EXPLORING THE EFFECTS OF MINDFULNESS-BASED INTERVENTIONS ON RESILIENCE AND SELF-EFFICACY IN AFRICAN AMERICAN DOCTORAL STUDENTS: A SINGLE CASE RESEARCH DESIGN

A Dissertation

by

RENITA L. NEWTON

BS, Southeastern Louisiana University, 2014 MS, Texas A&M University-Corpus Christi, 2019

Submitted in Partial Fulfillment of the Requirements for the Degree of

DOCTOR OF PHILOSOPHY

in

COUNSELOR EDUCATION

Texas A&M University-Corpus Christi Corpus Christi, Texas

December 2023

© Renita L. Newton

All Rights Reserved

December 2023

EXPLORING THE EFFECTS OF MINDFULNESS-BASED INTERVENTIONS ON RESILIENCE AND SELF-EFFICACY IN AFRICAN AMERICAN DOCTORAL STUDENTS: A SINGLE CASE RESEARCH DESIGN

A Dissertation

by

RENITA L. NEWTON

This dissertation meets the standards for scope and quality of Texas A&M University-Corpus Christi and is hereby approved.

K. Michelle Hunnicutt Hollenbaugh, Ph.D. Chair

Richard Ricard, Ph.D. Committee Member

Wannigar Ratanavivan, Ph.D. Committee Member

Peter Moore, Ph.D. Graduate Faculty Representative

ABSTRACT

The purpose of this study was to explore the impact of mindfulness-based interventions on resilience and self-efficacy in African American doctoral students. Participants in the study were doctoral students between the ages of 18 and 65 and were enrolled in doctoral programs within the United States. A single-case research design was conducted to explore changes in participant's use of mindfulness skills and levels of resilience and self-efficacy (N=8) over a 9week period. Quantitative analyses were performed to explore changes in participants' levels of resilience, measured by the Brief Resilience Scale and self-efficacy, measured by the General Self-efficacy scale. Additionally, participants' uses of mindfulness skills were measured using the Freiburg Mindfulness Inventory. Analysis of data using the single-case research design showed that 6 weeks of mindfulness-based interventions was effective for enhancing levels of resilience and self-efficacy in African American doctoral students and increasing use of mindfulness skills. Treatment effects ranging from small to large were reported. Quantitative results included statistically significant improvements in participants who completed the study. Results of this study supported the assumption that mindfulness-based interventions are helpful in enhancing levels of resilience and self-efficacy in African American doctoral students, while increasing the overall use of mindfulness skills. Clinical implications and directions for future research are discussed.

DEDICATION

This work is dedicated to my mother, father, and loved ones who are taking their eternal rest in Heaven. This work is also dedicated to my siblings, Daniel Jamar Newton and Danielle Ja'Nay Newton. I love you and know that you can accomplish anything that you set your mind to. To my aunt, Alice Faye Newton aka "Bud", thank you for nurturing me and raising me to be the woman that I am today. You have always encouraged me to be the best version of myself that I can possibly be, and to let nothing stand in my way. I love you so much. Last, but certainly not least, this work is dedicated to the culture. To all my Black and African American brothers and sisters, merely dreaming of achieving a higher education, it is possible. For you can do all things through Christ, who strengthens you, Philippians 4:13. Much love and God bless.

ACKNOWLEDGEMENTS

First, I would like to give reverence to God, the head of my life and the director of my path. Without You, attaining my doctorate degree would not have been possible. Thank you for going before me, standing beside me, and walking behind me, every single step of the way.

Thank you for wiping my tears, cancelling my worries, and reassuring me that You would get me through this. All glory, honor, and praise are due to You. Thank you and I love you, forever.

Second, I would like to thank my participants. Without you, there would be no study.

Thank you for your committed participation, and I wish you the best in your future endeavors.

Third, I want to thank my dissertation committee for their support in completing my dissertation. To my awesome chair, Dr. Michelle Hollenbaugh, thank you for your continued mentorship throughout my masters and Ph.D. career. I shared my goal of attaining my Ph.D. with you at the end of my practicum semester, as a master's student, and here we are. Wow. I have always been grateful for your wisdom, your thoughtful and supportive feedback, and your kindness and flexibility in allowing me to have the space I needed to successfully complete my dissertation when life got tough. Dr. Richard Ricard, thank you for your continued mentorship, professional and educational development, and unconditional support. Thank you for being one of the first people to encourage me to pursue my Ph.D., along with believing in me and having faith that I would do very well and succeed. I experienced several challenging moments during this process. Thank you for reminding me to engage in mindful self-compassion and remain present. Dr. Wannigar Ratanavivan, words cannot express my thanks to you. Thank you so much for your unwavering support, encouragement, and constant reassurance throughout my journey towards the completion of my Ph.D. Thank you for always giving me a gentle reminder to

engage in self-care, especially on the days that I needed it the most. You are appreciated. Dr. Peter Moore, thank you for your willingness to sit on my committee as my Graduate Faculty Representative. Your thoughtful feedback and dissertation support throughout this process is greatly appreciated. Thank you all, so much.

Fourth, I want to thank my goal friends, Dr. Ana M. Salazar, Dr. M. Ashley Burks, and Dr. Jalen Evans. You ladies have been my rock. You have seen the good, the bad, and the very, very ugly. Thank you for being there for me throughout some of my darkest times. You know first-hand, the adversities I experienced during this process. I know I would have had a far more challenging time if you all were not by my side. I love you all and thank you for everything.

Fifth, I want to thank my beautiful, illustrious sorors, of the Corpus Christi Alumnae Chapter of Delta Sigma Theta Sorority, Incorporated, and my line sisters, the InDeSTructible 7 (Karen, Angie, Fee, Clarenda, Lyn, and Meador). Thank you for demonstrating the true meaning of sisterhood. Whenever I needed you, you were there. Always REDy. No questions asked. Your love, support, and encouragement has been unwavering. I love you all.

Sixth and final, I want to thank my family and dear friends. To my siblings, Daniel and Danielle, thank you for being a listening ear. I know there were times that you did not have any idea about the information I was sharing with you, yet you heard me out, cheered me on, and validated me by telling me, "That's really good, Ne Ne". Your support and encouragement over the last seven years has been invaluable. Thank you for trusting me to move so far away, to chase my goals and dreams. This one is for us. I love you Booma and Nay. To my cousin, Shantel, thank you for being a dose of hope on the days I needed it the most. We moved to our respective cities, just months apart, and you have supported me the entire time. Your uplifting words of encouragement always helped to put a smile on my face and gave me the motivation I needed to

keep on going. I love you, deep, cousin, and I am so blessed to have you in my corner. To my best friend, of 20 plus years, Kim. Thank you for your constant prayers, support, and encouragement. Our frequent check-in sessions have helped me more than you know. You have seen the difficulties, through it all. I cannot thank you enough. I love you, twin, and I am extremely blessed to have you by my side, every step of the way. To my loving friend of 10 plus years, Jas. Thank you for being one of my biggest cheerleaders throughout the duration of this journey. Your prayers, support, and words of encouragement gave me the strength to carry on, when the going got tough. I appreciate you always being a ray of sunshine in my life. I love you and I am grateful for you. To my good friend, Dae, thank you. You have been there through it all. Thank you for your continuous support, reassurance, and encouragement throughout this process. You, like a few others, had a front row seat in this tumultuous experience. Our long, motivational talks and work sessions helped me get through some of the most challenging times. Thank you for being the big sister I have always wanted. Your guidance and redirection have been invaluable. Much, much love, big sis. You are next. To my Louisiana sister-friend, Kianna, thank you for being a solid rock for me to lean on. You have been a tremendous source of support since day one. Thank you for always reminding me to give everything my best. Your nurturing personality has helped me to approach and conquer this process with confidence and poise. Your friendship is priceless. I love you and thank you for it all. To my graduate school sister-friends, Brenda, and Sandra, thank you for always rooting for me and encouraging me to stay the course. You have cheered for me every step of the way. I love you both, and I am grateful for our friendship over the years. And lastly, to those that I cannot call directly by name, thank you for believing in me when I did not believe in myself. To God be the glory, it is PhinisheD!

TABLE OF CONTENTS

	Page
ABSTRACT	iv
DEDICATION	v
ACKNOWLEDGEMENTS	vi
TABLE OF CONTENTS	ix
LIST OF FIGURES	xiii
CHAPTER I: INTRODUCTION	1
Resilience	2
Self-Efficacy	5
Mindfulness	6
Problem Statement	8
Statement of Purpose	10
Research Question	11
Hypothesis	11
Significance of the Study	11
Research Design	13
Data Collection	15
Intervention	15
Limitations	16

Definitions of Terms	16
CHAPTER II: LITERATURE REVIEW	18
Doctoral Students	18
Demographics	19
Persistence, Retention, Attrition	21
Academic Hardiness	24
Self-Efficacy	25
Motivation and Well-being	29
Mentorship	30
Sense of Belonging	31
Mindfulness	32
Overview and History	32
Conceptualizations of Mindfulness: Buddhist vs. Western	33
Components of Mindfulness	34
Relationship Between Mindfulness and Self-efficacy	35
Mindfulness-based Interventions and African Americans	37
Resilience	38
Resilience Theory	38
Factors Impacting Doctoral Student Resilience	40
Conclusion	43

CHAPTER III: METHODOLOGY	45
Research Question	45
Participants	46
Setting	46
Data Collection	47
Measurement of Outcomes	47
Brief Resilience Scale (BRS; Smith et al., 2008)	47
General Self Efficacy Scale (GSE; Schwarzer & Jerusalem, 1995)	48
Freiburg Mindfulness Inventory (FMI; Walach, et al., 2006)	49
Procedures	50
Intervention	50
Data Analysis	53
Visual Analysis	53
Effect Size	54
Conclusion	56
CHAPTER IV: RESULTS AND FINDINGS	57
Research Question	57
Single-Case Analysis: Individual Profiles of Participants	58
Participant 1	58
Particinant 2	62

Participant 3	66
Participant 4	70
Participant 5	74
Participant 6	78
Participant 7	82
Participant 8	86
Conclusion	90
CHAPTER V: DISCUSSION	92
Recommendations and Implications for Counselors	98
Recommendations and Implications for College Counselors	100
Recommendations for Counselor Educators	101
Recommendations for Future Research	103
Limitations	104
Conclusion	105
REFERENCES	107
APPENDIX A: IRB APPROVAL LETTER	124
APPENDIX B: BRIEF RESILIENCE SCALE (BRS)	125
APPENDIX C: FREIBURG MINDFULNESS INVENTORY (FMI)	126
APPENDIX D: GENERAL SELF-EFFICACY SCALE (GSE)	128
APPENDIX E: MINDFULNESS-BASED INTERVENTION SCRIPTS	130

LIST OF FIGURES

P	Page
Figure 1. LRH's Use of Mindfulness Skills Across Phases.	59
Figure 2. LRH's Levels of Resilience Across Phases.	61
Figure 3. LRH's Levels of Self-efficacy Across Phases	62
Figure 4. BC's Use of Mindfulness Skills Across Phases	64
Figure 5. BC's Levels of Resilience Across Phases	65
Figure 6. BC's Levels of Self-efficacy Across Phases	66
Figure 7. DG's Use of Mindfulness Skills.	68
Figure 8. DG's Levels of Resilience Across Phases	69
Figure 9. DG's Levels of Self-efficacy Across Phases	70
Figure 10. TLAT's Use of Mindfulness Skills Across Phases	72
Figure 11. TLAT's Levels of Resilience Across Phases	73
Figure 12. TLAT's Levels of Self-efficacy Across Phases	74
Figure 13. BP's Use of Mindfulness Skills Across Phases	76
Figure 14. BP's Levels of Resilience Across Phases	77
Figure 15. BP's Levels of Self-efficacy Across Phases	78
Figure 16. TPW's Use of Mindfulness Skills Across Phases	80
Figure 17. TPW's Levels of Resilience Across Phases	81
Figure 18. TPW's Levels of Self-efficacy Across Phases	82
Figure 19. RF's Use of Mindfulness Skills Across Phases	84
Figure 20. RF's Levels of Resilience Across Phases	85
Figure 21. RF's Levels of Self-efficacy Across Phases	86

Figure 22. AW's Use of Mindfulness Skills Across Phases	88
Figure 23. AW's Levels of Resilience Across Phases	89
Figure 24. AW's Levels of Self-efficacy Across Phases	90

CHAPTER I

INTRODUCTION

All college students experience stress related to their academic endeavors. Graduate students experience more pressure- and for African American students this weight is compounded, especially in their first year (Cornwall et al., 2017b; McGee et al., 2019). When pursuing higher education endeavors, African American (AA) doctoral students, may often feel insecure, uncertain and overwhelmed. Per the National Center for Education Statistics (NCES, n.d.), the total number of doctoral degrees awarded to AA students was 15,118, which is representative of 9.2 percent of all doctoral degrees earned in the United States (NCES, n.d.). While African Americans are underrepresented at this level of education, it is also important to understand the factors contributing to this disparity (e.g., low enrollment in doctoral programs). Although the amount of AA students enrolled in doctoral programs is increasing, the persistence rates from year to year are not reflective of this increase, and AA doctoral students are not advancing year to year at a sufficient rate (Starks, 2010). In fact, students enrolled in doctoral programs experience a 50% attrition rate while pursuing their degree (Hover, 2014).

While there is an existing body of research highlighting the scarcity of AAs across the helping professions, there is a dearth of information explaining various socio-cultural factors impacting resilience and self-efficacy in AA students who are currently pursuing doctoral degrees, overall (Beasley et al., 2015). Furthermore, AA doctoral students may meet cultural and social norms differing from their own, which can affect their academic performance and self-efficacy, levels of motivation, and psychological well-being (Cai, 2020). Pursuing a graduate degree is a rigorous endeavor. As demands of a doctoral program are added to existing life circumstances, the amount of stress experienced by doctoral students increases. An early study

investigating university students' use of campus mental health services revealed that graduate students were the second most frequent group to use their college's mental health services, in comparison to their undergraduate counterparts (Cai, 2020). Beyond enrollment in graduate programs, added stressors such as finances, time, isolation, lack of motivation and support, and social connections and interactions are also present for AA doctoral students. These added stressors can make it extremely difficult to reach a graduate degree. In addition, these students may experience stressors related to negative stereotypes, racial profiling and discrimination, and police brutality (Stanley, 2020). Therefore, without the necessary supports to successfully navigate unjust and oppressed systems, AA doctoral students may begin to doubt their capabilities, withdraw from their programs, further contributing to the attrition rates within this population. Concepts like mindfulness, which is the ability to pay attention to the present moment, on purpose, without judgement, and factors such as resilience, also known as the ability, to persist, despite challenging and adverse situations, can contribute to the success of AA doctoral students. In this study, I will specifically explore the use of mindfulness-based interventions and their influence on resilience and self-efficacy in AA doctoral students.

Resilience

Rutter (1987) describes resilience as individual differences in a person's response to adversity and stress. Additional research defines resilience as a complex process involving positive adaptions when experiencing significant adversity under two set conditions, which are 1) exposure to significant threat or severe adversity; and 2) achievement of positive adaptation despite critical events or disruptions during the developmental process (Speight, 2009). Research investigating the impact of resilience in AAs suggests that resilience contributes to a variety of

environmental and cultural factors influencing the achievement of academic success (Boatman, 2014).

To better understand the construct of resilience, it is important to understand components of its historical development. The term resilience was first described as "invulnerability" or the ability to do well despite the experience of multiple risks and/or adversities. Many definitions describe resilience as an individual's ability to respond to adversity in a positive way, such as classifying the term resilience as a powerful process that encompasses a healthy adaptation to adverse experiences under certain conditions, (a) exposure to severe threat or adversity; and (b) the attainment of positive adaptations despite attacks and interference within the process of one's development (Luthar et al., 2000). Numerous factors contribute to an individual's ability to be resilient. Resiliency goes beyond the ideas of being invulnerable, rather, individuals engage in developmental processes of positive adaptation, regardless of their exposure to adversity (Viaud, 2014). It is within these developmental processes that new vulnerabilities and strengths arise during the experience of life changing events.

Early developments of resilience theory may illuminate the differences between AA and White individuals (Garmezy, 1991). Garmezy (1991), reported that nearly 50% of all AAs were living in poverty, AA children lacked quality care givers, and often went on to develop a series of severe mental health conditions. It is not uncommon to rebound from adverse experiences, however; it is important to consider how these experiences have shaped AA students who are currently enrolled in doctoral programs.

Further, resilience is central to an individual's relationship with their environment (i.e., academic, personal, and familial) and serves as a buffer to adversity and challenging situations that can exist in day-to-day life (Viaud, 2014). However, across many doctoral programs, AA

students are underrepresented and often lack supportive environments. Additionally, navigating through various social and political structures (e.g., poverty, discrimination, etc.) further perpetuates the need to be resilient within this racial group (Viaud, 2014). AA doctoral students overcome adversities (i.e., racial discrimination, physical and mental health disparities, intergenerational trauma) and therefore are resilient by nature. Many AA students have successfully journeyed through an educational pipeline rooted in systemic and racial injustices, designed to hinder their ability to conquer adverse experiences. Often, resilience can be viewed as an innate characteristic, suggesting that individuals who are resilient can achieve success for certain. However, resilience is not a set attribute, rather it changes with circumstances, allowing room for new opportunities of flexibility and adaptation (Rutter, 1987).

In all, a significant amount of literature has highlighted individual factors that contribute to a person's resilience (McCray & Joseph-Richard, 2020). Resilience is often studied across psychotherapy, sociology, engineering, social psychology, and recently, management and education have come of interest. However, discussions about the origins and true definition of the term resilience throughout the literature have been challenged (McCray & Joseph-Richard, 2020). According to Mohaupt (2009), the term resilience was first used in the 1940s, in social psychology. Moreso, there has been a debate concerning to what extent resilience is attributed to a genetic part and to what extent resilience can be learned throughout life (Block & Kremen, 1996). According to McCray et al. (2016) resilience involves the recovery of performance ability, after the adverse experience, and supporting performance ability over time, under adverse conditions and steady change. Regarding education, ideas of context specific resilience (i.e., educational or academic) has been explored (McCray & Joseph-Richard, 2020). As defined by Martin (2013) educational or academic resilience is one's capacity to overcome challenging or

adverse outcomes that may threaten their academic progress. Exploring educational and academic contexts of resilience is not without criticism. Resilience researchers argue that social and cultural factors creating situations that require resilience in the first place are ignored (McCray & Joseph-Richard, 2020). Further debates suggest that studies trying to individualize resilience, while dismissing social and cultural factors, (McCray & Joseph-Richard, 2020) continue to perpetuate systemic barriers and adverse experiences. To foster resilience in others, Richardson (2002) advocates that all systemic inadequacies that generate barriers, trauma, and adversities need to be acknowledged and addressed.

Self-Efficacy

The concept of self-efficacy can be defined as the personal judgements of an individual's capabilities to strategize and implement plans of action to achieve various performances (Bandura, 1977). Pajares (1996) suggests that a person's beliefs in their ability to successfully carry out a designated task may influence the choices individuals make and the route in which they take to reach the task(s). Students with higher levels of self-efficacy prove greater determination, persistence, and resilience when faced with adverse situations (Yuma, 2016). Bandura (1977) shares that an individual's self-efficacy beliefs are reliable determinants contributing to the level of accomplishment that students can achieve. Further, self-efficacy plays a significant role in outlining the trajectory of intellectual development and serves as an important contributor to academic success (Bandura, 1997). On the other hand, one cannot simply do tasks beyond their capabilities by only believing that they can. Often, it is self-perception of those capabilities that aid in finding the outcome of how one's knowledge and skills are used to achieve success (Pajares, 1996).

Most AA doctoral students identify as first-generation (Yuma, 2016). While many AA students are successful in obtaining an undergraduate degree, they may face new, challenging experiences at the graduate level. To counter the rigorous demands of graduate school, AA doctoral students may need self-efficacy to thrive while pursuing their degree (Stanley, 2020). Prior research found that self-efficacy was a significant prediction of an individual's academic performance and accomplishments (Turner et al., 2009; Lent et al., 1986). Scott (2017) reported the effects of self-efficacy on academic achievement, proposing that if one's self-efficacy increased, the effects will translate to better academic and educational success.

Self-efficacy mirrors a person's confidence and their ability to exercise control over their own motivations, behaviors, and social settings (Maycock, 2021). Numerous studies have investigated AAs and their educational experiences in doctoral programs; however, very few studies have explored AAs and their self-efficacy experiences in doctoral programs. Kola (2020) found that A.A. doctoral students experience more challenges in pursuit of their degree than students of other races. Additionally, AA doctoral students often report feeling challenged to prove themselves and defy negative stereotypes while seeking their degree. Nonetheless, given the nature of pursuing a graduate degree and a career simultaneously, Byars-Winston et al., (2011) suggest that a student's self-efficacy can influence the outcome of future vocational and immediate academic endeavors.

Mindfulness

Originating more than 2,500 years ago as a meditation technique practiced by Buddhist monks, the term mindfulness relates to paying attention, on purpose to present moment experiences and is useful in reducing stress and anxiety while enhancing overall well-being (Kabat-Zinn, 2015, p.1483). Today, the concept of mindfulness has been westernized by Jon

Kabat-Zinn from the University of Massachusetts Medical Center in Boston (Kabat-Zinn, 2015). Multiple therapeutic approaches that incorporate mindfulness exist including Mindfulness-Based Meditation (MBM), Mindfulness-Based Cognitive Therapy (MBCT), Mindfulness-Based Stress Reduction (MBSR), Dialectical Behavior Therapy (DBT), and Acceptance and Commitment Therapy (ACT) (Bach & Hayes, 2002). Existing research suggests that mindfulness practices have been correlated with various health benefits, a reduction of stress related symptoms, and an increase in more accepting attitudes and behaviors when experiencing difficult or negative situations (Kabat-Zinn, 2015). Further, engaging in mindfulness practices has been linked to lessening stress experiences of AA doctoral students pursuing graduate level degrees (Shapiro et al., 2007).

According to Zack and colleagues (2014) the application of mindfulness-based interventions has proved great growth across clinical and educational settings. The use of mindfulness-based practices is beneficial in the reduction of a wide range of distressing symptoms along with enhancing attention skills, concentration, emotion regulation, frustration tolerance, self-control, adaptive coping, self-esteem, and social and academic performance (Zack et al., 2014). There is a significant amount of literature expressing the connection between practicing mindfulness and changes in psychological, physical, neurological, emotional, and social behaviors (Menges & Caltabiano, 2019). Further, increased levels of mindfulness are significantly associated with numerous indicators of positive mental health outcomes (e.g., lower levels of depression, anxiety, negative affect, positive thought patterns) (Creswell, 2017). Given the efficacious benefits of engaging in mindfulness practices, it is safe to say that mindfulness can be classified as an alternative approach to mitigate chronic ailments across diverse populations (Biggers et al., 2020).

Problem Statement

The attainment of a doctoral degree is a stressful experience for many, especially African Americans. There are multiple disparities for AAs across a plethora of areas (i.e., high rates of unemployment, poor socioeconomic status, increased rates of incarceration); all of which directly impact their academic, physical, mental, and overall well-being (Levy et al., 2016). Numerous research studies have been conducted on the chronic, lasting effects of stressful life events experienced by African Americans. Existing literature found that African Americans experience chronic psychological stress at significantly higher levels than their White peers (Stanley, 2020). Further, African Americans are more likely to report experiencing multiple, co-occurring stressors at one point in time. Exposure to elevated levels of prolonged stress can lead to an increased risk of chronic diseases and poorer health outcomes for African Americans.

African Americans are also at higher risk for discrimination across multiple areas such as life events (i.e., employment, buying a home, medical care, etc.) and common, everyday experiences (i.e., microaggressions, racial profiling, stereotyping, etc.) (Biggers et al., 2020). Additionally, 46% of AAs report having worse sleep and more sleep disturbances when compared with 33% of their White counterparts. Such experiences can be attributed to the engagement in adverse health behaviors and maladaptive coping strategies (Biggers et al., 2020). Particularly, poor socioeconomic status can be classified as a predominant stressor underlying most academic, physical, and mental health disparities in African Americans (Levy, 2016). Lacking financial capital can significantly decrease an individual's ability to succeed and carry out various academic goals and aspirational milestones; unless a substantial amount of support from others, college/ personal savings, or other sources of monetary support (major credit cards, trust funds, family inheritance, etc.) are available.

Regarding doctoral students, particularly AA doctoral students, many are focused on changing numerous generational and inequitable trajectories affecting their current socioeconomic status. Most are concerned with their capabilities to overcome chronic stressors (i.e., low-income, poverty, lack of motivation, low resilience, lack of self-discipline, etc.) As a result of experiencing these stressors, many AA doctoral students often to withdraw from their studies, leading to the unsuccessful attainment of their terminal degree. The lack of AA doctoral students achieving degree attainment can also be attributed to a broken pipeline in academia; a system not addressing the issue of encouraging more AA students to pursue the doctoral credential (Harris, 2019). As a result of this, many can return to the toxic cycle of experiencing chronic, stressful life experiences. Adjusting to graduate-level coursework is not a small feat. A study conducted by Wynn et al. (2011) concluded that AA participants were at higher risk for poor adjustment to graduate level coursework if they experienced an academic failure (i.e., undergraduate college experience), or lacked faculty of color representation and/or adequate mentorship.

According to Harris (2019) less than 6% of full-time faculty members, teaching at institutions across the U.S., are African American. It is also important to address some of the experiences that AA students may encounter once they have enrolled in their university of choice. For example, an African American scholar being questioned about their doctoral status by a White colleague and being mistaken as a janitor. Or learning frightening information about life after achieving the doctorate such as African American faculty being 33 times more likely to be denied tenure when compared to their White colleagues (Harris, 2019). Experiences like these can be discouraging and lead to self-defeating thoughts and behaviors in AA doctoral students.

Further, lacking mindfulness skills, resiliency, and self-efficacy may further perpetuate the unsuccessful attainment of doctoral degrees by African Americans. Many African American students do not know if they can attain a doctoral degree. Harris (2019) suggests that it's the faculty's job to help African American doctoral students carry out this difficult yet attainable goal; "It is our job...not just Black faculty, but all faculty...to help them do it while they are in the program and after they have entered the job market as well." Despite an increase in doctoral degrees being awarded to African Americans over the past several years, the percentage of African Americans with doctoral degrees (PhDs) (2.1%), across the U.S. is still relatively small. Hence, there is a dire need to increase doctoral perseverance throughout the doctoral journey and beyond. Nonetheless, efforts to mitigate such challenges related to AA doctoral degree attainment can require much practice and skill development on the doctoral student's behalf. A paucity of literature exists, on the benefits of using mindfulness with African Americans to help them achieve success across various areas of life. Therefore, it is proposed that a study utilizing mindfulness-based interventions can increase mindfulness skills needed to evoke self-awareness and increase resilience and self-efficacy in AA doctoral students Each of these variables can be classified as a valuable set of characteristics needed to conquer and succeed the rigorous process of attaining a doctoral degree.

Statement of Purpose

A doctorate degree is classified as a terminal degree or the highest degree that is attainable in a particular field of study. However, research specific to the successful completion of AA doctorates is sparce. Per The Journal of Blacks in Higher Education, 2,458 doctoral degrees were awarded to African Americans in 2020 (*Academic Fields Where No African Americans Earned Doctorates in 2020*, 2021). This number is reflective of only 7.1% of African

Americans (identifying as U.S. citizens or permanent residents) who earned a doctorate degree (in varied disciplines) from a university in the United States, within the last two years. The purpose of this study was to explore the effects of mindfulness-based interventions on levels of resilience and self-efficacy in AA students enrolled in doctoral programs within the U.S.

Research Question

This study will answer the following research question: Does a 6-week mindfulness-based intervention effect resilience and self-efficacy in African American doctoral students?

Hypothesis

Regarding this study, I hypothesize that participants will report an increase in resilience, self-efficacy, and mindfulness skills.

Significance of the Study

Literature about the use of mindfulness-based interventions as a mediator between resilience and psychological well-being in AA doctoral students is sparse. Despite the advocacy efforts that have been made to increase the use of mindfulness-based interventions within the AA community, representation of such efforts is not reflected in recent research studies (Biggers et al., 2020). In a systematic review of mindfulness and mindfulness-based intervention studies from 1990 through 2016, researchers only found 24 out of 12, 265 citations that included marginalized individuals in the sample. Although the use of mindfulness-based interventions has been classified as both beneficial and successful for members of the AA community, there is still a significant gap amongst this population and the opportunity to receive help from mindfulness-based interventions. Waldron et al. (2018) conducted a systematic review of trial studies using Mindfulness-based Stress Reduction (MBSR) and Mindfulness-based Cognitive Therapy (MBCT) reporting that 78% of participants identified as non-Hispanic White. Hence, this study

seeks to contribute to closing the identified gap between evidenced-based mindfulness research and the AA community.

Former literature shows a need for future research about various systems (i.e., individual, family, community, and education) and how these systems contribute to resilience in AA students while pursuing a doctoral degree. Acknowledging the rate at which AA students reach doctoral degrees, this study is beneficial to the counseling profession, as it will aid in the identification of challenges and supports needed to help AA doctoral students with the completion of their doctorate degree. Exploring wellness-based approaches (e.g., mindfulness-based interventions) for AA students enrolled in doctoral programs is considered. Further, factors contributing to AA doctoral students' attainment of doctoral education ought to be shared.

The expansion of research on the variables under study can provide counselor educators with more information about the successful attainment and retention of AA doctoral students in doctoral programs. An increase in AA doctoral students may foster growth in the number of higher education faculty of color, in doctoral education programs across the U.S. (Scott, 2017). Further, an increase in AA faculty could result in increased retention of AA master's students and diversity. An increase in retention and diversity at the program and departmental levels can be especially helpful in combatting issues related to systemic racism, and colonized pedagogy (National Association of Diversity Officers Leading Higher Education, 2021). Fostering opportunities that support nurturing self-efficacy, resilience, and improved psychological well-being in AA students enrolled in doctoral programs is encouraged. This area of research is also pertinent in that it could enhance the current structure of teaching and developing multicultural competency and awareness in doctoral students who may be from various ethnic and cultural backgrounds.

Research Design

This study was conducted using an A-B Single Case Research Design (SCRD). The use of an A-B single-case research design will be essential in measuring the increase, if any, in the use of mindfulness skills as well as the enhancement of self-efficacy and resilience factors in AA doctoral students. This method is ideal for this study, because of my desire to find meaningful differences across varying intervals of time. Additionally, this method can be used to amplify research involving an understudied population (Lenz, 2015). Further, use of this design will be helpful in deciding if the mindfulness-based intervention used was effective over a 6-week period. Participants in this study will be graduate students, in doctoral programs across the U.S., identifying as AA and/or Black.

To obtain participants for this study, the primary investigator used snowball sampling, a convenience sampling method, which is purposive in nature. This sampling method was used to help recruit individuals meeting the eligibility criteria necessary to take part in the study. Data will be collected using the Brief Resilience Scale (BRS) (Smith et al., 2008), the General Self Efficacy Scale (GSE) (Schwarzer & Jerusalem, 1995), and the Freiburg Mindfulness Inventory (FMI) (Walach, et al., 2006), to assess an increase or decrease in the participants' levels of resilience, self-efficacy, and overall experience of mindfulness. The BRS is a 6-item scale that assesses an individual's ability to bounce back (Smith et al., 2008). Instructions for administration the scale (Smith et al., 2008) are as follows: "Please indicate the extent to which you agree with each of the following statements by using the following scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree" (e.g., "It is hard for me to snap back when something bad happens"). The GSE is a 10-item, self-report scale that measures one's self-efficacy (Schwarzer & Jerusalem, 1995). Individuals completing the scale are to record their

responses by selecting from one if the following choices: "Not at all true", "Hardly true", "Moderately true", or "Exactly true" (e.g., "I can always mange to solve difficult problems if I try hard enough"). The BRS demonstrates good internal consistency and acceptable levels of reliability with Cronbach's alpha ranges between .80 and .91 (Smith et al., 2008). According to Smith et al., (2008) scores for the BRS, based on convergent validity, reflect positive correlations with resilience measures exploring resilience and the relationship to experiences of optimism, social support, and purpose in life, and negative correlations with behavioral disengagement, denial, and self-blame. Further, convergent validity rating for the BRS indicated negative correlations to stress, anxiety, depression, negative affect, and psychological symptoms (Smith et al., 2008). Reliability scores for the GSE scale reflect Cronbach's alpha ranges between .76 and .90, showing acceptable rates and above. Additionally, the GSE scale is classified as a valid instrument that reflects positive correlations to emotion, optimism, and work satisfaction with negative coefficients being depression, stress, health complaints, burnout, and anxiety (Schwarzer & Jerusalem, 1995). The FMI is classified as both a valid and reliable inventory consisting of 14 items assessing how individuals experience mindfulness (e.g., "I feel connected to my experience in the here-and-now") (Walach, et al., 2006). The instructions for completion for the FMI (Walach, et al., 2006) read as follows: "Please use the last days as the timeframe to consider each item. Provide an answer for every statement as best you can. Please answer honestly and spontaneously as possible. There are neither "right" nor "wrong" answers nor "good" or "bad" responses. What is important to us is your own personal experience." The FMI exhibits a sound internal consistency rating, with Cronbach's alpha = .86 (Walach et al., 2006). Additionally, demographic information such as race/ethnicity, age, gender, education level, and geographical location will be collected.

Data Collection

The procedure for collecting data consisted of administering the BRS, the FMI, and the GSE virtually weekly for the first 3 weeks to establish baseline scores. For this study, all data was collected via Qualtrics. The primary investigator will introduce the mindfulness-based intervention during week four of the study and will continue over the next six weeks, while continuing to collect results from the BRS, the FMI, and the GSE. The approximate time needed to complete the measurements was 20-25 minutes and each mindfulness meditation took between 30-35 minutes with time included for reflection and group processing of the experience.

Intervention

For six consecutive weeks, participants voluntarily engaged in and took part in a series of mindfulness-based interventions to measure the increase in mindfulness experiences, and enhancement of self-efficacy and resilience traits, in AA doctoral students. The sessions were conducted virtually and lasted no longer than 60 minutes each week. The sessions began with a mindfulness-based intervention, followed by time to process the experience, and this will take approximately 30 to 35 minutes to facilitate. Following the intervention, participants will be allotted 20-25 minutes to complete the surveys. Week one focused on an introduction to breathwork exercise to facilitate deep breathing, week two focused on mindful mediation (awareness of thoughts and bodily sensations), week three targeted the awareness of difficult emotions, week four focused on acts of self-compassion (loving-kindness meditation), week five explored components of guided imagery meditation (visualizing higher self), and the final week concluded with a mindful letter writing activity (a letter to past, present, and future self).

Data collected was interpreted through visual and statistical analyses. Once all scores were established, the study concluded, and results were presented in the form of pictorial graphs

to show the relationships among the intervention and outcomes. A full description of the methodology used for this study is reported in greater detail in the chapters to follow.

Limitations

This study includes a few limitations. First, data collected was self-reported and participants may not have been honest with the primary investigator or themselves when completing the BRS, GSE, and FMI, which has the potential to contribute to inaccurate reporting and results of the study. The presence of the researcher in a virtual setting was also a limitation of the study, as presence of the primary investigator may have prompted participants to answer dishonestly in efforts to appease the primary investigator, which can contribute to a misrepresentation and/or inaccurate reporting of the data. Another possible limitation of this study is the sample. Due to an online recruitment method, some individuals eligible to take part in the study may have been excluded. Lastly, since this study was time limited, the primary investigator was not able to continue collecting data during the baseline phase. As a result of this, the intervention phase began without achieving stabilized scores.

Definitions of Terms

Mindfulness: Having moment-to-moment awareness, paying attention on purpose, without judgement (Kabat-Zinn, 2015).

Self-efficacy: An individual's beliefs and sentiment that they can successfully achieve at a designated level of. a personal or academic task or attain a certain educational goal (Domenech-Betoret et al., 2017).

Perceived stress: A condition subjectively experienced by an individual who identifies an imbalance between demands addressed to him/her and the available resources to encounter the demands (Kausar, 2010).

Resilience: The process of adapting well in the face of adversity, trauma, tragedy, threats, or even significant sources of stress (Southwick et al., 2014).

Persistence: A continuous variable ranging from no persistence (i.e., dropout) through persistence with some difficulty (intermit) to complete persistence (i.e., degree completion) (Donovan, 1984).

Retention: Continuous enrollment within the same degree institution from fall semester to fall semester or until degree completion (National Student Clearinghouse Research Center, 2015) **Attrition:** The proportion of students beginning a course of study withing a given year who do not complete or return to the institution the following year (Beer & Lawson, 2017).

Burnout: A feeling of emotional and physical exhaustion paired with a deep sense of frustration and failure (Wolfe, 1981).

African American: Any individual with a known Black ancestor, hence having one drop of Black blood (measured by blood quantum) (Green, 2006).

CHAPTER II

LITERATURE REVIEW

Higher education is a significant milestone for one's career and success in future endeavors. Today, the importance of continuing educational studies beyond baccalaureate and post- master's levels is critical in finding the likelihood of receiving better employment opportunities across various career fields. The number of doctoral degrees awarded to AA students has increased over the past few years (NCES, 2018). It is important to highlight that AA doctoral student are significantly underrepresented in achieving this level of education, although the number of African Americans enrolled in doctoral programs is increasing. Several factors contribute to the lack of representation thereof. This study focuses on various socio-cultural factors affecting resilience and self-efficacy in AA doctoral students currently enrolled in their respective programs. This chapter is a review of the literature on what is known about doctoral students and factors contributing to doctoral student success, specifically for AA doctoral students.

Doctoral Students

To better understand doctoral students and their characteristics, it is critical to explore the historical background of doctoral programs. The first doctoral program in the United States was established in 1876 at John Hopkins University, in Baltimore Maryland (McCloskey, 1993). Since its inception, over 400 institutions now offer doctoral programs and the number of students enrolling in doctoral programs has increased (Yuma, 2016). In contrast, data is still unclear concerning the enrollment and retention of doctoral students of color, especially about Ph.D. attainment of African American students (McCallum, 2017).

Demographics

As described by Offerman (2011) there are two demographics of doctoral students, traditional and nontraditional. In the early 1900s, traditional doctoral students were often classified as white, Protestant males with affluent status, enrolled in their academic program full time, with an assistant job role at their respective institution (Offerman, 2011). Further, traditional doctoral students were typically single without children, and were between 22 and 30 years of age (Offerman, 2011).

Compared to today's diverse society, doctoral student demographics are very different from the early 1900s (Yuma, 2016). Following 1960, a visible shift in doctoral students' demographics occurred. More women enrolled into doctoral programs, and colleges and universities became more diverse in their overall population of doctoral students (Gardner, 2009; Yuma, 2016). After the 1960's, doctoral students were categorized as part-time students, meaning they were mostly working full-time jobs and were enrolled in and completing coursework for their doctoral programs (Offerman, 2011). Today, doctoral students are typically aged 30 and above, married, and/or have children (Offerman, 2011). With a steady increase in diverse student populations in colleges and universities across the U.S. it is imperative that attention be given to the needs of all students and student groups. In turn, it is just as important to meet each need with preparation, aid, and support strategies to accomplish student persistence, retention, and degree attainment, with a specific focus on the African American population (Yuma, 2016).

Factors Impacting African American Doctoral Student Success
Systemic Racism in Higher Education

Within the higher education in the United States, there is a deep-seeded culture of White Supremacy, systemic racism, and support of dominant narratives designed to further suppress and oppress specific groups of people. Specifically, individuals not identifying as White, based on racial, ethnic, and gender backgrounds, fall prey to the ongoing stigmatization of nondominant groups. Further, the perpetuation of negative racial and gender-based stereotypes (e.g., Black women are angry and unapproachable) have the capability to become concretized, leading to negative outcomes for such individuals or a source of motivation in which these individuals refrain or resist from engaging in the perpetuating ideals and stereotypes (Rogers & Way, 2015). Acts of systemic racism (i.e., racial profiling, microaggressions, stereotyping, etc.) magnify daily stressors and overall life-time well-being (Braveman et al., 2022). Stress may take on many different forms, however; when experienced in significant amounts, it often negatively affects both the physical and mental health of those individuals. Shortcomings are ever present in areas of research looking to address systemic racism across the field of higher education. Museus and colleagues (2015) propose seven themes that change and affect the academic experience of minoritized students: (a) racial hostility; (b) racial prejudice and stereotypes; (c) racial invisibility and silencing; (d) racial balkanization or segregation; (e) cultural conflict and dissonance; (f) contradictory cultural pressures; and (g) cultural marginalization. As a result of such experiences, minoritized students are considerably less likely to find satisfaction with their campus environment and overall academic experience than their White peers (Museus et al., 2015).

Further, these themes significantly affect the scholarly trajectory of minoritized students who obtain doctoral degrees and aspire to become faculty members in higher education. Though the value of diversity is highly advocated for, across the field of higher education, faculty of

color remain the most significantly underrepresented group on university campuses (Museus et al., 2015). Data from NCES is reflective and supportive of the scarcity of non-white faculty employed at colleges and universities in the U.S. During the Fall 2020 semester, the characteristics of full-time faculty members, employed at degree-granting institutions, in the U.S. were reported as 39% White males, 35% White females, 7% Asian/Pacific Islander males, 5% Asian/Pacific Islander females, 4% African American females, 3% African American males, 3% Hispanic males, 3% Hispanic females, and combined, American Indian/Alaska Native and faculty of two or more races represented 1% or less of full-time faculty (NCES, 2022). Despite a subtle increase in the representation of faculty of color, in higher education (Museus et al. 2015) much of the increase can be attributed to a rise in faculty of color entering nontenured faculty positions. As professor rankings increase, faculty members of color, within higher rankings decrease, significantly. Further, cutting narratives proposing that PhDs of color are not capable of pursuing academic careers beyond attainment of their degree (Museus et al. 2015) continue to perpetuate racial inequality and systemic racism across higher education institutions. Perhaps, research that critically challenges systems and organizations that sustain racial inequities can provide support for doctoral students of color, specifically African Americans, to continue persisting through both current and former systemic issues. (Braveman et al., 2022).

Persistence, Retention, Attrition

Often, researchers focus on barriers that keep African Americans from attending graduate-level programs. For example, lack of employment after graduation, elevated tuition costs, and other lucrative career opportunities have been recorded as potential reasons why African Americans refrain from pursuing graduate degrees (McCallum, 2017). Moreover, factors contributing to the effects on enrollment are not well known, however; access to financial

resources, peer and faculty relationships, and career aspirations may influence the overall enrollment into Ph.D. programs. According to McCallum (2017) some scholar-practitioners postulate that while literature pertaining to Ph.D. program enrollment is deplorably inaccurate, the role of culture and serving as a productive member within the African American population may enable the enrollment of African American students into doctoral programs. Understanding African American students and their decision to enroll in Ph.D. program is almost impossible, as literature examining the decision-making process is nearly nonexistent (McCallum, 2017).

After deciding to enroll in a Ph.D. program, there are several variables that contribute to the completion of the doctoral degree for African Americans. In examining factors contributing to the increase or decrease of adequate persistence, retention, and attrition outcomes for African Americans enrolled in doctoral programs, Louque (1999) suggests that academic success can be attributed to a desire to better one's family and serving the African American community (i.e., giving back). On the other hand, factors such as poor mentorship, social class stats, and cultural norms across various institutions may lessen the visibility of suitable persistence, retention, and attrition results among AA doctoral students (Crumb, 2015).

Doctoral students are more likely to persist, return, and complete their doctoral studies, despite academic and economic hardships if they attend universities where they feel valued and supported throughout their educational endeavors (Tinto, 1993). According to researchers, it has been proven that doctoral students, who have support of their faculty members and institutional resources, are more likely to succeed in their doctoral program compared to those who do not (Crumb, 2015). As mentioned, the decision to enroll in a Ph.D. program is influenced by many factors. Often, full-time enrollment status is related to successful doctoral persistence. Crumb (2015) highlighted doctoral students, primarily African Americans, with limited financial

resources and/or familial obligations are more likely to enroll in their doctoral education parttime. Because of limited resources and external competing commitments (e.g., career, family,
partners, household obligations), many students might be inclined to enroll in their doctoral
programs part-time. Further, part-time enrollment can be attributed to the effects of academic
and social connectedness, especially within their respective departments or programs (Crumb,
2015).

When enrolled part-time, doctoral students may miss quality interactions with their departmental faculty and peers, and they may become less involved in program related activities (Ampaw & Jaeger, 2012). Considering this, many universities awarding doctoral degrees may struggle with retention and attrition outcomes. Moreover, doctoral programs are required to recruit and retain a diverse population of students. Failure to provide supportive and inclusive learning environments can impact doctoral students' decision to return or withdraw from their chosen programs (Ju et al., 2020). Doctoral students of color, especially AA doctoral students, face many ongoing challenges in their ability to succeed in predominately white graduate programs. According to Ju and colleagues (2022 many AA doctoral students reported feelings of isolation, tokenism, establishing voice, difficulty fostering relationships with white peers, and negotiating the education system. Considering the negative impact of these factors on retention and attrition, scholar-practitioners have posited strategies to help with retaining AA doctoral students and doctoral students in general. It has been recommended that support strategies such as intentional mentorship, increasing faculty diversity, understanding student cultures, and providing student support services may enhance retention and lessen attrition rates in doctoral programs, with a specific focus on AA doctoral students (Ju et al. 2020).

Academic Hardiness

Within the last 30 years, scholar-practitioners have expressed a trusted interest in understanding the impact of psychological distress in various school settings including graduate schools. Prior research findings show that following admission into graduate school, graduate students are likely to experience distress and struggle (Acker & Haque, 2015). The term hardiness is strongly associated with stress management literature. According to Cheng et al., (2019), hardiness is a personality characteristic linked to an individual's ability to preserve when meeting challenges in life. An upgraded term, academic hardiness was coined by Benishek & Lopez (2001) to illustrate some students' willingness to pursue academic difficulties, versus others avoiding challenging academic coursework in fear of harming their academic performance. Most literature on academic hardiness is associated with achievement levels in elementary schools, high schools, and undergraduate universities (Cheng et al., 2019). Research on graduate students' academic hardiness in relation to their efforts to cope and manage course assignments, exams, and research activities is limited. Moreso, it is suggested that strong associations have been found between academic hardiness and self-efficacy (Cheng et al., 2019). Due to a lack of research on academic hardiness and self-efficacy at the graduate school level, it can be of value to explore such relationships.

The term hardiness refers to an individual's ability to exude resilience during failures or challenging life experiences (Benischek & Lopez, 2001). Scholars conceptualized the term hardiness to have three characteristics and/or attitudes (3Cs): commitment, control, and challenge (Cheng et al., 2019). Commitment refers to circumstances where people agree to devote time and/or be involved in certain interests, tasks, or events. Control is classified as an individual's need to take charge over momentous events or situations. Challenge is associated

with the degree to with an individual takes on taxing events as a challenge to learn rather than viewing the situation as a threat. Maddi (2002) describes the 3Cs to provide the individuals with the courage needed to overcome demanding situations and view stressful experiences as opportunities for learning. Further, existing research suggests that students who are committed to their academic studies, have better control over their academic performance and related outcomes, and are willing to view each task as a challenge and learning experience, simultaneously (Cheng et al., 2019).

Self-Efficacy

The theory of self-efficacy stems from a conceptual framework, Albert Bandura's 1997, social cognitive theory. Social cognitive theory suggests that individuals can foster self-efficacy beliefs from four critical points of information: cognitive performance achievements, secondhand experiences, verbal influence, and emotional and physiological states (Phan & Ngu, 2013). Of the four critical points of information, cognitive performance achievements are classified as the most important source of information. Phan and Ngu (2013) described cognitive performance achievements as cognitive performances related to mastery in a specific subject area or category, and repeated success in a certain subject serves as an evaluation student confidence. Secondhand experiences include social comparison, and the observation of role model (Phan & Ngu, 2013). As an example, this could be described as a student seeing another student complete a task and then comparing their capabilities while believing that they, too, can complete the identical task. Verbal influence can be attributed to young children and is related to verbal commentary and evaluation feedback provided by other individuals (Phan & Ngu, 2013). Lastly, emotional, and physiological conditions are classified as points of information by where students

are to actively engage in self-judgment of their abilities, strengths, and weaknesses (Phan & Ngu, 2013).

According to Pajares (1996) how one interprets the outcome of their accomplishment or achievement can influence and/or alter their element and beliefs about the self, which may then lead to alterations in future performances to follow. Bandura (1986) defines this concept as reciprocal determinism: (a) personal factors (i.e., cognition, affect, and biological events), (b) behavior, and (c) environmental influences that create interactions resulting in triadic reciprocation. Since personal agency is rooted in social contexts and functions within sociocultural influences (Bandura, 1986) people are seen as products and producers of their individual environments and their social systems. Further, the process of self-reflection (the most unique human capability) can change how individuals evaluate and alter their perceptions and beliefs to execute plans of action necessary to manage forthcoming situations and events (Pajares, 1996). Individual beliefs related to personal competence can affect one's behavior in multiple ways, such as making choices and pursuing different life paths. Often, individuals take part in activities where they feel skilled and capable and avoid tasks in which they do not feel secure. Self-efficacy beliefs can help decide the amount of effort an individual will disburse on a particular activity or endeavor, how long they will persevere when confronted with obstacles or challenges, and how resilient they will be when faced with adverse situations and events (Pajares, 1996). Pajares (1996) suggests the higher the self-efficacy, the greater one's effort, persistence, and resilience. In contrast, individuals with lower self-efficacy may perceive things as being more difficult than they really are, which is classified as a belief that evokes stress, depression, and a limited scope of how to best solve problems and overcome adverse situations.

To better understand the implications of high and low self-efficacy characteristics, Usher & Pajares (2008) describe three types of self-efficacy and the background of each. According to Usher & Pajares (2008) self-efficacy can be classified as having or not having mastery experiences, vicarious experiences, verbal and social persuasions, and various emotional and physiological states of being. Mastery experiences are the most distinct type of self-efficacy. When individuals complete various tasks, they learn to interpret and analyze their results. If they believe they are successful in their efforts, there is an increase in confidence to carry out future related tasks, however; if they believe that the effort put forth does not produce the desired effect, there is a decline in confidence to succeed in future endeavors (Usher & Pajares, 2008). Bandura (1997) suggests that mastery experiences tend to prove powerful when individuals overcome obstacles or succeed difficult tasks (i.e., attainment of a Ph.D.). In addition to mastery experience, self-efficacy beliefs are constructed through indirect experiences of seeing others (Usher & Pajares, 2008). With specific consideration of many academic ventures, there are no certain measurements of ability. Therefore, students may evaluate their competencies in comparison to the performance levels of their peers (Usher & Pajares, 2008).

As an example, a student who scores 15 out of 30 on their theories exam has little information on how to interpret the score without knowing the performance of others in the class. Additionally, if the student becomes aware that most of their peers received fewer points, it is more likely that their self-efficacy will increase. On the other hand, if it is known that most of their peers received significantly higher scores, they are likely to have a substantial decline in their confidence and capabilities to succeed in future similar experiences. Interestingly, persons who battle through adverse encounters until they achieve a prosperous ending, are more likely to experience an increase in confidence and self-efficacy compared to those who react to mistakes

as if they never make them (Schunk, 1983). Regarding vicarious experience, the modeling of successes and failures can play an influential role during transitional periods such as the shift from undergraduate studies to graduate studies. Bandura (1997) saw that students will seek out competent models at tasks they aspire to reach, such as those with power, status, and prestige. Hence, vicarious information received from others perceived as similar in capabilities produces the most influential and relative information.

Another source of self-efficacy for students is verbal and social persuasions. For example, encouragement from individuals that students can trust (i.e., parents, professors, and peers). Verbal and social persuasions can increase students' confidence levels regarding their academic capabilities. Within educational settings, most students rely on others to provide evaluative feedback, and inferences about their academic performance. Verbally supportive messages may bolster student efforts and self-confidence, especially when associated with settings and instruction that help to foster success (Usher & Pajares, 2008). On the other hand, according to Usher & Pajares (2008) social influences may be minimal in their capacity to create lasting enhancements in self-efficacy. Per Bandura (1997) it may be simpler to demoralize an individual's self-efficacy via social influences than to increase it, especially during the formative times in which young people carefully listen to messages received from those who are close to them (i.e., parents, guardians, teachers, etc.). To relay effective information, feedback given should be framed in such a way to support students' self-efficacy, especially as their self-beliefs are developing (Schunk, 1983).

A final source of self-efficacy beliefs can be informed by emotional and physiological states (i.e., anxiety, stress, fatigue, and mood) (Usher & Pajares, 2008). Students and individuals learn to understand their physiological stimulation as a sign for individual competency through

evaluating their performances under opposing conditions (Usher & Pajares, 2008). Further, intense emotional reactions to varying tasks can cue the student to expected successes and/or failures. Individuals experiencing elevated levels of anxiety are more prone to have poor self-efficacy than those who do not (Usher & Pajares, 2008). For example, a student who experiences constant dread when it is time to enter a certain classroom may attribute their apprehension as proof that they lack skills and competencies in the subject area. Bandura (1997) suggested that individuals may function best when their physiological levels of stimulation are not too high or too low; suggesting that physiological arousal can be shaped around the development of healthy self-efficacy beliefs. Individuals who lack confidence in their abilities may associate negative emotions with incompetence in a certain area. Interpretations such as these can lead to failure being feared (i.e., failing the theories course). Hence, approaching situations with a pessimistic viewpoint may lead individuals to miscomprehend their mistakes as signs of inability, which can diminish self-efficacy beliefs (Usher & Pajares, 2008).

Motivation and Well-being

Doctoral students' well-being and levels of motivation are critical factors that influence students' academic encounters within their respective programs (Sverdlik & Hall, 2020). Much research in higher education garners a focus on obtaining an understanding and improving academic achievement as it relates to undergraduate students. In doing so, graduate students, and specifically doctoral students have been discounted in this area of educational research. To gain a better understanding of the doctoral student experience and factors contributing to well-being and motivation, much of the existing research takes on qualitative inquiry approaches, however; overuse of such approaches has limited researchers' abilities to obtain generalizable conclusions as well as produce evidence-based practices for doctoral programs. (Sverdlik & Hall, 2020).

Mentorship

For many, the experience of being a doctoral student can be a great time of pressure, selfdoubt, and ambiguity. Many studies have verified that sufficient mentorship is one of the best sources of support related to doctoral student success (Brunsma et al., 2016). Further, according to Brunsma et al., (2016), literature about students of color, specifically, suggests that academia does not do a respectable job of mentoring these students. A key element in exploring the experiences of doctoral students of color, especially African American students is a disconnect between the importance of mentoring during graduate school and the lack of mentoring for students of color. While the concept of mentorship is rare, it is tremendously valuable and vital for doctoral students of color, across all subject areas. Additionally, mentorship is not the only variable contributing to graduate students' success, it does play a vital role in deciding the probability of success in a doctoral-level program, obtaining a job in academia, achieving tenure status, as well as being in a position that offers ongoing job security (Brunsma et al., 2016). Extensive amounts of research indicate that adequate mentorship positively relates to improved productivity, career satisfaction, and self-efficacy (Baker & Griffin, 2010). Receiving positive mentorship has been reported as one of the most critical factors in carrying out one's end goal (i.e., degree attainment) (Pfund et al., 2016). Students receiving adequate mentorship are more likely to publish scholarly research, hold a more optimistic perspective on post graduate school careers, and overall, feel better about the academic report received throughout the duration of their graduate studies. In all, while positive mentorship experiences can be associated with many favorable outcomes (behavioral, attitudinal, health-related, relational, motivational, and career), the effect size for such outcomes is small (Eby et al., 2008).

Sense of Belonging

Within a university setting, sense of belonging is referred to as a student's observed social support on campus, a feeling of connectedness, an experience of mattering, or feeling cared about to others and the university campus (Strayhorn, 2008). Failing to meet the needs of belonging may lead to feelings of lonesomeness, communal isolation, and estrangement (Baumeister & Leary, 1995). Sense of belonging goes beyond the need for social contact. As defined by Baumeister & Leary (1995), the need or desire for sense of belonging is satisfied when interpersonal relationships are associated with stability, affective concern, and continued connection into the probable future. Persons with a lower need for a sense of belonging tend to be satisfied with less interpersonal contacts than those who hold a greater need to belong (Kelly, 2001). In all, the relational aspects of interactions with others are significant to the need to belong.

Further, a sense of belonging is a crucial factor due to the impact it has on attrition. Morrow & Ackerman (2012) conducted a study revealing that students who reported having greater faculty support were more likely to persist towards graduation than those who did not receive a great deal of support. In addition, results of the study concluded that students reporting greater peer support within their first year were more likely to return (Morrow & Ackerman, 2012). In a separate study, conducted by Hausmann and colleagues (2009), results showed the enhancement of sense of belonging projected student retention, persistence towards graduation, and academic success, primarily among students identifying as African American. Additionally, fostering a sense of belonging for students of color correlates with an increase in positively persisting, although they often experience various stressors that may discourage their desire to continue their academic studies (Gibson, 2014). While sense of belonging is an important aspect

of the climate and culture of various universities and institutions, literature suggests that some students, specifically students of color may struggle to find interpersonal connections within their educational setting due to racial discrimination (Warner, 2016). African American students often experience doubts regarding belonging, specifically at institutions that have historically excluded them (e.g., predominately White institutions). Further, their sense of belonging is often threatened through the reinforcement of stigmatizing racist stereotypes (Strayhorn, 2008). In all, the experiences of discrimination can negatively impact sense of belonging and retention, even within the most high-achieving African American students (Chang et al., 2011).

Mindfulness

Overview and History

Since it's origination more than 2,500 years ago, the term mindfulness can be defined as moment-to-moment, non-judgmental awareness fostered by paying attention, in a particular way, in the present moment, as non-reactive as possible (Kabat-Zinn, 2015). Kabat-Zinn (2015) describes two types of mindfulness: deliberate mindfulness, cultivated intentionally and effortless mindfulness, an idea that mindfulness occurs, naturally. However, the goal of arriving at mindfulness is mindfulness. While a variety of meditative practices exist worldwide, mindfulness is classified as the most basic, powerful, and universal practice and one of the easiest to grasp and partake in (Kabat-Zinn, 2015). Mindfulness practice can be described as the unfailing master key for understanding the mind, a tool for sculpting the mind, and an achieved freedom of the mind (Kabat-Zinn, 2015). Kabat-Zinn (2015) shares that mindfulness is a mirror, a mirror that knows "non-conceptually" what is within its scope. In other perspectives, mindfulness is an electromagnetic field (Kabat-Zinn, 2015), a field of knowing, awareness, and

emptiness. And like the mirror, the idea of mindfulness being an electromagnetic field suggests that our minds can hold anything and everything that comes before it.

Conceptualizations of Mindfulness: Buddhist vs. Western

The concept of mindfulness has been in existence for several thousands of years. It is believed that mindfulness first originated in early Buddhist tradition (Brown et al., 2007). Mindfulness is grounded in Eastern contemplative practices (Bluth & Blanton, 2014) and it is used to evoke consciousness and attentiveness to direct inner experiences. While it may not be alarming, significant differences among traditional Eastern practices and modern Western approaches to mindfulness exist. Several scholar-practitioners have debated the significance of acknowledging the distinct differences, especially to honor cultural foundations and contributions to diverse fields of study (Kolquist, 2021).

Though full, historical review of the fundamentals of mindfulness will not be provided, it is imperative to address the contrasts between Buddhist and Western conceptualizations of mindfulness practice. According to Keng et al. (2011) there are three specific levels of variation: contextual, process, and content. From a contextual standpoint, Theravada Buddhist customs see mindfulness as an individual component inside of a system of traditions that are essential to achieve freedom from suffering; this freedom is the supreme state of mindfulness in Buddhist tradition (Keng et al., 2011). In Western culture, the contextual standard of mindfulness is independent of any moral code or system of tradition (Keng et al., 2011). During the process level of mindfulness practice, Buddhists uses mindfulness to contemplate and reflect on the primary teachings of Buddha, himself; however, Western applications of mindfulness do not focus on traditional teachings of Buddha. Finally, at the content level, Buddhist teachings use mindfulness as a method of introspection into the physical and psychological process of the self,

while the Western application of mindfulness is used to evoke awareness to one's internal and external experiences (Keng et al., 2011).

Components of Mindfulness

Mindfulness is essential to the actions of consciousness, which can be expanded to include the procedures of awareness and attention (Brown et al., 2007). Different researchers and scholars have proposed that mindfulness is a two-part model, consisting of self-regulation of attention and awareness to a person's individual experiences as the two components (Bluth & Blanton, 2014). Kolquist (2021) defines awareness as the direct contact with one's individual reality. Further, the individual can consciously register stimuli, including the five physical senses, kinesthetic senses, and happenings of the mind (Brown et al., 2007). The association of awareness and attention is what allows a person to experience their present reality (Brown et al., 2007), as opposed to processing their experience through practical concepts. Hence, the components of awareness and attention are of most importance in mindfulness practice, as each includes the consciousness of internal and external experiences, set apart from an individual's abstractly developed world.

Additional components of mindfulness are diminished self-talk, non-judgement, non-doing, and philosophical, ethical, or therapeutic principles (Leary & Tate, 2007). Each of these components are essential in validating the effects of mindfulness on an individual's inward and outward experiences. The component of diminished-self talk is done by a reduction of one's inner self-talk (Leary & Tate, 2007). The idea, here, is to quiet self-chatter that occurs in the form of past and future thoughts, self-criticism, judgements, and other irrelevant feedback (Leary & Tate, 2007), allowing individuals to remain fully connected to their present reality. When practicing mindfulness, the component of non-judgement plays a key role. Here, the idea is to

reduce judgmental thoughts about a current situation or event as well as the individual's reaction to it (Leary & Tate, 2007). The non-judgement component of mindfulness gives individuals permission to evaluate their present experience even when discomfort or distress arises.

Mindfulness also entails the idea of not trying to do or experience any certain thing while keeping mindful attention (Leary & Tate, 2007). Non-doing involves refraining from an expectation to do something but rather to let go, and just be. The last component of mindfulness includes the context (i.e., philosophical, ethical, spiritual, or therapeutic system) that places mindfulness in a particular view of the world and highlights how mindfulness can be used to fulfill certain favorable and/or prosocial goals (Leary & Tate, 2007).

Relationship Between Mindfulness and Self-efficacy

Recently, the concepts of mindfulness and self-efficacy have become an attractive research interest across the world (Sukran & Gozen, 2021). Per Sukran & Gozen (2021) it is seen that these concepts are being studied particularly in the fields of educational sciences and psychology. Jon Kabat-Zinn, a pioneering researcher in mindfulness studies, describes mindfulness as reaching a state of awareness, as a result of living now. Mindfulness, along with psychological constructs such as self-efficacy are known to be effective in coping with personal difficulties (Chandna et al., 2022). Self-efficacy is classified as the decision and belief of individuals achieving a desired goal they aspire to accomplish (Sukran & Gozen, 2021). As a result, decisions and beliefs are skills that determine one's success when experiencing adverse situations or challenging life events.

Albert Bandura describes self-efficacy as a human's beliefs and decisions regarding their capabilities (Sukran & Gozen, 2021). Conversely, self-efficacy beliefs explore the feeling associated with believing in oneself and their abilities. Self-efficacy seeks to explicate how

individuals can engage in and perform the necessary and specific action needed to achieve a desired outcome. Per Sukran & Gozen, (2021) persons with higher self-efficacy are more likely to be future oriented and take an effective course of action towards goal attainment. In exploring the relationship between mindfulness and self-efficacy, it is imperative that individual and collaborative understanding of these two concepts is achieved. Mindfulness originated in Eastern philosophy and is believed to stimulate insight related to the idea that human emotions are transitional and constantly changing. This is a natural occurrence and promotes feelings of courage, fearlessness, and of freedom and power to own the ability to shape one's own life (Sukran & Gozen, 2021). Self-efficacy is salient in respect to one's ability to sustain adequate levels of performance after an encounter with adversity or failure. Conversely, engaging in mindfulness practice can prevent the desire to project failure or adversity into future experiences considering a wider range of self-conceptualization.

According to Sukran & Gozen, (2021) there is a positive correlation between self-efficacy and mindfulness outcomes. Individuals with higher levels of mindfulness are more apt to gain better control of their thoughts and feelings while simultaneously improving their self-efficacy. Hosseinzadeh et al. (2019) suggest that mindfulness may serve a mediating role in analyzing the parallel between mindfulness and self-efficacy. Further, self-efficacy is a significant and integral component of an individual's improvement, personally, professionally, and/or academically (Sukran & Gozen, 2021). Numerous studies evaluating the impact of mindfulness on self-efficacy concluded positive results. Specifically, a study conducted by Bohecker & Horn (2016) explored the connection between mindfulness experiential small groups (MESG), mindfulness skills, empathy, self-efficacy, and stress reduction of 22 university students. As a result of this study, it was concluded that there was a positive and significant

relationship within the concepts of mindfulness and self-efficacy. In all, both mindfulness and self-efficacy are critical in one's ability to achieve their desired levels of success.

Mindfulness-based Interventions and African Americans

In efforts to mitigate these physical and mental health inequities, engaging African Americans in mindfulness-based interventions can be a pivotal starting point. Watson-Singleton et al. (2019) suggests that mindfulness-based interventions are especially effective in lessening adverse outcomes. On the contrary, racial/ethnic minorities are heavily underrepresented in these interventions, which creates further challenges in providing adequate, culturally responsive care.

Engaging in mindfulness exercises helps promote stress regulation via mediative practices that evoke nonjudgmental attention to thoughts, feelings, and physical sensations that occur now. In exploring the benefits of mindfulness, across diverse populations, to include African Americans, it has been found that mindfulness-based interventions endorse optimal health and wellbeing, protection against negative health consequences, slowed disease progression and decreased maladaptive coping (Watson-Singleton et al., 2019). Per Watson-Singleton and colleagues (2019), mindfulness has a negative association with depressive symptomology and suicidal ideation in clinical trials of low-income African Americans, and mindfulness-based interventions have lessened dependency and anxiety symptoms in African American women, specifically. It is believed that the successful engagement in mindfulnessbased interventions by the African American population may be attributed to an impact of physiological symptoms experienced (e.g., inflammation) along with the capability to minimize behaviors that can contribute to illness. Together, results from such studies suggests that mindfulness-based interventions are efficient in treating stress-related disparities (i.e., biological, psychological, and behavioral processes) among African Americans.

While there is a growing attraction of utilizing mindfulness-based interventions with African Americans, much of the existing literature includes the experiences and social references aligned with White culture (Watson-Singleton et al., 2019). Additionally, mindfulness-based interventions have primarily publicized the acceptance of all human suffering, with little focus given to unique, race-related factors contributing to hurtful health outcomes among the African American population. Knowing this, culturally responsive adaptations for mindfulness-based interventions have been vastly non-existent, with most interventions targeting treatment concerns (i.e., substance abuse), (Watson-Singleton et al., 2019) as opposed to focusing on cultural values and sociocultural factors within diverse communities. This is problematic, based on qualitative literature reporting findings that explicate barriers African Americans experience when engaging in non-adapted mindfulness-based interventions. Some findings, according to (Watson-Singleton et al., 2019), identify practices that may be different from other aspects of cultural coping (i.e., prayer) and African Americans with prior mindfulness experience share that cultural adaptations were needed to increase their participation in mindfulness-based interventions. Hence, culturally responsive mindfulness-based interventions are essential for many reasons. African Americans are exposed to unique risk factors that impact their health outcomes. Once unique risk factor, impacting the health outcomes of African Americans is race-based stress. Such factors may have a direct influence on African American health and can contribute to other unhealthy behaviors, leading to compound risks for this population (Watson-Singleton et al., 2019).

Resilience

Resilience Theory

To better understand the construct of resilience, it is imperative to understand the history of its development. Established in the 20th century, the term resilience was first described as

"invulnerability" or the ability to do well despite the experience of multiple risks and/or adversities. Most definitions highlight an individual's ability to respond to adversity in a positive way, such as classifying the term resilience as a powerful process that encompasses a positive adaptation to significant adverse experiences under the following conditions, (a) exposure to a severe threat or adversity; and (b) the achievement of positive adaptations despite attacks and interference within the process of development (Luthar et al., 2000). Numerous factors contribute to an individual's ability to be resilient. Resilience goes beyond the ideas of being invulnerable, rather, individuals engage in developmental processes of positive adaptation, regardless of their exposure to adversity (Viaud, 2014). It is within these developmental processes that new vulnerabilities and strengths arise during the experience of life changing events.

Further, resilience theory can be explored through psychological contexts. Early on, much of the existing literature on resilience was attributed to the exploration of elements that resulted in adjusted outcomes, in the presence of adversity, with empirical literature on schizophrenia as prominent foundational base for research on resilience (Luthar et al., 2000). Prior investigations of persons with severe diagnoses were mostly focused on understanding of maladaptive behavior (Luthar et al., 2000), and those persons showing reasonably adaptive patterns were deemed atypical and offered minimal attention. Individuals with the diagnosis of schizophrenia, with least severe stints of illness were characterized as being premorbid and fully capable of developing work competence, engaging in social interactions and relationships (i.e., marriage), and having the capacity to fulfill responsibilities (Luthar et al., 2000). Moving forward in the psychological realm of resilience research, it became relevant to study children of mothers diagnosed with schizophrenia which played a pivotal role in the development of

childhood resilience (Luthar et al., 2000), a prominent theoretical and experiential area of research. Findings from numerous studies that explored children of mothers diagnosed with schizophrenia revealed that many of the children thrived, despite having high-risk conditions, which led to an increase in empirical efforts and a better understanding of person's varied responses to adverse life experiences (Luthar et al., 2000).

After conducting several pioneering studies, involving children, resilience research expanded past the psychological concepts, to now explore other variables such as poor socioeconomic status, disproportionate physical and mental health disparities (i.e., heart disease, stroke, cancer, anxiety, depression, substance misuse, etc.), maltreatment, community environments, traumatic life events, race- related systemic issues, and beyond (Viaud, 2014). As the initial research efforts that primarily focused on individual qualities of resilient children (i.e., autonomy or elevated self-esteem) expanded, researchers progressively recognized that resilience can often develop from external factors (Luthar et al., 2000). Consequent research led to the identification of three factors associated with the development of resilience: 1) attributes of children themselves, 2) aspects of their families, and 3) characteristics of their wider social environment (Luthar et al., 2000). Luthar and colleagues (2000) propose that beyond solely examining which child, family, and environmental characteristics are involved in resilience, researchers should strive to seek an understanding for how these factors can contribute to positive outcomes.

Factors Impacting Doctoral Student Resilience

Prior to addressing factors contributing to doctoral student resilience, it is important to review certain circumstances that may lessen the capability to foster resilience within AA doctoral students. First, some doctoral students may experience feelings of isolation, perceiving

that they are alone, lacking affective or emotional support to endure the demands experienced while pursuing a doctoral degree. Ali & Kohun (2006) describe isolation as being related to the misalignment of doctoral student's initial expectations of their doctoral journey, compared to the reality of their experience once engaged in the program (e.g., lack of knowledge regarding the rigor and challenges of pursuing a doctoral degree). Feelings of isolation can occur at various stages of the doctoral program, according to Castello and colleagues (2017), and factors contributing to the feelings of isolation may vary across different points in time. Upon admission of the program, many doctoral students may struggle with adjustment to unfamiliar environments and situations, whereas during the middle of the program, isolation may be associated with minimal progress in the research. Lastly, isolation can occur at the end of the doctoral program, as students prepare to face a new, unchartered experience; the dissertation defense, often categorized as a task that many doctoral students may to feel unprepared to champion (Castello et al., 2017).

Now, exploring inadequate socialization, Castello and colleagues (2017) found that doctoral students who are less integrated in to the academic, professional, and social life of their respective departments encounter a greater risk of not completing their doctoral studies.

Conversely, doctoral students who are active and more engaged in their doctoral program are less likely to drop out. Participating in collaborative projects and having an opportunity to solve problems of today with other like-minded practitioners and students helps to establish a more socially supported environment. Further, the establishment of personal networks of support is a key component in achieving adequate socialization during one's doctoral journey (Castello et al., 2017). Given the scarcity of literature on factors contributing to the high percentage rate of dropouts for doctoral students, an area of exploration to consider, in efforts to mitigate this issue

is factors contributing to doctoral student resilience. According to Jourdan-Ionescu and colleagues (2021) the most common factors to promote resilience in doctoral students are individual, family, and environmental protective factors (i.e., gender, cultural background, motivation, family support, being childless, wealth of social support network, resources offered by the enrolled institution). Within the identified individual factors, some are absolute, such as race, ethnicity, and gender. In contrast, doctoral students coming from a marginalized group (i.e., African Americans) or not being from the same ethnic group as their faculty and/or peers, is a risk factor to doctoral student resilience. Alternatively, specific skills may constitute as protective factors for promoting resilience in doctoral students: time management, selforganization, self-efficacy, autonomy, critical thinking, the capacity for self-regulation, utilization of adapted coping skills and/or strategies, and adequate help seeking behaviors (Jourdan-Ionescu et al., 2021). The possession of such skills and personal characteristics suggests a satisfactory level of readiness to pursue doctoral level studies. Seeking a doctoral degree is by far a taxing endeavor, requiring high levels of ongoing motivation. Further, obtaining a doctoral degree is comprised of both a commitment of time and an investment of energy. Jourdan-Ionescu and colleagues (2021) highlight the necessity of resilience and self-care, as doctoral students are a unique group, susceptible to issues of fatigue, physical ailments, and mental health conditions, which may contribute to the considerable risk of dropping out of their doctoral studies.

Family and environmental factors also play a key role in doctoral student resilience. Risk factors associated with poor doctoral student resilience in this area are mostly related to familial responsibilities and obligations (Jourdan-Ionescu et al., 2021). Additionally, life events (e.g., having children, separation, etc.) constitute risk factors that can impact doctoral student

resilience. Also, doctoral students who have unmet monetary needs, lack strong, encouraging familial connections, or live a great distance away from their family while pursuing their doctoral studies, are at risk for low levels of resilience. According to Jourdan-Ionescu et al., (2021) these risk factors can impact the graduation rate of women who are seeking doctoral degree completion, as women are identified as primary caretakers of children and are often responsible for managing the household. On the other hand, not being exposed to these life events are protective factors related to doctoral student resilience (e.g., being childless, avoiding divorce or separation, having a safe and supportive family, living near a supportive family, having adequate meals, etc.). While seeking a doctoral degree, having a group of fellow peers or colleagues who can offer support throughout the doctoral process is key (Jourdan-Ionescu et al., 2021). Furthermore, being a part of a support or mentoring group, developing and maintaining growth fostering relationships with faculty and colleagues, and socializing with a network of supportive peers and mentors can be especially helpful in promoting doctoral student resilience, and accomplishing the goal of attaining the doctorate degree.

Conclusion

Pursuing a doctorate degree is a massive undertaking, one that can encompass many difficulties. Those enrolled in doctoral programs often experience significant amounts of stress, and other factors that may impact their mental health and the ability to attain a doctorate degree. This chapter was sought to address the underrepresentation of African Americans enrolled in doctoral programs across the U.S., along with the exploration of factors contributing to their success. Despite an increase of African Americans enrolling in doctoral programs, few attain their degree. In the past two years African Americans, not including permanent residents, earned 2.1% of all doctorate degrees (PhDs) awarded to U.S. citizens (*Academic Fields Where No*

African Americans Earned Doctorates in 2020, 2021). Literature highlighting African Americans decision to engage in doctoral studies hardly exists. However, once enrolled in their respective programs, many bring with them a unique set of characteristics that may lead to a road of adverse experiences. Several African Americans doctoral students encounter systemic racism, racial distress, and inadequate mental health outcomes, to name a few. While seeking a doctoral degree, resilience and self-efficacy may diminish, and healthy support systems can seem rare. Furthermore, many African Americans lack the proper coping skills and strategies to help them carry on. While several studies demonstrating the effectiveness of various therapeutic interventions exist, research exploring the effectiveness of therapeutic interventions with African Americans, is extremely sparse. As a result, there is a need to contribute to the limited amount of literature examining the effectiveness of therapeutic interventions with African Americans. Specifically, this study will evaluate the effectiveness of mindfulness-based interventions on African American doctoral student resilience and self-efficacy.

CHAPTER III

METHODOLOGY

The primary investigator utilized a quantitative analysis, an A-B single-case research design, to evaluate the treatment effect of a 6-week, synchronous group using a series of mindfulness-based interventions on resilience and self-efficacy in AA doctoral students. In SCRDs, the A-B design is classified as the "cornerstone" of the experiment (Ray, 2014, p. 395). My rationale for choosing this research design was attributed to a desire to (a) add to the SCRD literature published in counseling, and (b) examine the treatment effectiveness of mindfulnessbased interventions. Ray (2014) noted that most SCRD publications exist in applied behavioral analysis and are scarce in professional counseling journals. According to Lenz (2015), SCRDs are essential for evaluating the fidelity of counseling and related interventions. The use of a SCRD is a pragmatic and plausible method for assessing the effectiveness of various interventions that focus on certain behaviors, personal characteristics, and similar constructs of relevance (Ray, 2014). Specifically, for my study, the SCRD method is ideal, because of my desire to evaluate the effectiveness of an intervention with a small number of cases (participants). Further, it is suggested that research designs that see individuals, such as SCRDs, supply a better perception of the methods of change in treatment (Ray, 2014). A single-case research design was utilized as a key approach to this study, as this design allowed me to monitor and develop an evidence-based practice for the implementation of mindfulness-based interventions with AA doctoral students.

Research Question

The following research question was used to guide this study: Does a 6-week mindfulness-based intervention affect resilience and self-efficacy in African American doctoral students?

Participants

Initially, this study sought to recruit first-year AA doctoral students. After navigating extreme recruitment challenges, the focus of the study changed to AA doctoral students who were enrolled in doctoral coursework, beyond the first year of their respective degree programs. Participants in this study were AA students enrolled in a doctoral program. To meet the criteria for, participants shall have completed 6 credit hours or more towards the completion of their doctoral degree. Further, participants were adults, ages 18 and older, who are currently enrolled in any 4-year college or university within the United States. To determine eligibility for participation in this study, interested participants completed a demographic questionnaire that included the following information: race/ethnicity, age, gender, education level, and geographical location. Exclusion criteria included those who did not identify as African American, were not enrolled in a doctoral program, were not attending a 4-year institution within the United States, and those who were under the age of 18.

Setting

This was a national study, including participants from various parts of the U.S. The study was conducted, via an asynchronous group format, which allowed the primary investigator to facilitate and participants to engage in the activities from our respective locations. The primary investigator utilized a private, confidential space (i.e., personal office) to facilitate all activities. Participants were encouraged to secure a quiet, confidential space that was free of any major distractions or that might otherwise be disruptive. To further protect the identity of the participants, each was given a pseudonym to be used in place of their actual name.

Data Collection

Upon receiving IRB approval from the university, a purposeful sampling method was utilized to recruit participants for this study. AA students enrolled in doctoral programs such Ph.D., PsyD, Ed.D., or DSW, across the United States, were recruited to participate in asynchronous group sessions, no longer than 60 minutes, for a total of six sessions. Participants for this study were recruited via emailing Listservs (i.e., CES-NET), and Facebook groups specifically for doctoral students of color (i.e., Black Girl Doctorate, Minority Doctoral Network, PhinisheD/FinishEdD, Doctoral Dissertation Cohort), via Qualtrics. Before engaging in the study, participants were asked to complete an informed consent form detailing the study's nature and all possible risks, and a demographic questionnaire outlining participation criteria. Following the intervention, the primary investigator electronically administered three separate self-report measurements weekly to track the enhancement of mindfulness experiences, resilience, and self-efficacy. Upon establishing the baseline scores (3 weeks), the primary investigator introduced a variety of mindfulness-based interventions over 6 weeks (about 1 and a half months) for about 20-30 minutes.

Measurement of Outcomes

Brief Resilience Scale (BRS; Smith et al., 2008)

The BRS is a 6-item scale that assesses an individual's ability to bounce back (Smith et al., 2008). Instructions for administration the scale (Smith et al., 2008) are as follows: "Please indicate the extent to which you agree with each of the following statements by using the following scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree" (e.g., "It is hard for me to snap back when something bad happens"). The BRS demonstrates good internal consistency and acceptable levels of reliability with Cronbach's alpha ranges

between .80 and .91 (Smith et al., 2008). According to Smith et al. (2008), scores for the BRS, based on convergent validity, reflect positive correlations with resilience measures exploring resilience and the relationship to experiences of optimism, social support, and purpose in life, and negative correlations with behavioral disengagement, denial, and self-blame. Convergent validity ratings for the BRS indicated negative correlations to stress, anxiety, depression, negative affect, and psychological symptoms (Smith et al., 2008). In 2022, a study conducted by Livingston and colleagues (2022) used the BRS to explore factors contributing to educational resilience, in African American students attending an Historically Black College or University (HBCU), during a global pandemic. A total of 332 students completed the BRS, with 83.4% of the sample identifying as Black/African American. Results indicated that 78% of students who completed the BRS exhibited normal to high resilience, indicating an adequate level of effectiveness (Livingston et al., 2022).

General Self Efficacy Scale (GSE; Schwarzer & Jerusalem, 1995)

The GSE is a 10-item, self-report scale that measures one's self-efficacy (Schwarzer & Jerusalem, 1995). Individuals completing the scale are to record their responses by selecting from one of the following choices: "Not at all true", "Hardly true", "Moderately true", or "Exactly true" (e.g., "I can always mange to solve difficult problems if I try hard enough"). The GSE demonstrates good internal reliability, as indicated by Cronbach's alpha ranges between .76 and .90, indicating acceptable rates and above. The GSE can be considered a valid instrument, known for positive correlations to emotion, optimism, and work satisfaction with negative coefficients being depression, stress, health complaints, burnout, and anxiety (Schwarzer & Jerusalem, 1995). Present research shares the results of three studies that examined the structural validity of the GSE in a large sample of Serbian students, the convergent validity with different

positive expectations, and predictive validity when predicting positive affect and life satisfaction (Lazić et al., 2018). Consistent across each study, results proved structure, convergent, and predictive validity for the GSE, and adequate internal consistency for test-re-test reliability. Cronbach's alphas were .84, .87, and .90 (Lazić et al., 2018). A 2012 study explored the relationships of self-reported numbers of microaggressions with alcohol use behaviors and symptoms of anxiety in ethnic minority college students, attending a historically White Institution (Blume et al., 2012). The researchers also included other factors that generally predict mental health behaviors in college students, such as sex and self-efficacy. In a sample of 178 ethnic minority college students, 100 (56.2 %) participants identified as Black or African American (Blume et al., 2012). To assess self-efficacy and the ability to cope with daily stressors (Blume et al., 2012), the GSE was used to successfully evaluate self-efficacy related to coping with difficulties among ethnic minority college students. Results of the study revealed that on average, approximately 3 out of 4 responses per item included higher scores, proving greater self-efficacy to cope.

Freiburg Mindfulness Inventory (FMI; Walach, et al., 2006)

The FMI is classified as both a valid and reliable inventory consisting of 14 items assessing how individuals experience mindfulness (e.g., "I feel connected to my experience in the here-and-now") (Walach, et al., 2006). The FMI was carefully constructed via expert interviews and intense literature analyses. Additionally, the FMI was tested with 115 participants who attended mindfulness meditation retreats (Walach et al., 2006). Walach and colleagues (2006) consider the FMI to be a "psychometrically sound" scale with the internal consistency of Cronbach alpha = .93, which demonstrated a significant increase in mindfulness following the mindfulness retreat. The instructions for completion for the FMI (Walach, et al., 2006) read as

follows: "Please use the last days as the timeframe to consider each item. Provide an answer for every statement as best you can. Please answer honestly and spontaneously as possible. There are neither "right" nor "wrong" answers nor "good" or "bad" responses. What is important to us is your own personal experience." The FMI exhibits a sound internal consistency rating, with Cronbach's alpha = .86 (Walach et al., 2006). To broaden the scope of the concept of mindfulness, another study was conducted with 86 participants with no mindfulness meditation experience, 117 participants with clinical diagnoses, and 54 participants from the mindfulness meditation retreats. Results of the second study were robust and psychometrically sound with Cronbach's alpha = .86; correlation to other constructs were significant in the medium to low range (Walach et al., 2006) and demonstrated construct validity for this inventory. A 2014 study was conducted to examine if trait mindfulness would explain the variance on task performance in a sample of 164 participants without meditation experience (Quickel et al., 2014). Of the 164 participants, 56.7 were White, 29.3% African American, 4.9% Hispanic, 5.5% biracial, and 3.7% Asian (Quickel et al., 2014). Utilizing the FMI to measure the overall experience of trait mindfulness, results of the FMI in this study reports a Cronbach's alpha value of .81, indicating adequate consistency amongst diverse groups.

Procedures

Intervention

For weeks one through three, or the A phase of the research design, baseline data were collected via a weekly, email administration of the BRS, GSE, and FMI. Entering week one of the treatment phase, participants began the intervention phase, or the B phase of the research design. During this phase, each assessment was administered, at the end of each session. During session one, the first mindfulness-based intervention, Breathwork, also classified as deep

breathing was introduced. Breathing is a critical component of most mindfulness or meditative practices, and a vital factor for reaching a meditative state of consciousness (Zaccaro et al., 2018). During this session, participants engaged in restorative breathing practices, focused on the inhalations and exhalations. Moving to week two of the treatment phase, participants engaged in the second mindfulness-based intervention, body scanning. Body scans are beneficial in that they can be utilized to assist individuals in bringing awareness to their bodies, noticing what they sense and feel in their bodies, in the present moment (Gibson, 2019). An example of this would look like participants taking time to notice what they feel in each part of their body, starting at their head and ending at their feet, being aware of any areas where tension might be experienced. During week three of the treatment phase, participants were introduced to the third mindfulnessbased intervention, emotional awareness. With this practice, participants were given the opportunity to engage in deep, emotional exploration, that allowed them to connect with their feelings, in the present moment (Philippot & Segal, 2008). To facilitate this process, participants were first invited to take a deep breath and settle into their respective environment. Next, participants were asked to identify a mildly difficult situation that they were presently in and label their emotions associated with the situation, noticing, and naming the emotions that arose within them. Participants then practiced being mindful of the emotion(s) in their body by bringing awareness to the body as a whole. Finally, participants were invited to soften, soothe, and allow their emotions. This was done by softening and relaxing the part of the body where tension may have been present, soothing themselves (i.e., placing a hand over the part of the body that was uncomfortable), and lastly, allowing the discomfort to be there, making room for it, without judgement, allowing themselves to be, just as they were. The fourth week of the treatment phase was an introduction to loving-kindness meditation. (Academic stress, struggles

with self-efficacy, suffering with various challenges). Engaging in this practice can help with embracing the idea that all of humanity suffers and that no one being is exempt from this suffering (Germer & Neff, 2013). This intervention focused on engaging in the act of self-compassion practices, teaching self-kindness, an essential skill contributing to personal and/or academic success. Week five of the treatment phase focused on the mindfulness-based intervention related to guided imagery (help with self-efficacy beliefs and nurturing resilience, seeing the self as a capable human being, even during challenging and/or unfortunate events and situations (Nguyen & Brymer, 2018). The final week of the treatment phase, week six, consisted of letter writing. This can also be classified as journaling. Letter writing or journaling has positive effects on reducing stress and anxiety and is known to be helpful in the attainment of one's goals and aspirations, and increasing gratitude (Emmons & Stern, 2013). Engaging in this final intervention was a pivotal point in completing the 6 sessions, as the participants engaged in past, present, and future journaling exercises, with reflection of the skills they have acquired from earlier activities. See the outline below:

Session 1: Collecting baseline data.

Session 2: Collecting baseline data.

Session 3: Collecting baseline data.

Session 4: Breathwork: An Introduction to Deep Breathing

Session 5: Mindful Meditation: Awareness of Thoughts and Bodily Sensations

Session 6: Awareness of Emotions: Working with Difficult Emotions

Session 7: Acts of Self-Compassion: Loving-kindness

Session 8: Guided Imagery Meditation: Visualizing the Higher Self

Session 9: Mindful Letter Writing: A Letter to Your Past, Present, and Future Self

Regarding treatment fidelity, the primary investigator has personal experience with mindfulness, practicing it daily over the last 5 years. Additionally, the primary investigator is certified in mindfulness via New Skills Academy, and the certification enables the teaching of mindfulness skills in small group settings.

Data Analysis

Visual Analysis

Per Ray (2015), visual analysis is the preferred and traditional method of data analysis in SCRD. Specifically, scores collected from the baseline phase through the intervention phase were analyzed and charted on a line graph. In efforts to provide a suitable, authentic demonstration of the intervention effect, the use of visual analysis is deemed most acceptable. For this study, the researcher engaged in four steps when conducting visual analysis. The primary investigator captured documentation of the predictable baseline pattern, examine data within each phase to assess the patterns, compare the data between phases to assess the intervention effect, and integrate information from all phases to determine if there are a total of three demonstrations of an effect (Ray, 2015). Additionally, a detailed examination of occurrences within and between phase patterns represented in the visual analysis was conducted. First the mean of each phase was explored, to determine if scores were above or below the designated threshold. Next, the trendline was observed (i.e., slope). Here, the primary investigator specifically looked for increases and decreases in measures during the intervention phase. Another consideration was the exploration of variability, the difference between the trendline and each data point across each phase. Next, the primary investigator explored the immediacy of the effect. Immediacy of effect provided information on how quickly the intervention proved an effect, as shown by a change in the data patterns when the intervention

was provided. Once the immediacy of effect was considered, the researcher explored the percentage of overlapping data. Here, proportions of data in one phase that overlaps with data in an earlier phase were explored. Lower rates of overlap showed a greater effect of treatment (Ray, 2015). The final variable explored during the visual analysis was the consistency of data patterns across similar phases. This was done via comparing the results among each of the participants.

Effect Size

While the visual analysis of SCRD data is beneficial, the use of effect size metrics is an adjunctive method of support to the visual inspection of the graphed illustrations (Lenz, 2015) Related to SCRD, effect sizes measures take into the consideration the amount of nonoverlap between data points recorded in the baseline phase and points within the treatment phase of the intervention. For this study, the primary investigator utilized a non-parametric strategy (Lenz, 2015) to synthesize the graphical representations of data collected throughout each phase. Data for this study was calculated using Excel and was stored on a password protected device.

Lenz (2015) describes three primary methods for calculating effect size: Percentage of Nonoverlapping Data (PND), Percentage of the Data Exceeding the Mean (PEM), and Percentage of All Nonoverlapping Data (PAND). PND is classified as the first main alternative to visual trend analysis. PND is classified as a procedure that looks at the percentage of data during the intervention phase that exceeds a single notable data point during the baseline phase (Lenz, 2015). A well-known strength of PND is that it can be computed by hand with the use of a ruler and pencil or a straight line when using graphs in Excel (Lenz, 2015). Additionally, the PND method is most ideal for smaller sets of data (e.g., n < 20).

Ma (2006) presents the use of PEM to help data sets that there is not a strong trend during the baseline phase. This computing procedure is classified as the evaluation of treatment

phase data (Ma, 2006) reliant on the intersection with the middle data point during the baseline phase. PEM is centered on the idea that if the treatment intervention is effective, data points will be mostly on the therapeutic side of the median. In contrast, if an intervention is not effective, data points in the treatment phase will fluctuate above and below the baseline median (Lenz, 2015). Like PND, PEM can be calculated by hand or with the use of Excel files.

Parker et al. (2007) introduced PAND as a procedure to give an alternative to the calculation techniques of PND and PEM. PAND differs from PND and PEM as it uses all data from both phases to decide treatment efficacy (Parker et al., 2007). This process is suggested to yield more robust measurement of effect size. Further, when dividing the graphical data in to a two-by-two chart using the nonoverlap line, the PAND procedure can form like proportions that are not achieved when using PND or PEM (Lenz, 2015).

After thoroughly analyzing the data, I decided to use PEM to calculate the effect size of the results. In contrast with PND, PEM uses more data than PND by calculation a median score to determine effect size (Vannest & Ninci, 2015). Further, this was an appropriate calculation method as the median data point may accurately reflect the significance of effect on the outcome variable during the treatment phase, as opposed to relying on a single outlier data point during the baseline phase (Ma, 2006) to determine the effectiveness of treatment results.

To interpret treatment effect size, Lenz (2015) reports that effect sizes of .90 and higher show highly effective treatment, scores ranging from .70 to .89 are representative of moderate effectiveness, scores between .50 to .69 are said to be debatably effective, and scores less than .50 are classified as not effective. The higher the score, the greater the treatment, and the lower the score, the lower the effectiveness of the treatment intervention (Lenz, 2013).

Conclusion

This chapter was inclusive of the methods used to conduct this study. This entailed the quantitative research method with specifics of a single-case research design approach. An overview of recruitment strategies, setting of the study, data collection methods, procedural interventions, data analysis, and interpretation of treatment effectiveness were provided. Further, with intentional reflection on the purpose of the study and research question: "Does a 6-week mindfulness-based intervention effect resilience and self-efficacy in African American doctoral students?" the primary researcher desired to engage in this research to gain a better perception of the effectiveness of using mindfulness-based interventions in understudied communities (i.e., African American doctoral students) to enhance resilience and self-efficacy behaviors.

CHAPTER IV

RESULTS AND FINDINGS

The primary purpose of this study was to examine the effectiveness of mindfulness-based interventions on resilience and self-efficacy in African American doctoral students. In this chapter, I will discuss the results based on an analysis of all sets of quantitative data: the General Self-Efficacy Scale, the Brief Resilience Scale, and the Freiburg Mindfulness Inventory. Data were collected during the spring 2023 semester, and no missing data were detected across all measures. Quantitative findings from these data are reported based on a primary research question.

Through utilizing mindfulness-based interventions with the participant group, I also documented the influence of the exercises on the participant's levels of resilience, self-efficacy, and mindfulness skills during the treatment phase. This analysis revealed crucial factors that proport changes in scores for each participant. Findings from mindfulness-based intervention metrics are reported in individual profiles of participants in the group, and quantitative findings from the data are reported based on the study's research question.

Research Question

The research question guiding this study concerned the effect of mindfulness-based interventions on resilience and self-efficacy in African American doctoral students. Data from the GSE, BRS, and FMI were analyzed using a visual trend analysis and the percentage of data exceeding the median (PEM) procedures for a single-case research design. Individual profiles of 8 participants are presented along with the discussion about single-case analytic measures based on the GSE, the BRS, and the FMI. Level, trend, variability, and immediacy of effect were interpreted utilizing graph-like representations. The visual analysis was performed by examining

and interpreting the level, trend, variability, and immediacy of treatment effect. Visual analysis and PEM calculations were analyzed to show changes in each participant's scores on the BRS, GSE, and FMI over a 6-week implementation of mindfulness-based interventions. Along with the visual inspection of behavioral changes, I calculated the effect size by finding the number of data points in the treatment phase on the therapeutic side of the median baseline (Ma, 2006). I collected three data points during the baseline phase and six data points during the intervention phase. Specifically for this study, the mindfulness-based interventions would be effective if more than 80% of data points (5 out of 6 scores) within the treatment phase were placed above the median baseline for resilience and self-efficacy. In addition, the use of MBI metrics was reported to reflect points of change for each participant and use of mindfulness skills via the FMI. A thorough description of participants' experiences with mindfulness-based interventions and changes in BRS, GSE, and FMI scores are discussed below.

Single-Case Analysis: Individual Profiles of Participants

Participant 1

LRH was between 45 and 54 years old and was in the first year of her doctoral program.

LRH had completed at least 12 credit hours towards her doctoral studies and was pursuing a doctorate degree in Ministry, leading to a Doctor of Ministry. LRH's scores for mindfulness skills, resilience, and self-efficacy are displayed in Figures 1, 2, and 3, respectively. Each figure shows the effectiveness of the mindfulness-based interventions over a 6-week period.

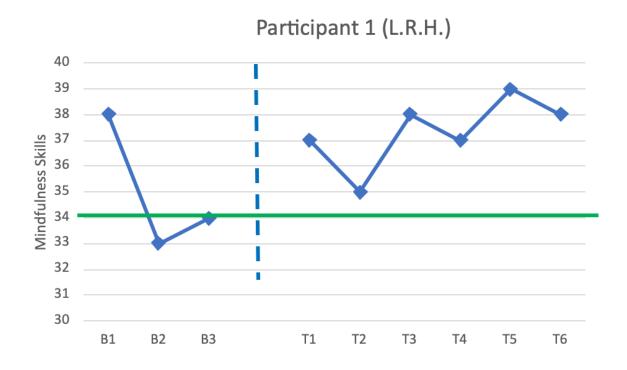
Use of Mindfulness Skills

A visual analysis of Figure 1 scores shows that LRH increased use of mindfulness skills. Regarding the trend, the FMI showed a fluctuating trend with an upward slope of scores within the treatment phase. In terms of variability, the score range reflects moderate variance in scores

between the baseline and treatment phase. Initial scores during the baseline phase were much lower than scores during the treatment phase. Additionally, the immediacy of treatment effect was noted at the first data point in the treatment phase. According to the data presented, LRH's scores on the FMI (Walach et al., 2006) demonstrates that the treatment effect of mindfulness-based interventions was very effective (PEM=1) in increasing use of mindfulness skills. Evaluation of the PEM statistic for the behavioral measure (1.00) indicated that 6 scores were on the therapeutic side, above the baseline score of 34. Trend analysis depicts LRH's improvement toward increasing use of mindfulness skills at the first session, as evidenced by increased scores on items such as "I am open to the experience of the present moment."

Figure 1

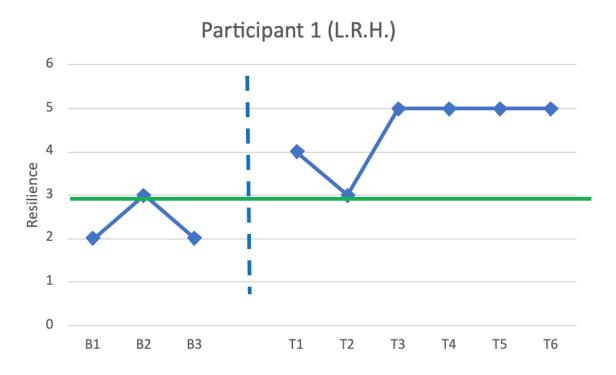
LRH's Use of Mindfulness Skills Across Phases



A visual analysis of Figure 2 scores shows that LRH reported an increase in levels of resilience. Regarding the trend, the BRS showed an upward slope of scores within the treatment phase. In terms of variability, the score range reflects significant variance in scores between the baseline and treatment phase. Initial scores during the baseline phase were much lower than scores during the treatment phase. Additionally, the immediacy of treatment effect was noted at the first data point in the treatment phase. According to the data presented, LRH's scores on the BRS (Smith et al., 2008) demonstrates that the treatment effect of mindfulness-based interventions was moderately effective (PEM=1.00) in measuring levels of resilience. Evaluation of the PEM statistic for the behavioral measure (1.00) indicated that 6 scores were on the therapeutic side, above the baseline score of 2. Trend analysis depicts LRH's improvement toward increasing resilience at the first session, as evidenced by increased scores on items such as "I tend to bounce back quickly after hard times."

Figure 2

LRH's Levels of Resilience Across Phases



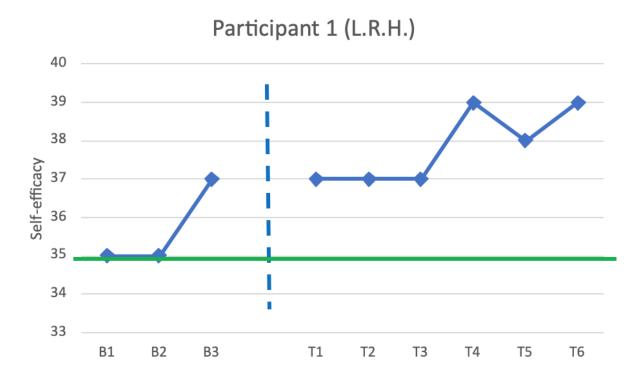
Self-Efficacy

A visual analysis of Figure 3 scores shows that LRH had an increase of levels of self-efficacy. Regarding the trend, the GSE showed fluctuating trend with an upward slope of scores within the treatment phase. In terms of variability, the score range reflects moderate variance in scores between the baseline and treatment phase. Initial scores during the baseline phase were relatively consistent with scores during the treatment phase. Additionally, the immediacy of treatment effect was noted during the first data point in the treatment phase. According to the data presented, LRH's scores on the GSE (Schwarzer & Jerusalem, 1995) demonstrates that the treatment effect of mindfulness-based interventions was very effective (PEM=1) in measuring levels of self-efficacy. Evaluation of the PEM statistic for the behavioral measure (1.00) indicated that 6 scores were on the therapeutic side, above the baseline score of 35. Trend

analysis depicts LRH's improvement toward increasing self-efficacy first session, as evidenced by increased scores on items such as "I can always manage to solve difficult problems if I try hard enough."

Figure 3

LRH's Levels of Self-efficacy Across Phases



Participant 2

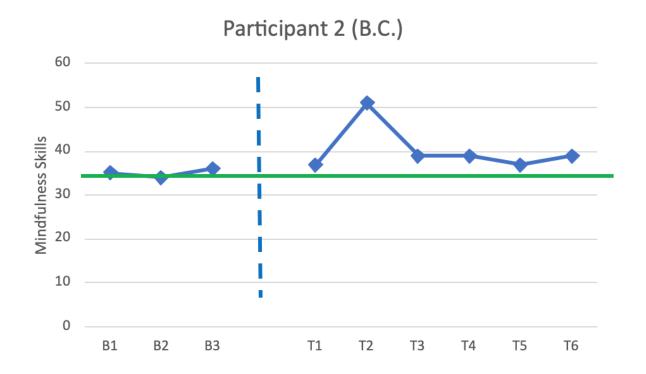
BC was between 55 and 64 years old and was in the first year of her doctoral program. BC had completed at least 15 credit hours towards her doctoral studies and was pursuing a doctorate degree in Educational Leadership, leading to a Doctor of Education (Ed.D.). BC's scores of uses of mindfulness skills, resilience, and self-efficacy are displayed in Figures 4, 5, and 6, respectively. Each figure shows the effectiveness of the use of mindfulness-based interventions over a 6-week period.

Use of Mindfulness Skills

A visual analysis of Figure 4 scores shows that BC increased use of mindfulness skills. Regarding the trend, the FMI showed a fluctuating trend with a descending slope of scores within the treatment phase. In terms of variability, the score range reflects moderate variance in scores between the baseline and treatment phase. Initial scores during the baseline phase were relatively consistent with scores during the treatment phase, apart from scores for week two of treatment. Additionally, the immediacy of treatment effect was noted during the first data point in the treatment phase. According to the data presented, BC's scores on the FMI (Walach et al., 2006) demonstrates that the treatment effect of mindfulness-based interventions was very effective (PEM=1) in measuring the use of mindfulness skills. Evaluation of the PEM statistic for the behavioral measure (1.00) indicated that 6 scores were on the therapeutic side, above the baseline score of 34. Trend analysis depicts BCs' improvement toward increasing use of mindfulness skills at the first session, as shown by increased scores on items such as "I see my mistakes and difficulties without judging them."

Figure 4

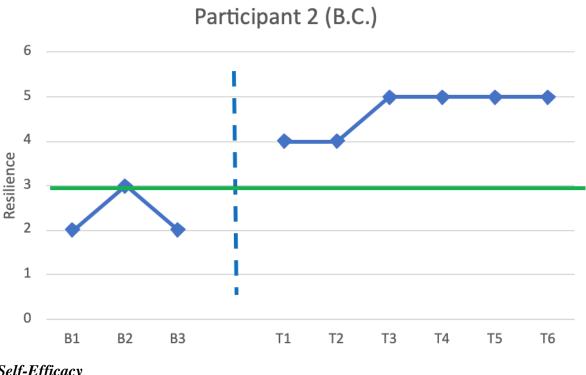
BC's Use of Mindfulness Skills Across Phases



A visual analysis of Figure 5 scores shows that BC had an increase of levels of resilience. Regarding the trend, the BRS showed an upward slope of scores within the treatment phase. In terms of variability, the score range reflects significant variance in scores between the baseline and treatment phase. Initial scores during the baseline phase were much lower than scores during the treatment phase. Additionally, the immediacy of treatment effect was noted during the first data point in the treatment phase. According to the data presented, BC's scores on the BRS (Smith et al., 2008) demonstrates that the treatment effect of mindfulness-based interventions was very effective (PEM=1) in measuring levels of resilience. Evaluation of the PEM statistic for the behavioral measure (1.00) indicated that 6 scores were on the therapeutic side, above the baseline score of 2. Trend analysis depicts BC improvement toward increasing resilience during

the second week of the treatment sessions, as evidenced by increased scores on items such as, "I usually come through difficult times with little trouble."

Figure 5 BC's Levels of Resilience Across Phases



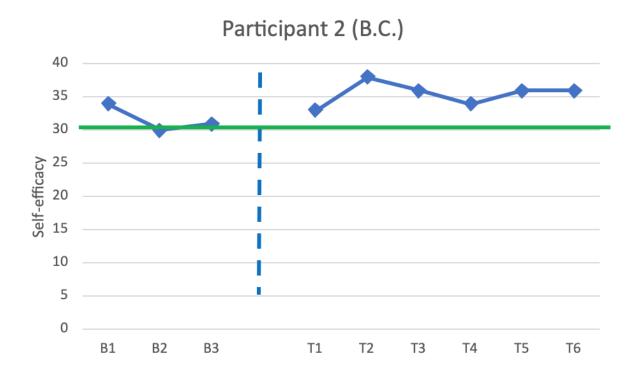
Self-Efficacy

A visual analysis of Figure 6 scores shows that BC had an increase of levels of selfefficacy. Regarding the trend, the GSE showed a relatively stable trend and an upward slope of scores within the treatment phase. In terms of variability, the score range reflects moderate variance in scores between the baseline and treatment phase. Initial scores during the baseline phase were relatively consistent with scores during the treatment phase. Additionally, the immediacy of treatment effect was noted during the first data point in the treatment phase. According to the data presented, BC's scores on the GSE (Schwarzer & Jerusalem, 1995) demonstrates that the treatment effect of mindfulness-based interventions was very effective

(PEM=1) in measuring levels of self-efficacy. Evaluation of the PEM statistic for the behavioral measure (1.00) indicated that 6 scores were on the therapeutic side, above the baseline score of 34. Trend analysis depicts BC's improvement toward increasing self-efficacy at the first session, as shown by increased scores on items such as "I can usually handle whatever comes my way."

Figure 6

BC's Levels of Self-efficacy Across Phases



Participant 3

DG was between 45 and 54 years old and was in the first year of her doctoral program.

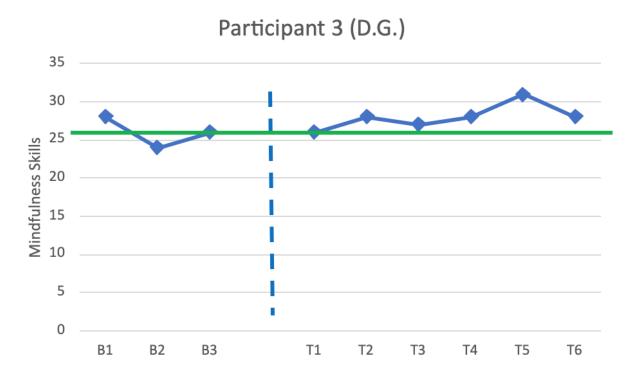
DG had completed at least 15 credit hours towards her doctoral studies and was pursuing a doctorate degree in Counselor Education and Supervision, leading to a Doctor of Philosophy (Ph.D.). DG's scores of uses of mindfulness skills, resilience, and self-efficacy are displayed in Figures 7, 8, and 9, respectively. Each figure shows the effectiveness of the use of mindfulness-based interventions over a 6-week period.

Use of Mindfulness Skills

A visual analysis of Figure 7 scores shows that DG increased use of mindfulness skills. Regarding the trend, the FMI showed a relatively stable trend and an upward slope of scores within the treatment phase. In terms of variability, the score range reflects moderate variance in scores between the baseline and treatment phase. Initial scores during the baseline phase were relatively consistent with scores during the treatment phase. Additionally, the immediacy of treatment effect was noted during the second data point in the treatment phase. According to the data presented, DG's scores on the FMI (Walach et al., 2006) demonstrates that the treatment effect of mindfulness-based interventions was effective (PEM=.83) in measuring the use of mindfulness skills. Evaluation of the PEM statistic for the behavioral measure (.83) indicated that 5 scores were on the therapeutic side, above the baseline score of 24. Trend analysis depicts DG's improvement toward increasing use of mindfulness skills at the first session, as evidenced by increased scores on items such as "I feel connected to my experience in the here and now."

Figure 7

DG's Use of Mindfulness Skills

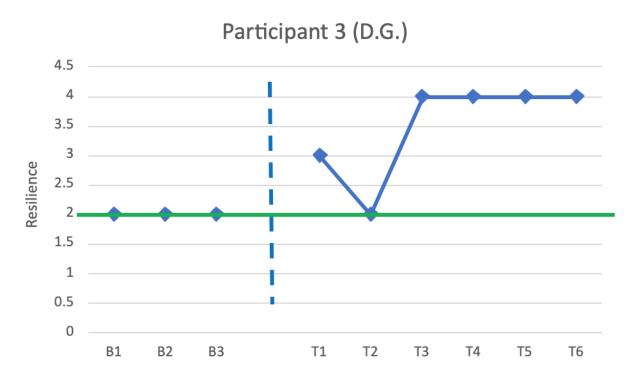


A visual analysis of Figure 8 scores shows that DG had an increase of levels of resilience. Regarding the trend, the BRS showed an upward slope of scores within the treatment phase. In terms of variability, the score range reflects significant variance in scores between the baseline and treatment phase. Initial scores during the baseline phase were much lower than scores during the treatment phase. Additionally, the immediacy of treatment effect was noted during the first data point in the treatment phase. According to the data presented, DG's scores on the BRS (Smith et al., 2008) demonstrates that the treatment effect of mindfulness-based interventions was effective (PEM=.83) in measuring levels of resilience. Evaluation of the PEM statistic for the behavioral measure (.83) indicated that 5 scores were on the therapeutic side, above the baseline score of 2. Trend analysis depicts DG's improvement toward increasing resilience in the

first session, as evidenced by increased scores on items such as "It does not take me long to recover from a stressful event."

Figure 8

DG's Levels of Resilience Across Phases



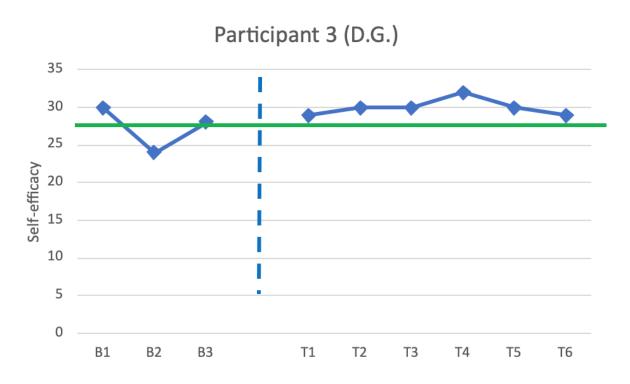
Self-Efficacy

A visual analysis of Figure 9 scores shows that DG had an increase/decrease of levels of self-efficacy. Regarding the trend, the GSE showed a relatively stable trend and an upward slope of scores within the treatment phase. In terms of variability, the score range reflects moderate variance in scores between the baseline and treatment phase. Initial scores during the baseline phase were relatively consistent with scores during the treatment phase. Additionally, the immediacy of treatment effect was noted during the first data point in the treatment phase. According to the data presented, DG's scores on the GSE (Schwarzer & Jerusalem, 1995) demonstrates that the treatment effect of mindfulness-based interventions was very effective

(PEM=1) in measuring levels of self-efficacy. Evaluation of the PEM statistic for the behavioral measure (1.00) indicated that 6 scores were on the therapeutic side, above the baseline score of 24. Trend analysis depicts DG's improvement toward increasing self-efficacy at the first session, as shown by increased scores on items such as "If I am in trouble I can usually think of a solution."

Figure 9

DG's Levels of Self-efficacy Across Phases



Participant 4

TLAT was between 55 and 64 years old and was in the first year of her doctoral program.

TLAT had completed at least 15 credit hours towards her doctoral studies and was pursuing a doctorate degree in Ministry, leading to a Doctor of Ministry. TLAT's scores of uses of mindfulness skills, resilience, and self-efficacy are displayed in Figures 10, 11, and 12,

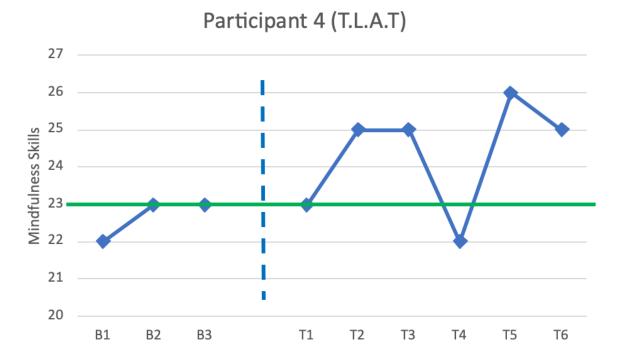
respectively. Each figure shows the effectiveness of the use of mindfulness-based interventions over a 6-week period.

Use of Mindfulness Skills

A visual analysis of Figure 10 scores shows that TLAT increased use of mindfulness skills. Regarding the trend, the FMI showed a fluctuating trend with an upward slope of scores within the treatment phase. In terms of variability, the score range reflects moderate variance in scores between the baseline and treatment phase. Initial scores during the baseline phase were relatively consistent with scores during the treatment phase. Additionally, the immediacy of treatment effect was noted during the second data point in the treatment phase. According to the data presented, TLAT's sores on the FMI (Walach et al., 2006) demonstrates that the treatment effect of mindfulness-based interventions was debatably effective (PEM = .67) in measuring the use of mindfulness skills. Evaluation of the PEM statistic for the behavioral measure (.67) indicated that 4 scores were on the therapeutic side, above the baseline score of 23. Trend analysis depicts TLAT's struggling to increase use of mindfulness skills occurred during the beginning and end of the treatment sessions, as shown by decreased scores on items such as "I experience moments of inner peace and ease, even when things get hectic and stressful."

Figure 10

TLAT's Use of Mindfulness Skills Across Phases

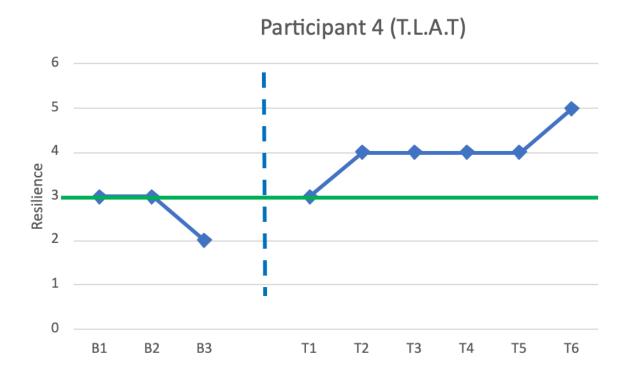


A visual analysis of Figure 11 scores shows that TLAT had an increase of levels of resilience. Regarding the trend, the BRS showed a relatively stable trend with an upward slope of scores within the treatment phase. In terms of variability, the score range reflects significant variance in scores between the baseline and treatment phase. Initial scores during the baseline phase were much lower than scores during the treatment phase. Additionally, the immediacy of treatment effect was noted during the second data point in the treatment phase. According to the data presented, TLAT's scores on the BRS (Smith et al., 2008) demonstrates that the treatment effect of mindfulness-based interventions was effective (PEM=.83) in enhancing resilience. Evaluation of the PEM statistic for the behavioral measure (.83) indicated that 5 scores were on the therapeutic side, above the baseline score of 3. Trend analysis depicts TLAT's improvement

toward increasing resilience in the second session, as shown by decreased scores on items such as "I tend to take a long time to get over setbacks in my life."

Figure 11

TLAT's Levels of Resilience Across Phases



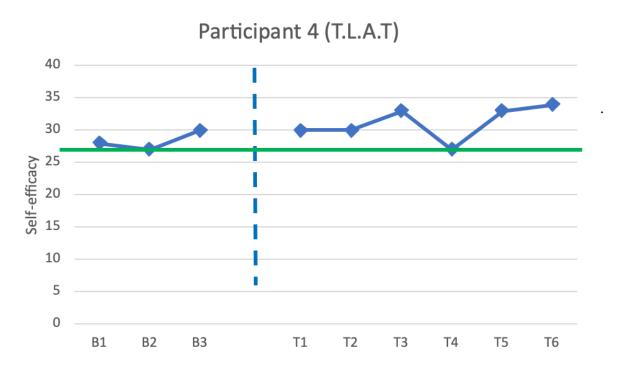
Self-Efficacy

A visual analysis of Figure 12 scores shows that TLAT had an increase of levels of self-efficacy. Regarding the trend, the BRS showed relatively stable slope with an upward trend of scores within the treatment phase. In terms of variability, the score range reflects moderate variance in scores between the baseline and treatment phase. Initial scores during the baseline phase were relatively consistent with scores during the treatment phase. Additionally, the immediacy of treatment effect was noted during the first data point in the treatment phase. According to the data presented, TLAT's scores on the GSE (Schwarzer & Jerusalem, 1995) demonstrates that the treatment effect of mindfulness-based interventions was effective

(PEM=.83) in measuring self-efficacy. Evaluation of the PEM statistic for the behavioral measure (.83) indicated that 5 scores were on the therapeutic side, above the baseline score of 27. Trend analysis depicts TLAT's improvement toward increasing self-efficacy at the first session, as shown by increased scores on items such as "I can solve most problems if I invest the necessary effort."

Figure 12

TLAT's Levels of Self-efficacy Across Phases



Participant 5

BP was between 35 and 44 years old and was in the third year of her doctoral program.

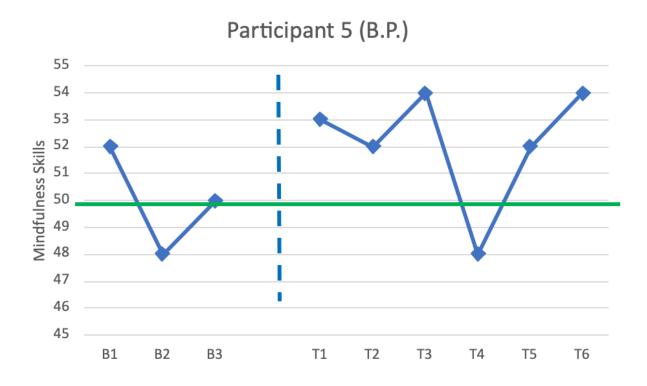
BP had completed at least 21 credit hours towards her doctoral studies and was pursuing a degree in Education, leading to a Doctor of Education (Ed.D.). BP's scores of uses of mindfulness skills, resilience, and self-efficacy are displayed in Figures 13, 14, and 15, respectively. Each figure shows the effectiveness of the use of mindfulness-based interventions over a 6-week period.

Use of Mindfulness Skills

A visual analysis of Figure 13 scores shows that BP increased use of mindfulness skills. Regarding the trend, the FMI showed a fluctuating trend with an upward slope of scores within the treatment phase. In terms of variability, the score range reflects moderate variance in scores between the baseline and treatment phase. Initial scores during the baseline phase were relatively consistent with scores during the treatment phase. Additionally, the immediacy of treatment effect was noted during the first data point in the treatment phase. According to the data presented, BP's scores on the FMI (Walach et al., 2006) demonstrates that the treatment effect of mindfulness-based interventions was effective (PEM=.83) in measuring the use of mindfulness skills. Evaluation of the PEM statistic for the behavioral measure (.83) indicated that 5 scores were on the therapeutic side, above the baseline score of 50. Trend analysis depicts BP's improvement toward increasing use of mindfulness skills at the first session, as shown by increased scores on items such as "I accept unpleasant experiences."

Figure 13

BP's Use of Mindfulness Skills Across Phases



A visual analysis of Figure 14 scores shows that BP had an increase of levels of resilience. Regarding the trend, the BRS showed fluctuating trend with an upward slope of scores within the treatment phase. In terms of variability, the score range reflects significant variance in scores between the baseline and treatment phase. In terms of variability, the score range reflects significant variance in scores between the baseline and treatment phase. Initial scores during the baseline phase were much lower than scores during the treatment phase. Additionally, the immediacy of treatment effect was noted during the first data point in the treatment phase. According to the data presented, BP's scores on the BRS (Smit et al., 2008) demonstrates that the treatment effect of mindfulness-based interventions was very effective (PEM=1) in measuring resilience. Evaluation of the PEM statistic for the behavioral measure (1.00) indicated

that 6 scores were on the therapeutic side, above the baseline score of 3. Trend analysis depicts BP's improvement toward increasing resilience in the first session, as shown by decreased scores on items such as "I have a hard time making it through stressful events."

Figure 14

BP's Levels of Resilience Across Phases



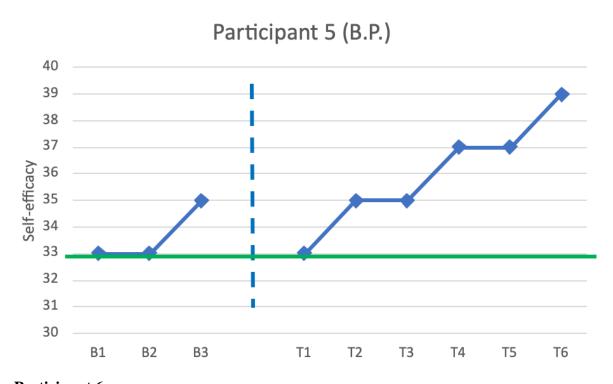
Self-Efficacy

A visual analysis of Figure 15 scores shows that BP had an increase of levels of self-efficacy. Regarding the trend, the GSE showed an upward slope of scores within the treatment phase. In terms of variability, the score range reflects moderate variance in scores between the baseline and treatment phase. Initial scores during the baseline phase were relatively consistent with scores during the treatment phase. Additionally, the immediacy of treatment effect was noted during the second data point in the treatment phase. According to the data presented, BP's scores the GSE (Schwarzer & Jerusalem, 1995) demonstrates that the treatment effect of

mindfulness-based interventions was effective (PEM=.83) in measuring self-efficacy. Evaluation of the PEM statistic for the behavioral measure (.83) indicated that 5 scores were on the therapeutic side, above the baseline score of 33. Trend analysis depicts BP's improvement toward increasing self-efficacy at the second session, as shown by increased scores on items such as "I am confident that I could deal efficiently with unexpected events."

Figure 15

BP's Levels of Self-efficacy Across Phases



Participant 6

TPW was between 25 and 34 years old and was in the fourth year of her doctoral program. TPW had completed more than 21 credit hours towards her doctoral studies and was pursuing a degree in Learning and Development, leading to a Doctor of Education (Ed.D.).

TPW's scores of uses of mindfulness skills, resilience, and self-efficacy are displayed in Figures

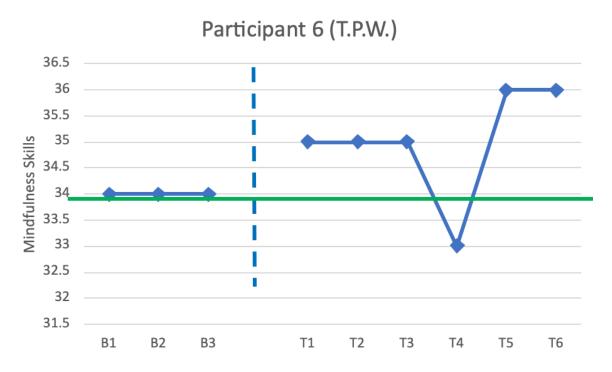
16, 17, and 18, respectively. Each figure shows the effectiveness of the use of mindfulness-based interventions over a 6-week period.

Use of Mindfulness Skills

A visual analysis of Figure 16 scores shows that TPW increased use of mindfulness skills. Regarding the trend, the FMI showed fluctuating trend with an upward slope of scores within the treatment phase. In terms of variability, the score range reflects moderate variance in scores between the baseline and treatment phase. Initial scores during the baseline phase were relatively consistent with scores during the treatment phase. Additionally, the immediacy of treatment effect was noted during the first data point in the treatment phase. According to the data presented, TPW's scores on the FMI (Walach et al., 2006) demonstrates that the treatment effect of mindfulness-based interventions was effective (PEM=.83) in measuring the use of mindfulness skills. Evaluation of the PEM statistic for the behavioral measure (.83) indicated that 5 scores were on the therapeutic side, above the baseline score of 34. Trend analysis depicts TPW's improvement toward increasing use of mindfulness skills occurred during the first session, as evidenced by decreased scores on items such as "In difficult situations, I can pause without immediately reacting."

Figure 16

TPW's Use of Mindfulness Skills Across Phases

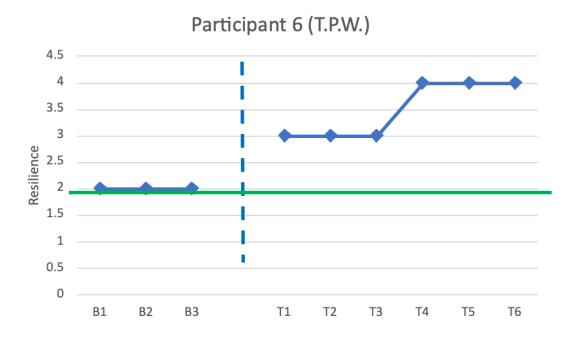


A visual analysis of Figure 17 scores shows that TPW had an increase of levels of resilience. Regarding the trend, the BRS showed relatively stable slope with an upward of scores within the treatment phase. In terms of variability, the score range reflects significant variance in scores between the baseline and treatment phase. Initial scores during the baseline phase were much lower than scores during the treatment phase. Additionally, the immediacy of treatment effect was noted during the first data point in the treatment phase. According to the data presented, TPW's scores on the BRS (Smith et al., 2008) demonstrates that the treatment effect of mindfulness-based interventions was very effective (PEM=1) in measuring resilience. Evaluation of the PEM statistic for the behavioral measure (1.00) indicated that 6 scores were on the therapeutic side, above the baseline score of 2. Trend analysis depicts TPW's improvement

toward increasing resilience in the first session, as shown by increased scores on items such as "I usually come through difficult times with little trouble."

Figure 17

TPW's Levels of Resilience Across Phases



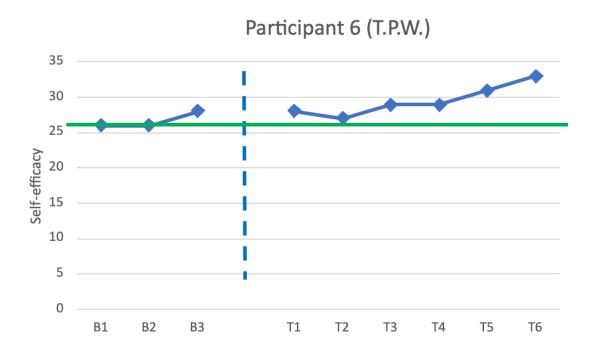
Self-Efficacy

A visual analysis of Figure 18 scores shows that TPW had an increase of levels of self-efficacy. Regarding the trend, the GSE showed a relatively stable trend with an upward slope of scores within the treatment phase. In terms of variability, the score range reflects moderate variance in scores between the baseline and treatment phase. Initial scores during the baseline phase were relatively consistent with scores during the treatment phase. Additionally, the immediacy of treatment effect was noted during the first data point in the treatment phase. According to the data presented, TPW's scores on the GSE (Schwarzer & Jerusalem, 1995) demonstrates that the treatment effect of mindfulness-based interventions was very effective (PEM = 1) in measuring self-efficacy. Evaluation of the PEM statistic for the behavioral measure

(1.00) indicated that 6 scores were on the therapeutic side, above the baseline score of 26. Trend analysis depicts TPW's improvement toward increasing self-efficacy at the second session, as shown by increased scores on items such as "Thanks to my resourcefulness, I know how to handle unforeseen situations."

Figure 18

TPW's Levels of Self-efficacy Across Phases



Participant 7

RF was between 35 and 44 years old and was in the first year of her doctoral program.

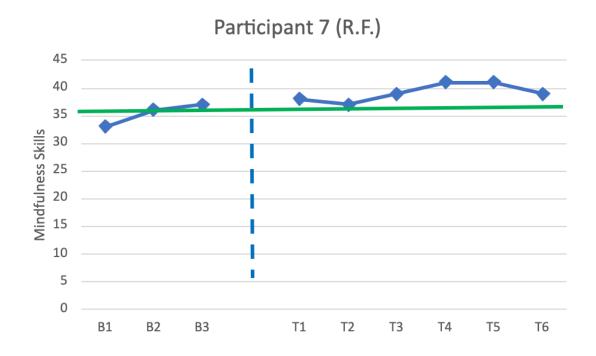
RF had completed at least 18 credit hours towards her doctoral studies and was pursuing a doctorate degree in Child Development and Early Education, leading to a Doctor of Philosophy.

RF's scores of uses of mindfulness skills, resilience, and self-efficacy are displayed in Figures 19, 20, and 21, respectively. Each figure shows the effectiveness of the use of mindfulness-based interventions over a 6-week period.

Use of Mindfulness Skills

A visual analysis of Figure 19 scores shows that RF increased use of mindfulness skills. Regarding the trend, the FMI showed a relatively stable trend with a descending slope of scores within the treatment phase. In terms of variability, the score range reflects moderate variance in scores between the baseline and treatment phase. Initial scores during the baseline phase were relatively consistent with scores during the treatment phase. Additionally, the immediacy of treatment effect was noted during the first data point in the treatment phase. According to the data presented, RF's scores on the FMI (Walach et al., 2006) demonstrates that the treatment effect of mindfulness-based interventions was very effective (PEM=1) in measuring the use of mindfulness skills. Evaluation of the PEM statistic for the behavioral measure (1.00) indicated that 6 scores were on the therapeutic side, above the baseline score of 36. Trend analysis depicts RF's improvement toward increasing use of mindfulness skills occurred during the first session, as shown by decreased scores on items such as "I see my mistakes and difficulties without judging them."

Figure 19 *RF's Use of Mindfulness Skills Across Phases*

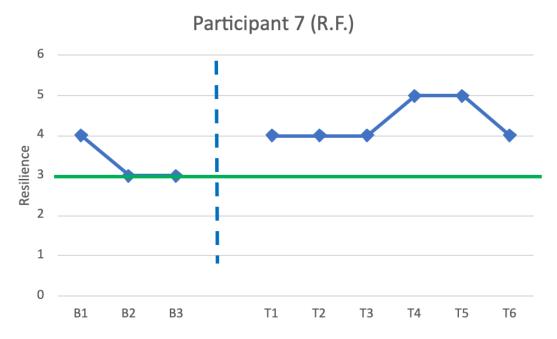


A visual analysis of Figure 20 scores shows that RF had an increase of levels of resilience. Regarding the trend, the BRS showed a relatively stable trend with a descending slope of scores within the treatment phase. In terms of variability, the score range reflects moderate variance in scores between the baseline and treatment phase. Initial scores during the baseline phase were relatively consistent with scores during the treatment phase. Additionally, the immediacy of treatment effect was noted during the first data point in the treatment phase. According to the data presented, RF's scores on the BRS (Smith et al., 2008) demonstrates that the treatment effect of mindfulness-based interventions was very effective (PEM=1) in measuring resilience. Evaluation of the PEM statistic for the behavioral measure (1.00) indicated that 6 scores were on the therapeutic side, above the baseline score of 2. Trend analysis depicts

RF's improvement toward increasing resilience in the first session, as shown by increased scores on items such as "I tend to bounce back quickly after hard times."

Figure 20

RF's Levels of Resilience Across Phases



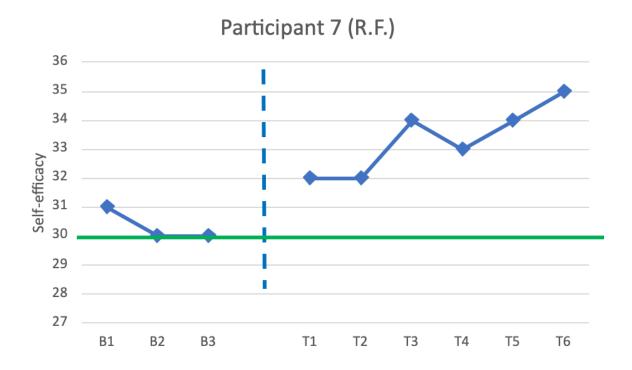
Self-Efficacy

A visual analysis of Figure 21 scores shows that RF had an increase of levels of self-efficacy. Regarding the trend, the GSE showed a fluctuating trend with an upward slope of scores within the treatment phase. In terms of variability, the score range reflects moderate variance in scores between the baseline and treatment phase. Initial scores during the baseline phase were relatively consistent with scores during the treatment phase. Additionally, the immediacy of treatment effect was noted at the first data point in the treatment phase. According to the data presented, RF's scores on the GSE (Schwarzer & Jerusalem, 1995) demonstrates that the treatment effect of mindfulness-based interventions was very effective (PEM=1) in measuring self-efficacy. Evaluation of the PEM statistic for the behavioral measure (1.00)

indicated that 6 scores were on the therapeutic side, above the baseline score of 26. Trend analysis depicts RF's improvement toward increasing self-efficacy at the second session, as shown by increased scores on items such as "When I am confronted with a problem, I can usually find several solutions."

Figure 21

RF's Levels of Self-efficacy Across Phases



Participant 8

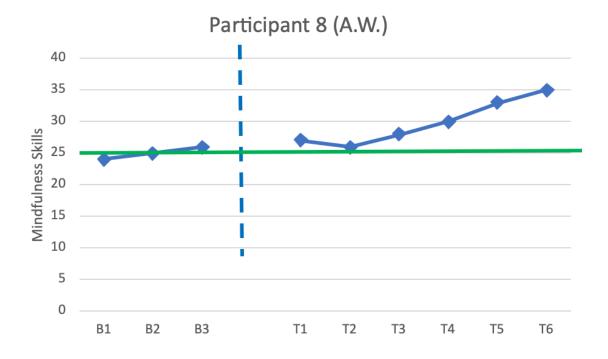
AW was between 35 and 44 years old and was in the second year of her doctoral program. AW had completed at least 21 credit hours towards her doctoral studies and was pursuing a doctorate degree in Adult Higher Education, leading to a Doctor of Education (Ed.D.). AW's scores of uses of mindfulness skills, resilience, and self-efficacy are displayed in Figures 22, 23, and 24, respectively. Each figure shows the effectiveness of the use of mindfulness-based interventions over a 6-week period.

Use of Mindfulness Skills

A visual analysis of Figure 22 scores shows that AW increased use of mindfulness skills. Regarding the trend, the FMI showed an upward slope of scores within the treatment phase. In terms of variability, the score range reflects moderate variance in scores between the baseline and treatment phase. Initial scores during the baseline phase were relatively consistent with scores during the treatment phase. Additionally, the immediacy of treatment effect was noted at the first data point in the treatment phase. According to the data presented, AW's scores on the FMI (Walach et al., 2006) demonstrates that the treatment effect of mindfulness-based interventions was effective (PEM=.83) in increasing the use of mindfulness skills. Evaluation of the PEM statistic for the behavioral measure (.83) indicated that 5 scores were on the therapeutic side, above the baseline score of 25. Trend analysis depicts AW's improvement toward increasing use of mindfulness skills occurred during the first session, as shown by decreased scores on items such as "When I notice an absence of mind, I gently return to the experience of the here and now."

Figure 22

AW's Use of Mindfulness Skills Across Phases

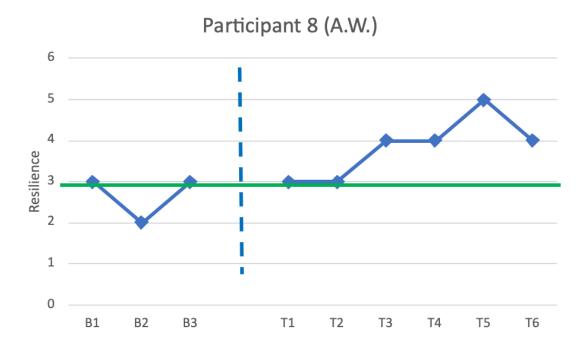


A visual analysis of Figure 23 scores shows that AW had an increase of levels of resilience. Regarding the trend, the BRS showed a fluctuating trend with a descending slope of scores within the treatment phase. In terms of variability, the score range reflects significant variance in scores between the baseline and treatment phase. Initial scores during the baseline phase were much lower than scores during the treatment phase. Additionally, the immediacy of treatment effect was noted during the second data point in the treatment phase. According to the data presented, AW's scores on the BRS (Smith et al., 2008) demonstrates that the treatment effect of mindfulness-based interventions was debatably effective (PEM=.67) in measuring resilience. Evaluation of the PEM statistic for the behavioral measure (.67) indicated that 4 scores were on the therapeutic side, above the baseline score of 3. Trend analysis depicts AW's

improvement toward increasing resilience in the first session, as shown by decreased scores on items such as "It is hard for me to snap back when something bad happens."

Figure 23

AW's Levels of Resilience Across Phases



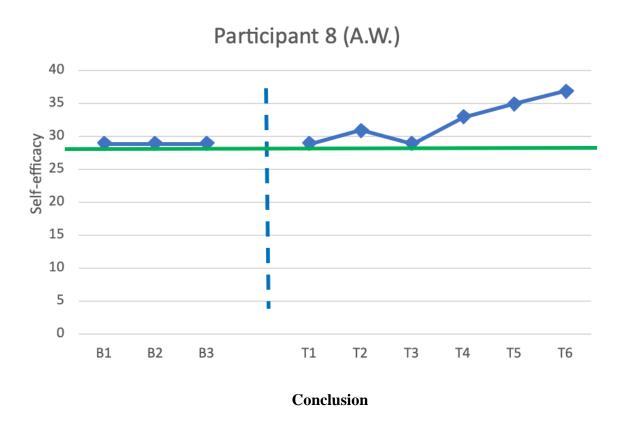
Self-Efficacy

A visual analysis of Figure 24 scores shows that AW had an increase of levels of self-efficacy. Regarding the trend, the GSE showed a relatively stable trend with an upward slope of scores within the treatment phase. In terms of variability, the score range reflects moderate variance in scores between the baseline and treatment phase. Initial scores during the baseline phase were relatively consistent with scores during the treatment phase. Additionally, the immediacy of treatment effect was noted during the first data point in the treatment phase. According to the data presented, AW's scores of the GSE (Schwarzer & Jerusalem, 1995) demonstrates that the treatment effect of mindfulness-based interventions was effective (PEM=.67) in measuring self-efficacy. Evaluation of the PEM statistic for the behavioral

measure (.67) indicated that 4 scores were on the therapeutic side, above the baseline score of 29. Trend analysis depicts AW's improvement toward increasing self-efficacy at the second session, as shown by increased scores on items such as "I can remain calm when facing difficulties because I can rely on my coping abilities."

Figure 24

AW's Levels of Self-efficacy Across Phases



This chapter was inclusive of an analysis of findings for the current study. For each participant, I analyzed the data for scores reported on the FMI, BRS, and GSE. Visual analysis was conducted for each participant along with the interpretation of treatment effect, trend (slope), variability, and immediacy of effect. Additionally, effect sizes were calculated by using PEM. I also included a thorough description of each participant and their experiences participating in mindfulness-based interventions over a period of 6 weeks. I also observed

changes in scores on each self-report measure (FMI, BRS, and GSE). Findings from the use of mindfulness-based interventions to enhance resilience and self-efficacy in African American doctoral students were reported across participant profiles during the treatment phase and were guided by a single research question: Does a 6-week mindfulness-based intervention effect resilience and self-efficacy in African American doctoral students? In the subsequent chapter, I will discuss the findings of this study in relation to implications for practice, recommendations, limitations, and final considerations.

CHAPTER V

DISCUSSION

Outcomes of the current study confirmed that mindfulness-based interventions were effective in improving levels of resilience and self-efficacy in African American doctoral students across various degree programs in the United States. This study espoused the current, and insufficient, literature exploring the effectiveness of mindfulness-based interventions within the African American culture, and more specifically, investigating their effect on the variables of resilience and self-efficacy in relation to African American doctoral students. The research question for the current study evaluated changes in participant's levels of resilience and selfefficacy following a 6-week mindfulness-based intervention, utilizing the Freiburg Mindfulness Inventory (FMI), Brief Resilience Scale (BRS), and the General Self-efficacy Scale (GSE). Findings demonstrated a trend towards enhanced levels of resilience, self-efficacy, and use of mindfulness skills following the participation in 6-weeks of mindfulness-based interventions. The PEM statistic also demonstrated an increase in levels of resilience, self-efficacy, and use of mindfulness skills across all participants' profiles (N=8). Visual representation of participants' scores and treatment effect are depicted by the graphs associated with their respective profile (see List of Figures).

The results of this study support the utilization of mindfulness-based interventions to promote the enhancement of resilience, self-efficacy, and use of mindfulness skills in African American doctoral students (Chanda et al., 2022). This study exemplified a pragmatic approach to implementing mindfulness-based interventions in a virtual setting, specifically with African American doctoral students. Conducting the study across the virtual platform, Zoom, was helpful as it provided a way for participants to engage in the study via multi-media incorporation (i.e.,

cellphone, PC, tablet) and allowed for engagement in the interventions from various locations. Utilizing a virtual approach to implement mindfulness-based interventions compliments current literature by Xu et al. (2022) that supports the notion that virtual mindfulness-based interventions offer participants ease of accessibility, flexibility of device options, and interactive participation, regardless of locale.

This study also aligns with previous findings that the effects of mindfulness-based interventions can increase optimal health and wellbeing, protect against negative health consequences, slow disease progression, and decrease maladaptive coping within the African American population (Watson-Singleton et al., 2019). For example, following the facilitation of the body scan meditation, Participant two, BC, disclosed that she struggles with chronic shoulder pain, due to the nature of her job. Although this was BC's first time participating in a body scan mediation, she was surprised to experience pain relief, almost immediately after the intervention concluded. In alignment with the previous study, BC expressed that she would continue utilizing the body scan mediation beyond the conclusion of the study to help sustain pain reduction. Participant three, DG, expressed having little to no motivation to engage in her doctoral coursework and daily activities prior to participating in the study interventions. DG also shared that she recently experienced a difficult life event shortly before beginning the treatment phase of the study. In support of the previous study (Watson-Singleton et al., 20190, DG reported feeling more hopeful regarding her ability to succeed in a doctoral program and her abilities to overcome obstacles and life challenges. She shares that she learned to be more accepting of circumstances beyond her control and has plans to prioritize her wellbeing moving forward.

Findings of the current study also support the notion that the use of mindfulness-based interventions is effective in treating stress-related factors (e.g., biological, psychological, and

physiological) among African Americans (Biggers et al., 2020). Participant one, LRH, reported feeling more capable of managing distressing symptoms. Not only were the interventions helpful in reducing her symptoms of stress, LRH shared that she noticed a change in her self-care routine and coping skills. Initially, to cope with doctoral student stressors, LRH shared that she had a bad habit of staying up late and eating lots of unhealthy foods. Since participating in the mindfulness-based interventions, she shared that she is now more aware of when she is not practicing self-care and is more conscious when choosing snack foods.

Though the results of this study support positive change regarding resilience, selfefficacy, and use of mindfulness skills, some participants demonstrated more change than others across treatment phases. When reviewing participant experiences, participant four, TLAT and participant eight, AW, demonstrated the least amount of change out of all participants. In meeting with TLAT, she expressed struggling with imposter syndrome and often mentioned that she had a fear of being found out. She further discussed the challenges of pursuing a Doctor of Ministry while navigating personal life issues. Based on my encounters with TLAT, I suppose that TLAT subconsciously experienced some spiritual and/or religious conflict while engaging in the interventions. With her degree program being heavily rooted in upholding Christian principles, engaging in exercises that incorporate Buddhist customs may have been defying. In support of TLAT's experiences, current literature by Green et al., (2021) affirms that African Americans with strong Christian identities and traditions may struggle with the idea of engaging in practices that may be associated with different spiritual traditions (i.e., Buddhism). Several research studies exploring the benefits of mindfulness-based interventions have been conducted; however, very few have examined how mindfulness can be used with African Americans, specifically (Woods-Giscombe & Gaylord, 2014). In meeting with AW, expressed that she was

experiencing some academic challenges that were impacting her mental health and causing her to doubt that she belonged in a doctoral program. Additionally, she expressed concerns about her ability to integrate mindfulness practices into her daily life. She also shared that she struggles with acceptance, which is a component of mindfulness. During the initial meeting, AW shared that she experienced a recent loss and thought that it would be beneficial to participate in the current study, to gain a set of skills to help her cope with grief and loss. She went on to share her challenges of reintegrating into life as a doctoral student and struggles to find balance. In my interactions with AW, I presume that AW had a difficult time engaging in the exercises, and could have benefited from practicing the exercises, consistently. In support of AW's experiences, current literature by Mantzios & Giannou (2018) that supports the notion that recurring engagement in mindfulness-based interventions can enhance overall wellbeing and foster more mindful ways of living.

During the initial meeting, all participants reported that they had not engaged in mindfulness-based interventions, prior to participating in the study. Participant three, DG, shared that she thought that mindfulness was related to pushing away all thoughts and zoning out. Participant four, TLAT, shared that she has been curious about the concept of mindfulness for quite some time. She expressed that participating in the current study would provide her an opportunity to develop a better understanding of mindfulness-based interventions. Additionally, TLAT was eager to learn how engaging in mindfulness practices could help her overcome chronic thoughts of imposter syndrome as a doctoral student, seeking a terminal degree in ministry. Participant seven, RF, was also curious about mindfulness-based interventions and what they entailed. Initially, RF thought that engaging in mindfulness related practices was unique to persons of Asian culture. She shared that prior to engaging with the current study, she

was not aware that African Americans could participate in mindfulness. Without much knowledge regarding mindfulness-based interventions, RF expressed concerns about the interventions conflicting with her current prayer life. Additionally, RF expressed feeling more comfortable having a facilitator of the same cultural background, as it helped to ease the apprehension, she felt prior to participating in the study. RF's concerns support findings by Woods-Giscombe and Gaylord (2014) that suggest that African Americans are more apt to engage in mindfulness-based interventions if there are other African American participants present and if the facilitator of the interventions is also African American. Further, consistent with growing literature centered on utilizing mindfulness-based interventions with African Americans, findings of the current study validate the need for more culturally responsive adaptations for mindfulness-based interventions with this population (Watson-Singleton et al., 2019).

During the start of each session, participants were invited to join in with me as I facilitated each mindfulness-based intervention. At the end of each session, participants were invited to process their experience related to the corresponding intervention. Some participants were a bit timid and refrained from sharing their experiences. However, those that did share, had positive expressions. Participant one, LRH, often reported that she felt calm, more focused, and overall, she found each intervention to be insightful and soothing. This is consistent with a study by Mantzios & Giannou (2018) that found that recurring engagement in mindfulness practices may increase one's overall state of mindfulness, leading to the development of a more mindful lifestyle. Additionally, she shared that she plans to continue engaging in mindfulness-based interventions beyond the conclusion of the study. LRH shared that her favorite intervention was

the guided meditation focused on letter writing, as it helped her to see her full potential and what she is truly capable of achieving, while pursuing her doctorate degree in Ministry.

Participant two, BC, often reported that she felt less stressed and that participating in the mindfulness-based interventions helped her find a new way to relax when feeling overwhelmed with her doctoral coursework and demands of her full-time job as an administrator. BC also shared that the interventions were time-friendly and work well for busy doctoral students who are always on the go. BC shared that her favorite intervention was the guided meditation centered on loving-kindness, as it helped her to better understand how to express more compassion towards others, especially her coworkers.

Participant five, BP, reported that participating in the interventions was helpful and that she often felt relaxed and grounded after each session. BP shared that the session that benefited her the most was the guided meditation centered on the introduction to breathwork, as it was a good reminder to take time out her day to engage in deep breathing, especially during stressful times of the semester.

Participant seven, RF, often reported that participating in the mindfulness-based interventions helped her to feel less anxious, improved her mood, and helped her to be more accepting of her current academic and life challenges. RF shared that her favorite intervention was the guided meditation focused on letter writing, as it helped her to reflect on life experiences that she has overcome and gave her hope for the direction she is headed.

Lastly, participant eight, AW, reported feeling more confident in her abilities to accomplish difficult tasks and be more present. During the study, AW expressed that she was experiencing some academic and personal challenges that were impacting her mental health and causing her to engage in self-doubting behaviors. AW shared that after engaging in the guided

meditation centered on visualizing the higher self, she was able to reclaim her worth and belief in herself succeed.

These participant accounts substantiate findings within existing literature by Barry et al., (2018) that explicates the unique challenges of doctoral students and their experiences with mental health concerns. Concluding, additional findings validate the effectiveness of mindfulness-based interventions as an attractive self-care strategy for doctoral students along with increasing self-efficacy, hope, optimism, and resilience (Barry et al., 2018).

Recommendations and Implications for Counselors

Despite the apparent need for mental health counseling and support, several African Americans remain hesitant to engage in treatment to address mental health concerns (Curtis-Boles, 2017). A great deal of this reluctance can be attributed to prior experiences that are entrenched in the historical truths of the involuntary exploitation of African Americans and lack of regard for their mental health. Additionally, chronic misdiagnosis and cultural insensitivity has contributed to skepticism, mistrust, and the underutilization of mental health services by African Americans (Curtis-Boles, 2017). Conversely, African Americans who know of members in their cultural community or who have family members who have been served by the mental health system are more inclined to consider engaging in mental health services. In light of this information, mental health practitioners should be equipped with culturally informed and relevant strategies to adequately provide mental health care services to this population.

At present, African Americans encounter copious challenges that impact their mental health (e.g., extreme rates of poverty, unemployment, incarceration, health complications)

(Withfield, 2021). Such factors can lead to an increase in emotional and psychological distress, which can contribute to inadequate levels of resilience and self-efficacy, especially those

pursuing doctoral degrees. Many of these challenges are preceded and complicated by experiences of intergenerational trauma (i.e., slavery) which continue to perpetuate psychological oppression of African Americans (Curtis-Boles, 2017). Additional influencing factors such as institutionalized racism, race-based oppression, and race-based traumatic stress have significant effects on African Americans and their mental health. When working with African American clients, counselors should consider the implications of these factors and how they can impact client levels of resilience and self-efficacy.

Because much of the existing literature includes experiences and social references aligned with White culture (Biggers et al., 2020), findings of the current study contribute to the gap in the literature and enriches education regarding the use of mindfulness-based interventions with African Americans. Additionally, findings of the current study are supportive of culturally responsive recommendations and implications for counseling practice made by Biggers et al. (2020), Green et al., (2021), and Williams, (2022) when using mindfulness-based interventions with African Americans. Culturally responsive recommendations include incorporating African American facilitators, integrating significant cultural values, promoting self-awareness, highlighting skills related to interdependence, incorporating space for storytelling, utilizing culturally relevant terminology (e.g., awareness, relaxation, mindful), and distributing culturally appropriate resources (i.e., audio or video with cultural tone voice). As an example, I was able to facilitate culturally adapted interventions in the current study by changing the language of the interventions. Instead of using the term "meditation" to describe the intervention, I introduced the interventions as mindful activities, awareness practices, or relaxation skills and/or techniques. Consistent with findings by Williams (2022) and Biggers et al. (2020), participants of the current study were more inclined to participate in the interventions when culturally relevant approaches

were used. Since research on the use of mindfulness-based interventions with African Americans is relatively new, culturally adapted interventions are crucially needed to further encourage the use of mindfulness practices with African Americans. Making effective interventions, such as mindfulness, more accessible to all people is a current issue of inequity that should be addressed if we want to achieve our full potential as scholar-practitioners within the counseling field (Green et al., 2021).

Recommendations and Implications for College Counselors

College counselors should be aware of challenges associated with adjusting to graduate level coursework along with preexisting life circumstances for African American doctoral students. Current literature suggests that graduate students are the second most frequent group to utilize on campus mental health services, indicating that graduate students may experience more mental health symptoms than undergraduate students (Cai, 2020). Further, it is imperative that college counselors acknowledge systems and barriers that perpetuate common challenges for African American clients. Many helping professionals acknowledge their anxieties and concerns about working with African American clients. According to Curtis-Boles (2017), even experienced and practicing counseling professionals struggle to address and manage cultural issues with their clients. Findings of this study are especially helpful for college counselors who work with African American clients that may present with low levels of resilience and selfefficacy as they can utilize mindfulness-based practices (e.g., loving-kindness meditation, just like me meditation) (Caldwell, 2012) to address biases that may be present in working with historically marginalized clients (i.e., African Americans). Further, counselors can introduce mindfulness-based interventions to their clients, particularly doctoral students identifying as African American, who are lacking resilience and self-efficacy characteristics. Additionally,

results of the current study are consistent with literature related to college counselors using mindfulness-based interventions during individual counseling sessions (Caldwell, 2012), to implement techniques or, take-home exercises to promote client growth, help African American doctoral students or clients identify new strengths, engage in healthier ways of coping, and evoke positive therapeutic effects.

As a result of utilizing mindfulness-based interventions with African American doctoral students, college counselors working with this population may consider offering the 6-week mindfulness-based interventions in the format of a training module (i.e., Interpersonal Mindfulness Program) (Kramer et al., 2008). The interventions can be offered as a group, virtual or in person, via the counseling center, that is structured to provide psychoeducation on the intervention (i.e., mindful breathing meditation), delivery of the intervention, and processing time, following the completion of the intervention.

Recommendations for Counselor Educators

African American doctoral students are significantly underrepresented in CACREP-Accredited counselor education programs (Johnson, et. al., 2007). Findings of the current study support the use of mindfulness-based interventions as an effective resource for counselor educators to utilize with their students. Specifically, counselor educators working with African American doctoral students exhibiting low levels of resilience and self-efficacy, may find that incorporating mindfulness-based interventions into the classroom can have a positive impact on these students' overall academic performance while enrolled. Further, the inclusion of mindfulness-based interventions could serve as a method of contemplative pedagogy within the counselor education curriculum. The engagement in mindfulness and contemplative practices invites students to examine their biases, as well as foster new ways of knowing, that are

complementary to traditional methods of instruction that support multicultural education in counseling (Dougherty, 2015; Mcdaniel, 2010). Counselor educators can integrate mindfulness and contemplative practices into the classroom through a variety of exercises and techniques (e.g., during class contemplation activity, guided mediations, listening to difficult conversations, journaling, letter writing, silence). Additionally, counselor educators could teach their students (masters and doctoral) about the effectiveness of mindfulness-based interventions as a technique to minimize elevated symptoms of distress and persistent negative thoughts and emotions, which can have a positive effect on client treatment outcomes.

When introducing mindfulness as a class activity, counselor educators need to notify students that participation in the exercise(s) are optional and issue a formal invitation for students to willingly participate. As an example, you could say, "If you are willing, I would like to invite you to participate in a brief mindfulness exercise, centered on belly breathing." Counselor educators also need to consider students with diverse religious and cultural backgrounds. Historically, within the African American community, churches have been associated with addressing the physical and mental health needs of this cultural group (Green et al., 2021). Additionally, church is an integral component in the lives of countless African Americans. According to Green et al. (2021), close to 80% of African Americans identify as Christian. Before facilitating mindfulness-based interventions in the classroom, counselor educators should know that African Americans, who are connected to church, may be leery of engaging in activities of Buddhist origins (i.e., Eastern-originated mindfulness practices) (Watson-Singleton et al., 2019). Given this, counselor educators can foresee African American students displaying distrust, confusion or rejection when inviting a historically marginalize community to participate in mindfulness-based interventions (Green et al., 2021). Counselor educators could also broach

such concerns with African American students by addressing questions, challenges and apprehensions related to any impending religious conflicts regarding engaging in the mindfulness-based intervention (Green et al., 2021). In all, the integration of mindfulness-based interventions, into counselor education classrooms, brings great promise to improving existing interventions that may not be as effective in enhancing African American student (masters and doctoral) characteristics (i.e., resilience) and self-beliefs (i.e., self-efficacy), that can impact their ability to thrive in rigorous academic environments and accomplishing their goal of obtaining a doctorate degree.

Recommendations for Future Research

Findings of the current study support the need for further research to reassess the effectiveness of mindfulness-based interventions on resilience and self-efficacy in African American doctoral students. Because the current study was performed utilizing an A-B single-case research design, replicating the study with multiple baselines and a follow-up phase could yield more robust outcomes of the study. The implementation of mindfulness-based interventions with African American doctoral students, conducted in an asynchronous group structure allowed participants to engage in the interventions from their respective locations across the U.S., while learning a variety of mindfulness practices together. Although the location of participants varied for this study, most participants were recruited from North and South regions of Texas. In efforts to diversify participant location, future researchers could recruit a larger sample of participants from different states across the U.S.

Though the number of participants recruited for the current study was sufficient for establishing an appropriate level of evidenced-based treatment, finding of this study cannot be generalized to all African American doctoral students in the United States. Hence, future SCRD

research, with larger samples of African American doctoral student participants is needed.

Additionally, conducting a qualitative or mixed methods study is recommended for future research to gain an in-depth understanding of the experiences of African American doctoral students and to further evaluate the effectiveness of mindfulness-based interventions on resilience and self-efficacy. Perhaps engaging in extensive interviews with African American doctoral students can contribute to a better understanding of their experiences. Themes of a qualitative analysis may expose elements that can be associated to inadequate levels of resilience and self-efficacy while pursuing a terminal degree.

Additional research is needed to explore the effectiveness of mindfulness-based interventions on resilience and self-efficacy in African American doctoral students utilizing a withdrawal design (i.e., A-B-A) for single-case research. Implementing a SCRD withdrawal design will allow researchers to assess for changes in participant's levels of resilience and self-efficacy following the withdrawal and reintroduction of the mindfulness-based interventions. For this current study, I observed the variables of resilience and self-efficacy. It is recommended that prospective researchers consider exploring additional variables with participants such as anxiety and depressive symptoms, emotion regulation, or purpose in life.

Limitations

This study includes a few limitations. First, data collected was self-reported. Each week, participants were encouraged to provide honest response when completing the BRS, GSE, and FMI. Conducting the study via a virtual setting was also a limitation of the study. A virtual study increased the risk for survey fatigue, survey fraud, and difficulty to interpret sentiments behind participant responses. Appropriateness of the interventions is also a limitation of the study. Some of the mindfulness activities were more advanced and participants may have found difficulty

grasping the intention and concepts of the practice (i.e., visualizing the higher self). Additionally, the primary investigator served in a dual role during the study, facilitator, and researcher.

Serving in this capacity may have influenced the primary investigator's ability objectively capture the true essence of the participant's response to the treatment interventions, along with influencing the data collection process by not being able to recognize if there was any bias regarding a particular intervention over another. Another possible limitation of this study was the sample. Due to an online recruitment method, some individuals eligible to take part in the study may have been excluded. Additionally, generalizability of the current findings to other AA doctoral students was limited due to participants of the study being all women, in humanistic fields, above the median range of graduate students. Therefore, the sample may not be representative of all AA students who are pursuing their doctorate degree. Lastly, each participant received an incentive, a \$20 Amazon e-gift card. Since participants were incentivized for their participation in the study, this could have impacted the accuracy of participants' responses and the integrity of study results.

Conclusion

The results of this study indicated that participation in 6-weeks of mindfulness-based interventions was effective in enhancing levels of resilience and self-efficacy in African American doctoral students. Participants who engaged in the interventions demonstrated significant results via increased levels of resilience and self-efficacy. Regarding these results, counselors, counselor educators, and other mental health professionals may consider integrating mindfulness-based interventions in to their clinical and academic practice. Whether the interventions are delivered via a group format or individually, the interventions can evoke positive experiences for persons within the African American community. Given the sparse

number of studies centered on the utilization of mindfulness-based practices with African Americans, the findings of this study contributed to the literature through the conduction of an efficacious single-case research design that is sufficient for replication. Overall, results of the current study validate the use of mindfulness-based interventions as an effective intervention to enhance resilience and self-efficacy in African American doctoral students. Due to an extreme deficit of research related to the current topic of study, continued research will yield significant, positive outcomes in African American doctoral students.

REFERENCES

Acker, S., & Haque, E. (2014). The struggle to make sense of doctoral study. *Higher Education Research and Development*, 34(2), 229–241.

https://doi.org/10.1080/07294360.2014.956699

Affordable Colleges Online. (n.d.) Women of color ph.d. programs.

- https://www.affordablecollegesonline.org/college-resource-center/doctoral-programs-women-of-color/
- Ali, A., & Gregg Kohun, F. (2007). Dealing with social isolation to minimize doctoral attrition:

 A four stage framework. *International Journal of Doctoral Studies*, 2, 033–049.

 https://doi.org/10.28945/56
- Ampaw, F. D., & Jaeger, A. J. (2011). Completing the three stages of doctoral education: An event history analysis. *Research in Higher Education*, *53*(6), 640–660. https://doi.org/10.1007/s11162-011-9250-3
- Bach, P., & Hayes, S. C. (2002). The use of acceptance and commitment therapy to prevent the rehospitalization of psychotic patients: A randomized controlled trial. *Journal of Consulting and Clinical Psychology*, 70(5), 1129–1139. https://doi.org/10.1037/0022-006x.70.5.1129
- Baker, V. L., & Griffin, K. A. (2010). Beyond mentoring and advising: Toward understanding the role of faculty "developers" in student success. *About Campus: Enriching the Student Learning Experience*, 14(6), 2–8. https://doi.org/10.1002/abc.20002
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change.

 *Psychological Review, 84(2), 191–215. https://doi.org/10.1037/0033-295x.84.2.191

- Bandura, A., & National Inst of Mental Health. (1986). Social foundations of thought and action:

 A social cognitive theory. Prentice-Hall, Inc.
- Barry, K. M., Woods, M., Martin, A. J., Stirling, C., & Warnecke, E. (2018). A randomized controlled trial of the effects of mindfulness practice on doctoral candidate psychological status. *Journal of American College Health*, 67(4), 299–307.

 https://doi.org/10.1080/07448481.2018.1515760
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*(3), 497–529. https://doi.org/10.1037/0033-2909.117.3.497
- Beasley, S. T., Miller, I. S. K., & Cokley, K. O. (2015). Exploring the impact of increasing the number of Black men in professional psychology. *Journal of Black Studies*, 46(7), 704–722. https://doi.org/10.1177/0021934715599424
- Beer, C., & Lawson, C. (2016). The problem of student attrition in higher education: An alternative perspective. *Journal of Further and Higher Education*, 41(6), 773–784. https://doi.org/10.1080/0309877x.2016.1177171
- Benishek, L. A., & Lopez, F. G. (2001). Development and initial validation of a measure of academic hardiness. *Journal of Career Assessment*, 9(4), 333–352. https://doi.org/10.1177/106907270100900402
- Biggers, A., Spears, C. A., Sanders, K., Ong, J., Sharp, L. K., & Gerber, B. S. (2020). Promoting mindfulness in African American communities. *Mindfulness*, 11(10), 2274–2282. https://doi.org/10.1007/s12671-020-01480-w

- Block, J., & Kremen, A. M. (1996). IQ and ego-resiliency: Conceptual and empirical connections and separateness. *Journal of Personality and Social Psychology*, 70(2), 349–361. https://doi.org/10.1037/0022-3514.70.2.349
- Blume, A. W., Lovato, L. V., Thyken, B. N., & Denny, N. (2012). The relationship of microaggressions with alcohol use and anxiety among ethnic minority college students in a historically White institution. *Cultural Diversity and Ethnic Minority Psychology*, 18(1), 45–54. https://doi.org/10.1037/a0025457
- Bluth, K., & Blanton, P. W. (2013). Mindfulness and self-compassion: Exploring pathways to adolescent emotional well-being. *Journal of Child and Family Studies*, 23(7), 1298–1309. https://doi.org/10.1007/s10826-013-9830-2
- Boatman, M. (2014). Academically resilient minority doctoral students who experienced poverty and parental substance abuse [Doctoral dissertation, Walden University].
- Bohecker, L., & Doughty Horn, E. A. (2016). Increasing students' empathy and counseling self-efficacy through a mindfulness experiential small group. *The Journal for Specialists in Group Work*, 41(4), 312–333. https://doi.org/10.1080/01933922.2016.1232322
- Braveman, P. A., Arkin, E., Proctor, D., Kauh, T., & Holm, N. (2022). Systemic and structural racism: Definitions, examples, health damages, and approaches to dismantling. *Health Affairs*, *41*(2), 171–178. https://doi.org/10.1377/hlthaff.2021.01394
- Brown, K. W., Ryan, R. M., & Creswell, J. D. (2007). Mindfulness: Theoretical foundations and evidence for its salutary effects. *Psychological Inquiry*, *18*(4), 211–237. https://doi.org/10.1080/10478400701598298
- Brucon Publishing Company. Academic fields where no African Americans earned doctorates in 2020. (2021, December 30). The Journal of Blacks in Higher Education.

- https://www.jbhe.com/2021/12/academic-fields-when-no-african-americans-earned-doctorates-in-2020/
- Brunsma, D. L., Embrick, D. G., & Shin, J. H. (2016). Graduate students of color. *Sociology of Race and Ethnicity*, 3(1), 1–13. https://doi.org/10.1177/2332649216681565
- Byars-Winston, A., Gutierrez, B., Topp, S., & Carnes, M. (2011). Integrating theory and practice to Increase scientific workforce Diversity: A framework for career development in graduate research training. *CBE- Life Sciences Education*, 10(4), 357–367. https://doi.org/10.1187/cbe.10-12-0145
- Cai, J. (n.d.). *Black Students in the Condition of Education*2020. https://www.nsba.org/Perspectives/2020/black-students-condition-education
- Caldwell, K. L., & Caldwell (2012, October 28). *Mindfulness matters: Practices for counselors and counselor education*. [Paper presentation]. Association for Counselor Education and Supervision Conference, Nashville, TN, United States.
- Castelló, M., Pardo, M., Sala-Bubaré, A., & Suñe-Soler, N. (2017). Why do students consider dropping out of doctoral degrees? Institutional and personal factors. *Higher Education*, 74(6), 1053–1068. https://doi.org/10.1007/s10734-016-0106-9
- Center, N. R. (n.d.). Persistence & Retention 2015 / National Student Clearinghouse Research

 Center. https://nscresearchcenter.org/snapshotreport-persistenceretention18/
- Chandna, S., Sharma, P., & Moosath, H. (2022). The Mindful Self: Exploring mindfulness in relation with self-esteem and self-efficacy in Indian population. *Psychological Studies*, 67(2), 261–272. https://doi.org/10.1007/s12646-021-00636-5
- Chang, M. J., Eagan, M. K., Lin, M. H., & Hurtado, S. (2011). Considering the impact of racial stigmas and science identity: Persistence among biomedical and behavioral science

- aspirants. *The Journal of Higher Education*, 82(5), 564–596. https://doi.org/10.1353/jhe.2011.0030
- Cheng, Y. H., Tsai, C. C., & Liang, J. C. (2019). Academic hardiness and academic self-efficacy in graduate studies. *Higher Education Research and Development*, *38*(5), 907–921. https://doi.org/10.1080/07294360.2019.1612858
- Cornwall, J., Mayland, E. C., van der Meer, J., Spronken-Smith, R. A., Tustin, C., & Blyth, P. (2018b). Stressors in early-stage doctoral students. *Studies in Continuing Education*, 41(3), 363–380. https://doi.org/10.1080/0158037x.2018.1534821
- Creswell, J. D. (2017). Mindfulness Interventions. *Annual Review of Psychology*, 68(1), 491–516. https://doi.org/10.1146/annurev-psych-042716-051139
- Crumb. (2015). A phenomenological investigation of the persistence of working-class African

 American women doctoral students in counselor education [Doctoral dissertation,

 University of Georgia]. http://getd.libs.uga.edu/pdfs/crumb_lonika_201505_phd.pdf
- Curtis-Boles, H. (2017). Clinical strategies for working with clients of African descent. *Best Practices in Mental Health*, *13*(2), 61+. https://link-gale-com.manowar.tamucc.edu/apps/doc/A582635313/HRCA?u=txshracd2566&sid=summon &xid=365f75a7
- Deirdre McCloskey: Publications: *Review of In Pursuit of the Ph.D. (n.d.).* https://www.deirdremccloskey.com/articles/bowen.php
- Doménech-Betoret, F., Abellán-Roselló, L., & Gómez-Artiga, A. (2017). Self-efficacy, satisfaction, and academic achievement: The mediator role of students' expectancy-value beliefs. *Frontiers in Psychology*, 8. https://doi.org/10.3389/fpsyg.2017.01193

- Donovan, R. (1984). Path analysis of a theoretical model of persistence in higher education among low-income black youth. *Research in Higher Education*, 21(3), 243–259. https://doi.org/10.1007/bf00974861
- Duncan, L. E. (2005). Overcoming biases to effectively serve African American college students: A call to the profession. *College Student Journal*, *39*(4), 702–710. https://eric.ed.gov/?id=EJ765272
- Eby, L. T., Allen, T. D., Evans, S. C., Ng, T., & DuBois, D. L. (2008). Does mentoring matter?

 A multidisciplinary meta-analysis comparing mentored and non-mentored individuals.

 Journal of Vocational Behavior, 72(2), 254–267.

 https://doi.org/10.1016/j.jvb.2007.04.005
- Emmons, R. A., & Stern, R. (2013). Gratitude as a psychotherapeutic intervention. *Journal of Clinical Psychology*, 69(8), 846–855. https://doi.org/10.1002/jclp.22020
- Essandoh, P. K. (1995). Counseling Issues with African college students in U.S. colleges and universities. *The Counseling Psychologist*, 23(2), 348–360. https://doi.org/10.1177/0011000095232009
- Fuchs, C. H., Lee, J. R., Roemer, L., & Orsillo, S. M. (2013). Using mindfulness- and acceptance-based treatments with clients from nondominant cultural and/or marginalized backgrounds: Clinical Considerations, meta-analysis findings, and introduction to the special series. *Cognitive and Behavioral Practice*, 20(1), 1–12. https://doi.org/10.1016/j.cbpra.2011.12.004
- Gardner, S. K. (2009). Conceptualizing success in doctoral education: Perspectives of faculty in seven disciplines. *The Review of Higher Education*, *32*(3), 383–406. https://doi.org/10.1353/rhe.0.0075

- Garmezy, N. (1991). Resiliency and vulnerability to adverse developmental outcomes associated with poverty. *American Behavioral Scientist*, *34*(4), 416–430. https://doi.org/10.1177/0002764291034004003
- Germer, C. K., & Neff, K. D. (2013). Self-compassion in clinical practice. *Journal of Clinical Psychology*, 69(8), 856–867. https://doi.org/10.1002/jclp.22021
- Gibson, J. (2019). Mindfulness, interception, and the body: A contemporary perspective. *Frontiers in Psychology*, 10. https://doi.org/10.3389/fpsyg.2019.02012
- Gibson, S. L. (2014). *Black undergraduate women's sense of belonging as engineering majors*[Doctoral dissertation, University of Georgia)]
- Green, C. E., DeBlaere, C., & Said, I. A. (2021). Mindfulness in Black church settings: A culturally adapted group intervention for stress. *The Journal of Psychology and Christianity*, 40(2), 110-119. https://ixtheo.de/Record/1786490447
- Green, K. M. (2006). Who's who: Exploring the Discrepancy between the methods of defining African Americans and Native Americans. *American Indian Law Review*, 31(1), 93. https://doi.org/10.2307/20070774
- Guiffrida, D. A., & Douthit, K. Z. (2010). The Black student experience at predominantly White colleges: Implications for school and college counselors. *Journal of Counseling and Development*, 88(3), 311–318. https://doi.org/10.1002/j.1556-6678.2010.tb00027.x
- Guo, F., Kang, N., & Shi, J. (2018). Preparation for the scholar's role: first-year doctoral students in Tsinghua University. *Asia Pacific Education Review*, 19(2), 169–185. https://doi.org/10.1007/s12564-018-9529-6

- Harris, A. (2019, April 19). Why Are There So Few Black Ph.D.s? The

 Atlantic. https://www.theatlantic.com/education/archive/2019/04/lack-of-black-doctoral-students/587413/
- Hausmann, L. R. M., Ye, F., Schofield, J. W., & Woods, R. L. (2009). Sense of belonging and persistence in White and African American first-year students. *Research in Higher Education*, 50(7), 649–669. https://doi.org/10.1007/s11162-009-9137-8
- Hosseinzadeh, Z., Sayadi, M., & Orazani, N. (2019). The mediating role of mindfulness in the relationship between self-efficacy and early maladaptive schemas among university students. *Current Psychology*, 40(12), 5888–5898. https://doi.org/10.1007/s12144-019-00487-4
- Hover, P. A. (2014). Perceived stress, mindfulness, and sense of coherence: A comparison between first generation and non-first-generation clinical psychology doctoral trainees [Doctoral dissertation, Chicago School of Professional Psychology].
- Johnson, P., Bradley, C., Knight, D. W., & Bradshaw, E. J. (2007). Preparing African American counselor education students for the professorate. *College Student Journal*, 41(4), 886–890. https://eric.ed.gov/?id=EJ816811
- Jourdan-Ionescu, C. (2021, May 14). Fostering the resilience of graduate students. http://ocs.editorial.upv.es/index.php/HEAD/HEAd21/paper/view/13006
- Ju, J., Merrell-James, R., Coker, J. K., Ghoston, M., Casado Pérez, J. F., & Field, T. A. (2020).
 Recruiting, retaining, and supporting students from underrepresented racial minority
 backgrounds in doctoral counselor education. *The Professional Counselor*, 10(4),
 581–602. https://doi.org/10.15241/jj.10.4.581

- Kabat-Zinn, J. (2015). Mindfulness. *Mindfulness*, 6(6), 1481–1483. https://doi.org/10.1007/s12671-015-0456-x
- Kelly, K. M. (2006). Individual differences in reactions to rejection. In *Oxford University Press eBooks* (pp. 290–315). https://doi.org/10.1093/acprof:oso/9780195130157.003.0011
- Keng, S. L., Smoski, M. J., & Robins, C. J. (2011). Effects of mindfulness on psychological health: A review of empirical studies. *Clinical Psychology Review*, 31(6), 1041–1056. https://doi.org/10.1016/j.cpr.2011.04.006
- Kola, I., PhD. (2023, January 31). Now Is the Perfect Time for Black Women To Apply To Doctorate Programs. *Medium*. https://zora.medium.com/now-is-the-perfect-time-for-black-women-to-apply-to-doctorate-programs-8569cabe9a1e
- Kolquist, M. (2021). School-based mindfulness interventions in promoting resilience in adolescents: A meta-analysis [Doctoral dissertation, California Lutheran University].
- Lazić, M., Jovanović, V., & Gavrilov-Jerković, V. (2018). The general self-efficacy scale: New evidence of structural validity, measurement invariance, and predictive properties in relationship to subjective well-being in Serbian samples. *Current Psychology*, 40(2), 699–710. https://doi.org/10.1007/s12144-018-9992-6
- Leary, M. R., & Tate, E. B. (2007). The multi-faceted nature of mindfulness. *Psychological Inquiry*, 18(4), 251–255. https://doi.org/10.1080/10478400701598355
- Lent, R. W. (1986). Self-efficacy in the prediction of academic performance and perceived career options. *Journal of Counseling Psychology*, *33*(3), 265–269. https://doi.org/10.1037/0022-0167.33.3.265

- Lenz, A. S. (2015). Using single-case research designs to demonstrate evidence for counseling practices. *Journal of Counseling and Development*, 93(4), 387–393. https://doi.org/10.1002/jcad.12036
- Levy, D. J., Heissel, J. A., Richeson, J. A., & Adam, E. K. (2016). Psychological and biological responses to race-based social stress as pathways to disparities in educational outcomes.

 American Psychologist, 71(6), 455–473. https://doi.org/10.1037/a0040322
- Livingston, V., Nevels, B. J., Chung, I., Ericksen, K. S., Duncan, E., Manley, C. K.,

 Merriwether, H., & McCullar, J. (2022). The enigma of resilience at an HBCU during a
 global pandemic. *Journal of Human Behavior in the Social Environment*, 33(6), 1–21.

 https://doi.org/10.1080/10911359.2022.2100028
- Lobo, M., Moeyaert, M., Cunha, A. B., & Babik, I. (2017). Single-case design, analysis, and quality assessment for intervention research. *Journal of Neurologic Physical Therapy*, 41(3), 187–197. doi:10.1097/NPT.0000000000000187
- Louque, A. (1999). Factors influencing academic attainment for African American women PhD recipients: An ethnographic study of their persistence. *Negro Educational Review*, 50, 101-108. https://doi.org/10.1097/npt.00000000000000187
- Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development*, 71(3), 543-562. https://doi.org/10.1111/1467-8624.00164
- Maddi, S. R. (2002). The story of hardiness: Twenty years of theorizing, research, and practice.

 *Consulting Psychology Journal: Practice and Research, 54(3), 173–185.

 https://doi.org/10.1037/1061-4087.54.3.173

- Mantzios, M., & Giannou, K. (2018). A real-world application of short mindfulness-based practices: A review and reflection of the literature and a practical proposition for an effortless mindful lifestyle. *American Journal of Lifestyle Medicine*, 13(6), 520–525. https://doi.org/10.1177/1559827618772036
- Maycock, J. (2021). Exploring self-efficacy of African American women in online doctoral programs: A narrative inquiry [Doctoral dissertation, University of Phoenix].
- McCallum, C. (2017). Giving back to the community: How African Americans envision utilizing their PhD. *The Journal of Negro Education*, 86(2), 138-153. https://doi.org/10.7709/jnegroeducation.86.2.0138
- McCray, J., & Joseph-Richard, P. (2020). Towards a model of resilience protection: factors influencing doctoral completion. *Higher Education*, 80(4), 679–699.
 https://doi.org/10.1007/s10734-020-00507-4
- McCray, J., Palmer, A., & Chmiel, N. (2016). Building resilience in health and social care teams.

 Personnel Review, 45(6), 1132–1155. https://doi.org/10.1108/pr-04-2014-0095
- Mcdaniel, R. (2010, August 13). Mindfulness in the classroom. *Vanderbilt University*. https://cft.vanderbilt.edu/guides-sub-pages/contemplative-pedagogy/
- McGee, E. O., Griffith, D. M., & Houston, S. L. (2019). "I know i have to work twice as hard and hope that makes me good enough": Exploring the stress and strain of Black doctoral students in engineering and computing. Teachers College Record: *The Voice of Scholarship in Education*, 121(4), 1–38. https://doi.org/10.1177/016146811912100407
- Menges, J. R., & Caltabiano, M. L. (2019). The effect of mindfulness on academic self-efficacy:

 A randomized controlled trial. *International Journal of Education, Psychology and Counseling*, 4(31), 170–186. https://doi.org/10.35631/ijepc.4310015

- Mohaupt, S. (2009). Review article: Resilience and social exclusion. *Social Policy and Society*, 8(1), 63–71. https://doi.org/10.1017/s1474746408004594
- Morrow, J. A., & Ackermann, M. E. (2012). Intention to persist and retention of first-year students: The importance of motivation and sense of belonging. *College Student Journal*, 46, 483-491. https://eric.ed.gov/?id=EJ996948
- Museus, S. D., Ledesma, M. C., & Parker, T. L. (2015b). Racism and racial equity in higher education. *Ashe Higher Education Report*, 42(1), 1–112. https://doi.org/10.1002/aehe.20067
- National Association of Diversity Officers Leading Higher Education. (2021). https://www.nadohe.org/
- National Center for Education Statistics. (n.d.). *Doctor's degrees conferred by postsecondary institutions, by race/ethnicity and sex of student: Selected years, 1976-77 through 2019-20.* https://nces.ed.gov/programs/digest/d21/tables/dt21_324.20.asp
- Nguyen, J., & Brymer, E. (2018). Nature-based guided imagery as an intervention for state anxiety. *Frontiers in Psychology*, 9. https://doi.org/10.3389/fpsyg.2018.01858
- Offerman, M. (2011). Profile of the nontraditional doctoral degree student. *New Directions for Adult and Continuing Education*, 2011(129), 21–30. https://doi.org/10.1002/ace.397
- Pajares, F. (1996). Self-efficacy beliefs in academic settings. *Review of Educational Research*, 66(4), 543–578. https://doi.org/10.3102/00346543066004543
- Pfund, C., Byars-Winston, A., Branchaw, J., Hurtado, S., & Eagan, K. (2016). Defining attributes and metrics of effective research mentoring relationships. [Auto-Immune Deficiency Syndrome] *AIDS and Behavior*, 20(S2), 238–248.

 https://doi.org/10.1007/s10461-016-1384-z

- Phan, H. P., & Ngu, B. (2013). Factorial equivalence of social cognitive theory: educational levels x time differences. *Educational Psychology*, *34*(6), 697–729. https://doi.org/10.1080/01443410.2013.814190
- Philippot, P., & Segal, Z. V. (2008). Mindfulness based psychological interventions: Developing emotional awareness for better being. *Journal of Consciousness Studies*, *16*(10), 285–306. https://dial.uclouvain.be/handle/boreal:36003
- Quickel, E. J. W., Johnson, S. K., & David, Z. (2014). Trait mindfulness and cognitive task performance. *SAGE Open, 4*(4), 215824401456055. https://doi.org/10.1177/2158244014560557
- Ratts, M. J., Singh, A. A., Nassar-McMillan, S., Butler, S. K., & McCullough, J. R. (2016).
 Multicultural and social justice counseling competencies: Guidelines for the counseling profession. *Journal of Multicultural Counseling and Development*, 44(1), 28–48.
 https://doi.org/10.1002/jmcd.12035
- Richardson, G. E. (2002). The metatheory of resilience and resiliency. *Journal of Clinical Psychology*, 58(3), 307–321. https://doi.org/10.1002/jclp.10020
- Rogers, L. O., & Way, N. (2015). "I have goals to prove all those people wrong and not fit into any one of those boxes." *Journal of Adolescent Research*, 31(3), 263–298.

 https://doi.org/10.1177/0743558415600071
- Rutter, M. (1987). Psychosocial resilience and protective mechanisms. *American Journal of Orthopsychiatry*, *57*(3), 316–331. https://doi.org/10.1111/j.1939-0025.1987.tb03541.x
- Schunk, D. H. (1983). Developing children's self-efficacy and skills: The roles of social comparative information and goal setting. *Contemporary Educational Psychology*, 8(1), 76–86. https://doi.org/10.1016/0361-476x(83)90036-x

- Schwarzer, R., & Jerusalem, M. (1995). Generalized Self-Efficacy scale. In J. Weinman, S. Wright, & M. Johnston, Measures in health psychology: A user's portfolio. *Causal and control beliefs* (pp. 35-37).
- Scott, S. V. (2017). The struggle is real: Black doctoral students' perceptions aspiring to the professoriate (Publication No.10267165) [Doctoral dissertation]. ProQuest Dissertations and Theses Global.
- Shapiro, S. L., Brown, K. W., & Biegel, G. M. (2007). Teaching self-care to caregivers: Effects of mindfulness-based stress reduction on the mental health of therapists in training.

 Training and Education in Professional Psychology, 1(2), 105–115

 https://doi.org/10.1037/1931-3918.1.2.105*
- Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The brief resilience scale: Assessing the ability to bounce back. *International Journal of Behavioral Medicine*, 15(3), 194–200. https://doi.org/10.1080/10705500802222972
- Southwick, S. M., Bonanno, G. A., Masten, A. S., Panter-Brick, C., & Yehuda, R. (2014).

 Resilience definitions, theory, and challenges: interdisciplinary perspectives. European *Journal of Psychotraumatology*, 5(1), Article 25338.

 https://doi.org/10.3402/ejpt.v5.25338
- Speight, N. P. (2009). The relationship between self-efficacy, resilience and academic achievement among African American urban adolescent students (Publication No. 3380333) [Doctoral dissertation]. ProQuest Dissertations and Theses Global.
- Stanley, D. C. (2020). *Understanding sociocultural factors that foster resilience for Black male doctoral students in psychology* (Publication No. 27995813) [Doctoral dissertation].

 ProQuest Dissertations and Theses Global.

- Starks, L. J. (2010). Pathways to the doctorate degree: A phenomenological study of african american women in doctorate degree programs (Publication No. 3423008) [Doctoral dissertation]. ProQuest Dissertations and Theses Global.
- Strayhorn, T. L. (2009). Fittin' in: Do diverse interactions with peers affect sense of belonging for Black men at predominantly White institutions? [National Association of Personnel Administrators] *NASPA Journal*, 45(4). https://doi.org/10.2202/0027-6014.2009
- Sukran, C., & Gözen, A. (2021). The relationship between mindfulness and self-efficacy.

 International Journal of Commerce and Finance, 7(2), 184–205.

 https://ijcf.ticaret.edu.tr/index.php/ijcf/article/view/263
- Sverdlik, A., & Hall, N. C. (2019). Not just a phase: Exploring the role of program stage on well-being and motivation in doctoral students. *Journal of Adult and Continuing Education*, 26(1), 97–124. https://doi.org/10.1177/1477971419842887
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed.).

 University of Chicago Press.
- Turner, E. A., Chandler, M., & Heffer, R. W. (2009). The influence of parenting styles, achievement motivation, and self-efficacy on academic performance in college students.

 Journal of College Student Development, 50(3), 337-346.

 https://doi.org/10.1353/csd.0.0073
- Usher, E. L., & Pajares, F. (2008). Sources of self-efficacy in school: Critical review of the literature and future directions. *Review of Educational Research*, 78(4), 751–796. https://doi.org/10.3102/0034654308321456

- Vega, D., & Puff, A. M. (2020). It takes a village: How counselors and psychologists support the college aspirations of students of color. *Phi Delta Kappan*, 102(4), 40–45.
 https://doi.org/10.1177/0031721720978064
- Viaud, K. M. (2014). Pursuing the doctoral degree: A symbolic interpretation of first-generation

 African American/Black and Hispanic doctoral students (Publication No. 3627260)

 [Doctoral dissertation]. ProQuest Dissertations and Theses Global.
- Walach, H., Buchheld, N., Buttenmüller, V., Kleinknecht, N., & Schmidt, S. (2006). Measuring mindfulness: The Freiburg Mindfulness Inventory (FMI). *Personality and Individual Differences*, 40(8), 1543–1555. https://doi.org/10.1016/j.paid.2005.11.025
- Waldron, E. M., Hong, S., Moskowitz, J. T., & Burnett-Zeigler, I. (2018). A systematic review of the demographic characteristics of participants in US-based randomized controlled trials of mindfulness-based interventions. *Mindfulness*, 9(6), 1671-1692. https://doi.org/10.1007/s12671-018-0920-5
- Warner, R. C. (2019). The role of racial microaggressions, belongingness, and coping in African American psychology doctoral students' well-being (Publication No. 10929372)

 [Doctoral dissertation]. ProQuest Dissertations and Theses Global.
- Watson-Singleton, N. N., Black, A. R., & Spivey, B. N. (2019). Recommendations for a culturally responsive mindfulness-based intervention for African Americans.
 Complementary Therapies in Clinical Practice, 34, 132–138.
 https://doi.org/10.1016/j.ctcp.2018.11.013
- Woods-Giscombe, C. L., & Gaylord, S. (2014). The cultural relevance of mindfulness meditation as a health intervention for African Americans. *Journal of Holistic Nursing*, 32(3), 147–160. https://doi.org/10.1177/0898010113519010

- Wolfe, G. A. (1981b). Burnout of therapists. *Physical Therapy*, *61*(7), 1046–1050. https://doi.org/10.1093/ptj/61.7.1046
- Wynn, P. T., Fite, P. J., & Pardini, D. A. (2011). Childhood predictors of an at-risk transition into early adulthood among African American and Caucasian males. *Race and Social Problems*, *3*(2), 63-74. https://doi.org/10.1007/s12552-011-9043-5
- Xu, J., Helen, J., L, N., Patel, A., & Li, A. (2022, March 1). Virtual mindfulness interventions to promote well-being in adults: A mixed-methods systematic review. *Journal of Affective Disorders*, 300, 571–585. https://doi.org/10.1016/j.jad.2022.01.027
- Yuma, S., Kupczynski, L., Mundy, M. A., & Ruiz, A. (2016). Self-efficacy of generational college students in educational doctoral programs in Texas. *Journal of Education and Social Policy*, 3(5).
 - https://www.jespnet.com/journals/Vol_3_No_5_November_2016/1.pdf
- Zaccaro, A., Piarulli, A., Laurino, M., Garbella, E., Menicucci, D., Neri, B., & Gemignani, A. (2018). How breath-control can change your life: A systematic review on psychophysiological correlates of slow breathing. *Frontiers in Human Neuroscience*, 12. https://doi.org/10.3389/fnhum.2018.00353
- Zack, S., Saekow, J., Kelly, M., & Radke, A. (2014). Mindfulness-based interventions for youth.

 **Journal of Rational-Emotive and Cognitive-Behavior Therapy, 32(1), 44–56.

 **https://doi.org/10.1007/s10942-014-0179-2

APPENDIX A: IRB APPROVAL LETTER



Date: April 03, 2023

To: Karen Hunnicutt Hollenbaugh PhD CC: Michelle Eisenman, MSc From: Office of Research Compliance

Subject: Amendment Approval for Exempt Study

Dear Dr. Hollenbaugh,

On 04/03/2023, the Texas A&M University-Corpus Christi Institutional Review Board (IRB) reviewed and approved the request changes for the following study:

Type of Review: Protocol Sub mission Form

Exploring the Effects of Mindfulness-based Interventions on Resilience and Self-Title of Study: efficacy in First-year African American Doctoral Students: A Single Case Research

Design

Principal Investigator: Karen Hunnicutt Hollenbaugh
IRB Number: TAMU-CC-IRB-2023-0714

Submission Number: TAMU-CC-IRB-2023-0714-AMD-4.0

Risk Level: Not Greater than Minimal Risk under 45 CFR 46 / 21 CFR 56

I am submitting this request to make changes to my inclusion criteria for the study. Currently, I am recruiting first-year African American doctoral students, and would like to change the inclusion criteria to include African American doctoral students

Change Description: like to change the inclusion criteria to include African Ameri who are enrolled in doctoral programs, beyond the first year.

Submission Outcome: Amendment Approved for Exempt Study

On 04/03/2023, the IRB confirmed the study as changed continues to meet Exempt Category 3: i. Research involving benign behavioral interventions in conjunction with the collection of information from an adult subject through verbal or written responses (including data entry) or audiovisual recording if the subject prospectively agrees to the intervention and information collection and at least one of the following criteria is met: A. The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects, B. Any disclosure of the human subjects' responses outside the research would not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation; or C. The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by 111(a)(7). ii. For the purpose of this provision, benign behavioral interventions are brief in duration, harmless, painless, not physically invasive, not likely to have a significant adverse lasting impact on the subjects, and the investigator has no reason to think the subjects will find the interventions offensive or embarrassing. Provided all such criteria are met, examples of such benign behavioral interventions would include having the subjects play an online game, having them solve puzzles under various noise conditions, or having them decide how to allocate a nominal amount of received cash between themselves and someone else, iii. If the research involves deceiving the subjects regarding the nature or purposes of the research, this exemption is not applicable unless the subject authorizes the deception through a prospective agreement to participate in research in circumstances in which the subject is informed that he or she will be unaware of or misled regarding the nature or purposes of the research.

Approved changes may now be implemented.

If you have any questions or concerns please contact us at irb@tamucc.edu.

Sincerely,

Office of Research Compliance

APPENDIX B: BRIEF RESILIENCE SCALE (BRS)

Brief Resilience Scale (BRS)

	Please respond to each item by marking <u>one box per row</u>	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
BRS 1	I tend to bounce back quickly after hard times	1	2	3	4	□ 5
BRS 2	I have a hard time making it through stressful events.		4	3	2	1
BRS 3	It does not take me long to recover from a stressful event.	1	2	3	4	5
BRS 4	It is hard for me to snap back when something bad happens.	□ 5	4	3	2	1
BRS 5	I usually come through difficult times with little trouble.	1	2	3	4	5
BRS 6	I tend to take a long time to get over set-backs in my life.	5	4	3	2	1

Scoring: Add the responses varying from	1-5 for all six items giving a range from 6-30. Divide the	ne tota
sum by the total number of questions answ	wered.	

	1.00	A		
My score:		item	average	/ 6

Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The brief resilience scale: assessing the ability to bounce back. *International journal of behavioral medicine*, 15(3), 194-200.

IRB NUMBER: TAMU-CC-IRB-2023-0714
CRANGACHIEST IRB APPROVAL DATE: 2/17/2023

IRB NUMBER: TAMU-CC-IRB-2023-0714 CHOST IRB APPROVAL DATE: 2/17/2023

APPENDIX C: FREIBURG MINDFULNESS INVENTORY (FMI)

Freiburg Mindfulness Inventory

Description:

The FMI is a useful, valid and reliable questionnaire for measuring mindfulness. It is most suitable in generalized contexts, where knowledge of the Buddhist background of mindfulness cannot be expected. The 14 items cover all aspects of mindfulness.

The purpose of this inventory is to characterize your experience of mindfulness. Please use the last ____ days as the time-frame to consider each item. Provide an answer the for every statement as best you can. Please answer as honestly and spontaneously as possible. There are neither 'right' nor 'wrong' answers, nor 'good' or 'bad' responses. What is important to us is your own personal experience.

1 Rarely	2 Occasionally	3 Fairly ofter	n	Alı	4 nost alw	ays
I am open to the ex	perience of the present	moment.	1	2	3	4
I sense my body, w talking.	hether eating, cooking,	cleaning or	1	2	3	4
When I notice an al	osence of mind, I gently ne here and now.	return to	1	2	3	4
I am able to apprec	iate myself.		1	2	3	4
I pay attention to what's behind my actions.				2	3	4
I see my mistakes a	and difficulties without	judging them.	1	2	3	4
I feel connected to	my experience in the he	re-and-now.	1	2	3	4
I accept unpleasant	experiences.		1	2	3	4
I am friendly to my	self when things go wro	ong,	1	2	3	4
I watch my feelings	without getting lost in	them.	1	2	3	4
In difficult situation reacting.	ns, I can pause without	mmediately	1	2	3	4
I experience momen	nts of inner peace and e	ase, even	1	2	3	4

when things get hectic and stressful.

I am impatient with myself and with others.	1	2	3	4
I am able to smile when I notice how I sometimes make	1	2	3	4

Scoring Information:

Add up all items to get one summary score. When scoring, please observe that there are a couple of reversed items. For these you need to reverse the scoring, preferably by a recode command that recodes 1 into 4, 2 into 3, 3 into 2 and 4 into 1.

The item to be recoded is "I am impatient with myself and with others."

At the moment, we do not recommend to use separate factor-scale scores. If you wish to do so, we recommend that you analyze your own data set and extract 4 to 6 factors according to the data structure you find and then proceed accordingly, adding up item scores per scale.

Reference:

Walach, H., Buchheld, N., Buttenmuller, V., Kleinknecht, N., Schmidt, S. (2006).

Measuring Mindfulness--The Freiburg Mindfulness Inventory (FMI). *Personality and Individual Differences*, 40, 1543-1555.

APPENDIX D: GENERAL SELF-EFFICACY SCALE (GSE)

General Self-Efficacy Scale (GSE)

	Not at all true	Hardly true	Moderately true	Exactly true
I can always manage to solve difficult problems if I try hard enough				
2. If someone opposes me, I can find the means and ways to get what I want.				
It is easy for me to stick to my aims and accomplish my goals.				
4. I am confident that I could deal efficiently with unexpected events.				
5. Thanks to my resourcefulness, I know how to handle unforeseen situations.				
6. I can solve most problems if I invest the necessary effort.				
7. I can remain calm when facing difficulties because I can rely on my coping abilities.				
8. When I am confronted with a problem, I can usually find several solutions.				
9. If I am in trouble, I can usually think of a solution	0			
10. I can usually handle whatever comes my way.				

IRB NUMBER: TAMU-CC-IRB-2023-0714
CREVEACHER IRB APPROVAL DATE: 2/17/2023

IRB NUMBER: TAMU-CC-IRB-2023-0714 ***CHIASTI IRB APPROVAL DATE: 2/17/2023

General Self-Efficacy Scale (GSE)

About: This scale is a self-report measure of self-efficacy.

Items: 10

Reliability:

Internal reliability for GSE = Cronbach's alphas between .76 and .90

Validity:

The General Self-Efficacy Scale is correlated to emotion, optimism, work satisfaction. Negative coefficients were found for depression, stress, health complaints, burnout, and anxiety.

Scoring:

All questions	true 1	2	true 3	4
	Not at all	Hardly true	Moderately	Exactly true

The total score is calculated by finding the sum of the all items. For the GSE, the total score ranges between 10 and 40, with a higher score indicating more self-efficacy.

References:

Schwarzer, R., & Jerusalem, M. (1995). <u>Generalized Self-Efficacy scale.</u> In J. Weinman, S. Wright, & M. Johnston, *Measures in health psychology: A user's portfolio. Causal and control beliefs* (pp. 35-37). Windsor, UK: NFER-NELSON.

PRACTICE #2 MINDFUL BREATHING MEDITATION

Benefits

Relieves pain

Fewer side effects of chemotherapy: less nausea, fatigue, anxiety

Increased immune system functioning

Greater sense of control

Increased self-awareness

Greater sense of calm, peace, happiness

Greater resilience

Definitions - Descriptions

Mindfulness: Cultivating awareness of your experience in the present

moment, living each moment as fully as possible

Meditation: Paying attention, on purpose, in the present moment.

Inner Resource: The Breath and Breathing

The breath is the life force

Breathing gives us life

Inhaling brings oxygen to cells

Exhaling releases waste – carbon dioxide

Rhythmic breathing balances the nervous system

Mindful breathing

Gentle focus of attention on the breath

Coming in and going out

Not trying to change your breathing in any way

No expectations

Simply awareness of the breath moment to moment

Preparation

Find a comfortable position, either sitting or lying down, with your head, neck and spine aligned. Uncross your legs and let your hands rest quietly in your lap or by your sides. Loosen any tight clothing and gently close your eyes.

Adapted from Thich Nhat Hanh, "A Short Teaching on Mindfulness Breathing" (Excerpts in quotes)

As your body settles and your eyes close, bring your awareness to your breathing. Notice the breath coming in, and the breath going out. Follow the breath with your awareness... follow the breath all the way in... and follow the breath all the way out... not trying to change it in any way. Just breathing in... and breathing out. Breathing in, feeling the breath as it passes through your nostrils... breathing out, feeling the breath as it leaves your nostrils. Keeping your awareness lightly and gently on your breath... breathing mindfully in the present moment.

"Breathing in, I know I am breathing in... Breathing out, I know I am breathing out."

If thoughts come in...as they always do... acknowledge the thoughts, without judgment, and let them go... let them drift away like clouds floating across the sky... and bring your awareness back to your breath, back to your breathing... back to the present moment.

"Breathing in... I know I am breathing in... Breathing out... I know I am breathing out..."

Each time your attention moves away from the breath... distracted by a thought about something you have to remember to do perhaps... or maybe something that is bothering you or worrying you... notice the thought, acknowledge the thought, and then let it go... and bring your awareness back to your breath, back to the present moment. Letting your full awareness be on the breath... as it comes in... and as it goes out... noticing the familiar rhythm of the breath.

"Breathing in, I calm my body... Breathing out, I smile..."

When you bring your awareness to the breath in this way, you are connecting the mind and the body in the present moment. The word for breath and the word for spirit in many languages is the same. So bringing your awareness to your breath, connects mind, body and spirit in the present moment.

"Dwelling in the present moment...

I know this is a wonderful moment..."

Continue to mindfully breathe in this way for as long as you like... following the breath all the way in... noticing the slight pause at the turning point as the in-breath becomes the out-breath... and following the breath all the way out... noticing the brief pause at the turning point as the out-breath becomes the in-breath... aware of the steady familiar rhythm of the breath.

Continue for 10-15 minutes if possible

As we bring this meditation to an end, keeping your eyes closed for just a little while longer... take a moment to notice how you are feeling... your body... your mind... your spirit. If you like, offer gratitude for this time you have taken for yourself... to be quiet... to breathe.. and bring yourself back into balance.

So slowly come back into the room... aware of your body in the chair... opening your eyes whenever you are ready.

Applications for Mindful Breathing Meditation

Regular Daily Practice

- Set aside 5-10 minutes at a regular time in the morning or evening, or both, to practice
- If you practice every day at regular times, you will have greater access to this resource in difficult situations that arise in your daily life

Throughout the day

- Use mindful breathing to calm you throughout the day: when you brush your teeth, stop at a red light, waiting for an appointment, when the phone rings, etc. Find your own times to use mindful breathing.
- Put "breathe" signs on your mirror, kitchen cabinet, or dashboard to remind you to breathe, mindfully and deeply, if only for a moment or two

In stressful situations and/or emergencies

- When you find yourself starting to feel tense, anxious, or in pain, use your breathing to calm you. Take 5 mindful breaths, or 3 breaths. Taking even one conscious breath can make a difference.

Marion Werner

marionswerner@gmail.com

301-254-7216



One wing pharma www.OneMindDharma.com Info@OneMindDharma.com

Body Scan Meditation Script

Find a comfortable position in which to sit. You may sit or lie down, but make sure you remain awake and aware. If you're comfortable doing so, allow the eyes to gently close. Start by tuning into the posture of the body. It is helpful to keep the spine straight and energized, while relaxing the muscles around the skeleton.

You can use the breath to aid in this process: as you breathe in, breathe energy and awareness into the spine, reaching the spine gently upward. As you exhale, let go. Allow the shoulders to drop, let there be some slack in the jaw, and soften the belly.

(Allow for a few deep breaths like this.)

We'll start the body scan by tuning into the crown of the head. Simply bring your awareness to the top of the head, tuning into whatever is present for you. Can you feel the skin of the scalp? The temperature of the air on the skin? Your hair? There's no right or wrong; just tune into whatever is physically present.

You can drop down into the forehead and brow, again tuning into whatever is present. You may notice the temperature of the air, some slight scrunching of the brow, or some relaxation. Whatever is present, simply be with it.

Drop down into the eyes and cheekbones. Even with eyes closed, you may notice some movement in the eyes.

Continue down to the tip of the nose and upper lip. Here you can feel the body breathing gently and naturally. You may notice the air tickling on its way in, and coming out just a little bit warmer.

Move on into the mouth, looking at the lips, the jaw, and the tongue. You may notice the moisture, how the tongue is resting, any tension or slack in the jaw, or whatever it is that is present.

Drop down into the neck and throat, noticing any tension or any movement of the body with the breath. Remember, there is nothing you should be experiencing; there is no right or wrong. Just tune into the direct physical experience. Let go of the judgements and thoughts, and return to the actual physical body.

You can move out the tops of the shoulders and into shoulder blades, perhaps noticing any movement with the breath or the sensation of the clothes on the body.

Dropping down into the upper arms and elbows, again just tune into whatever is directory present in your experience.

Continue down into the forearms and wrists, perhaps noticing any points of contact. Maybe your arms are resting in your lap or on the arms of the chair, and just notice how that feels.

And moving into the hands, go over the palms, the fingers, and the back of the hand. Notice any points of contact where the hands may be touching each other or resting in the lap. You may notice that the temperature of the air feels different on the back of the hand than it does on the palm.

Come back up into the chest and rest here for a moment, tuning in to the body breathing. You can notice the rising and falling, the expansion and contraction, the natural movement of the body breathing itself.

(Allow a few moments to sit with the breath in the chest)

As you drop down into the abdomen and stomach, again you may notice the sensations of the body breathing. Rest your awareness with the body and just stick with whatever sensations arise.

Drop down into the hips, the pelvis, and the butt. You can probably feel the point of contact where your body meets the chair or cushion, and taking a moment to feel these sensations.

Move on into the thighs and knees, noticing any points of contact, any tensions, the clothes on the body, and anything else present in your direct experience.

Drop into the calves, shins, and ankles, seeing what's present for you. Perhaps there is some ease, or some jittery or anxious feeling in the legs. Whatever is present, be with it.

Finally, move into the feet, going over the heel, the arch, the ball of the foot, the toes, and the top of the foot. Tune into the points of contact where the feet are touching the ground or tucked up underneath you.

Take a moment here at the end to tune into the whole body together, from head to toe. You may be able to feel the breath energy as it moves through the body. You can get a sense of the entire outline or posture of the body as it rests here.

(Ring bell).

IRB NUMBER: TAMU-CC-IRB-2023-0714 CHIEFI IRB APPROVAL DATE: 2/17/2023

Soften –Soothe- Allow

WORKING WITH DIFFICULT EMOTIONS

There are 3 components to this practice: (1) labeling emotions, (2) mindfulness of emotion in the body, and (3) soften-soothe-allow. This practice is presented below in a meditative way to develop familiarity with the components. However, it is an informal practice that is designed to be applied on-the-spot in daily life rather than as a meditation, and the individual components can be practiced individually or in combination.

- Please find a comfortable position, sitting or lying down, close your eyes, and take three relaxing breaths.
- Place your hand over your heart, or another soothing place, for a few moments
 to remind yourself that you are in the room, and that you, too, are worthy
 of kindness.
- Let yourself recall a *mild to moderately difficult situation* that you are in right now, perhaps a health problem, stress in a relationship, or a work issue. Do not choose a very difficult problem, or a trivial problem—please choose a situation that can generate a little stress in your body when you think of it.
- Clearly visualize the problem. Who was there? What was said? What happened? Or what *might* happen?

Labeling Emotions

• As you relive this situation, notice if any emotions arise within you. (pause) And if so, seeing if a *label* for an emotion comes up—a name. For example: o Anger? o Sadness? o Grief? o Confusion? o Fear? o Longing? o Despair?

- If you are having many emotions, seeing if you can name the *strongest* emotion associated with the situation.
- Now, repeating the name of the emotion to yourself in a tender, understanding voice, as if you were validating for a friend what they were feeling: "That's longing." "That's grief."

Mindfulness of Emotion in the Body

- Now expanding your awareness to your body as a whole.
- Recalling the difficult situation again, if it has begun to slip out of your mind, naming the strongest emotion you feel, and scanning your body for where you feel it most easily. In your mind's eye, sweeping your body from head to toe, stopping where you can sense a little tension or discomfort.
 Just feel what is "feel-able" in your body right now. Nothing more.
- Now, if you can, please choose a single location in your body where the
 feeling expresses itself most strongly, perhaps as a point of muscle
 tension in your neck, a painful feeling in your stomach, or an ache in your
 heart.
- In your mind, inclining gently toward that location.
- See if you can experience the sensation directly, as if from the inside. If that's too specific see if you can just feel the general sense of discomfort.

Soften-Soothe-Allow

- Now begin *softening* into that location in your body. Letting the muscles soften, letting them relax, as if in warm water.

 Softening...softening...softening... Remember that we're not *trying* to change the feeling—we're just *holding* it in a tender way. If you wish, just softening a little around the edges.
- Now, soothing yourself because of this difficult situation. If you wish, placing a hand over the part of your body that feels uncomfortable and just feeling the warmth and gentle touch of your hand. Perhaps imagining warmth and

- kindness flowing through your hand into your body. Maybe even thinking of your body as if it were the body of a beloved child. Soothing...soothing...soothing.
- And are there some comforting words that you might need to hear? For
 instance, you might imagine if you had a friend who was struggling in the
 same way. What would you say to your friend? ("I'm so sorry you feel
 this way." "I care deeply about you.")
- Can you offer *yourself* a similar message? ("Oh, it's so hard to feel this." "May I be kind to myself.")
- If you need, feel free to open your eyes whenever you wish, or let go of the exercise and just feel your breath.
- Finally, *allowing* the discomfort to be there. Making room for it, releasing the need to make it go away.
- And allowing *yourself* to be just as you are, just like this, if only for this moment.
- Softening...soothing...allowing. Softening...soothing...allowing. Taking some time and going through the three steps on your own. (pause)
- You may notice the feeling starts to shift or even change location, that's okay. Just stay with it. Softening...soothing...allowing.
- Now letting go of the practice and focusing on your body as a whole.

 Allowing yourself to feel whatever you feel, to be exactly as you are in this moment.
- Gently open your eyes.

Lovingkindness Meditation Script

[Free audio recording of this meditation and others are available on the Palouse Mindfulness website]

This meditation can be done in any position, and begins by taking a moment to be aware of any thoughts or feelings you may be experiencing right now, acknowledging how things are for you right now... and when you are ready, beginning to bring awareness to body: feeling your feet... legs... hips... lower and upper body... arms... shoulders... neck... head..., beginning to feel the movement of your breath, the actual sensations of breathing, reminding yourself that you are here, alive, whole...

When you're ready, you might bring to mind the image of a person who you know or you've known in your life to be loving and kind to you, someone who easily evokes feelings of warmth and love, it could be a spouse or partner, parent or family member, a mentor or close friend... someone who has been good to you, helps you feel safe and whole, whose caring easily emanates from them to you.

And if a person, past or present, doesn't come to mind, maybe someone who you know to be inspirational may come, someone it is easy to imagine sending wishes of well-being to, wishing them well, and if it feels right, imagining saying to them:

May you be happy, healthy and whole, (picturing them receiving your wishes for them)

May you have love, warmth and affection,

May you be protected from harm and free from fear,

May you be alive, engaged and joyful

...may you experience inner peace and ease

You may have your own words and wishes for them, so feel free to use words that resonate with you...

Taking a few minutes now to feel how it is to wish these things for them, letting yourself have the sense of the wishes for well-being emanating from you to them, connecting you to them...

...noticing how it feels inside you, as you send these wishes of well-being to this person you love or care about.

When you are ready, seeing if you can imagine this person or figure wishing these very same things for you, knowing that they have your well-being in their heart, imagining them saying to you:

May you be happy, healthy and whole,

May you have love, warmth and affection in your life, (imagining them close to you, feeling their presence and unconditional love for you, as they say):

May you be protected from harm and free from fear,

May you be alive, engaged and joyful,

May you experience inner peace and ease...

Letting those feelings wash over you, feeling their unconditional love and caring for you, letting the feelings of love and safety grow in you, knowing there is nothing you have to do to deserve these feelings and wishes, that they are given freely, without condition. Seeing if you can connect to the meaning of these phrases even if won might not feel all the safety and warmth right now, knowing that is their wish for you, and now seeing if you can have these wishes for yourself, hearing yourself say to yourself:

May I be happy and healthy and loved,

May I be safe and protected,

May I be alive and free,

May I experience inner peace and ease.

You may have loved ones for whom it's also easy to have these wishes for, a child or family member or friend, or even a loved pet, and if it feels right, saying to them, in your own way and with your own words:

May you be happy and healthy and loved in your life, May you be safe and protected, and not suffer,

May you be alive and joyful, May you have inner peace and ease.

If it feels right, seeing if there are others in your life you can extend these good wishes to, a friend, a coworker, a neighbor, saying to yourself, to them:

May you be happy and healthy and loved in your life, May you be safe and protected, free from harm, May you be alive and joyful, And may you have inner peace and ease.

It might even be possible to expand even further out, to acquaintances, people you know of but don't have a personal relationship with: the people you see around town, your neighbors, even people you don't have strong feelings about, like the salesperson who checks your groceries, saying to these people:

May you be happy and healthy and loved, May you be safe and protected, free from suffering May you be alive, engaged and joyful, And may you have inner peace and ease.

And even if the wishes aren't infused with the same warmth and love as they were with a loved one, seeing if you can extend the wish, without the expectation that it should make you or them feel in any particular way, connecting with what these wishes represent, keeping these people in your awareness as you send these good wishes:

Wishing for them to be healthy and whole, Wishing for them to have aliveness and love in their lives,

And if you feel strong and secure, and you're comfortable with this, you might try extending these wishes to someone who's difficult for you right now, not necessarily the most difficult person in your life, just someone for whom there's been some sort of frustration or misunderstanding. In doing this, it might help to remember that, just like you, they want to be loved... And just like you, they want peace in their life, you could say to yourself:

Just like me, they want to feel happiness and joy, Just like me, they want peace and ease,

And they want to be loved and to know their loved ones are safe and healthy,

And just like me, they are doing the best they can with what inner and outer resources they have,

And if this feels possible to you, silently saying to them...

May you feel peace and ease (remembering that if this were really true for them, that they would certainly be easier to get along with)

May you have love and warmth in your life, May you be happy, healthy and whole

Even if this is difficult, there's value in noticing what it's like to extend the wish, recognizing that you are not condoning their actions, but seeing in them a human being with some of the same needs as you: to be loved, to be safe, to be at peace.

safe, to be at peace.

And, if this is possible, remember the circle that began with yourself and the persons you loved the most a family and friends, extending the circle to include all the many people you don't know who may live far away in other countries or cultures, saying:

May you be happy and healthy, May you have peace and ease.

May you have love and warmth in your life.

You could even imagine extending these wishes to include the animals and plants, all life on our planet and beyond, including ourselves, saying

May we all be happy and healthy, May we all be safe and protected, May we all live together in peace, ease and happiness

And now, as this lovingkindness meditation comes to an end, taking time to appreciate and feel what's been generated through this practice. And even if there have been difficult parts of this practice, knowing that this practice has the potential to increase your sense of aliveness, of connection and of belonging...

And when you are ready, letting yourself feel again your physical presence, sensations of your body, feet, seat, upper torso, neck and head, beginning to notice the movement of your own breath, bringing aliveness and nourishment to your body as a whole, just as your wishes of good will bring aliveness and nourishment to those around you...

Higher Self Meditation Guided Meditation Script

Date / Time:	So far today, have you brought kind awareness to your:			
	Thoughts?	Heart?	Body?	None
Го begin this Meditation, ple	ase bring kind au	vareness to		
why you chose this topichow your belly, chest, and he	ad agab faal whan	vou reflect or	this topic	
how your belly, chest, and nethe emotions that you can as				
the emotions that you can asthe positive or negative impo	ect of any stories ve	u helieve in r	igs egarding this	tonic
the fact that many others are	e feeling similarly a	hout this tonic	r as vou	10010
how you might feel with incr				
 when you can apply increase 				y life
		,		
		75-0		
		2) (
IIishar Calf Maditation				
Higher Self Meditation				
Hello, and welcome.				
mello, dila welcome.				
Please make sure that you are co	ompletely comfortal	ole and that yo	ou will not be	disturbed for
the duration of this session.				
This allows for maximum relaxat	tion and connection	to your higher	self.	
To relax, we breathe deeply, and	l activate our sense:	5.		
So let's breathe 3 big breaths to	gether now each br	eath takina vo	ou closer to cr	eative
intelligence.				
1 inhaling as fully as you can,	expanding your lun	gs and belly	.holding it for	a moment
And exhale.				
2 inhale, feeling relaxing sens	ations oncompassin	a vour body	hold it	
Z Illindie, feeling relaxing sens	utions encompassin	g your body	noid it.	
And exhale.				
3 inhaling as mush as you car	n, feeling great pow	er through oxy	genationho	ld it to soak it
in.				
s.				
nindfulness Downlo	ad more mindfulness w			pts, e-books and n
	Mi	ndfulnessExe	rcises.com	

Guided Meditation Script

Higher Self Meditation

And exhale.

So just relax, allowing your eyes to gently close, taking your sense of vision away. And begin to focus on all the sounds around you.

Perhaps you can only hear this recording and music in headphones, or perhaps there are sounds you can also hear in your surroundings.....

Good.

Now stop listening to the sounds and begin to focus on the sensations in your body.

What are your fingertips touching?

Notice how the palms of your hands feel.

What are your feet touching?

Notice how the soles of your feet feel.

Become aware of your head and notice how your scalp feels.

Can you sense how extremely powerful your brain is?

How about your mind.... can you become aware of your mind?...

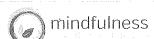
How big is your mind?

Our mind is our imagination.

Our ability to imagine is boundless.

The mind does not have any limits whatsoever.

You can literally use the great power of your creative imagination to experience quantum dimensions.



Download more mindfulness worksheets, guided meditation scripts, e-books and mo

Guided Meditation Script

Higher Self Meditation

I am going to count from 10 to 1 and with each number I say, you will float along the timeline of your past, just observing all the moments of your life pass by without involving any emotions.

You are floating along this timeline of your life, all the way to your birth, and making your way back to soul-level, where you can communicate with your higher self- or also known as quantum self.

10 letting your mind begin to drift back in time what were you doing this	
morningyesterdaylast month	
9 see what you were doing last year	
8floating back along your timeline5 years go bythen 10 years	
8nodding back diong your differinc	
7you drift all the way to your school dayssee moments flash by when you were a	
teenager	
6drifting though your childhoodsee the places you lived during these timesany	
memories that come, just let them pass by	
5you are seeing things from when you were very youngperhaps they are real accounts	
of memories you had, or maybe you can just see stories you were told about your early	
childhood	
4you can see you are a baby now, just learning to walksee these moments as clearly as	
you can	
you can	4
2 and papels caring for you	-071
3you are a very tiny baby now, before you could walksee people caring for you	23-
observe any colors or sounds you may notice from this time	3-20
	-IR
2now you are in your mother's womb, safe and warmit's quiet in there, and you feel	ο ·
wanted in the world outside of your mother	TAMU-CC-IRB-2023-0714
	.;. ₫
1now you are only but a spark of life in your mother, sent from your father	
	NUMBER:
And 0you are passing through, back into the spiritual dimensionthe place of unlimited	IRB I
awareness	I
	SCHIR
	85



Download more mindfulness worksheets, guided meditation scripts, e-books and mo it:

MindfulnessExercises.com

Guided Meditation Script

Higher Self Meditation

Observe whatever you are experiencing right now.......

You sense a presence that is pure and beautiful.

It is the most intelligent presence you've ever felt......

This presence is your spirit. It is higher self......

Notice the qualities of this existence. What's it like?

Allow for a moment of stillness now......

This higher-self has been waiting a long time for you to come to this moment where you can connect, and learn.

What form does this higher-knowledge take on in this moment?

What do they look like?....notice every detail and quality about this quantum-being that you can.

Let are excited that you are here and listening.

The first bit of knowledge this spirit offers is about you, in your human form, giving you insight about something you need to know.....

So, open yourself up completely now to anything you need to learn about this current human incarnation you are experiencing.......

And listen.

Listen with an open mind, allowing anything into your mind that needs to present itself.

[pause for 30 seconds]

Good, any messages you receive here and now, you remember for the rest of your human life.

This is a very important moment with your total soul consciousness.....



Download more mindfulness worksheets, guided meditation scripts, e-books and mo MindfulnessExercises.com

RB NUMBER: TAMU-CC-IRB-2023-0714 PR APPROVAL DATE: 2/17/2023

Guided Meditation Script

Higher Self Meditation

You may hear messages in the form of words, or you may just have a feeling, whatever you experience is perfectly fine.

This is your intuition....allow your intuition to speak with you......

Good.....

This moment you are spending with your intuition is void of any fears.

Fear cannot exist when spirit is present.

So without any burden of fear, ask this all-knowing higher knowledge whatever you need to, or anything that comes to mind.....

Say to your higher-self now,

"How can my human incarnation carry out my soul's purpose?"

And listen.....

Incarnating as life on Earth is a learning experience, kind of like school..... so ask this spirit now anything you need to know or do as a student in human form.

....listen now very closely because any message you receive are very important.....

Good.

As you spend this time together, you are completely rejuvenated.

Your mind automatically sorts though any problems with ease, and clarity.

Earth is a chance for us to solve any and all problems, so that we can fully experience pure paradise.

Ask your higher self now anything that comes to mind, and listen very closely.

[pause for 30 seconds]



Download more mindfulness worksheets, guided meditation scripts, e-books and mo MindfulnessExercises.com

Guided Meditation Script

Higher Self Meditation

There are 7 messages that your higher self has for you right now.

So as they say each of these things to you, sit with the message, and allow yourself to make of it what you will.

"You deserve the best in every situation"
[Pause for 20 seconds]
"You have special gifts"
[Pause for 20 seconds]
"Turn the negatives into positives"
[Pause for 20 seconds]
"Live and let other's live"
[Pause for 20 seconds]
"Remember to make time for play"
[Pause for 20 seconds]
"meditate as much as you can"
[Pause for 20 seconds]
"Love yourself, always"
[Pause for 20 seconds.]
Good.
And now you are going to merge fully and completely with your higher-self, bringing you full

access to your intuition during every moment of your human life.



Download more mindfulness worksheets, guided meditation scripts, e-books and mo MindfulnessExercises.com

Guided Meditation Script

Higher Self Meditation

Allow yourself to connect completely with your higher self, becoming a powerful force, never separating again.

[Pause for 20 seconds.]

You are now one with your intuition, that guides you while you are in human form, knowing that human form is only temporary.....

Ask your intuition anything you want.

And listen with great respect.

You are one with your higher self, whole and complete....able to access infinite intuition at any moment of your physical incarnation.

Sit for a moment and really experience the sensation of wholeness.....

[Pause for 20 seconds.]

Good, and now we are going to travel to an experience in a past life that will allow you to clear anything that could be holding you back in your present life...... so begin to float along your timeline again, and I will count down from 5 and with each number I say, you get closer and closer to a past life that you need to witness, a past life that will allow you release any limitations.....

5....drifting and floating along your timeline.

4.....

3.....

- 2....allowing for your mind to bring you into a past life...
- 1....you are now in a past life, gaze around and see what you notice.

It appears that this past life is one that allows you to release anything that's holding you back, removing any blocks you may have.....whatever comes up for you, just open yourself to it.....



Download more mindfulness worksheets, guided meditation scripts, e-books and mo MindfulnessExercises.com

Guided Meditation Script

Higher Self Meditation

Look down at your feet.

What do they look like?

See your surroundings, where are you?.....notice the details of where you are and what you are supposed to notice here.

Sense what kind of person you are in this past life experience.....what kind of clothes do you wear?....

What kind of people do you know?.....

How do you feel in this body?...

You see that you are going to a place, perhaps an event or ceremony to remove any blocks you may have.

See this day happen......

There are important people here, those that greatly support you.

See the special things that take place, allowing for any limitations to be freed.....

Feel in your body, the sensations of all blockages dissipating....notice how you feel each time something more releases during this special ceremony.

You have been waiting for this day for so long, and the others attending this ceremony are also spirits, incarnating in this vision, to congratulate you on this advancement into complete freedom.

The spirits in this experience are people you know now, people you have known, and people you will know along your human life.....they are pure spirit.

See your body glowing with beautiful energy once you are fully freed.

Good.



Download more mindfulness worksheets, guided meditation scripts, e-books and mo

MindfulnessExercises.com

Guided Meditation Script

Higher Self Meditation

You have completed this spiritual ceremony through this amazing past life experience.

You are completely unblocked, and you feel more free than you ever have.

[Pause for 20 seconds.]

And now let your mind leave the ceremony, being happy of the experience you had here.....

Let your mind float and drift, bringing into your imagination the thought of a beautiful beach....you are walking though the white sand, and it's so soft and warm under your feet....

Small waves are lapping against the shore......and as you walk you see things in the sand like colorful shells and pieces of rock, seaweed and your own footprints.

You notice a piece of driftwood that is the perfect size for writing in the sand with, so pick it up and go to where the sand is wet with sea water......

Begin to write your name in the sand, and notice the sounds the stick makes as you scratch it though the sand.

Good...now step back from your name and look at it.....you notice a small wave comes and partially washes away your name, also washing away any fears....and another comes, and washes your name away even more, washing away anything that brings your anguish.....and another after another until your name is so washed away by the waves, and completely washing away your worries until all you can see is ripples in the sand where your name used to be.

And you continue your walk along this beautiful beach, noticing the temperature of the weather, and perhaps the sun on your skin, or a nice breeze passing by.

Maybe you can hear the waves lapping against the shore, and some sea birds flying overhead.

As you walk a little further you see a nice chair, so sit down to take a rest, and gaze out into the beautiful blue ocean....

Notice the horizon and how the ocean meets the sky.....



Download more mindfulness worksheets, guided meditation scripts, e-books and mo

Guided Meditation Script

Higher Self Meditation

As you look out into this most beautiful scene you've ever witnessed, you notice a small white cloud brewing on the horizon, and it's coming towards you....

When this cloud gets closer, you notice that this cloud is very intelligent....

This is the cloud of infinite knowledge.....

Any questions that you have, begin to blow them out, towards this cloud, and watch that as you blow anything that you desire to know, the cloud grows darker and heavy with rain....

Continue blowing, allowing for the cloud of knowledge to soak up anything you ponder.

It becomes heavy with rain, and begins to pour down a warm and gentle storm of purified insight upon the beach

This beautiful rainstorm is filling you with infinite knowledge.

Enjoy this storm now....soak in boundless intelligence.

[Pause for 30 seconds]

Good....

You have had incredible experiences today, ones that will last you for your entire life. We are going to come back now to wakeful awareness, bringing back all that you have learned today with you.

- 1...coming back
- 2....feeling good
- 3....feeling strong
- 4....breathing in fresh oxygen
- 5....feeling complete.

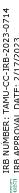


Download more mindfulness worksheets, guided meditation scripts, e-books and mo MindfulnessExercises.com

Guided Meditation Script

Higher Self Meditation

- 6...feeling whole
- 7....feeling wiser
- 8....good coming back now
- 9....almost there
- 10.....feeling happy and rejuvenated.





Download more mindfulness worksheets, guided meditation scripts, e-books and more Mindfulness Exercises.com

A Letter to Your Past, Present, and Future Self-Guided Script

- Before writing, take a moment to close your eyes, breathe deeply, and bring yourself back, back
 in memory to that time in your life, re-experiencing the event, emotions, and thoughts of that
 time.
- Think back to a time in your life when you could have used advice from a wiser you.
- Think about what you have learned about yourself and life since then.
- Write your letter.
- Now, take a moment to think about who you currently are. Bringing awareness to your life at this present time.
- Think about your recent accomplishments, current interests, or extracurricular activities.
- Reflect on your current goals, hopes, and dreams? Also consider your present fears and biggest worries.
- Think about your current skills, talents, and abilities.
- · Write your letter.
- Before writing the final letter, take a moment to close your eyes, breathe deeply, and bring your future self to mind. Imaging seeing yourself exactly one year from now.
- Think about what you would say.
- What kind of person will you be? What goals will you have achieved?
- What are you most proud of?
- Think of the challenges you will have overcome by next year.
- What will life look like for you? Are you content? Are you living a life of authenticity and wholeness?
- Write your letter.
- As this mindful letter writing exercise comes to a close, I invite you to take a few deep breaths, closing your eyes, if you so choose, prepare to journey back to the present moment. You may wish to bring back with you all the skills, strengths, and capabilities you have picked up along the way and use them as a guide to help you accomplish what you have purposed to do. When you are ready, you may open your eyes, and proceed with greatness and inner peace.