 0.88-0.95. Additional results indicated strong test-retest reliability across samples of college students and clinical treatment of GAD in adults. Psychometric properties amongst young adults are high with less investigation of the PSWQ with older adults. However, the limited studies have demonstrated reasonable internal validity and consistency with an older population (Davey & Wells, 2006). The PSWQ was chosen to use in conjunction with the GAD-7 as several previous studies have utilized the combination to provide a more accurate picture of anxiety effects, particularly in individuals who may be experiencing symptoms of Generalized Anxiety Disorder

(GAD) (Cuijpers et al., 2014; Keough et al., 2010; Oh et al., 2018; O'Rourke et al., 2020). A copy of the PSWQ can be found in Appendix B.

The Perceived Stress Scale (PSS)

The PSS is a 10-item self-reporting scale which assesses an individual's psychological stress and alleged view of how stressful their life is to them. This widely used measure evaluates one's thoughts and feelings related to their coping with stress within the last month (Cohen, 1994). Sample item questions include "In the last month, how often have you felt you were unable to control important things in your life?"; In the last month, how often were you able to control irritations in your life?" and "In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?" This scale ranges from 0 to 4 with 0 = *never,* 1 = *almost never* 2 = *sometimes* 3 = *fairly often* and 4 = *very often* (Cohen et al., 1983). Several versions of the PSS have been used throughout research beginning with the original 14-item version and the two most current forms, the PSS-10 and short form PSS-4 (Nielsen et al., 2016). Scores ranging from 0-13 would be considered low stress, 14-26 moderate stress and 27-40 high stress (State of New Hampshire EAP, n.d.).

The PSS has been found to have solid internal validity and suitable for a variety of populations (Lee, 2012). In a multi-study evaluation of the PSS, Lee (2012) determined internal consistency reliability to be established and that the instrument demonstrated a high level of correlation with depression and anxiety reports meaning results of the PSS could overlap with depression and anxiety accounts. Across studies, Chronbach's a > 0.70 in every study evaluated and test-retest reliability was > 0.70 in all evaluated cases. Two-factor structure was dominant, and it was the researcher's recommendation that the PSS-10 be utilized in both clinical and research settings over the shortened version PSS-4. Roberti et al. (2006) explored the

psychometric support for the PSS and determined its effective use with young adults who often report stress related to their perception of threat, demand and lack of resources to manage the stress. Researchers determined the instrument to have high construct and convergent validity for use with young adults. Construct validity of the PSS was exclusively reviewed by Nielsen et al. (2015) using three analysis – Rasch, Mokken Scale and CFA. Results were consistent with other analyses indicating solid statistical support of the PSS-10 as a two-dimensional scale. A copy of the PSS is provided in Appendix C.

The Warwick-Edinburgh Mental Well-being Scale (WEMWBS)

Mental well-being regarding the WEMWBS is defined as "(1) the subjective experience of happiness (affect) and life satisfaction (the hedonic perspective); and (2) positive psychological functioning, good relationships with others and self-realization (the eudemonic perspective). The latter includes the capacity for self-development, positive relations with others, autonomy, self-acceptance and competence" (Stewart-Brown & Janmohamed, 2008. p. 2). According to Stewart-Brown and Janmohamed (2008) the WEMWBS is a 14-item scale designed to measure one's subjective mental well-being and psychological functioning with both feeling and functional aspects of mental health considered. A 5-point Likert scale is used with a minimum of 14 and maximum of 70 with the higher the score the greater sense of well-being. The scale ranges from 1 = *none of the time*, 2 = *rarely*, 3 = *some of the time*, 4= *often* and 5 = *all the time* regarding feeling or experiencing well-being in the last 2 weeks. Sample questions include: "I've been feeling optimistic about the future"; "I've been feeling relaxed"; "I've been dealing with problems well"; "I've been feeling good about myself"; and "I've had energy to spare". The WEMWBS is designed for use with ages 16+ and has been shown to help study participants gain a clearer picture of their well-being. The WEMWBS helps determine if one's

mental well-being is considered low, medium or high and is considered an ideal measure for the assessment of an intervention's influence on mental well-being (Stansfield et al., 2013).

In terms of validity, the WEMWBS has been found to demonstrate high construct validity, Internal consistency, test-retest reliability, response bias and content validity (Stewart-Brown & Janmohamed, 2008). Maheswaran et al. (2012) explored the WEMWBS's wide range of use across studies looking to evaluate its use in determining the effect of the intervention. Researchers identified the measure to be valid in the evaluation of causal pathways and gauging effectiveness of interventions. Koushede et al. (2018) analyzed both the standard and shortened versions of the WEMWBS looking at psychometric properties. Content validity was established, and high internal consistency indicated a Chronbach's a = 0.94. They also reported good model fit for construct validity and there were no significant differences across gender. Permission to use the WEMBS is provided in Appendix D. A copy of the WEMWBS is provided in Appendix E.

The Big Five Inventory

The Big Five Inventory is a 44-item inventory that measures an individual's five primary personality factors which include introversion vs. extroversion; agreeableness vs. antagonism; conscientiousness vs. lack of direction; neuroticism vs. emotional stability; openness vs. closedness to experience (Fetzer Institute, n.d.). These traits are further described by Tony (2016) in terms of high scoring to low scoring. Higher scores in Extroversion can be described as outgoing, assertive, energetic, seeking the company of others, perceived as attention seeking and dominant whereas low scoring on Extroversion can be described as solitary, reserved, reflective and perceived as aloof or self-absorbed. High scoring on agreeableness can be described as friendly, cooperative, compassionate, trustful, well-tempered and helpful whereas low scoring

would be described as analytical, detached, competitive, challenging, argumentative or untrustworthy. High scores on conscientiousness may be described as efficient, organized, dependable and disciplined whereas low scores may indicate easy-going, careless, flexible, spontaneous but may be perceived as unreliable or sloppy. High scores on neuroticism may be described as high emotional reactivity, vulnerable to stress and perceiving most situations as threatening whereas low scores describe a tendency to be calm, stable and experience less negative emotional reactions. Finally, high scores on openness may be seen as inventive, intellectually curious, prefer variety over routine and seek euphoric experiences whereas a lower score might correlate with consistency, caution, perseverance, pragmatic, and data driven.

The inventory is scored on a 5-point Likert scale of 1= *disagree strongly*, 2= *disagree a little*, 3= *neither agree or disagree*, 4= *agree a little* and 5= *agree strongly*. The measure asks the question "I see myself as someone who…" and then proceeds to list forty-four characteristics. Samples descriptions include: "Is talkative", "does a thorough job", "is reserved", "can be moody", "generates a lot of enthusiasm", "has a forgiving nature", "is out-going and sociable", "gets nervous easily', prefers work that is routine" and "tends to be quiet". Each item refers to one of the five trait scales and scored on the Likert scale. Several items are reversed scored. The sum of all the items is calculated and then averaged for an overall average score (Fetzer Institute, n.d.).

Oliver P. John (2007) director of the Berkley Personality Lab maintains the copyright and is a premier researcher in use of the BFI. No official norms have been determined for the BFI. It is advised to use the sample population one is studying to create norms. John was one of the original developers of the BFI for use in research. Considering existing model's Lexical facets and NEO-PI-R, the BFI aimed to simplify the measurement process to accurately assess the Big

Five dimensions (John, Naumann & Soto, 2008). John, Naumann & Soto (2008) examined the validity of the BFI by testing it against several existing personality measures. The validity in comparison to the three instruments for personality demonstrated that the BFI had the strongest convergence validity of mean r =.80. They also determined the overall discriminant correlation to be low (.20). A copy of the BFI is provided in Appendix F.

Procedures

Technology & Recruitment

The study utilized several technology platforms that were pivotal in the recruitment and execution of the research. The initial recruitment and communication phase employed social media, specifically Facebook and Instagram to promote the study and recruit potential candidates. The virtual word of mouth option allowed for the targeted population of adult men and women in the United States to be easily accessed through friend networks. Social media platforms are growing in use for research participant recruitment becoming an important and effective tool in the promotion and attainment of research subjects (Gelinas et al., 2017). An example of a social media advertisement is provided in Appendix G.

Once potential candidates were interested, they were directed via the social media advertisement to a webpage housed on the Squarespace platform via https://www.katiemcnichol.com/study, This webpage offered detailed information about the participation requirements for the study and allowed the interested subject to indicate their intention to participate via a registration form. The webpage described the technology requirements, time commitment and assessment process. It also briefly explained the psychoeducational intervention and how to contact the researcher directly. When the recruit determined they were interested in moving forward, they completed the form on the webpage

asking basic demographic information such as name, age, gender, location, religious affiliation, email address and phone number. Once completed the researcher contacted them directly either via email to obtain informed consent and provide a start date. Informed consent was sent via a secured Qualtrics link in which the participant electronically signed the form. A copy of the informed consent content can be found in Appendix H. The specific recruitment content from the webpage is provided in Appendix I.

The psychoeducational intervention was delivered via a password protected virtual course on Teachable.com. Only participants were allowed to access the psychoeducational intervention and assessments as the researcher had the ability to monitor and provide entry only to registered and approved study participants. This permitted the researcher management of subject participation including the ability to view their progress in completing the video segment requirements. Administration of the assessments and gathering assessment data was conducted separately through a secured link that was emailed to the participants. The secured link sent assessments via Qualtrics which housed and stored the data.

Schedule and Communication

Participants were separated into three cohorts A, B and C. Each week begins on a Monday. Beginning week one, all participants received a welcome email and directions for completing the five assessments. Collectively the assessments took no more than 15 minutes per person. Participants were given the initial baseline assessments in week one. In addition to the initial baseline assessments in week one, cohort A also completed the psychoeducational intervention in week one (i.e., Cohort A received a second email with the psychoeducational link upon completing the assessments). Cohort B was given a link with instructions to the psychoeducational intervention two weeks after the initial baseline assessments (i.e., Cohort B

received an email with the link to the psychoeducational intervention on Monday of week 3). Cohort C was given a link five weeks after the initial baseline to complete the intervention (i.e., Cohort C received an email with the link to the psychoeducational intervention on Monday of week 5). All participants were measured again at week five and then a final measurement at week eight all via secured Qualtrics links. The study began on Monday October 4th and ended on Monday November 29th. See Table 1 below for staggered start schedule.

Table 1

Staggered Start Schedule

Cohort	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
A	XO				X			X
B	X		O		X			X
C	X				XO			X

Note: X = Assessments; O = Intervention

Psychoeducational Intervention

The psychoeducational intervention is a four-part video series that orients the participant to the practice of Sabbath-keeping and the potential mental health benefits of its use. Once the cohort was granted access to the intervention (which is given on their cohort's assigned start date, see table 1 listed above), they were asked to watch the video series during their start week to practice Sabbath-keeping. The video segments used a combination of the researcher teaching, visual aids such as PowerPoint, and downloadable handouts. The video series begins with an introduction video about the study and expectations. The second video discusses what is Sabbath-keeping, its origins, and intentions as well as the mental health benefits of practicing Sabbath-keeping. The third video address the four core principles of Sabbath-keeping as

formulated from the traditional spiritual discipline of Sabbath: stop, rest, contemplate and delight are discussed and how they correlate to mental health when practiced (Kessler, 2012; Scazzero, 2015; Speedling, 2019).

The principle of *stop* refers to the intentional act of stopping or ceasing all paid and unpaid work for a twelve-to-twenty-four-hour period. The principle of *rest* refers to the intentional slowing down, literal rest or sleep, relaxation and allowing the mind and body to recharge and renew. The principle of *contemplate* involves the intentional act of taking time to think, pray, worship, and write about one's life and relationships. And finally, the principle of *delight* which is the intentional act of doing activities that bring joy, excitement, play and creativity. These four principles of Sabbath-keeping create a framework for participants to begin their own Sabbath-keeping practice. The final video discusses how to combine the core principles to create an individualized Sabbath-keeping practice and then asks the individual to begin weekly Sabbath-keeping for the remainder of the study. Participants chose their time window of twelve to twenty-four hours and the specific day of the week they dedicated for Sabbath-keeping (i.e., one may choose Sunday while another may choose Monday based on their work schedule). A follow-up email was sent each Monday, after a cohort began their practice asking if they practiced Sabbath and for how many hours.

Data Analysis

The data analyses of the multiple baseline SSRD was dependent on the sample size which was chosen after the initial recruitment using a snowball sampling method. Typically, the SSRD uses a visual inspection in which the participants data is plotted over time (Price et al., 2015). The graphing of data allows the researcher to view the potential effects of the independent variables on the dependent variable at baseline and then post intervention. This helps determine

if treatment had an overall affect, the time it may have taken for the conditions to affect change as well as any potential trends (Price et al., 2015).

Summary

The management and resolve of psychological distress have considerable social, economic, health and spiritual impacts (Trudel-Fitzgerald et al., 2019). Psychological distress affects all people at some point and to others it can severely disrupt their daily life (CDC Mental Health FastStats, 2020). Identifying new ways to help people find relief is a primary aim of counseling research (McLeod, 2015). The proposed study seeks to contribute to that literature by considering the mental health benefits, specifically related to anxiety, stress and psychological well-being of consistent Sabbath-keeping. A psychoeducational intervention will deliver essential information about the mental health benefits of Sabbath-keeping including ways to begin a practice that participants will use weekly. Assessments investigating changes related to anxiety, stress and psychological well-being will be used to evaluate the effectiveness of the intervention anticipating there will be statistically significant changes for positive mental health improvements upon completion of the study.

Chapter Four: Findings

Overview

The purpose of this study was to consider the impact of weekly Sabbath-keeping on mental health, specifically anxiety, stress, and well-being. The researcher explored whether participants who were educated on the benefits of Sabbath-keeping and practiced weekly, demonstrated improvement in their mental health. The following chapter will discuss the results of the presented study through descriptive statistics, organized by assessment results.

Descriptive Statistics

The initial sample of participants included 24 volunteers consisting of 2 males and 22 females ages 20-63 (M = 43 years). 83% identified as Christian, 16% as none and 1% as Hindu. The final sample size of participants who completed the study through the 8-weeks, taking assessments and practicing weekly Sabbath-keeping based on their cohort start date consisted of 18 participants (1 male, 17 female).

This single subject multiple baseline design study assessed participants for an initial baseline at week 1, mid-point assessment at week 5 and final assessments at week 8. Four measures were used to evaluate anxiety, worry, stress, and well-being. Participants were randomly divided into 3 cohorts (A, B and C). Initial cohorts were broken into groups of 8. The final number of each cohort was 7 in cohort A, 7 in cohort B and 4 in cohort C totaling 18 participants. Means related to each cohort and assessment are presented below.

Results

This study attempted to review the habit of weekly Sabbath-keeping and the potential mental health benefits that may occur with consistency. Three hypotheses were established as follows:

H_a1: Participants who receive a Sabbath-keeping intervention will report reduced anxiety symptoms upon completion of a Sabbath-keeping intervention.

H_a2: Participants who receive a Sabbath-keeping intervention will report reduced stress upon completion of a Sabbath-keeping intervention.

H_a3: Participants who receive a Sabbath-keeping intervention will report improved psychological well-being upon completion of a Sabbath-keeping intervention.

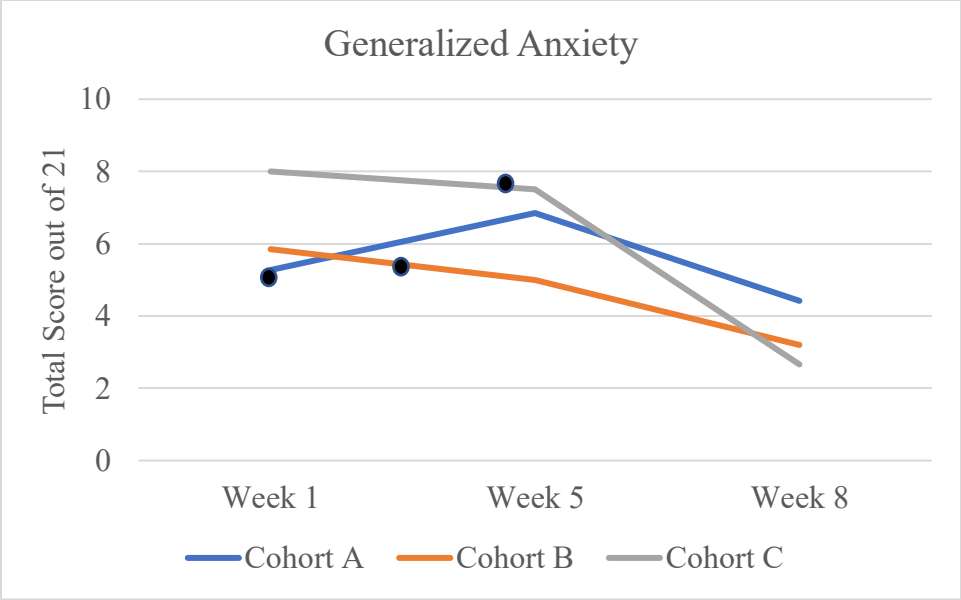
To address these hypotheses, a combination of four assessments were given in conjunction with a personality assessment to consider any personality factors that might impact the results. This results section will discuss the data collected from a series of assessments given to participants at three different intervals throughout the 8-week study. The primary four assessments were given at three intervals, week 1, week 5 and week 8 with participant cohorts beginning at staggard start times of week 1 (cohort A), week 3 (cohort B) and week 5 (cohort C).

Generalized Anxiety Disorder 7 (GAD-7)

Overall, participants from all three cohorts had lower anxiety scores at week 8 compared to week 1. As mentioned previously (chapter 3), scores range from 0-21 with higher scores representing more severe levels of anxiety (i.e., minimal = 0-4, mild = 5-9, moderate = 10-14 and severe = 15-21). See Figure 4.

Figure 4

GAD-7 Assessment Results Total Score



Note: Black dots represent intervention start dates of Cohort A (week 1), Cohort B (week 3) and Cohort C (week 5).

Table 2

GAD-7 Assessment Means

	Week 1	Week 5	Week 8
Cohort A	5.28	6.85	4.42
Cohort B	5.85	5	3.2
Cohort C	8	7.5	2.66

The Penn State Worry Questionnaire (PSWQ)

Overall, participants from all three cohorts had lower worry scores at week 8 compared to week 1. As mentioned previously (chapter 3), scores range from 16-80 with higher scores representing clinical levels of worry (i.e., not anxious or worrisome = <29, bothered by worries but not clinical = 30-52, problematic worry that would benefit from treatment = 52-65 and chronic worry in need of treatment = 66<). A comparison of cohort average scores did not

demonstrate any unusual differences. Scores were similar across cohorts despite the sample size. A visual representation is presented in Figure 6. Means for the PSWQ can be seen in Table 4.

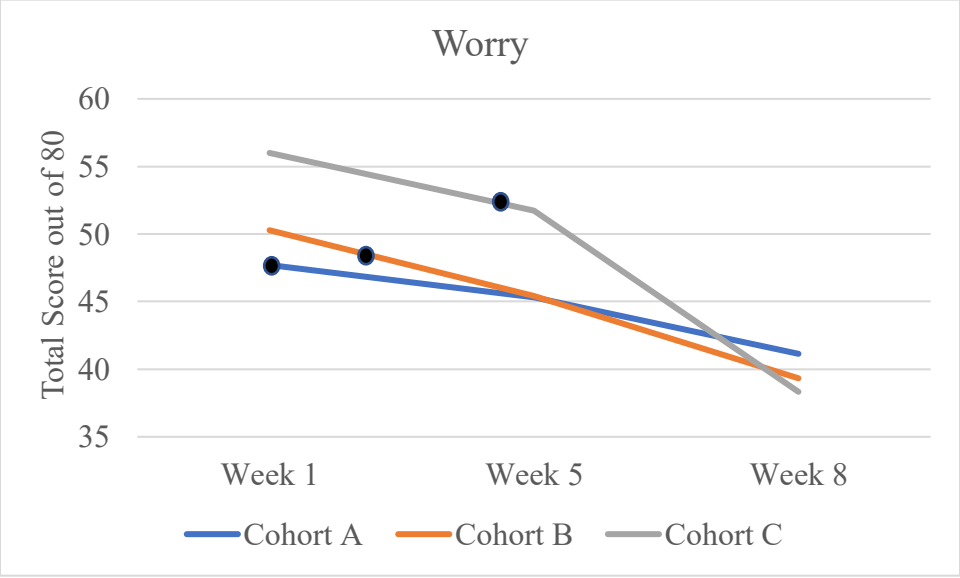
Table 3

The Penn State Worry Questionnaire Assessment Means

	Week 1	Week 5	Week 8
Cohort A	47.71	45.33	41.14
Cohort B	50.28	45.42	39.33
Cohort C	56	51.75	38.33

Figure 5

The PSWQ Assessment Total Scores



Note*:* Black dots represent intervention start dates of Cohort A (week 1), Cohort B (week 3) and Cohort C (week 5).

Perceived Stress Scale (PSS)

Overall, participants from all three cohorts had lower stress scores at week 8 compared to week 1. As mentioned previously (chapter 3), scores range from 0-40 with higher scores

representing higher stress levels (i.e., *low* = 0-13, *moderate* = 14-26, and *high* = 27-40). In review of the data for the PSS, there were no unusual scores however cohort C reported slightly higher scores in each week compared to cohorts A and B. This may be due to the smaller sample size. A visual representation of PSS scores is presented in. Means for the PSS can be seen in Table 3.

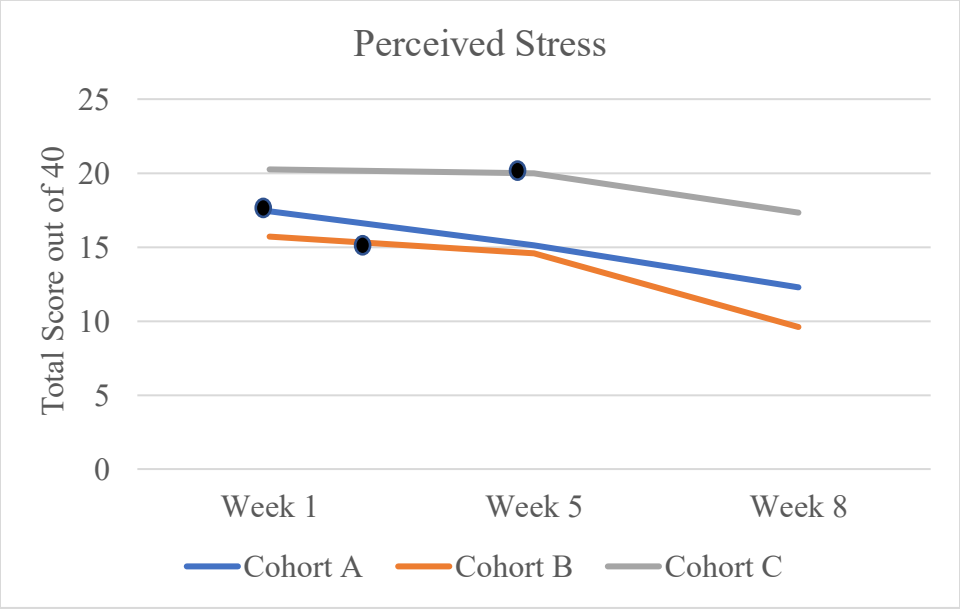
Table 4

Perceived Stress Scale Assessment Means

	Week 1	Week 5	Week 8
Cohort A	17.42	15.14	12.28
Cohort B	15.71	14.57	9.6
Cohort C	20.25	20	17.33

Figure 6

The PSS Assessment Total Score



Note*:* Black dots represent intervention start dates of Cohort A (week 1), Cohort B (week 3) and Cohort C (week 5).

The Warwick Edinburgh Mental Well-being Scale (WEMWBS)

Overall, participants from all three cohorts had increased sense of well-being scores at week 8 compared to week 1. As mentioned previously (chapter 3), scores range from 14-70 with higher scores representing greater sense of well-being. No specific categories are listed for scoring accept low to high.

Total scores for the WEMWBS did not show any unusual patterns in the data. Cohort C stayed flat between week 1 and week 5, then improved in week 8. This may be due to the timing of their cohort. Cohort C did not begin actual Sabbath-keeping practice until week 5. A visual representation of the WEMWBS is shown in Figure 7. Means for the WEMWBS can be seen in Table 5.

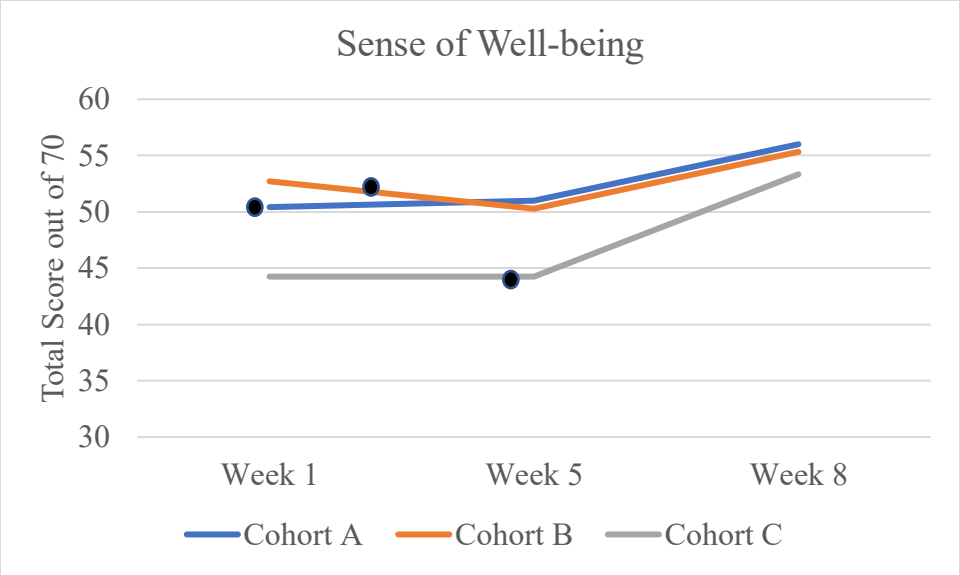
Table 5

The Warwick Edinburgh Mental Well-Being Scale Assessment Means

	Week 1	Week 5	Week 8
Cohort A	50.42	51	56
Cohort B	52.71	50.28	55.33
Cohort C	44.25	44.25	53.33

Figure 7

The WEMWBS Assessment Total Scores



Note*:* Black dots represent intervention start dates of Cohort A (week 1), Cohort B (week 3) and Cohort C (week 5).

Big Five Inventory (BFI)

A secondary analysis of personality was measured in this study. The intent was to consider personality factors that may have influenced results. The BFI is scored based on norms within the study versus generalized norms. Using the participant pool of 18 (N=18), the means for each factor and a total mean score of the entire assessment are calculated below. Personality factors are discussed previously (chapter 3) but include extroversion, agreeableness, conscientiousness, neuroticism, and openness to experience. Mean scores for the total sample and total factors can be seen in Table 6. This assessment was only given at baseline.

Table 6

Big 5 Inventory Assessment Means Across All Participants

Big 5 Factor	Mean Score
Extroversion	3.55
Agreeableness	4.31
Conscientiousness	3.88

Neuroticism	2.81
Openness	3.92
Total Mean Score	3.47

The population sample (N=18) had Extroversion scores range from lowest 2.25 to highest 6.37 shown in Figure 8, Agreeableness scores range from lowest 3.66 to highest 7.6 shown in Figure 9, Conscientiousness scores range from lowest 3 to highest 4.88 shown in Figure 10, Neuroticism scores range from lowest 1.62 to highest 4.25 Figure 11 and Openness scores range from lowest 2.2 to highest 4.7 Figure 12. Overall mean scores per cohort is presented in Figure 13. Visual representations of the scores are presented below.

Figure 8

Extroversion

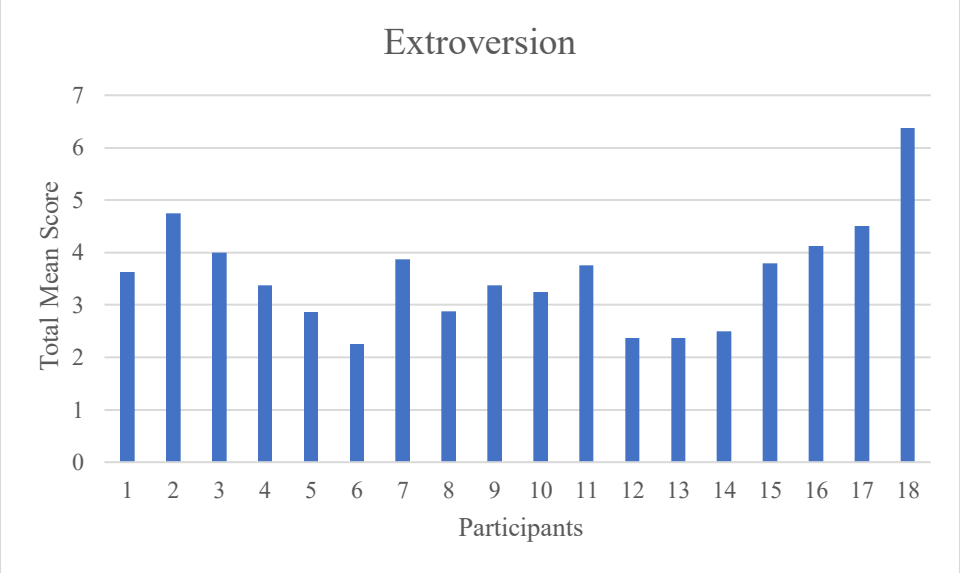


Figure 9

Agreeableness

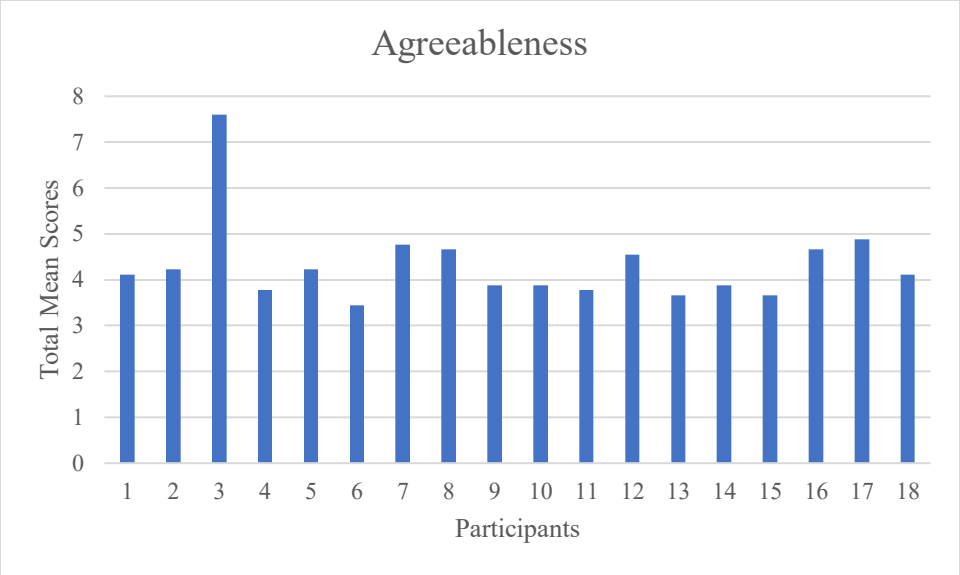


Figure 10

Conscientiousness

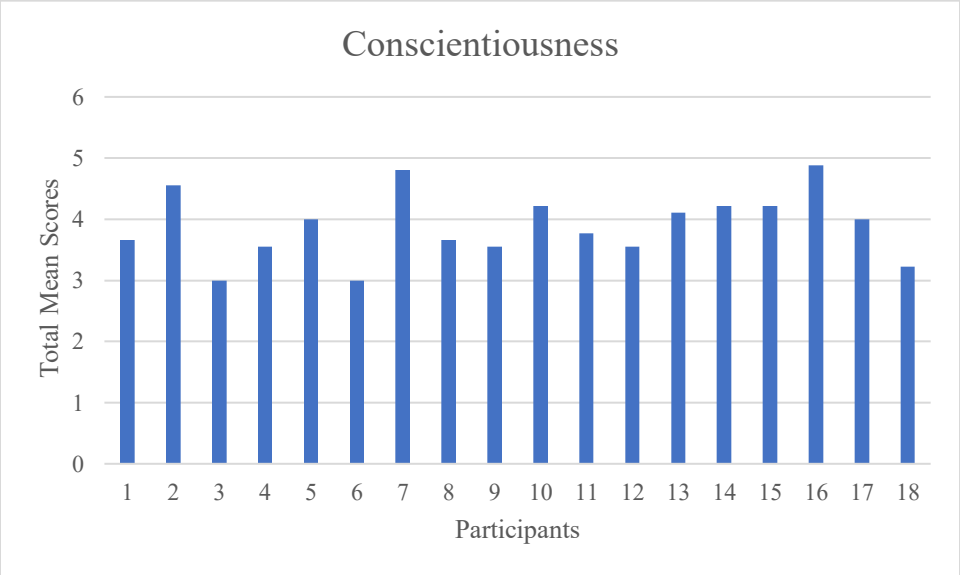


Figure 11

Neuroticism

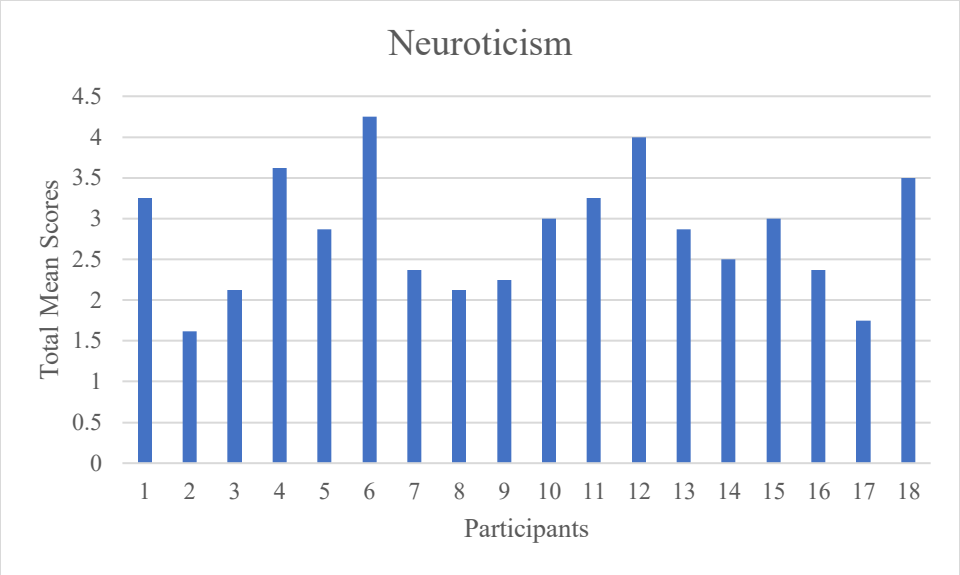


Figure 12

Openness

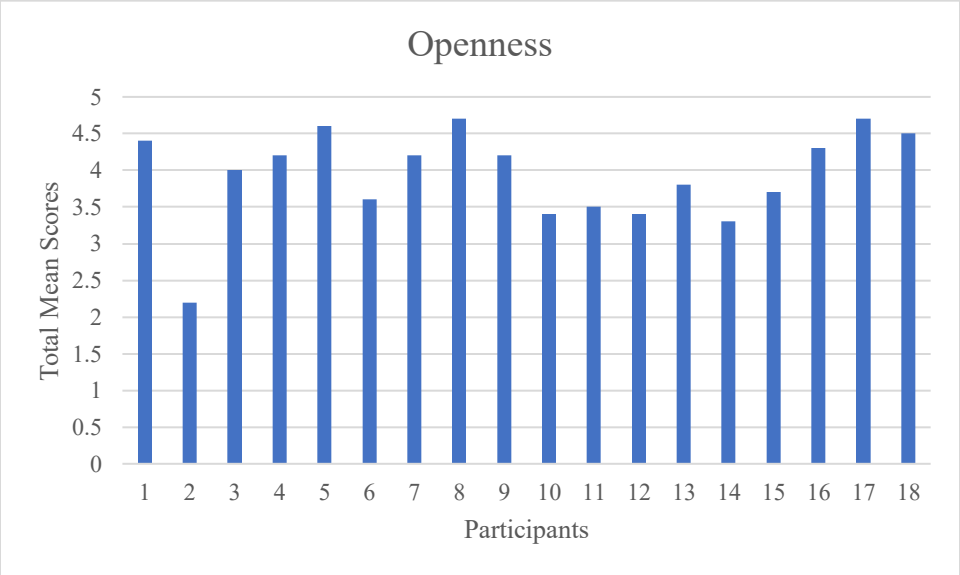
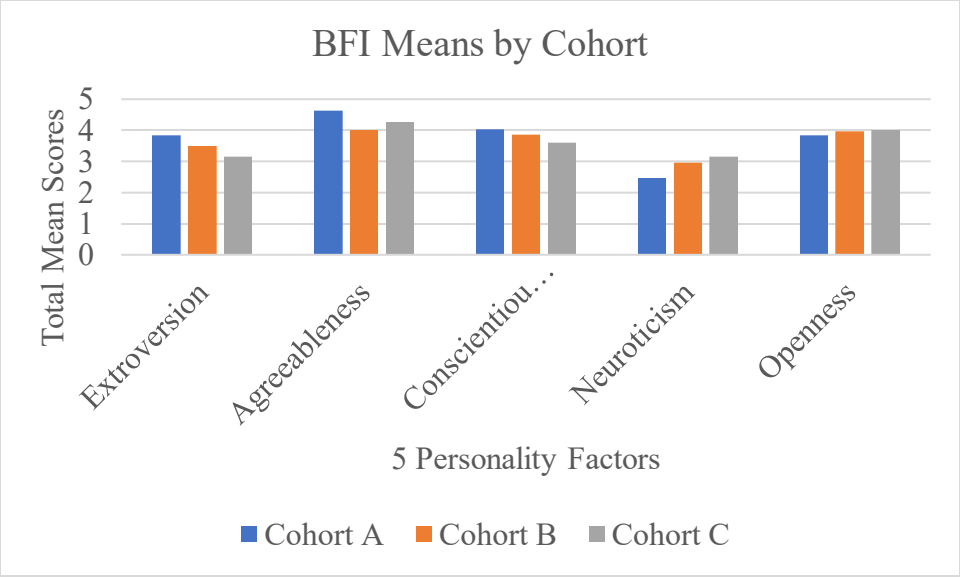


Figure 13

Mean Scores by Cohort

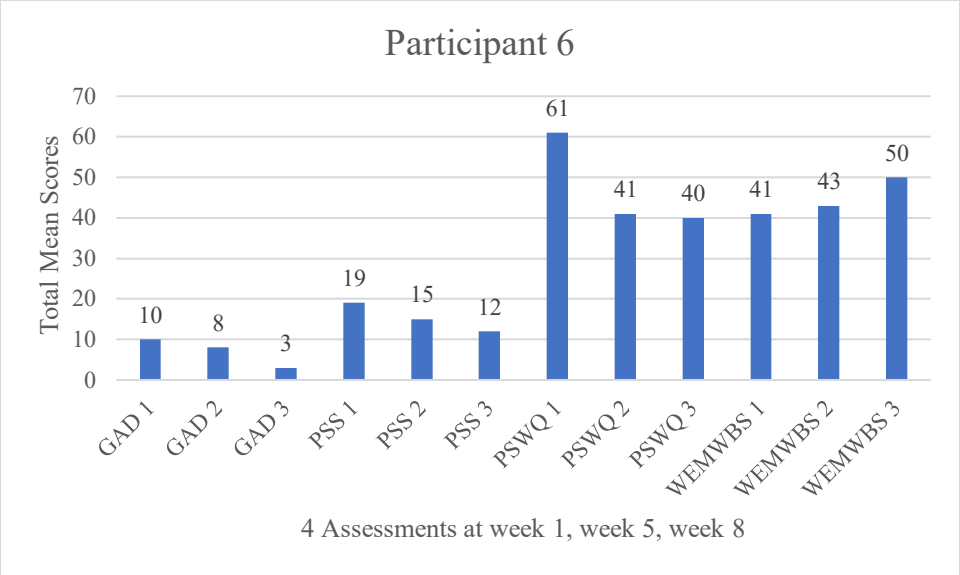


Participant Insights

An analysis of the results demonstrated a few participants worth further discussion in how their results and participation in the study demonstrated an impact of the intended study outcome. Participant 6 GAD-7 scores went from 10 (week 1) to 3 (week 8), PSS scores 19 (week 1) to 13 (week 8), PSWQ 61 (week 1) to 40 (week 8) and WEMWBS 41 (week 1) to 50 (week 8). Participant 6 demonstrated growth and improvement throughout the study, but also indicated some of the highest scores in the study suggesting anxiety and stress levels higher than the averages. Figure 14 provides a visual illustration of scores.

Figure 14

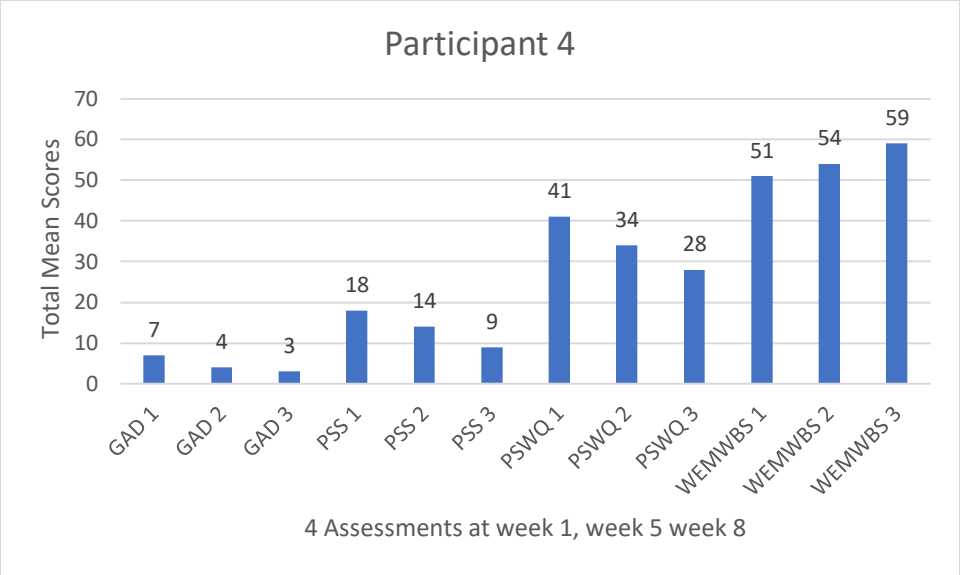
Participant 6 Overall Mean Scores Throughout the Study



Participant 4 demonstrated consistent declines in anxiety, stress and worry from week 1 to week 8 indicating potential positive impacts from the intervention. She also demonstrated an increase in well-being from week 1 to week 8. Several other participants also exhibited similar patterns indicating possible validation of the intervention. Participant 4 is a good representation of the above-mentioned hypotheses. A visual illustration of participant 4 scores is depicted in Figure 15.

Figure 15

Participant 4 Overall Mean Scores Throughout the Study



One question that came up during the analysis is why cohort C, despite fewer participants, had noticeably higher scores than others. It was discovered that participant 12 scores were elevated in almost every assessment in comparison to the others in their cohort. For example, week 1 for participant 12 was 73 on the PSWQ whereas the other cohort participants were scoring in the 20's and low 50's. Participant 12 WEMWBS scores were 29 (week 1) compared to the others scoring in the 50's at week 1. Participant 12 and participant 1 (both cohort C) scored high on the GAD-7 and PSS in comparison to the other participants in cohort C and cohorts A and B. Participant 12 scored 12 (week 1) on the GAD-7 and Participant 1 scored 11 (week 1) on the GAD-7 compared to the week 1 averages of 5.28 (cohort A) and 5.25 (cohort B). On the PSS, participant 12 scored 24 (week 1 and participant 1 scored 22 (week 1) in comparison to the averages of cohort A 17.42 (week 1) and cohort B 15.41 (week 1). These results might indicate that anxiety and stress levels were more elevated for these participants in comparison to the rest of the participants.

Finally, it was observed that cohort A had elevated mean scores from week 1 to week 5 (5.28 to 6.85. See figure 13 above) of the GAD-7. An analysis of cohort A participant individual

scores revealed that three of the seven participants had highly elevated scores from week 1 to week 5. Participant 2 went from a score of 2 at week 1 to 11 at week 5; participant 16 went from a score of 4 week 1 to 21 at week 5; and participant 17 went from a score of 2 at week 1 to 5 at week 5. See Figure 16 below. Compared to other participants whom all saw a consistent decrease in scores these participant scores were high enough to affect the overall mean scores for cohort A. See Figure 17 below. It is unsure what exactly may have caused the increase. A discussion on possible factors is provided in chapter five.

Figure 16

GAD-7 Scores for Cohort A Participants Who Increased Week 1 to Week 5

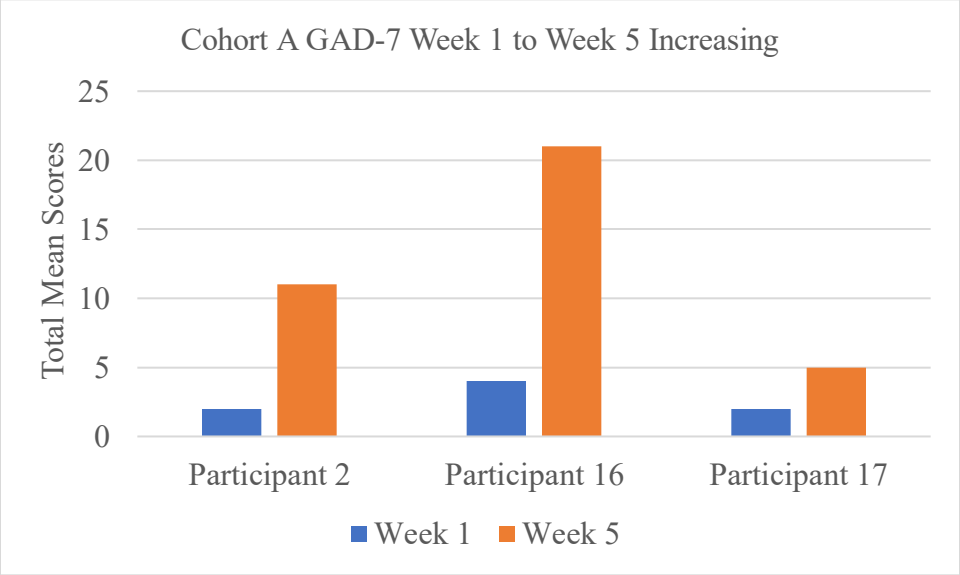
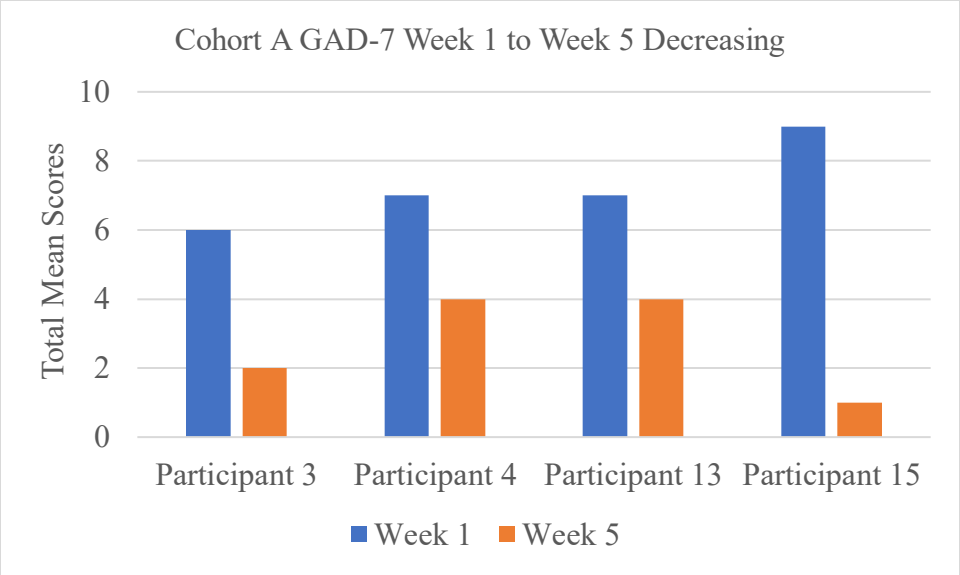


Figure 17

GAD-7 Scores for Cohort A Participants Who Decreased Week 1 to Week 5



Personality factors did not demonstrate any explicit patterns or commonalities that would have been impactful to the results. There was one participant who stood out as exhibiting personality factors that are in alignment with higher levels of anxiety and stress mentioned in previous research. Participant 6 (cohort B) had the lowest score on the Extroversion scale (2.25), lowest score on Agreeableness (3.44) and the highest on the Neuroticism scale (4.25). These scores are in alignment with what John et al. (2008) described as scores that correlate with someone who may suffer more with anxiety and poor coping with stress. If we further investigate participant 6's additional assessments, we discover that her other assessment scores were initially in the higher ranges indicating greater distress levels in comparison to other participants and the scores ultimately were in alignment with all three hypotheses. See Figure 14 above.

Summary

The study intent was to assess the potential psychological benefits of a weekly Sabbath-keeping practice on mental health. Psychological distress which includes anxiety, stress and reduced well-being was measured throughout the 8-week study, considering improvements post psychoeducational intervention and practice. The three hypotheses were supported in the results.

Participants demonstrated reported the use of Sabbath-keeping as beneficial to the reduction of anxiety and stress and the improvement in well-being. The results of this study indicate trends that could be helpful in the development of a weekly Sabbath-keeping practice as an alternative, supportive mental health benefit.

Chapter Five: Conclusions

Overview

Exodus 20:8-10a (AMP) states, “Remember the Sabbath (seventh) day, to keep it holy (set apart, dedicated to God). Six days shall you labor and do all your work, but the seventh day is a Sabbath (a day of rest dedicated) to the Lord your God”. Taken from the ten commandments, this fourth commandment is an often-overlooked directive that may hold the key to several lifestyle factors causing significant distress to our culture. The following chapter discusses the impact that consistent Sabbath-keeping habits may have on one’s mental health and well-being based on the study results. Three cohorts were given a psychoeducational intervention on Sabbath-keeping at different intervals and a series of assessments regarding anxiety, stress, and well-being. Chapter five discusses the implications of Sabbath-keeping in preventative mental health care, as well as limitations within the study. Recommendations for future research are also considered.

Discussion

The purpose of the current study is to explore the effectiveness of a psychoeducational Sabbath-keeping intervention in the reduction or prevention of mental health concerns such as anxiety, stress, and well-being. These three variables were chosen to strengthen the validity of the study as they are often interconnected. Anxiety and stress are frequently correlated yet they are separate constructs (Davey, 2018). Well-being was selected to counter-balance anxiety and stress. It could be hypothesized that if anxiety and stress levels go down, well-being levels rise. Therefore, three research questions were established to investigate the potential benefits of consistent Sabbath-keeping practice. **RQ1** - Do participants who receive a Sabbath-keeping psychoeducational intervention have lower levels of anxiety compared to participants that do not

receive the Sabbath-keeping psychoeducational intervention? **RQ2** – Do participants who receive a Sabbath-keeping psychoeducational intervention have lower levels of stress compared to participants that do not receive the Sabbath-keeping psychoeducational intervention? **RQ3** – Do participants who receive a Sabbath-keeping psychoeducational intervention have higher psychological well-being compared to participants that do not receive the Sabbath-keeping psychoeducational intervention? It should be noted that a review of the literature determined there have been few studies conducted regarding the spiritual discipline of Sabbath-keeping and none to date that have specifically looked at the potential mental health benefits. Although not a pilot study, this study is unique in its review of a spiritual discipline with mental health benefits.

Research Question 1

The first area of investigation centered on anxiety, specifically the physical and cognitive aspects of anxiety symptoms. Today's culture is described as an "anxiety epidemic" (Davey, 2020) in which millions of U.S. adults are suffering with a variety of anxiety related symptoms ranging from stomach aches, headaches, low quality sleep and body tension to worry, doubt, lack of focus and overthinking. Anxiety is a feeling related to nervousness, worry and unease about a potential outcome (Pittman & Karle, 2015). The first research question asked, "Do participants who receive a Sabbath-keeping psychoeducational intervention have lower levels of anxiety compared to participants that do not receive the Sabbath-keeping psychoeducational intervention?"

Participants were asked to review a psychoeducational intervention that encouraged each to take 12-24 hours out of their week to develop Sabbath-keeping habits of stopping their normal routines related to work, resting (physically, cognitively, and spiritually), contemplation (reflection, prayer, medication) and delight (doing things that bring joy, refreshment,

excitement). Individually many of these Sabbath related habits or practices have been studied and shown to have positive impacts on anxiety reduction. For example, understanding that many individuals with anxiety do not seek professional help and instead use a variety of self-help or self-management techniques to cope with their anxiety Shepardson et al. (2017) examined six categories of self-management including self-care, cognitive, avoidance, connectedness, pleasurable activities, and achievement in Veterans struggling with anxiety, all of which correlated to the current Sabbath related study. GAD-7 scores in the Shepardson et al. (2017) study indicated effectiveness for self-management strategies for anxiety. Participants reported specific habits of exercise, outdoor activity, spending time with family or friends, formal relaxation, prayer, rest, deep breathing, music, and cooking were just a few examples of effective coping for anxiety. The current study made similar suggestions in the psychoeducational intervention for building Sabbath-keeping habits.

The assessments used in this study looked at cognitive and physical symptoms of anxiety, measuring anxiety levels at three points throughout the study. It was expected that the researcher would view a downward trend in scores after each cohort received the intervention. In general, this was the case. See Figures 4 and 5. Anxiety levels at baseline did not show that participants met criteria for Generalized Anxiety Disorder. The GAD-7 and PSWQ were used to measure anxiety. Mean scores on the GAD-7 at baseline were considered 5-9 *mild* for all three cohorts (See Table 2) and mean scores of the PSWQ (See Table 3) were considered 30-52 *bothered by worries but not clinical*. A review of anxiety levels showed a general decrease in scores with most mean scores on the GAD-7 moving from 5-9 *mild* to 0-4 *minimal* and PSWQ scores moving from the mid-high range of 30-52 *bothered by worries but not* clinical to the lower end of the range at completion of the 8-week study.

Research Question 2

The second area of research focus was on stress. Stress is unavoidable and something individuals encounter daily (Sapolsky, 2004). According to Sapolsky (2004), "a stressor is anything in the outside world that knocks you out of homeostatic balance… A stressor can also be the anticipation of that happening (p. 6)". Therefore, stress can be both physical and cognitive. The second research question asked, "Do participants who receive a Sabbath-keeping psychoeducational intervention have lower levels of stress compared to participants that do not receive the Sabbath-keeping psychoeducational intervention"? Participants were given the Perceived Stress Scale to measure stress levels throughout the study. Baseline measures indicated participants began in the 14-26 *moderate stress* category with means in week 1 ranging from 17-20. Upon completion of the study cohort's A and B decreased to a 0-13 *low stress* range and cohort C stayed in the moderate range (See Table 4). The existing literature suggests that women tend to report more difficulty with stress coping (APA, 2012). This study was predominately female and may suggest that women seek out practices such as Sabbath-keeping to help reduce or manage stress.

Stress in America is a significant lifestyle problem (Braun et al., 2016) and participants in this study were not immune from the current pandemic stress that occurred throughout the course of the study. Previous studies have suggested and indicated that finding new and alternative ways to manage stress can be beneficial and effective (Noordsy, 2019; Braun et al., 2016; Shepardson et al., 2017). This study taught concepts related to rest, meditation, contemplation, and pleasurable activities all of which have shown in the existing literature to aid is stress reduction (Comer, 2019, Walsh, 2011, Scazzero, 2015, Muller, 2013).

Research Question 3

The final area of consideration for this study was well-being. A shift in the general mental healthcare debate has evolved from the treatment and prevention of mental health complaints to the promotion of one's well-being (Weiss et al., 2016). In review of the literature, Weiss et al. (2016) concluded that well-being could be improved through behavioral interventions. In the current study, the basic principles of Sabbath-keeping promote lifestyle changes and habits that could improve well-being. The third research question asked, "Do participants who receive a Sabbath-keeping psychoeducational intervention have higher psychological well-being compared to participants that do not receive the Sabbath-keeping psychoeducational intervention"? The hypothesis assumed well-being would improve in those who developed a weekly Sabbath-keeping practice.

A review of mean scores in each cohort demonstrated a slight increase from week 1 to week 8 (see Table 6). The WEMWBS was used to assess well-being. In general, the participants began with a relatively high sense of well-being mean scores 44-52 out of possible 70 and ended with a slight increase in the range to mean scores of 53-56. Cohort B had a slight shift down in well-being mean scores between week 1 and week 5 decreasing from 52.71 to 50.28. A review of the individual participants in the cohort indicated that four of the seven decreased their scores in that time. It is unsure why most cohort B participants had lower scores. Outside of the time of year (pandemic and holidays) there were no noticeable personality traits or other factors.

The Problem of Psychological Distress

Psychological distress involves an internal response to an external stressor (McKenzie & Harris, 2013). Stress and anxiety are key components of mental health, specifically with one's sense of well-being (Daviu et al., 2019). Public health has been a topic of discussion in terms of well-being. The research continues to reveal the significance of how one's sense of well-being

affects their overall health and wellness, including mental health. Trudel-Fitzgerald et al. (2019) propose the need for scalable interventions such as personal growth, optimism, life satisfaction, positive affect and more to aid the mental health crisis we are facing in the United States. Alternative forms of self-management are desirable. La Placa and Knight (2013) discuss well-being indicators of happiness, satisfaction, and anxiety to determine how the social, physical, psychological, and environmental factors are impacting communities. This sense of well-being is becoming a political issue in the realm of public health. The current study an alternative way of coping with psychological distress using Sabbath-keeping practice. The results were promising that overtime the Sabbath-keeping practice could assist in the reduction of stress, anxiety and increase one's sense of well-being.

Psychological distress may be linked to personality factors (Pereira-Morales et al., 2019; Ruini et al., 2003). Researchers are starting to investigate well-being, psychological distress, and personality to consider vulnerability and protective factors (Ruini et al., 2003; Ebstrup et al., 2011). Personality in the current study was measured using the Big Five Inventory. Personality was chosen as a measurement to review the general make-up of the study population and to account for any specific personality variables that may have impacted the results. The BFI considers Extroversion, agreeableness, conscientiousness, neuroticism, and openness factors of personality. In research related to anxiety, the personality factors of Extroversion and neuroticism are often associated (Brandes & Bienvenu, 2006). Scoring low in Extroversion and high in neuroticism may make one more vulnerable to anxiety (Brandes & Bienvenu, 2006; Pereira-Morales et al., 2019).

This study drew participants from a general population and had a minimal number of participants (N=18). The likelihood of having many participants with personality profiles that

indicate levels of anxiety or stress that would be considered disordered is low. In the current study two participants (6 and 12) mirrored these conditions scoring low on Extroversion and high on neuroticism in comparison to the other participants. Both also scored high on the GAD-7 and PSWQ. In general, the cohorts were diversified in personality factors and did not indicate any significant results. Pereira-Morales et al. (2019) discuss the connection between perceived stress, anxiety and neuroticism indicating a poorer quality of life. They determined that high neuroticism scores correlate to anxiety and stress thus validating the use of measures chosen in this study. Their research also provides insight that when people chose to improve their quality of life their levels of stress and anxiety reduce. This was a primary intention of the current study.

Sabbath-keeping and Mental Health

A discussion on the impact of this Sabbath-keeping and mental health study would not be complete without considering the spiritual discipline aspect of Sabbath-keeping. Although no formal studies have specifically addressed mental health and Sabbath many studies have considered the implications of religiosity or spirituality and mental health (Anderson et al, 2015; Fabricatore et al., 2004; Gonçalves et al., 2015; Koenig, 2009; Krok, 2008). The concept of Sabbath-keeping is rooted in both Judaism and Christianity. The current study did not investigate religious beliefs except to note if they had any religious affiliation. 83% identified as Christian.

Kessler (2012) proposed the notion that Sabbath-keeping could be a factor in solving the problem of human restlessness suggesting that time set aside each week for a break from work, mental rest and time for leisure could ultimately give individuals a truer sense of work-life balance and well-being. White et al. (2015) talks at length about the potential benefits of consistent Sabbath-keeping and mental health focusing on the specific element of rest. Describing rest as a virtue, they make claim that “leisure and spirituality can be blended to

increase positive life coping" (p.102). In their discussion of sacred leisure they state, "an individual's meaning making, leisure-spiritual coping behaviors, and leisure-spiritual coping resources interplay to increase overall well-being" (p.102). This belief was the desired outcome of the current study.

Implications

The counseling field is driven by assisting individuals in their journey to wholeness through a variety of healing related approaches including their physical, spiritual, social, mental, and emotional aspects of self. Lifestyle medicine is an emerging field that considers the benefits of diet, exercise, meditation, rest, and other lifestyle factors impact on one's mental health (Sarris et al., 2012). This researcher considered how the use of Sabbath-keeping could have positive impacts on an individual's mental health if practiced consistently. Investigating lifestyle medicine led to a discussion on how customary principles related to Sabbath-keeping could impact well-being. Speedling (2019) pioneered research in Sabbath-keeping and holistic health that inspired this researcher to consider the mental health benefits. Emerging themes from Speedling's research highlighted self-awareness, self-care, enriched relationships improved spirituality and positive affect.

As a researcher and professional counselor, the implications for the counseling field are profound. The counseling field must evolve and grow, looking for new and improved ways to understand mental wellness. Preventative and self-help tools are vital. These practices help with cost savings and can improve clinical care (Merlo & Vela, 2021; Van Daele et al., 2012). Mental health is in essence related to behavioral health which requires an individual to take some form of action in their life to improve their wellness and well-being. The combination of lifestyle medicine and mental health focuses on the actions one can take within their lifestyle to develop

habits that affect change and help them create a life worth living. The basic principles of Sabbath-keeping align well with the concept of lifestyle medicine. This study taught participants the value of stopping work, resting, contemplation and finding delight in a 12–24-hour period each week. It suggested that in doing this, mental health issues related to anxiety, stress, and well-being would improve. The results of this study indicated a potential connection could be made to Sabbath-keeping and mental health. Further, more advanced studies directly related to lifestyle and mental health are needed to progress from association to causation indicators (Merlo & Vela, 2021).

The very nature of Sabbath-keeping is God-centered. In the Old Testament, God laid out foundational ways to live and in them included the concept of rest, setting aside dedicated time each week to break so that ultimately, they could find personal restoration and improved productivity in their work. As a Christian, this researcher finds it perplexing that the principles of Sabbath-keeping are not taught and not encouraged throughout the faith; yet scripture reading, prayer, church attendance and fasting have in-depth studies and research. One must ask the question why is this spiritual discipline overlooked? Like other disciplines it requires practice, intentionality, and self-control. It is also counterculture. Yet in scripture the concept of Sabbath-keeping is discussed in both the new and old testaments with the very words of Jesus quoted in Mark 2:27 (NIV) ““The Sabbath was made for man, not man made for the Sabbath”. This researcher believes that an exploration of Sabbath-keeping practice, habits and principles could greatly add to the mental health field and provide clinicians an additional tool to teach clients in their overall stress management.

Scripture also speaks to the problem of anxiety. Luke 12:25-26 (NIV) states, “Who of you by worrying can add a single hour to your life? Since you cannot do this very little thing.

Why do you worry about the rest"? Philippians 4:6 (NIV) states, "Do not be anxious about anything, but in every situation, by prayer and petition, with thanksgiving, present your requests to God. A simple Google search on rest and scripture yields multiple verses about Sabbath. Dein and Lowenthal (2013) make the following claim about Sabbath in Judaism and mental health which this researcher believes all people but especially Christian's should take notice:

> There are many potential mental health benefits. The Sabbath provides opportunities to rest from both physical and mental stresses and introduces a rhythm into the cycle of everyday life. Non-work time is considered holy and provides the possibility of deepening relationships, expressing the emotional dimensions of our being, and enjoying the here and now. It detracts from the quotidian struggle for survival emphasizing contemplation, meaningful conversation, and freedom from mundane and practical concerns. The Friday night meal allows individuals to interact on a deeper level with their families, providing social emotional support, identity, meaning and security from these relationships and facilitating religious coping strategies for responding to emotionally and physically debilitating situations. Finally, it is the weekly disengagement from everyday tasks and concerns that facilitates the conviction that one can control thought, action, and emotion, thus enhancing a sense of self-efficacy. (p.1384)

Limitations

There were several limitations to this study. First, the study began on October 4, 2021, ending on November 29, 2021. Possible external cultural events such as the ongoing Coronavirus pandemic could have impacted the participant responses as there was a spike in the virus reports during that time (Stone, 2021), as well as the holiday season coming up which often raises people's anxiety levels (*Find Your Holiday Happiness: Manage Anxiety and Depression* |

Anxiety and Depression Association of America, ADAA, n.d.). Anxiety levels in the United States have been reported at an all-time high due to the on-going pandemic (Bethune, 2021). The American Psychological Association's on-going series entitled *Stress in America* reported in October 2021 that stress related to the pandemic has specifically impacted adult decision-making with over 63% of adults surveyed reporting that the pandemic has caused them to directly re-think how they are living their lives (Bethune, 2021). An examination of the results exposed a noticeable difference in cohort A's scores on the GAD-7 (see Figure 4). From week 1 to week 5 their scores went up and eventually declined in week 8. It could be assumed that a shift in scores might be due to the cultural events at the time.

A second limitation to the study is the length of the study. This is two-fold. First, participant retention is critical to the validity of the study (Robinson et al., 2015). The study experienced attrition as the original participant pool of 24 ended with 18. Cohort C was affected most with an attrition rate of 50%. This cohort did not start the intervention until week 5 of the study which could account for the higher attrition rate. Selective attrition could be due to any number of factors including loss of motivation or distractibility (Cherry, 2020). Asking participants to commit to 8-weeks is a long obligation. Second, the length of the study was eight weeks which gave participants, based on their cohort placement, three to eight opportunities to practice the skills taught in the psychoeducational intervention to build a Sabbath-keeping practice. Building habits or the practice of a particular skill takes effort. James Clear (2018) author of Atomic Habits is one of today's most prolific writers about habit or practice building. He observes that not only does building a habit take some level of time but more importantly it is the frequency that makes the difference. He states, "The amount of time you have been performing a habit is not as important as the number of times you have performed it (p.147)".

The study length may not have been sufficient time to demonstrate significant results. Future studies of this kind may benefit from a longitudinal study of 12 months or longer to gather a more accurate reflection of the benefits to weekly Sabbath-keeping practices.

A third limitation to the study affecting internal validity are two common factors often found in research design: history and testing (Ohlund & Chong-ho, n.d.). As stated above time may have been a factor as there were three separate testing dates and issues such as current events and time of year could have impacted the measurements. The testing itself could have been a factor as each participant received the same assessments three times. Receiving the same assessment repeatedly could account for memory effect during test-retest (Shou et al., 2021).

Finally, a Single Subject Multiple Baseline design has limitations inherently in its strategy. SSRD is described as an observation of overall effectiveness of the study because of the difficulty in determining if the intervention is the direct cause of the desired effect (Pearson Education, n.d.). The design measures the same subject variables at varying points across participants. In this study participants received a psychoeducational intervention on Sabbath-keeping benefits with the intent to examine the mental health benefits of Sabbath-keeping practice. The study was limited in participants (N=18), which also makes it difficult to generalize to a larger population any findings, effecting external validity. The small sample size typically found in a Multiple Baseline SSRD study negatively impacts external validity requiring any replication to carefully consider specifics of the existing sample (Price et al., 2017).

Recommendations for Future Research

This study had promising indications that consistent Sabbath-keeping practice could impact one's mental health positively. A large-scale, longer-term study with interviews as well as assessments would be a great option for future research. In-depth participant interviews could

help define which specific aspects of Sabbath-keeping practice are the most helpful. They could also help look for commonalities that could be studied further. For example, if a study of one hundred participants indicated that 80% of participants claimed time in nature as part of their Sabbath-practice was helpful, that variable could be assessed further. This study did not use inferential statistics. It may be beneficial to develop a research design that would allow for the use of inferential statistics to determine any significant correlations to Sabbath-keeping practice and mental health.

The possible development of a survey for existing Sabbath-keeping populations to discuss the mental health benefits of their practice could lead to more discussion on the specific variables and habits that affect mental health. Sabbath-keeping in general is an understudied spiritual discipline that warrants a variety of investigations into its impact and effect if individuals would begin to implement a consistent practice. In a culture that is consumed with productivity and starved for restoration, Sabbath-keeping offers a potential solution. Swoboda (2018) poses the question "Why do we pray for rest when we have the answer to prayer in the practice of Sabbath? (p.49)". Future research would be well-served if Sabbath-keeping habits were investigated as they relate to rest and wellness. God has given us the answer, it is up to science to take the next step of validating this truth.

Finally, a deeper look into personality factors with a larger sample size could be an interesting addition to the existing literature on mental health and Sabbath-keeping. Few existing studies mention traits outside of neuroticism. It could be helpful to understand if the remaining four traits in any combination impact not only the results of a similar study but open the door for understanding the type of personality who may ultimately be drawn to a study on Sabbath-keeping and mental health.

Summary

This study was unique in its emphasis on specific mental health traits of anxiety, stress, and well-being as they relate to the regular practice of Sabbath-keeping. Given the nature of the study design SSRD with multiple baseline staggard starts and the lack of inferential statistics it was expected to yield results that could pave the way for future research. This was accomplished. Abraham Lincoln said it best, “As we keep or break the Sabbath day, we nobly save or meanly lose the last best hope by which man rises (Sleeth, 2012, p.4)”. In a culture of hustle, do more, don’t stop, rest is for the weak, yet mental illness is at an all-time high, burnout is an issue in every industry and stress management relief is a multibillion-dollar industry why not consider the spiritual disciple as a remedy for the restlessness of humanity at White et al. (2015) suggest. This researcher believes with consistent intentionality and the development of a personal Sabbath-keeping habit an individual may not only be able to reduce their mental health concerns but prevent issues before they start.

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Appendix A

Generalized Anxiety Disorder 7 item GAD-7

About: This scale is a self-report measure of anxiety. Items: 7

Reliability: The internal consistency of the GAD-7 is considered excellent with a Cronbach a score of .92 (Spitzer et al., 2006).

Validity: Spitzer et al. (2006) states,

> Convergent validity was assessed by examining correlations of the final version of the GAD scale with the Beck Anxiety Inventory and the anxiety subscale of the Symptom Checklist-90, even though neither scale is specific for GAD.
>
> To assess construct validity, we used analysis of covariance to examine associations between anxiety severity on the final GAD scale and SF-20 functional status scales, self-reported disability days, and physician visits, controlling for demographic variables. For criterion validity, we investigated sensitivity, specificity, predictive values, and likelihood ratios for a range of cutoff scores of the final scale with respect to the MHP diagnosis. To investigate whether anxiety as measured by the GAD-7 and depression as measured by the PHQ-8 reflect distinct dimensions, we assessed factorial validity by using confirmatory factor analyses. Finally, procedural validity and test-retest reliability were assessed by means of intraclass correlation (p.1093).

Scoring:

	Not at all	Several days	More than half the days	Nearly every day
All questions	0	1	2	3

The total score is calculated by finding the sum of the 7 items.

Score 0-4 = Minimal anxiety
Score 5-9 = Mild anxiety
Score 10-14 = Moderate anxiety
Score greater than 15 = Severe anxiety

References: Spitzer RL, Kroenke K, Williams JB, Löwe B. A brief measure for assessing generalized anxiety disorder: the GAD-7. Arch Intern Med. 2006 May 22;166(10):1092-7. doi: 10.1001/archinte.166.10.1092. PMID: 16717171.

Over the last 2 weeks, how often have you been bothered by the following problems?

	Not at all	Several days	More than half the days	Nearly every day
Feeling nervous, anxious or on edge	0	1	2	3
Not being able to stop or control worrying	0	1	2	3
Worrying too much about different things	0	1	2	3
Trouble relaxing	0	1	2	3
Being so restless that it is hard to sit still	0	1	2	3
Becoming easily annoyed or irritable	0	1	2	3
Feeling afraid as if something awful might happen	0	1	2	3

(For office coding: Total Score T____ = ____ + ____ + ____)

Appendix B

Penn State Worry Questionnaire (PSWQ)

Author of Tool:
Meyer, T. J., Miller, M. L., Metzger, R. L., & Borkovec, T. D.

Key references:
Original article:
Meyer, T. J., Miller, M. L., Metzger, R. L., & Borkovec, T. D. (1990). Development and validation of the penn state worry questionnaire. Behavior Research and Therapy, 28, 487-495.

Brown, T.A. Confirmatory factor analysis of the Penn State Worry Questionnaire: Multiple factors or method effects? Behavior Research and Therapy (2003) 41, 1411-14226.

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Primary use / Purpose:
The Penn State Worry Questionnaire (PSWQ) is a 16-item questionnaire that aims to measure the trait of worry, using Likert rating from 1 (not at all typical of me) to 5 (very typical of me). Research suggests that the instrument has a strong ability to differentiate patients with generalized anxiety disorder (GAD) from other anxiety disorders.

Background:
Worry is regarded as a dominant feature of GAD. Since its development in 1990, the PSWQ has become a widely used self-report tool for pathological worry and GAD. The PSWQ attempts to measure the excessiveness, generality, and uncontrollable dimensions of worry.

Psychometrics:
The PSWQ has shown to possess high internal consistency and good test-retest reliability (Meyer et al., 1990).

Patient Name:_____ Date:_____

The Penn State Worry Questionnaire (PSWQ)

Instructions: Rate each of the following statements on a scale of 1 ("not at all typical of me") to 5 typical of me"). Please do not leave any items blank.

	Not at all typical of me				Very typical of me
1. If I do not have enough time to do everything, I do not worry about it.	1	2	3	4	5
1. My worries overwhelm me.	1	2	3	4	5
1. I do not tend to worry about things.	1	2	3	4	5
4. Many situations make me worry.	1	2	3	4	5
5. I know I should not worry about things, but I just cannot help it.	1	2	3	4	5
1. When I am under pressure I worry a lot.	1	2	3	4	5
1. I am always worrying about something.	1	2	3	4	5
1. I find it easy to dismiss worrisome thoughts.	1	2	3	4	5
9. As soon as I finish one task, I start to worry about everything else I have to do.	1	2	3	4	5
10. I never worry about anything.	1	2	3	4	5
11. When there is nothing more I can do about a concern, I do not worry about it anymore. 12. I have been a worrier all my life.	1	2	3	4	5
13. I notice that I have been worrying about things.	1	2	3	4	5
14. Once I start worrying, I cannot stop.	1	2	3	4	5
15. I worry all the time.	1	2	3	4	5

16. I worry about projects until they are all done.	1 2 3 4 5

Appendix C

The Perceived Stress Scale (PSS)

Author of Tool:

Cohen, S.

Key references:

Cohen, S., & Janicki-Deverts, D. (2012). Who's stressed? Distributions of psychological stress in the United States in probability samples from 1983, 2006 and 2009. Journal of Applied Social Psychology.

Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. Journal of Health and Social Behavior, 24, 385-396.

Cohen, S., & Williamson, G. (1988). Perceived stress in a probability sample of the U.S. In S. Spacapam & S. Oskamp (Eds.), The social psychology of health: Claremont Symposium on Applied Social Psychology. Newbury Park, CA: Sage..

Cohen, S., & Janicki-Deverts, D. (2012). Who's stressed? Distributions of psychological stress in the United States in probability samples from 1983, 2006 and 2009. Journal of Applied Social Psychology.

Primary use / Purpose:

Measures the degree to which situations in one's life are appraised as stressful

Background:

Potentially stressful life events are thought to increase risk for disease when one perceives that the demands these events impose tax or exceed a person's adaptive capacity (Lazarus & Folkman, 1984). In turn, the perception of stress may influence the pathogenesis of physical disease by causing negative affective states (e.g., feelings of anxiety and depression), which then exert direct effects on physiological processes or behavioral patterns that influence disease risk (Cohen, Janicki-Deverts, & Miller, 2007). The Perceived Stress Scale (PSS) measures psychological stress associated with sex, age, education, income, employment status, and a number of other demographics. Measures psychological stress associated with mm

Psychometrics:

The PSS showed adequate reliability and, as predicted, was correlated with life-event scores, depressive and physical symptomology, utilization of health services, and social anxiety. For full psychometrics see: Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. Journal of Health and Social Behavior, 24, 385-396.

The Perceived Stress Scale (PSS)

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate by circling how often you felt or thought a certain way.

Name _____Date _____

Age _____ Gender (Circle): M F Other _____

0 = Never 1 = Almost Never 2 = Sometimes 3 = Fairly Often 4 = Very Often

In the last month, how often have you been upset because of something that happened unexpectedly?	0	1	2	3	4
In the last month, how often have you felt that you were unable to control the important things in your life?	0	1	2	3	4
In the last month, how often have you felt nervous and "stressed"?	0	1	2	3	4
In the last month, how often have you felt confident about your ability to handle your personal problems?	0	1	2	3	4
In the last month, how often have you felt that things were going your way?	0	1	2	3	4
In the last month, how often have you found that you could not cope with all the things that you had to do?	0	1	2	3	4
In the last month, how often have you been able to control irritations in your life?	0	1	2	3	4
In the last month, how often have you felt that you were on top of things?	0	1	2	3	4
In the last month, how often have you been angered because of things that were outside of your control?	0	1	2	3	4

In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?	0 1 2 3 4

PSS Scoring

PSS-10 scores are obtained by reversing the scores on the four positive items, e.g., 0=4, 1=3, 2=2, etc. and then summing across all 10 items. Items 4,5, 7, and 8 are the positively stated items.

PSS-4 scores are obtained by reverse coding items # 2 and 3.

PSS-14 scores are obtained by reversing the scores on the seven positive items, e.g., 0=4, 1=3, 2=2, etc., and then summing across all 14 items. Items 4, 5, 6, 7, 9, 10, and 13 are the positively stated items.

The PSS was designed for use with community samples with at least a junior high school education, The items are easy to understand and the response alternatives are simple to grasp. Moreover, as noted above, the questions are quite general in nature and hence relatively free of content specific to any sub population group. The data reported in the article are from somewhat restricted samples, in that they are younger, more educated and contain fewer minority members than the general population. In light of the generality of scale content and simplicity of language and response alternatives, we feel that data from representative samples of the general population would not differ significantly from those reported in the article.

Perceived Stress Scale (PSS)

Primary Reference:

Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. Journal of Health and Social Behavior, 24, 385-396.

Purpose: To assess the degree to which people perceive their lives as stressful. High levels of stress are associated with poor self-reported health, elevated blood pressure, depression, and susceptibility to infection.

Description: Subjects indicate how often they have found their lives unpredictable, uncontrollable, and overloaded in the last month.

Scaling: 0 = Never; 1 = Almost Never; 2 = Sometimes; 3 = Fairly often; 4 = Very often

Items: 10

Sample Items:

"In the last month, how often have you been upset because of something the happened unexpectedly?" "In the last month, how often have you felt nervous and "stressed"?"

Psychometrics:

Reliability: alpha = .78
Validity: Correlates in a predicted way with other measure of stress (Job Responsibilities Scale, life events scales).

Scoring:

Reversed Items: 4, 5, 7, 8
Total Perceived Stress: Sum Items: 1, 2, 3, 4R, 5R, 6. 7R, 8R, 9, 10

Variable Names:

pss_tot: Total Perceived Stress Score

Appendix D

Permission to use WEMWBS

<no-reply@warwick.ac.uk>
Sent: Monday, February 15, 2021 9:15 PM
To: McNichol, Kathryn <kmcnichol@liberty.edu>
Subject: [External] Submission (ID: 533866663) receipt for the submission of /fac/sci/med/research/platform/wemwbs/using/non-commercial-licence-registration

---

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

Thank you for completing the registration for a Licence to use WEMWBS for non-commercial purposes. You now have access to the scales and the associated resources here on our website: https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwarwick.ac.uk%2Fwemwbs%2Fusing%2Fregister%2Fresources&data=04%7C01%7Ckmcnichol%40liberty.edu%7C1c2ce32aa8ae4df2e92208d8d220bca6%7Cbaf8218eb3024465a9934a39c97251b2%7C0%7C0%7C637490385340261178%7Cunknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000&sdata=tDBYYrT1LARS295q73K2CpFbERwtxtXIv0MTd6u1i7M%3D&reserved=0
We suggest you bookmark this page for future reference.
The information declared on your Registration Form is documented below. Please retain a copy of this email as a record of your Licence together with the Terms and Conditions you have accepted.
https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwarwick.ac.uk%2Fwemwbs%2Fusing%2Fnon-commercial-licence-registration%2Fshrink-wrap_licence_-wemwbs_non-_commercial_v3_8.9.20.pdf&data=04%7C01%7Ckmcnichol%40liberty.edu%7C1c2ce32aa8ae4df2e92208d8d220bca6%7Cbaf8218eb3024465a9934a39c97251b2%7C0%7C0%7C637490385340271171%7Cunknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000&sdata=6zZTaJcEQpUhqRVL1gwxWg9ql4uErflXOPVwU2ulzHw%3D&reserved=0.
If you have any questions please contact us via email: wemwbs@warwick.ac.uk

Appendix E

Warwick Edinburgh Mental Wellbeing Scale (WEMWBS)

Below are some statements about feelings and thoughts. Please select the answer that best describes your experience of each over the last 2 weeks.

1= None of the time 2= Rarely 3= Some of the time 4=Often 5= All of the time

I've been feeling optimistic about the future	1	2	3	4	5
I've been feeling useful	1	2	3	4	5
I've been feeling relaxed	1	2	3	4	5
I've been feeling interested in other people	1	2	3	4	5
I've had energy to spare	1	2	3	4	5
I've been dealing with problems well	1	2	3	4	5
I've been thinking clearly	1	2	3	4	5
I've been feeling good about myself	1	2	3	4	5
I've been feeling close to other people	1	2	3	4	5
I've been feeling confident	1	2	3	4	5
I've been able to make up my own mind about things	1	2	3	4	5
I've been feeling loved	1	2	3	4	5
I've been interested in new things	1	2	3	4	5
I've been feeling cheerful	1	2	3	4	5

Appendix F

Big Five Inventory

How I am in general?

Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who *likes to spend time with others*? Please write a number next to each statement to indicate the extent to which **you agree or disagree with that statement.**

1 Disagree Strongly	**2** Disagree a little	**3** Neither agree nor disagree	**4** Agree a little	**5** Agree strongly

I am someone who…

1._____ Is talkative

2._____ Tends to find fault with others

3._____ Does a thorough job

4._____ Is depressed, blue

5._____ Is original, comes up with new ideas

6._____ Is reserved

7._____ Is helpful and unselfish with others

8._____ Can be somewhat careless

9._____ Is relaxed, handles stress well.

10. _____ Is curious about many different things

11._____ Is full of energy

12._____ Starts quarrels with others

13._____ Is a reliable worker

14._____ Can be tense

15._____ Is ingenious, a deep thinker

16._____ Generates a lot of enthusiasm

17._____ Has a forgiving nature

18._____ Tends to be disorganized

19._____ Worries a lot

20._____ Has an active imagination

21._____ Tends to be quiet

22._____ Is generally trusting

23._____ Tends to be lazy

24. _____ Is emotionally stable, not easily upset

25._____ Is inventive

26._____ Has an assertive personality

27._____ Can be cold and aloof

28._____ Perseveres until the task is finished

29._____ Can be moody

30._____ Values artistic, aesthetic experiences

31._____ Is sometimes shy, inhibited

32._____ Is considerate and kind to almost everyone

33._____ Does things efficiently

34._____ Remains calm in tense situations

35._____ Prefers work that is routine

36._____ Is outgoing, sociable

37._____ Is sometimes rude to others

38._____ Makes plans and follows through with them

39._____ Gets nervous easily

40._____ Likes to reflect, play with ideas

41._____ Has few artistic interests

42._____ Likes to cooperate with others

43._____ Is easily distracted

44._____ Is sophisticated in art, music, or literature

SCORING INSTRUCTIONS

To score the BFI, you'll first need to **reverse-score** all negatively-keyed items:

Extroversion: 6, 21, 31
Agreeableness: 2, 12, 27, 37
Conscientiousness: 8, 18, 23, 43
Neuroticism: 9, 24, 34
Openness: 35, 41

To recode these items, you should subtract your score for all reverse-scored items from 6. For example, if you gave yourself a 5, compute 6 minus 5 and your recoded score is 1. That is, a score of 1 becomes 5, 2 becomes 4, 3 remains 3, 4 becomes 2, and 5 becomes 1.

Next, you will create scale scores by ***averaging*** the following items for each B5 domain (where R indicates using the reverse-scored item).

Extroversion: 1, 6R 11, 16, 21R, 26, 31R, 36
Agreeableness: 2R, 7, 12R, 17, 22, 27R, 32, 37R, 42
Conscientiousness: 3, 8R, 13, 18R, 23R, 28, 33, 38, 43R
Neuroticism: 4, 9R, 14, 19, 24R, 29, 34R, 39
Openness: 5, 10, 15, 20, 25, 30, 35R, 40, 41R, 44

Appendix G

Sample Social Media Recruitment

ATTENTION FACEBOOK FRIENDS: I am conducting research as part of the requirements for a doctorate in Marriage and Family Therapy at Liberty University. The purpose of my research is to investigate the effects of weekly sabbath-keeping on mental health, in particular anxiety, stress and well-being. I want to know if someone who consistently practices sabbath-keeping will experience decreased anxiety and/or stress and a higher sense of well-being. Pretty cool right?!

What would I need to do?

1. Commit to the full length of the study. The length of the study is 8 weeks. Every participant will be in the study for the same 8 weeks.
2. Week 1 all participants will take the Big Five Inventory assessment which takes approximately 10 minutes to complete and is only given at week 1.
3. Participants will be randomly assigned to 1 of 3 groups. You will be placed into a group (without contact from other group members). The group determines when you will receive the psycho-educational intervention. This is determined randomly and cannot be chosen. The psychoeducational intervention is given at week 1, week 3 or week 5.
4. The psychoeducational intervention is a psychoeducational video series on the benefits of sabbath-keeping and mental health with instruction on how to begin an individual sabbath-keeping practice each week. The video series will explain how to do it. The 4-part video series will be accessed via a private web-link and will take approximately 60 minutes to watch. After watching the series, you will begin your sabbath-keeping practice the week you are assigned to view the intervention.
5. All participants will be given a series of assessments at week 1, week 5 and week 8. The assessments should take no longer than 20 minutes each time they are completed and will be given online.
6. Weekly email check-in. Once you review the intervention and begin sabbath-keeping you will receive an email each week asking if you practiced sabbath-keeping that week and for how long. Participants are asked to respond each week with the feedback (approximately 2 minutes each week).

Participants who complete the study, which means you start at week 1 and you end at week 8 regardless of what group you are randomly assigned to, will be entered into a lottery where 4 participants will be randomly chosen to win a $100 Amazon gift card.

If you are interested in being a participant or know someone who might be, please click here and you will be linked to more information and how to register.

The registration page provides additional details. The study is open to any adult (18+) male or female in the United States, who has access to the internet and a computer to complete the intervention and assessments. Consent information for the study will be emailed prior to the study start date.

Please share this with your people!! I am recruiting through as much word of mouth as possible.

Appendix H

Informed Consent

Title of the Project: Sabbath and Mental Health: The Influence of Weekly Sabbath-keeping on Stress, Anxiety and Well-being

Principal Investigator: Katie McNichol, M.S., LMHC, Liberty University

Invitation to be Part of a Research Study

You are invited to participate in a research study. In order to participate, you must be an adult age 18 or older, living in the United States. This study is open to both men and women. It requires access to the internet and the ability to watch a psychoeducational intervention online as well as the ability to complete assessments online. Candidates should have no previous consistent sabbath-keeping practice as this study is looking at its use from a mental health baseline before the use of sabbath-keeping to after consistent practice. Taking part in this research project is voluntary.

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

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

The purpose of the study is to investigate the effects of sabbath-keeping on mental health. This study will assess individuals who begin to practice sabbath-keeping on a weekly basis and how that directly impacts stress, anxiety and well-being.

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 things:

7. Commit to the full length of the study. The length of the study is 8 weeks. Every participant will be in the study for the same 8 weeks.
8. Week 1 all participants will take the Big Five Inventory assessment which takes approximately 10 minutes to complete and is only given at week 1.
9. Participants will be randomly assigned to 1 of 3 groups. You will be placed into a group (without contact from other group members). The group determines when you will receive the psychoeducational intervention. This is determined randomly and cannot be chosen. The psychoeducational intervention is given at week 1, week 3 or week 5.
10. The psychoeducational intervention is a psychoeducational video series on the benefits of sabbath-keeping and mental health with instruction on how to begin an individual sabbath-keeping practice each week. The video series will explain how to do it. The 4-part video series will be accessed via a private web-link and will take approximately 60 minutes to watch. After watching the series, you will begin your sabbath-keeping practice the week you are assigned to view the intervention.
11. Participants will be required to complete a short series of assessments at week 1, week 5 and week 8. These assessments should take no longer than 20 minutes each time they are

completed and will be given online. All will be asked to complete the same group of assessments on the same weeks.

12. Weekly email check-in. Once you review the intervention and begin sabbath-keeping, you will receive an email each week asking if you practiced sabbath-keeping that week and for how long. Participants are asked to respond each week with the feedback (approximately 2 minutes each week).

How could you or others benefit from this study?

The direct benefits participants should expect to receive from taking part in this study are an overall positive impact on their mental health. Participants may feel less stress and anxiety and an improved sense of well-being. Rest is a key component to sabbath-keeping, and participants may find they have learned to slow down their life pace as a result of consistent sabbath-keeping. Another benefit from this study is greater self-awareness, which is a key element to emotional intelligence (EQ). Sabbath-keeping provides time for self-reflection, which can allow an individual quality time to think, reflect and dream.

A deeper spiritual connection is also a benefit. Spending time in nature, prayer, meditation and faith-based activity is typically part of the sabbath-keeping practice and creates weekly time to consistently focus on this aspect of a person.

Time management is a potential benefit. The intentionality of setting aside time each week that is protected for a specific use towards relaxation, rest and renewal may require the remaining time of the week to be assessed and prioritized thus helping an individual structure his or her time in a more productive way.

Benefits to society include an alternative form of treatment and/or prevention for mental health. Sabbath-keeping practice could benefit society by teaching people better ways to manage their time and stress.

What risks might you experience from being in this study?

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

How will personal information be protected?

The records of this study will be kept private and confidential. Research records will be stored securely, and only the researcher will have access to the records.

- Participant responses to assessments will only be viewed by the researcher and the data is stored in password protected computers and password protected cloud storage. Participant responses will be kept confidential through the use of codes.
- Participant enrollment into the Teachable course for the psychoeducational intervention will be viewed only by the researcher. At the completion of the study, the course will be deleted including any enrollment information.
- Data will be stored on a password-locked computer and may be used in future presentations. After three years, all electronic records will be deleted.

- The use of technology platforms Teachable and Qualtrics (assessment administration) have privacy policies in place to protect information to the best of their ability. As with all internet use, there can be some risk involved due to the nature of the internet and the internet device you choose to use.

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

Participants may be compensated for participating in this study. Participants, regardless of what group they are placed in, who complete the study from week 1 to week 8 will be assigned a number and entered into a lottery system in which the researcher will randomly select 4 winners of $100 Amazon gift cards. This will take place within 1 week of the study completion, and the winners will be sent the Amazon gift cards. Only the researcher will have access to the winning numbers. All qualified participants will receive an email once the winners are chosen letting them know if they were not selected.

Does the researcher have any conflicts of interest?

The researcher serves as a licensed professional counselor at Katie McNichol, M.S., LMHC. Recruitment for the study is open to any adult, male or female over the age of 18. This may include the clients of Katie McNichol, M.S., LMHC and their family or friends. Participants will not have contact with other participants as part of the study, and all information will be kept confidential. Should volunteers choose to disclose their participation in the study it is at their own admission.

This disclosure is made so that you can decide if this relationship will affect your willingness to participate in this study. No action will be taken against an individual based on his or her decision to participate in this study.

Is study participation voluntary?

Participation in this study is voluntary. Your decision whether to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time 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 included in the next paragraph. Should you choose to withdraw, data collected from you will be destroyed immediately and will not be included in this study. You will also be ineligible for the compensation as outlined above.

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

The researcher conducting this study is Katie McNichol, M.S., LMHC. 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. Jeremiah Sullins, 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 would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA 24515 or email at irb@liberty.edu.

Disclaimer: The Institutional Review Board (IRB) is tasked with ensuring that human subjects research will be conducted in an ethical manner 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.

_____

Printed Subject Name

_____

Signature & Date

Appendix I

Recruitment Webpage Content

Have you been looking for a new way to practice self-care?

Feeling burnout, fatigue or just needing some rest?

Katie McNichol, M.S., LMHC, a current doctoral candidate at Liberty University, is conducting a study on the impact of Sabbath-keeping on mental health. **The study is open to adult men and women (over 18) in the United States, who have access to the internet and a computer, have no previous consistent Sabbath-keeping practice, and** are interested in alternative ways to treat and support their mental health.

What is it?

The 8-week study is investigating the impact of Sabbath-keeping on mental health. The basic principles of Sabbath-keeping encourage individuals to slow down, take a break, rest, reflect and take care of themselves for a specific period of time each week (12-24 hours) in order to create a rhythm of work and rest that is designed to alleviate burnout. Consistent Sabbath-keeping helps with flow of life.

Although Sabbath-keeping is a spiritual discipline, the intent of this study is to consider its effects on mental health. It is not a requirement to come from a faith background to participate in this study.

Here is what you are being asked to do if you participate:

· Commit to the full length of the study. The length of the study is 8 weeks. Every participant will be in the study for the same 8 weeks.

· Week 1, all participants will take the Big Five Inventory assessment which takes approximately 10 minutes to complete and is only given at week 1.

· Participants will be randomly assigned to 1 of 3 groups. You will be placed into a group (without contact from other group members). The group determines when you will receive the psycho-educational intervention. This is determined randomly and cannot be chosen. The psychoeducational intervention is given at week 1, week 3 or week 5.

· The psychoeducational intervention is a psychoeducational video series on the benefits of sabbath-keeping and mental health with instruction on how to begin an individual sabbath-keeping practice each week. The video series will explain how to do it. The 4-part video series will be accessed via a private web-link and will take approximately 60 minutes to watch. After watching the series, you will begin your sabbath-keeping practice the week you are assigned to view the intervention.

· All participants will be given a series of assessments at week 1, week 5 and week 8. The assessments should take no longer than 20 minutes each time they are completed and will be given online.

· Weekly email check-in. Once you review the intervention and begin sabbath-keeping you will receive an email each week asking if you practiced sabbath-keeping that week and for how long. Participants are asked to respond each week with the feedback (approximately 2 minutes each week).

Compensation

Participants who complete the study which means you start at week 1 and you end at week 8 regardless of what group you are randomly assigned to will be entered into a lottery where 4 participants will be randomly chosen to win 1 of 4 $100 Amazon gift cards.

Referrals

The study is open to all men and women over age 18 in the U.S. If you have friends or family that would be interested in learning and practicing Sabbath-keeping consistently, please send them the link to this website. Even if it is not for you, please feel free to pass it along to anyone you think would benefit from learning new ways of mental health coping and prevention.

Interested?

If you meet the above criteria and are willing to commit to the 8 weeks, please complete the form below, and you will receive the proper information regarding consent and how to proceed

(the information below is an actual form participants complete on the webpage)

Name *
First Name
Last Name
Age *
Gender *
Email *
Phone *
Location *
Religious Affiliation *

You are welcome to email me directly with questions – [redacted]