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## Stress, Obesity, Depression, and Codependency as Predictors of Unmitigated Communion in African American Pastors

Troy Tyrone Johnson  
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# Walden University

College of Allied Health

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Troy Tyrone Johnson

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2023

Abstract

Stress, Obesity, Depression, and Codependency as Predictors of Unmitigated  
Communion in African American Pastors

by

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MS, Walden University, 2020

MDiv, Houston Graduate School of Theology, 2015

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BS, Southern University at New Orleans, 1996

Dissertation Submitted in Partial Fulfillment

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## Abstract

Many pastors spend significant time tending to their congregants' needs while disregarding their own needs. They may not know how to ask for or receive help and may look to others for self-worth and value. Inappropriate self-sacrificing behaviors could result in pastors compromised emotional and physical health. The purpose of this study was to determine whether stress, obesity, depression, and codependency, individually or in a linear combination, were adequate predictors of unmitigated (UC) among African American senior pastors who pastor congregationally led churches without the benefit of paid support staff. The social cognitive learning theory was the theoretical framework in this quantitative nonexperimental study. Approximately 129 senior pastors across the United States completed surveys. Simple regression results indicated that stress and obesity were not statistically significant predictors of UC. However, depression and codependency were statistically significant predictors of UC. The multiple regression model was not statistically significant but did indicate that perceived stress was a statistically significant predictor of unmitigated communion,  $\beta = 0.17$ ,  $t = 2.02$ ,  $F = 5.860$ ,  $p < .005$ , as well as codependency,  $\beta = 0.35$ ,  $F = 5.860$ ,  $t = 3.67$ ,  $p < .001$ . The study's results may yield positive social change by providing much-needed information to pastors and other professional helpers. With more information on how the study variables affect their overall well-being, professional helpers may be able to take steps to reduce negative impacts, which could be beneficial to their emotional and physical health.

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## Dedication

I dedicate this dissertation to every African American pastor who has given to the point of exhaustion and has given more than they have. They found themselves psychologically, emotionally, spiritually, and physically bankrupt.

## Acknowledgments

This dissertation is dedicated to the elders in my village, both deceased and living, who spent their precious time nurturing and preparing me for this moment. I dedicate this dissertation to the Fresh Start Community Church of Houston, Texas, which I have had the privilege of pastoring. The Fresh Start Church has cheered and supported me in my educational journey. I thank Rev. Dr. Douglas A. Slaughter, Dr. Lisa Green-Dery, Dr. Tia Crosley, Dr. Betty Brown, Dr. Anthony Bennett, Dr. Tyrone Jones, and Dr. Elizabeth Jones, to name a few, for the times they encouraged me to move forward. I want to thank my siblings and my children for their continued support. Thanks to my father, Felix Joseph Johnson Jr., and my mother, Audrey J. Johnson, who taught me how to endure the process. I want to thank Dr. Angela Glymph and Dr. Jennifer Rounds-Bryant, my dissertation coaches, without whose support I could not have completed Chapter 5. I want to also thank my editor, Laura Hamlet Schlater, for all of her help. Finally, I thank my dissertation committee—chair, Dr. Jay Griener, and cochair, Dr. Neal McBride—who pushed me to my limit to complete this work.

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## Chapter 1: Introduction to the Study

In this study, I sought to determine whether stress, obesity, depression, and codependency, individually or in a linear combination, were adequate predictors of unmitigated communion (UC) among African American senior pastors serving congregationally led congregations without the benefit of paid support staff. This study could have positive social change implications, as teachers, nurses, pastors, counselors, and other professional helpers could better understand the importance of balance and appropriate, effective self-care. Additionally, supervisors of helpers could use the results to train their employees on the importance of balancing their public, private, and personal lives. In Chapter 1, I provide an overview of the study's topic, problem statement, purpose, guiding theory, and methodology. The chapter includes the rationale for the design paradigm and definitions of essential terms. There is also a discussion of the study's assumptions, scope and delimitations, limitations, and significance.

### **Background**

The alternative to UC is communion, which is a balanced approach to caring for others and oneself. UC is defined by a focus on others to the detriment of self and the inability to ask for or receive help. UC and communion correlate but are distinctly different components, as UC causes damage and could result in having a negative self-view and turning to others for self-evaluation (Fritz & Helgeson, 1998; Helgeson et al., 2015). Research has shown that UC and psychological distress are correlated and showed, UC, relational behavioral patterns, and well-being could ultimately hurt daily life. A correlation exists between support and interpersonal behavior and UC as a

predictor of problematic interpersonal behavior and distress (Fritz & Helgeson, 1998; Helgeson et al., 2015).

Manister and Gigliotti (2016) examined how stress and emotional eating increased obesity among the clergy. The researchers concluded that obesity directly results from a sedentary lifestyle and that stress is the primary culprit in emotional eating, a major cause of obesity. Manister and Gigliotti further stated that high obesity and emotional eating partially mediate the relationship between role stress and obesity.

Nikolsky and Smolin (2019) examined the syndrome of emotional and professional burnout among the clergy. The findings showed that extreme exhaustion was a mediator of mental strength paralysis and could result in a loss of joy in life and service to God. Walther et al. (2015) investigated how pastors' conceptualization of health impacted their personal health and that of their congregants. The researchers suggested that pastors' theologies of care affect how they conceptualize health and well-being, ultimately influencing personal and congregant health.

### **Problem Statement**

UC consists of a focus on others to the detriment of self and the inability to ask for or receive help (Fritz & Helgeson, 1998; Helgeson et al., 2015). A growing body of research has focused on how pastors fail to provide self-care and continuously neglect themselves to care for the needs of others (Walther et al., 2015). Some scholars have conducted empirical research on pastors' mental and physical health. The research has shown that a pastor's psychological and physical health could significantly affect the church, the community, and the nation. Pastors often try to live up to imposed, unrealistic

expectations and, as a result, may compromise their psychological and physical well-being (Salwen et al., 2017). Pastors who take care of others to their detriment demonstrate UC, an imbalance characterized as the capacity to provide support for others and the inability to request or receive help to support oneself (Helgeson et al., 2015).

Helgeson et al. (2015) found that UC predicted problematic interpersonal behavior and distress. Using daily diaries, they measured the impact of UC on well-being and interpersonal behaviors. The authors suggested further study of the relationship between UC, interpersonal behaviors, and well-being among distressed populations, especially those economically vulnerable and vulnerable to life stressors. Pastors could fit within this paradigm. Although not all pastors are members of economically vulnerable populations, they are vulnerable regarding life stressors.

UC is the result of denying oneself the appropriate self-care (Fritz & Helgeson, 1998; Helgeson et al., 2015). Stress, obesity, depression, and codependency are interpersonal behaviors. The variables may be predictors of UC. This study addressed a gap in the research by examining whether stress, obesity, depression, and codependency, individually or in linear combination, predict UC among African American senior pastors pastoring congregationally led churches without the benefit of paid support staff. The study was needed to address a lack of understanding among African American pastors of the signs of UC and its impact on overall health.

### **Purpose of the Study**

The purpose of this quantitative nonexperimental study was to determine whether stress, obesity, depression, and codependency, individually or in a linear combination,

were adequate predictors of UC among African American senior pastors whom pastor congregationally led churches without the benefit of paid support staff.

### **Research Question and Hypotheses**

In line with the study's purpose, I sought to answer one research question (RQ) and five hypotheses, which were as follows:

RQ: Do stress, obesity, depression, and codependency adequately predict, individually or in a linear combination, UC among African American pastors serving congregationally led churches without the benefit of paid support staff?

*H*<sub>0</sub>1: Stress, as measured with the Perceived Stress Scale (PSS), is not an adequate predictor of UC, as measured with the Unmitigated Communion Scale (UCS), among African American senior pastors serving congregationally led churches without paid support staff.

*H*<sub>A</sub>1: Stress, as measured with the PSS, is an adequate predictor of UC, as measured with the UCS, among African American pastors serving congregationally led churches without paid support staff.

*H*<sub>0</sub>2: Obesity, as measured via body mass index (BMI), is not an adequate predictor of UC, as measured with the UCS, among African American senior pastors serving congregationally led churches without paid support staff.

*H*<sub>A</sub>2: Obesity, as measured via BMI, is an adequate predictor of UC, as measured with the UCS, among African American pastors serving congregationally led churches without paid support staff.



*H<sub>03</sub>*: Depression, as measured with the Patient Health Questionnaire (PHQ-9), is not an adequate predictor of UC, as measured with the UCS, among African American senior pastors serving congregationally led churches without paid support staff.

*H<sub>A3</sub>*: Depression, as measured with the PHQ-9, is an adequate predictor of UC, as measured with the UCS, among African American senior pastors serving congregationally led churches paid support staff.

*H<sub>04</sub>*: The Composite Codependency Scale (CCS) is not an adequate predictor of UC, as measured with the UCS, among African American senior pastors serving congregationally led churches without paid support staff.

*H<sub>A4</sub>*: Codependency, as measured with the CCS, is an adequate predictor of UC, as measured with the UCS, among African American senior pastors serving congregationally led churches without paid support staff.

*H<sub>05</sub>*: When in a linear combination, stress, obesity, depression, and codependency are not adequate predictors of UC among African American pastors serving congregationally led churches without paid support staff.

*H<sub>A5</sub>*: When in a linear combination, stress, obesity, depression, and codependency are adequate predictors of UC among African American pastors serving congregationally led churches without paid support staff.

### **Theoretical Framework for the Study**

The study's theoretical framework was the social learning theory (Bandura, 1977). Bandura (1977) argued that individuals learn through observation, imitation, and

modeling. The theory bridges behaviorist and cognitive learning theories because it includes attention, memory, and motivation. The four learning components, or elements, are attention, retention, motor reproduction, and motivation (Kretchmar, 2019). In addition to these elements, environmental and cognitive factors may influence the learning process (Bandura, 1977; Kretchmar, 2019). The social learning theory was an appropriate framework because pastors may learn from observation, imitation, and modeling. In Chapter 2, I present a more detailed explanation of Bandura's social learning theory.

### **Nature of the Study**

The study had a quantitative nonexperimental survey design, with simple and multiple linear regression (MLR) used for data analysis. The independent variables were stress, obesity, depression, and codependency. The dependent variable was UC. I measured the study variables using the following instruments: the UCS to measure UC, PSS to measure stress, the BMI scale to measure obesity, the PHQ-9 to measure depression, and the CCS to measure codependency.

### **Definitions**

The following operational terms are relevant and specific to the study:

*Codependency*: An affective disorder in which individuals focus on others to derive self-purpose through relationships (Carr & Buchanan, 1997; Webb, 2009).

*Congregationally led churches/independently led churches*: Self-governed churches with autonomy that are not part of a larger governing body that can provide administrative assistance.

*Chronic stress:* Constant stress that persists over an extended period. Stress can have positive and negative effects (American Psychological Association, 2019).

However, chronic stress can have debilitating, overwhelming, and negative effects on a person's physical and psychological well-being, which, in turn, could cause a variety of problems, such as anxiety, insomnia, muscle pain, high blood pressure, and a weakened immune system (American Psychological Association, 2019).

*Depression/major depressive disorder:* A clinical syndrome lasting 2 weeks or more and causing an individual to experience depressed moods or anhedonia. Major depressive disorder (MDD) could lead to the inability to concentrate, significant weight loss or gain, insomnia, excessive sleeping, low energy, and feelings of worthlessness (American Psychological Association, 2021a). Individuals with MDD may experience guilt and even thoughts of suicide or death (American Psychological Association, 2021a; Runner, 2021)

*Obesity:* A condition marked by the excess accumulation of body fat, which could result in diabetes, heart disease, sleep apnea, and chronic health problems (American Psychological Association, 2021b).

*Paid support staff:* Other staff pastors who are paid to share pastoral responsibilities

*Senior pastor/lead pastor:* A pastor who leads a congregation and is primarily responsible for the preaching, teaching, and overall administration of the church.

*Unmitigated communion (UC)*: A focus on others to the detriment of the self-characterized by a negative self-view and turning to others for self-evaluation (Fritz & Helgeson, 1998).

### **Assumptions**

I had several assumptions when conducting this study. First, I assumed that the senior pastors in the study would answer the questions honestly and accurately. In addition, I assumed that the pastor participants would understand how the research could positively affect themselves and the community at large. Another assumption was that participating pastors would influence other pastors to participate in the study and complete the instruments. Last, I assumed that the participants would return the surveys promptly. The assumptions had relevance because full participation was vital to having sufficient data for analysis.

### **Scope and Delimitations**

Pastors are vulnerable to daily life stressors, as they exhibit interpersonal behaviors that might negatively affect their overall well-being. Helgeson et al. (2015) suggested conducting further research on the relationship between UC, interpersonal behaviors, and well-being among economically vulnerable populations and populations vulnerable to life stressors. The study's research problem concerned whether stress, obesity, depression, or codependency, individually or in a linear combination, adequately predicted UC among African American senior pastors without paid support staff.

The study was delimited to African American senior pastors who pastor congregationally led churches without paid support staff. The participants were male and

female senior pastors. The study did not include pastors outside of the United States or pastors of churches that are part of a larger governing body, such as Catholic, Anglican, Presbyterian, and Methodist churches. Another delimitation of the study was that it did not include retired senior pastors or pastors of social community ministries. Nonetheless, the results cannot be generalized to the larger population of African American senior pastors who may not pastor congregationally led churches and/or who pastor in multiple settings (e.g., rural, urban, or semiurban). In addition, the findings may have pertinence to pastors of other ethnicities.

### **Limitations**

I used nonprobability purposive sampling or judgmental sampling. This particular sampling method provides the opportunity to select participants based on their specific needs and criteria. Researchers use this method when they are interested in the particular characteristics of specific individuals. This sampling technique can be an appropriate approach for quantitative research in particular situations, as it enables researchers to use their judgment to select specific cases to address the needs of their studies. In addition, researchers use purposive or judgmental sampling to recruit difficult-to-reach populations requiring study (Creswell & Creswell, 2018).

The purposive or judgmental sample is often employed in qualitative research under particular circumstances. However, purposive sampling is an appropriate nonprobability sampling method for quantitative research with a particular purpose and when the population of choice addresses the needs of the research study (Burkholder et al., 2016). Nonprobability purposive sampling was an appropriate approach because the

study focused on a select group of individuals with specific skill sets who are part of a particular cultural group.

One of the weaknesses of purposive sampling is that the sample may not be representative of the larger population (Burkholder et al., 2016). A possible limitation in this study was selection bias. Another limitation could be self-reporting measures to determine the participants' BMI, depression, stress, codependency, and UC. Researchers who use self-report surveys assume that the respondents will respond honestly and accurately and not answer to portray themselves positively. Addressing the potential for bias due to self-reporting required that I encouraged the participants to respond honestly and accurately. I assured the participants that their responses would remain anonymous and confidential.

Controlling the threat to instrumentation consisted of administering the same instrument to all the participants for uniformity in procedures. To further mitigate bias, I used only standard, previously validated measures with proven strong reliability and validity. Another limitation of the study was that it did not indicate the causation between variables, even for significant relationships because causation could not be proven only if a relationship exists.

### **Significance**

This study is potentially significant because it helps to address the research gap and contributes to the current literature. The results could provide congregants, pastors, and care providers with a deeper understanding of how obesity, stress, depression, and codependency predict UC, individually or in a linear combination. Pastors are a vital

population to study because of their unique responsibilities. To a large extent, pastors remain underrepresented in clinical research studies and are a vulnerable group regarding life stressors (Edwards et al., 2020; Helgeson et al., 2015; Salwen et al., 2017; Walther et al., 2015).

In addition, this study has implications for professional practice and may contribute to positive social change by enabling clergy to understand the predictors of UC. Teachers, nurses, pastors, counselors, and other professional helpers could use the study's results to understand the importance of balance and appropriate, effective self-care. Additionally, the study could assist those who supervise professional helpers and the leaders of educational institutions that provide them with services in recognizing some of the signs and symptoms of UC.

### **Summary**

In Chapter 1, I introduced the concept of UC and presented the study's problem statement and purpose, the RQ and hypotheses, and a brief description of the theoretical framework. Additionally, Chapter 1 included the essential operational definitions and the study's assumptions, limitations, delimitations, and significance. In Chapter 2, I will provide more information on the study's theoretical framework, review key literature, and discuss the literature search strategy.

## Chapter 2: Literature Review

### **Introduction**

Pastors are not immune to the stressors that affect other professional helpers. For example, multiple chronic diseases disproportionately affect clergy (Salwen et al., 2017). A pastor's psychological and physical health can significantly affect their church, community, and nation (Hough et al., 2018; Salwen et al., 2017; Webb & Bopp, 2017). Clergy may suffer from feelings of inadequacy because of unrealistic expectations that they and their church community impose. Pastors who try to live up to unrealistic expectations may compromise their psychological and physical well-being (Salwen et al., 2017).

Caring for others to one's detriment is a sign of UC (Helgeson et al., 2015). UC is an imbalance characterized as the capacity to support others but the inability to request, receive and provide support for oneself. Obesity, stress, depression, and codependency could be signs of UC. The purpose of this quantitative nonexperimental study was to determine whether stress, obesity, depression, and codependency, individually or in a linear combination, were adequate predictors of UC among African American senior pastors serving congregationally led churches without the benefit of paid support staff. In this chapter, I present the study's literature review and the conceptual framework. Chapter 2 includes the literature search strategy, the conceptual framework, and the literature gap on how obesity, stress, depression, and codependency may be predictors of UC in the clergy.



### **Literature Search Strategy**

To find literature, I searched counseling and psychology databases, such as EBSCO, ProQuest, PsycArticles, PsycINFO, and SAGE Journals. I also used Walden University's Thoreau multidatabase search tool. The followed keywords were used to narrow the search: *unmitigated communion, pastors, clergy, reverend, priest, counselors, therapist, psychologist, experience, burnout, obesity, stress, theology, and self-care*. To incorporate the most current articles for this research, I searched for materials published from 2011 to 2023

### **Theoretical Framework**

Bandura's (1977) social learning theory was the theoretical framework for the study. The theory supports the idea that pastors learn from other pastors through observation, imitation, and modeling. The theory links behaviorist and cognitive learning theories approaches that focus on attention, memory, and motivation. The reconceptualized theory of social learning, social cognitive theory (SCT), suggests that expectations, self-regulation, social support, and self-efficacy influence individuals (Webb & Bopp, 2017).

Social learning theory originated from a model of reciprocal determinism (Wulfert, 2019). Bandura (1977) argued against the humanist and existentialist positions. As Bandura detailed, the humanist asserts that the individual is a free agent, but the behaviorist maintains that the environment controls behavior. Bandura argued that individuals are neither free agents nor passive reactors to external pressures; however, behaviors result from interlocking external and internal determinants. External

determinants consist of rewards and punishments, and internal determinants include thoughts, expectations, motivation, and beliefs. The interlocking determinants, including behavioral, cognitive, and environmental influences, influence the system.

With a model of the emergent interactive agency, SCT indicates that individuals are neither autonomous agents nor simply mechanical conveyors of animating environmental influences (Bandura, 1989). Instead, SCT suggests that individuals make causal contributions that contribute to their motivation and actions, all within a system of triadic reciprocal causation. Bandura (1989) also argued that self-generated influences are contributing factors when considering any determinants of human action.

Bandura (1977) stated that observational learning and imitation are the keys to understanding individuals' learning. Observational learning is an alternative to experimental learning that results from watching others. Observational learning occurs in various ways, from children watching parents to amateur athletes watching professional athletes (Warren & Loes, 2019). Human learning provides individuals with knowledge for future use and is often a byproduct of cognitive skills. Learning, which is the result of direct experience, can occur vicariously by observing the behaviors engaged in by others and the consequences of these behaviors.

A tenet of social learning is that observers learn rules and behavioral patterns through observational learning instead of trial and error. Observation is an effective agent when individuals seek new perspectives or novel behaviors, as it enables the observer to rehearse observed behavior cognitively without the risks of direct experiences (Loes & Warren, 2016; Warren & Loes, 2019). Observational learning has several governing

subprocesses, including attention, retention, production, and motivation. Without all three subprocesses, learning cannot occur (O'Kelley, 2019; Warren & Loes, 2019).

Retention involves taking small segments or codes and transforming them into mental concepts accessible for future use on many occasions (Warren & Loes, 2019). Production occurs when the observer decodes the information coded in the retention phase and reproduces the coded images into action similar to the observed activity. The individual divides the motivational process into the actions acquired from the retention process. The observer then decides which behaviors have a positive motivational component and which to retain or reject. All three phases are instrumental parts of the learning process and precursors to behavior.

Imitation results from observational learning and emerges through operant conditioning principles. Observation and imitation indicate much of human learning, and imitation is a symbolic representation that the observer has committed the internalized mental representations learned from observing (Connolly, 2017). The individual will likely continue the observed behavior when positive contingencies result from the imitative behavior. Humans are active information processors, and they make connections between behaviors and their consequences. Observational learning and imitation are cognitive processes mediated by mental factors within the learning process. Thoughts occur before imitation, a mediational process during which a person chooses to imitate or reject the modeled behaviors. Observational learning and imitation may be critical components of pastors' learning, as I would argue that pastors often model observed behaviors.

SCT suggests that individuals can learn capabilities through role modeling. The SCT indicates how behaviors and communication transmit and teach observers practical skills and strategies for managing environmental demands. Modeling is an effective way to develop adaptable competencies in individuals with limited experiences and opportunities. Individuals rely heavily on role models to provide social standards for measuring their performance (Garcia et al., 2019).

According to SCT, role modeling enables observers to learn what to do and how to behave and, as a result, they emulate the behaviors they observe (Garcia et al., 2019). Active role models capture the observer's attention based on several paradigms: nurturance, competence, and power (Brown & Treviño, 2014). Many individuals are not ethically self-sufficient; therefore, they look outside themselves to individuals who model ethical leadership for guidance. The social learning process commences when observers look to others for modeled behaviors. Observational learning, imitation, and modeling could explain how pastors learn and internalize the behaviors influencing how and why pastors engage in relationships with their practitioners in ways that may be detrimental.

The SCT was a vital component of the study and provided a lens for understanding the participating pastors' behaviors. The SCT could show the influence of multiple determinants in pastors' pastoring styles. Further, SCT could indicate how pastors adopt behaviors that might cause them to compromise their physical well-being. Using this model was essential to the study because it helps make sense of specific behavioral patterns, which could be the catalysts for multiple health concerns.

The RQ in this study and the theoretical framework of SCT are related because the question suggests that UC is an observed-learned modeled behavior and that obesity, stress, depression, and codependency may be predictors of UC. In addition, the study was a way to build on the existing theory because SCT presents a challenge to self-efficacy. Although an individual may have self-sufficiency, environment, and culture could override the person's choice or desire to act independently. Finally, the SCT was a vital part of the study because it indicates that behavior and ways of doing do not occur in a vacuum; instead, they may be the byproducts of pastors' relational patterns with their congregants.

### **Literature Review Related to Key Concepts**

#### **Unmitigated Communion**

In *The Duality of Human Existence*, Bakan quoted Rabbi Hillel, who said, "If I am not for myself, who will be for me? However, if I am only for myself, who am I?" (O'Donovan, 1968, p. 120). Per this quote, Bakan introduced the concepts of agency and communion. The agency is the individual as an organism; an individual's interconnectedness to a more extensive organism is communion. A growing body of research has emerged on communion and agency since the introduction of both concepts in the 1960s.

Fritz and Helgeson (1998) argued that the two personality characteristics of communion and UC indicate how individuals engage with the self and others and thus require further research. Communion consists of how individuals form connections and create unions; it is a concept characterized as awareness of others' feelings and

interpersonal situations when caring for others and the self. A person with communion possesses positive attributes that result in positive outcomes. Most importantly, communion indicates an individual's ability to connect with others positively. Research has shown that individuals with communion experience less loneliness and less stress. In addition, communion is a factor in relationship satisfaction (Fritz & Helgeson, 1998). However, UC is the opposite character trait of communion.

The character trait of UC consists of caring for others to the detriment of the self (Fritz & Helgeson, 1998). Bakan did not conceptualize the term *unmitigated communion* but argued for communion, noting that an individual with communion exemplifies balance and a healthy orientation to self (O'Donovan, 1968). Individuals who possess UC subjugate their needs to meet the needs of others at their expense (Fritz & Helgeson, 1998). Therefore, although communion and UC share some of the same features, they are contradictions.

Horne et al. (2020) contended that UC occurs when individuals find their self-worth in others' evaluations and base their worth and value on how well they care for others instead of how they provide for themselves. UC negatively affects a person's entire being and is an issue for many caregivers, including pastors. UC may have a particular effect on pastors because they provide continuous care for the needs of many. Pastors' mental well-being is vital, as it can affect the community and the nation (Salwen et al., 2017). Many pastors face unrealistic expectations; if they try to live up to unrealistic expectations, they may compromise their physical and psychological well-being.

Pastors cannot meet imposed unrealistic needs and goals. However, pastors who internalize unrealistic goals and expectations may become inept at providing appropriate self-care. Some individuals become so skilled at supporting others that they cannot request help, receive help, or appropriately support themselves. Providing care to others to the detriment of the self could result in an imbalance (Helgeson et al., 2015).

In many instances, high demands on the church result in high demands on pastors (Walther et al., 2015). A growing body of research has focused on how pastors provide self-care and the impact of neglecting the self. The theological framework which guides pastors is an indication of how they conceptualize health; this conceptualization ultimately affects how well pastors provide self-care. This framework also shows pastors how to provide care for themselves; however, it also affects how pastors relay the importance of self-care to their congregants. Although many pastors are experts at providing self-care information and discussing the importance of self-care, many engage in poor self-care themselves (Walther et al., 2015).

### **Self-Care**

Jesus posed one of the most challenging theological questions in Mark 8:36: “For what does it benefit a man to gain the whole world yet lose his life?” (*Holman Christian Standard Bible*). Jesus posed this question to the disciples after saying they must deny themselves, take up his cross, and follow him. Pastors apply this teaching differently depending on their theological or philosophical underpinnings (Poppa, 2019). When looking at the paradigms posed by Jesus, the standard for being a disciple can be to mistreat instead of providing care for one’s soul. Many individuals care for their souls by

living out spiritual disciplines instead of holistic expressions of their entire being. Jesus requires caring for one's soul while simultaneously meeting the needs of others.

A proper hermeneutic interpretation of the passage is that soul-care is the precursor of self-care. Self-care is an intentional, proactive act that results in personal care. Proper soul-care occurs when individuals care for their physical, mental, emotional, spiritual, and relational needs (Poppa, 2019). According to Mark 12:31, "The second [rule] is: Love your neighbor as yourself" (*Holman Christian Standard Bible*). This passage indicates the need for self-care and shows that self-care is not an option: It is Christ's command. Jesus essentially showed that no commandment, assignment, or law is greater or more significant than this. One of the most substantial problems for pastors in their careers is that they may become skilled at neglecting the self because they have inappropriate theological and philosophical interpretations of the Scripture related to denying the self to follow Christ (Poppa, 2019).

Pastoral demands can often result in the perpetuation of theology, which suggests that pastors should neglect their care and welfare for the care of others. Pastors give themselves to others by listening to others' hurts, often helping to mend the wounds of others but failing to provide appropriate care for themselves. Many pastors cater to others but often do not attend to their own needs. Pastors may settle for crumbs while giving whole loaves to their congregants (Vaccarino & Gerritsen, 2013). In addition, many pastors are experts at staying busy—so busy providing for others in the ministry that they forget to give themselves the care they need to sustain the self. In turn, pastors may



compromise their growth and spiritual walk. Additionally, pastors may compromise their physical and emotional health because the whole self is in flux.

Pastors must learn to balance the concerns of others with self-concern to mature the body and soul. Pastors who understand self-care recognize that it results in positive health and balances all components (Vaccarino & Gerritsen, 2013). On many occasions, congregants view pastors as superhuman in their work performance; however, pastors may feel overwhelmed by caring and continually providing for others. Pastors may damage their ability to sufficiently care for others and themselves without appropriate care for the self.

Self-care can be problematic for pastors because they often view it as optional. Self-care must be a commitment one makes to God and oneself when accepting ministry challenges. Self-care must be integral to a pastor's life, not only a theoretical construct applied if desired (Vaccarino & Gerritsen, 2013). Balance requires that pastors make self-care an essential part of their lives to protect their emotional, psychological, and physical well-being.

### **Obesity**

The disease's prevalence increased among adults from 1999–2000 through 2017–2018. The age-adjusted prevalence of obesity in adults was 42% in 2017–2018 between women and men. When adjusted by age, the prevalence of severe obesity in adults was 9.2%; however, there are significantly higher rates of obesity in men than in women (Hales et al., 2020). Additionally, there are higher prevalence of obesity and severe

obesity in non-Hispanic Black adults compared to other races. Compared to other age groups, adults aged 40–59 show the highest prevalence of obesity.

Obesity and chronic health diseases disproportionately impact the clergy (Webb & Bopp, 2017). A North Carolina survey by the United Methodist Church found higher diabetes, arthritis, and hypertension rates in clergy than in the general population (Hough et al., 2018). The study of 2,500 clergy showed that 75% were overweight or obese. Multiple contributing factors resulted in these higher rates.

In many communities, the clergy plays a significant leadership role and can influence community health. The community views pastors as authority figures; therefore, pastors assume the responsibility of encouraging healthy behaviors for those in their care. Many pastors realize that their congregants highly respect their voices and leadership. Thus, they take on the responsibility of addressing the issues faced by their congregants. Historically, African American pastors have been changing agents, social leaders, and champions of congregational health (Manister & Gigliotti, 2016; Story et al., 2017). Many African American pastors provide their congregants with the information they need to live healthy lifestyles; however, they may compromise their health while passing on this information.

Studies have shown that although clergy excels at modeling positive health behaviors and advancing community health programs, they do not model healthy weights (Manister & Gigliotti, 2016). High obesity rates among the clergy correlate with unhealthy behaviors such as eating out frequently, church activities built around food, and sedentary lifestyles (Hough et al., 2018). Emotional eating is one of the most

common behaviors associated with obesity among the clergy. Pastors may engage in emotional eating or comfort eating to mitigate the impact of chronic stress; however, this is an unhealthy practice. Research has shown that eating pleasing foods activates the brain's reward system (Manister & Gigliotti, 2016; Stammers et al., 2020). However, emotional or comfort eating can ultimately result in obesity and other health concerns.

Stress is a precipitating factor in emotional eating. Stress causes a cascade of physiological events. Individuals experiencing stress often eat high-calorie foods, which could lead to obesity. In addition, obesity and other chronic health diseases have an unequal effect on the clergy (Manister & Gigliotti, 2016; Webb & Bopp, 2017). Obesity directly correlates to poor eating habits and insufficient exercise; however, stress is often the culprit. Without understanding the role of stress, individuals may struggle to change their behaviors and maintain a healthy weight. Stress is a precursor to obesity, as stress affects the metabolic rate (Manister & Gigliotti, 2016; Stammers et al., 2020; Tomiyama, 2019). Therefore, stress contributes to developing and maintaining obesity (Tomiyama, 2019). It is vital to understand this paradigm among pastors and other clergy, as they tend to face general daily life and other unique stressors (Manister & Gigliotti, 2016) that harm their total health and cause a cascade of health issues.

### **Stress/Burnout**

In many instances, scholars have discussed stress and burnout together; however, stress and burnout are not the same qualities. Burnout is often a consequence of stress and a response to long-term chronic occupational, emotional, and interpersonal stressors (Nikolsky & Smolin, 2019). Often, pastors find ministry and life at odds with each other.

Many congregants view pastors as first responders; therefore, ministry can be stressful. Clergy provides crisis intervention to people and families inside and outside their congregations (Doehring, 2013). Pastors major in working with people; however, people-centered professions can cause extreme exhaustion (Prevost, 2016). Many pastors face the daunting tasks of meeting daily routines and struggling with daily emergencies while acting as counselors, mentors, mediators, fundraisers, administrators, and community leaders; thus, many pastors can find the ministry overwhelming. Pastors dealing with these tasks may struggle to provide appropriate boundaries due to nebulous and blurred social and professional lines (Doehring, 2013; Hough et al., 2018).

The pastor's role is a highly visible one. Therefore, many pastors feel they and their families live in the open, frequently resulting in heightened stress levels. In addition, congregants often have high expectations of pastors, expecting them to be spiritually and emotionally healthy and available to meet the needs of their congregants and communities. Workplace stressors also challenge pastors (Doehring, 2013; Lindholm et al., 2016).

Doehring (2013) suggests that pastors have high job satisfaction rates worldwide. However, research has also shown the exhausting nature of ministry, which can result in cynicism, insufficiency, feelings of indifference, dehumanization, and negative professional self-perceptions. Therefore, exhaustion in ministry can hurt pastors' physical, spiritual, and emotional health and result in burnout (Doehring, 2013; Lindholm et al., 2016; Nikolsky & Smolin, 2019; Prevost, 2016).

Pastors experience the same life stressors as other service providers (Doehring, 2013). At least 28% of pastors struggle with daily stressors that cause exhaustion and burnout. Deaths, communication challenges, complex ethical issues, heavy workloads, feelings of isolation, role overload, role conflicts, a lack of control, insufficient pay or rewards, and difficulties in the work environment are some stressors pastors faces (Prevost, 2016). Nikolsky and Smolin (2019) found that 13% to 15% of pastors are in the process of divorce, 25% of pastors without close, trusted individuals to converse with about family and personal problems, and 33% of pastors' wives reported bitter conflicts between family and ministry. The statistics also showed that 33% of pastors felt overwhelmed with their workloads within the first 5 years; 40% of pastors and 47% of their wives dealt with too much work, busy work schedules, and unrealistic expectations; 47% had suffered from depression; and 57% said they would leave ministry to take secular jobs. In addition, 1,000 to 1,500 pastors leave the ministry every month.

Pastors often lack the necessary skills to mitigate stress without feeling they are harming their ministries. One reason for pastors' high stress is role ambiguity, which can occur when the laity and clergy have conflicting views about clergy expectations. Other issues that can cause stress disorders and affect clergies' subjective well-being are the critical and demanding interactions between members and the clergy, resulting in compassion fatigue and burnout (Prevost, 2016; Scott & Lovell, 2015).

Additional factors that can cause undue stress and burnout include pastors' perceptions of the pastoral leadership role and what it means to be a pastor. It is not uncommon for pastors to maintain unhealthy narratives of these roles. Existing church

cultures, expectations, and pressures from congregants have been pivotal factors in shaping the narrative of what it means to be a pastor. An unhealthy narrative can result in unhealthy or harmful practices (Dunbar et al., 2020). When pastors give to the point of exhaustion without replenishment, they may consider burnout and undue stress as natural parts of life (Johnson, 2016).

### **Depression**

Depression is a treatable medical illness that impacts more than 19 million adults in the United States; however, depression is often a condition undiagnosed and untreated in the African American community (Anthony et al., 2015). Studies have produced inconsistent findings regarding the rates of depression within racial groups in the United States. Blacks have lower rates of depression than Whites; however, depression in Blacks is often more disabling, severe, and untreated (Anthony et al., 2015; Wharton et al., 2018). However, a recent study found that older Blacks were disproportionately more at risk for MDD than their White counterparts (Rodriquez et al., 2018).

Anthony et al. (2015) suggested that many factors contribute to African Americans remaining misdiagnosed and untreated for MDD, including a historical mistrust of the medical profession, cultural barriers, and a reliance on family and religious communities when experiencing emotional distress. Many African Americans live in a context of oppression, injustice, discrimination, high crime, decreased access to goods and services, and racism, making them further vulnerable to stress, which can result in depression and other mental disorders (Anthony et al., 2015; Wharton et al., 2018).

Assessing the rate of depression in the Black community is a challenge. However, scholars have highlighted the potential risks that depression presents to Blacks' long-term health. Blacks experience more depressive symptoms, which can increase the risk of cardiovascular disease (CVD). In addition, larger waist-to-hip ratios and increased body fat could be indicators of CVD. A correlation exists between CVD risk and mortality in Blacks. Blacks who experience higher depressive symptomatology are likely to have poorer health outcomes than individuals less depressed (Robbins et al., 2020; Rodriguez et al., 2018; Wharton et al., 2018). Depression can harm a person's total well-being. In addition, work environments and personal and religious views of depression can affect treatment and diagnosis.

Stressful work environments can have a dispiriting effect on individuals, and a proven correlation exists between occupational stress and depressive symptoms. Over an extended period, depressive symptoms can result in occupational distress, reduced engagement, and increased burnout. Therefore, negative occupational attributes predict depressive symptoms (Milstein et al., 2020; Upadyaya et al., 2016).

Scholars have expressed an increased interest in role-related mental illness among police officers, emergency services workers, health professionals, and other community workers; however, there is little research on the clergy's mental health and well-being. The clergy has a demanding role, and in some cases, overutilization of the clergy could correlate with an increased risk of depression. Many African Americans view depression as a personal weakness and believe they can use prayer and faith to mitigate the symptoms (Anthony et al., 2015; Eagle et al., 2019; Edwards et al., 2020). The statistics

of the diagnosis, treatment, and religious views of depression in the Black suggest that many African American clergy suffer in silence because they are keepers and sustainers of culture and first responders.

### **Codependency**

Specific behaviors and general descriptions of codependent individuals often characterize codependency. Some behaviors specific to codependent individuals include attempting to control others' feelings and behaviors, consistently worrying about others' whereabouts and activities, and covering and compensating for embarrassing, inappropriate, or disruptive behaviors. Such behaviors can indicate obsession, attachment, overinvolvement, and enmeshment in others' lives. In addition, codependent behaviors are characteristics of personal boundary distortions and alienation from one's feelings, needs, and desires. Codependent individuals primarily focus on others and look to derive self-purpose through relationships with others (Carr & Buchanan, 1997; Webb, 2009).

Codependency is an affective disorder that scholars first identified more than 60 years ago in researching the interpersonal relationships of the families of individuals abusing alcohol. Codependency is a term often used to describe relationships with individuals with addiction. In its initial stages, scholars used the term to describe the psychological, emotional, and behavioral problems of the spouses and children of individuals with alcohol addiction that enabled them to remain addicted. After the formation of Codependent Anonymous in the 1980s, clinical attention began to focus on individuals with codependent traits and not just those in relationships with substance



abusers. Scholars expanded the term codependency to include individuals exhibiting unhealthy relational patterns due to dysfunctional family practices. Thus, adults exhibiting codependent behavior display learned behaviors passed from generation to generation. Individuals with codependency focus their thoughts, feelings, judgments, and belief systems outwardly. In addition, individuals with codependency struggle with separation and identifying, expressing, and managing their emotions (Cullen & Carr, 1999; Lampis et al., 2017; Webb, 2009).

### **Summary and Conclusions**

Chapter 2 presented the literature review. The chapter included search strategies for the theoretical framework of Bandura's (1977) social learning theory and its principles of observational learning, retaining, imitating, and role modeling (Brown & Treviño, 2014; Garcia et al., 2019; Loes & Warren, 2016; O'Kelley, 2019; Warren & Loes, 2019). In addition, this chapter included in-depth knowledge of UC, which is the ability to take care of others to the detriment of self (Fritz & Helgeson, 1998).

This chapter included discussions of obesity, stress, depression, and codependency, their impact on physical, psychological, and physical well-being, and how they can cause additional psychological and physical distress. Scholars have studied the model variables in isolation; however, none have shown how they work in concert or individually in the lives of senior pastors. Additionally, researchers have not explored how codependency may be a factor in leadership styles and the lives of the clergy.

The study could contribute to a growing body of research on pastors' mental and physical health and the impact of a particular way of being. Additionally, this study could

add to the literature, as little empirical research has focused on pastors' mental and physical health (Edwards et al., 2020; Salwen et al., 2017). Chapter 3 presents the study's methodology, the research design rationale, and the constructs' instrumentation and operationalization.

## Chapter 3: Research Method

### **Introduction**

In this quantitative nonexperimental study, I sought to determine whether stress, obesity, depression, and codependency, individually or in a linear combination, were adequate predictors of UC among African American senior pastors serving congregationally led churches without paid support staff. The results provide much-needed insight into the target population. In addition, the study produced findings that may be useful to pastors and other professional helpers by showing how stress, obesity, depression, and codependency predict UC and influence well-being. In Chapter 3, I describe the study's research design and rationale and methodology, including its target population; sampling procedures; and recruitment, participation, and data collection procedures. I also discussed the data analysis plan, threats to validity, and the ethical procedures for the study.

### **Research Design and Rationale**

I used a quantitative approach with nonexperimental surveys to collect and analyze data for this study. The participants who provided the data completed the survey instruments. Consistent with the study's design, MLR was used to test the hypotheses and determine whether stress, obesity, depression, and codependency were adequate predictors of UC, individually or in a linear combination. MLR is a correlational predictive research design that facilitates an understanding of the relationships that may occur between multiple variables (Rosli et al., 2018). Scholars use MLR to determine the relationship between dependent and multiple independent variables (Rosli et al., 2018).

The predictor (independent) variables were stress, obesity, depression, and codependency; the dependent variable was UC. The BMI, PSS, PHQ-9, and CCS were the instruments used to measure the independent variables. Measurement of the dependent variable was with the revised UCS.

## **Methodology**

### **Population**

The target population for this study was African American senior pastors or lead pastors of congregationally led churches without paid support staff. The participants were male or female pastors in the United States.

### **Sampling and Sampling Procedure**

I used nonprobability purposive or judgmental sampling to recruit participants who met the eligibility criteria and aligned with the study's purpose. Researchers use purposive sampling to select participants based on specific needs and criteria (Creswell & Creswell, 2018). Individuals who did not meet the outlined criteria were not included in the study. Additionally, the data from individuals who completed the surveys but did not fit the eligibility criteria were removed from the study.

Purposive or judgmental sampling is a strategy that is often used in qualitative research; however, quantitative researchers can use the method to recruit participants from unique populations to address the purpose of their study (Creswell & Creswell, 2018). Purposive sampling was appropriate because the study focused on a specific population with specific characteristics. However, one of the weaknesses of purposive sampling is its poor representativeness of the larger population (Burkholder et al., 2016).

Scholars use purposive sampling when they are interested in specific characteristics and populations requiring further research.

I conducted a priori power analysis using G\*Power for multiple regression with four predictor variables. The multiple regression occurred with a medium effect size ( $f^2 = 0.15$ ), an alpha level of .05, and a power level of .95. The results indicated that the study should have a minimum sample size of 129 participants.

### **Procedures for Recruitment, Participation, and Data Collection**

The recruitment process began after I obtained approval from the Walden University Institutional Review Board (no.04-04-44-0732154) to conduct the study per the approved standards, policies, and procedures. The recruitment of the potential participants occurred in several ways. I disseminated a recruitment flyer (see Appendix A) with a brief study overview to spark initial interest. I disseminated flyers via email and text to pastors I know in the United States. In addition, the pastors received a request to refer other pastors in their networks. The recruitment consisted of posting flyers on various social media platforms in the various groups geared to African American preachers and pastors of which I am a member. The flyer presented the eligibility requirements for the study. The pastors who agreed to participate received a SurveyMonkey link to access the eligibility checklist, informed consent form, and surveys.

SurveyMonkey was the platform used to house the demographic questionnaire (see Appendix B), informed consent form, and surveys (see Appendices C–F). The demographics checklist was the screener used to determine eligibility, and the questions

were used to calculate BMI. There was no cost to post the study on SurveyMonkey and no sample size limits. SurveyMonkey required me to provide my name and contact information, the study's title, a brief description of the surveys, participant compensation, an image of the flyer, and the Institutional Review Board study approval number.

The participants completed and submitted the instruments electronically, and I took measures to ensure confidentiality, anonymity, and minimal bias in the responses. The demographic information and surveys did not require the participants' names. The participants were aware of my name and that I was a doctoral student at Walden University conducting the study for my PhD degree. I informed the participants of their right to decline participation and withdraw from the process at any point.

The participants accessed the informed consent and surveys via the SurveyMonkey link. The respondents were aware of the purpose of the study and the anonymity of data collection. I told the participants that completing the instruments would take about 25–30 minutes and require their demographic information, including age, identified gender, race, church setting (rural or urban), years of pastoring, governance style (autonomously led or governed by a larger body), weight, and height. The study did not require a follow-up procedure; there was no need for repeated observation because the participants provided the data and submitted the surveys. I formatted the data on a spreadsheet and uploaded the file into SPSS for analysis after completing the data collection. In addition, I downloaded the collected data on a password-protected personal computer and saved the file on a hard drive and on

Microsoft OneDrive cloud storage. I will retain study data and files for 5 years and then destroy them.

## **Instrumentation and Operationalization of Constructs**

### ***Body Mass Index Scale***

The BMI, also known as Quetelet's index, was named after Adolphe Quetelet, who developed the scale in the mid-19th century. Ancel Benjamin Keys, an American scientist and nutritionist, popularized the BMI scale by inventing K-rations for U.S. soldiers during World War II (Mercadal, 2019). Measuring BMI consists of dividing a person's weight in pounds by height in inches, squaring the number, and multiplying that total by a conversion factor of 703. The BMI has four categories: underweight, healthy, overweight, and obesity. Although BMI measures weight, it does not directly measure body fat. Over the past few decades, the importance of BMI in health studies has become more evident when discussing how body weight, health risk, and longevity correlate (Mercadal, 2019).

Park et al. (2011) focused on the validity and reliability of birth certificate pregnancy weight and height among women enrolled in prenatal Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) programs in Florida in 2005. Pearson's correlation was the statistic used to estimate reliability and sensitivity. Calculation of specificity occurred with WIC data as the reference. The researchers found an overall mean differences plus or minus standard error were  $1.93 \pm 0.04$  kg for weight,  $-1.03 \pm 0.03$  cm for height, and  $1.07 \pm 0.02$  kg/m<sup>2</sup> for BMI. The Pearson's correlation ranged from 0.83 to 0.95, which indicates a strong positive association (p. 853)

BMI is only a screening tool. Therefore, health care providers should not use it to diagnose individuals' body fat or health, as the BMI does not indicate body fat distribution, such as visceral and subcutaneous fat. However, BMI is an easy and cost-effective screening method. Table 1 shows the categories of BMI (Centers for Disease Control and Prevention, 2020; Nafakhi et al., 2021).

**Table 1**

*Body Mass Index (BMI) Categories*

BMI	Status
18.5	Underweight
18.5–24.9	Normal or healthy
25.0–29.0	Overweight
30.0 and above	Obese

*Perceived Stress Scale*

Stress can have an impact on individuals in different ways. In and of itself, stress may not be abnormal or problematic; however, prolonged stress can result in disease and negatively affect the quality of life and life expectancy. Therefore, practitioners created the PSS to determine levels of stress in individuals (Campbell, 2020; Chen et al., 2020; Klein et al., 2016). Developed by Cohen et al. (1983), the PSS is a 5-point Likert scale test and the most widely used psychological instrument for measuring nonspecific perceived stress.

The PSS is a self-report instrument of an individual's thoughts over the last month. The scale measures the respondent's thoughts with 10 items that indicate the degree to which the individual found life situations stressful during the prior month. The survey includes accurate measures of stress answered using the following scale: 0 =



*never*, 1 = *almost never*, 2 = *sometimes*, 3 = *fairly often*, and 4 = *very often*. The scores on the PSS range from 0–40, with higher scores indicating higher levels of perceived stress. The scores in a probability-based U.S. sample were 12.1 and 13.7 in men and women, respectively (Campbell, 2020; Plantinga et al., 2017).

The PSS is a self-report instrument designed for individuals with at least a junior high school education level. The theoretical perspective of the instrument is that multiple levels of perceived stress can affect an individual's experience of stressful events. Scholars have translated and adapted the instrument to more than 30 languages and validated it for diverse populations; therefore, the scale measures global perceived stress (Park & Colvin, 2019). The conformity factor analysis showed that the second-order factor model was an acceptable alternative to the total score of the two-factor PSS. Stress and counter-stress are lower order factors, and perceived stress is higher order (Park & Colvin, 2019). Cronbach's alpha indicated the total scale reliability as 0.72, and the study addressed two main perceived stress factors: distressed (Factor 1) and coping (Factor 2). Distressed had an estimated validity of 0.72, and coping had an estimated validity of 0.70. The intercorrelation coefficient showed a significant correlation at .093 between scores and the second *t*-tests ( $p < 0.0001$ ). The test indicated the reproducibility of the subscales and the whole scale (Khalili et al., 2017).

### ***Patient Health Questionnaire–9***

MDD is one of the leading causes of disability worldwide when focusing on the total number of years lost because of a disability. In addition, MDD correlates with excessive morbidity and mortality. Scholars have used multiple assessment tools to

measure MDD. This study will include the PHQ-9, a scale developed in the 1990s. In trial settings, scholars have found the PHQ-9 a valid outcome measure and an accurate assessment of change in symptom frequency (Daray et al., 2019; Hudgens et al., 2021; Wang et al., 2021).

The PHQ-9 is a nine-item self-reporting measure for screening for depression in primary care settings and detecting MDD in extensive epidemiological studies. The tool is a way to rate the presence and severity of depression using continuous scoring (0–3/item, for a total of 0–27). The PHQ-9 is one of the most commonly used instruments to diagnose the severity of depression. In addition, the PHQ-9 is a measure based on the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.; American Psychiatric Association, 2000) criteria for a major depressive episode and the *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.; *DSM-5*; American Psychiatric Association, 2013) depression symptom criteria for an occurrence in the 2 weeks before screening (Daray et al., 2019; Trotter et al., 2019).

Scores 5, 10, 15, and 20 indicate mild, moderate, moderately severe, and severe depression, respectively. A PHQ-9 cutoff score of 10 or greater indicates major depression, which requires follow-up diagnosis and treatment. The initial internal validity finding resulted from a study sample of 3,000 adult patients whom 62 primary care physicians evaluated for depression. The physicians and other mental health professionals found the PHQ-9 effectiveness for indicating depression with the Structured Clinical Interview for *DSM-5*, Clinician Version within 48 hours of PHQ-9 completion. For the

diagnosis of one or more PHQ disorders,  $\kappa = 0.65$ , overall accuracy = 85%, sensitivity = 75%, and specificity = 90% (Stocker et al., 2021; Trotter et al., 2019).

### ***Composite Codependency Scale***

Marks et al. (2012) developed the CCS, a 19-item, 5-point response scale. In creating the scale, the researchers used items from the Holyoake Codependency Index, the Spann-Fischer Codependency Scale, the Codependency Assessment Tool, and the Codependent Questionnaire. The initial scale had 28 items; however, a factor analysis found nine items loading less than .50 on their factors or cross-loadings of greater than .30. Therefore, the revised CCS omitted those nine items, with 19 items remaining. The 19 items included seven interpersonal controls, six self-sacrifices, and six emotional suppressions. The subsection showed internal consistency, interpersonal control = .80, self-sacrifice = .77, emotional suppression = .83, and total scale = .85.

The sample population consisted of adults from the general community and individuals attending Codependent Anonymous meetings (Marks et al., 2012). The scholars found positive intercorrelation; higher codependency scores were signs of depression, anxiety, and stress. Also, the higher scores correlated with familial dysfunction and lower self-esteem, less emotional expressivity, and lower narcissistic tendencies. In addition, the scale resulted in positive discrimination against the participants attending Codependent Anonymous meetings from the general population. The final analysis showed that the three subscales were independent measures of the underlying construct of codependency.

### *Unmitigated Communion Scale*

The UCS was initially developed by Fritz and Helgeson in 1998 in response to the Extended Personal Attributes Questionnaire (EPAQ). The EPAQ is not a conceptual measure of the construct of UC on patient and spouse adjustment to a first coronary event. The researcher anticipated the unreliability of the EPAQ; therefore, Fritz and Helgeson (1998) developed a new scale to measure UC. In the new scale, respondents indicate the extent to which they agree or disagree (on a 5-point scale) with the eight statements shown in Table 2 (e.g., “I always place the needs of my family above my own” and “I am unable to say no when someone asks for help”).

**Table 2**

*Factor Analysis Results for Fritz and Helgeson’s (1998) Revised Unmitigated Communion Scale*

Statement	Factor loading item total (first- factor) correlation
1. I always place the needs of my family above my own.	.70 .47
2. I cannot be happy unless my family is happy.	.66 .45
3. I have been worried about how my family (my spouse) is getting along without me during my (his/her) hospitalization.	.39 .28
4. I often find myself getting overly involved in others’ problems.	.40 .30
5. I have great difficulty getting to sleep at night when one of my family members is upset.	.55 .39
6. I have difficulty satisfying my own needs when they interfere with the needs of my family	.77 .60
7. I am unable to say no when someone asks me for help.	.72 .53
8. Even when exhausted, I will help a friend	.51 .36

The theoretical purpose of the UCS is to measure UC. The development of the items occurred in response to comments from 96 cardiac patients in a previous study who

seemed concerned about others to an extreme. These patients neglected their health to tend to the needs of others. The scale's psychometric properties underwent evaluation on the entire sample of 96 patients.

The internal consistency of the new scale of UC was .72 for patients and .71 for spouses. A principal-components analysis, followed by varimax rotation, showed two factors with eigenvalues greater than 1 but substantial positive loadings on the first principal component. Table 2 shows the loadings for the patients, along with the correlations of the individual scale items with the total scale.

The first rotated factor was the reason for 36% of the variance in patients and 34% in spouses. This factor consisted of the five items (Items 1, 2, 6, 7, and 8) indicating the general placement of others' needs before one's own. The second factor, which accounted for 15% of the variance in patients and 17% in spouses, consisted of three items (Items 3, 4, and 5) that indicated distress and concern for others. Scholars have replicated the psychometrics in two samples, as discussed in the following paragraphs. This scale did not correlate with two unrelated constructs: health locus of control (Wallston et al., 1976;  $r = .07$ ) or social desirability (Crowne & Marlowe, 1960;  $r = -.14$ ). The scale related to more traditional gender role beliefs for patients (Krause, 1984;  $r = .30$ ,  $p < .05$ ) but not spouses ( $r = .13$ ).

The correlations are unsurprising, as UC can affect gender roles. Scholars have obtained additional reliability and validity information from two other samples. First, 527 college undergraduates completed the UCS. The scale showed good internal consistency ( $\alpha = .71$ ). In that sample, the scale positively correlated with communal orientation to

relationships, which may have had some conceptual overlap (Clark et al., 1987;  $r = .47$ ,  $p < .01$ ) but did not correlate with the unrelated constructs of mastery (Pearlin & Schooler, 1978;  $r = -.01$ ), state-trait anxiety (Spielberger et al., 1970;  $r = .03$ ), or self-esteem (Rosenberg, 1965;  $r = .05$ ). The scale focuses on concerns and worries about others; therefore, it is not surprising that the results showed a modest but significant positive correlation with neuroticism (Guilford et al., 1976;  $r = .12$ ). A sex difference also appeared in this sample,  $F(1, 525) = 5.60$ , as women scored higher ( $M = 3.50$ ) than men ( $M = 3.37$ ),  $p < .05$ . Second, there was a scale administered to a sample of 72 adult women in a study of menstrual symptoms. The scale had good internal consistency ( $\alpha = .71$ ) and 6-week test-retest reliability ( $r = .78$ ).

Helgeson (1993) updated the scale because although the Extended Version of the Personal Attributes Questionnaire contained a UCS, it had low internal consistency and questionable construct validity. Therefore, Helgeson created an eight-item measure of UC to focus on concern for others to the exclusion of the self. Helgeson originally developed the scale for use with cardiac patients.

The scale has undergone modification with one item added and revised item wording for increased generalizability to a wide array of populations (Helgeson, 1993). For example, "I have been worried about how my spouse is getting along without me during my hospitalization" became "I worry about how other people get along without me when I am not there." The respondents indicated their agreement with each item on a 5-point bipolar scale (e.g., I always place the needs of others above my own; I cannot say no when someone asks me for help). Previous research has shown that this scale,

including the revised version used in the proposed study, has an acceptable internal consistency ranging from .7 to .8 and high test-retest reliability (Fritz & Helgeson, 1998). This scale is a way to assess how individuals place others' needs before their own and express distress and concern for others.

Since the conception and implementation of the updated UCS, scholars have used the scale in numerous peer-reviewed journal articles. In one study, Wang et al. (2010) measured UC with the revised UCS. Questions included, "I often worry about others' problems" and "I always place the needs of others above my own." The participants answered items on a 5-point scale, ranging from 1 (strongly disagree) to 5 (strongly agree). A single index was computed by averaging nine items within subjects, with higher scores indicating a higher degree of UC ( $\alpha = .74$ ).

Horne et al. (2020) conducted a study (N = 486) with Amazon Mechanical Turk to validate the UC item (and several other items from pairfam) by comparing the item against the well-established UCS (Fritz & Helgeson, 1998) and distinguishing it from the related construct of communal motivation with the Communal Strength Scale (Mills et al., 2004) through a series of CFAs with guidelines from Kline. The scholars ran the validation study before computing the analyses for the study. The results of the first conformity factor analysis showed that the pairfam UC item had strong construct validity, with a standardized factor loading of .73 (which was the highest loading item on the factor, with the other indicators ranging from .64 to .70) on the UC latent variable (Horne et al., 2020).

Moreover, the second conformity factor analysis showed a pairfam item that was empirically distinct from communal motivation, as it was a significantly stronger indicator of UC (standardized factor loading .82) than communal motivation (standardized factor loading .14; Horne et al. al., 2020). The supplement provides further details of the Mechanical Turk sample and this validation process (see Appendix SC in the online supplemental materials). All the instruments have well-established psychometric qualities and were suitable as measures for the critical variables in this study.

### **Data Analysis Plan**

The RQ of this study was, Are stress, obesity, depression, and codependency adequate predictors, individually or in a linear combination, of UC among Black pastors serving congregationally led churches without the benefit of paid support staff? The hypotheses were.

*H*<sub>0</sub>1: Stress, as measured with the PSS, is not an adequate predictor of UC as measured with the UCS, among Black senior pastors serving congregationally led churches without paid support staff.

*H*<sub>A</sub>1: Stress, as measured with the PSS, is an adequate predictor of UC, as measured with the UCS, among Black pastors serving congregationally led churches without paid support staff.

*H*<sub>0</sub>2: Obesity, as measured via BMI, is not an adequate predictor of UC, as measured with the UCS, among Black senior pastors serving congregationally led churches without paid support staff.



*H<sub>A2</sub>*: Obesity, as measured via BMI, is an adequate predictor of UC, as measured with the UCS, among Black pastors serving congregationally led churches without paid support staff.

*H<sub>03</sub>*: Depression, as measured with the PHQ-9, is not an adequate predictor of UC, as measured with the UCS, among Black senior pastors serving congregationally led churches without paid support staff.

*H<sub>A3</sub>*: Depression, as measured with the PHQ-9, is an adequate predictor of UC, as measured with the UCS, among Black senior pastors serving congregationally led churches paid support staff.

*H<sub>04</sub>*: The CCS is not an adequate predictor of UC, as measured with the UCS, among Black senior pastors serving congregationally led churches without paid support staff.

*H<sub>A4</sub>*: Codependency, as measured with the CCS, is an adequate predictor of UC, as measured with the UCS, among Black senior pastors serving congregationally led churches without paid support staff.

*H<sub>05</sub>*: When in a linear combination, stress, obesity, depression, and codependency are not adequate predictors of UC among Black pastors serving congregationally led churches without paid support staff.

*H<sub>A5</sub>*: When in a linear combination, stress, obesity, depression, and codependency are adequate predictors of UC among Black pastors serving congregationally led churches without paid support staff.

I used the SPSS Statistics (IBM Corp., 2020) to analyze data. Before proceeding with the analysis, I screened the data for missing values. I cleaned the data, determined the outliers, and entered the data into SPSS. I performed MLR to address the stated RQs and associated hypotheses (see Creswell & Creswell, 2018). By performing an MLR, I was able to assess whether the independent variables were predictors of the dependent variable (criterion). An MLR is the method used to determine the relationships among a set of interval/ratio predictor variables on an interval/ratio criterion independent variable.

The study included assessments of the assumptions of multiple regression (i.e., linearity, homoscedasticity, and absence of multicollinearity). Linearity assumes a straight-line relationship between the predictor variables and the criterion variable. Homoscedasticity is the assumption of the normal distribution of scores about the regression line. The assessment of linearity and homoscedasticity will occur by examining a scatterplot, with variance inflation factors (VIF) used to assess multicollinearity. VIF values over 10 will indicate the presence of multicollinearity (Statistics Solutions, 2013).

### **Threats to Validity**

There could have been several threats to this study's validity. Validity consists of drawing meaningful inferences from the study's results; internal validity consists of the research procedure. Additionally, external validity consists of generalizing the sample population or drawing inaccurate conclusions when analyzing the data (Creswell & Creswell, 2018).

**External Validity**

This study had a clearly defined and limited population. Limiting the study to a particular population might not produce results generalizable to other groups within or outside the targeted population. The results serve as an opportunity for speculative inferences for other similar caregiving populations; however, scholars should view such inferences with caution. The study provided a baseline for further research; however, validating future research should occur through appropriate protocols. In addition, the study provided information on areas that were not the study's focus.

**Internal Validity*****Sample Size***

To determine the sample size, I conducted a priori power analysis for multiple regression with G\*Power software. The results indicated that at least 129 participants were necessary. The sample size has significance because it indicates whether there is enough power to detect a significant predictive relationship within the population (Creswell & Creswell, 2018).

***Missing Data***

Missing data is expected in research, especially when collecting data through self-reporting methods such as surveys and questionnaires. Self-report methods present unique challenges. Missing data could result from unintentional or intentional skipping of items or data entry errors. Missing data could result in biased parameter estimates (Grigsby & McLawhorn, 2019). The data analysis will not include surveys with missing data to address the threat of missing data.

### ***Regression Assumptions***

One of the most common problems of MLR for analysis is multicollinearity. Violating the assumptions underlying the procedure in MLR could result in errors; therefore, it is necessary to meet the assumptions to prevent errors. The SPSS tools of variance swelling value, condition index, and tolerance value will be the statistics used to detect multicollinearity problems (Yasar et al., 2019).

### ***Reliability of Instruments***

The measurement instruments could threaten the proposed study's internal validity. Mitigating the threat in this study will entail using psychometrically sound instruments with proven validity and reliability. However, I have not found any studies to focus on the population under study, including the UCS, CCS, PSS., or PHQ-9.

### ***Ethical Procedures***

The American Psychological Association's (2017) *Ethical Principles of Psychologists and Code of Conduct* provides a guide for psychological researchers to follow. The expectation is that research commences per the guidelines. The goal of the principles is to protect the participants and maintain the integrity of the research. I protected the participants' demographics during this study and did not share their personal information with anyone not directly involved in the research. The participants received an informed consent form before they advanced to the questionnaires. A password-protected computer and a cloud server were the sources used to maintain the data. I will keep the study data for 5 years and then destroy them. The participants

received a link to the surveys, information about the purpose of the study, and how to complete the instruments via SurveyMonkey.

### **Summary**

I used a quantitative, nonexperimental survey research approach to determine whether stress, obesity, depression, and codependency, individually or in a linear combination, were adequate predictors of UC among African American senior pastors serving congregationally led churches without the benefit of paid staff. Purposive or judgmental sampling was used to recruit members of the target population. To answer the RQ, I performed MLR and t-test analyses and computed correlation coefficients in SPSS.

This study had limitations, as the results might not be generalizable to populations within or outside the targeted population. In addition, the data collection occurred using a self-report method; therefore, missing and incorrect data could have resulted from multiple sources. Lastly, the data collection commenced with measurement instruments with validity and reliability. This study is among the first to include the UCS, CCS, PSS, and PHQ-9. Therefore, it is necessary to conduct further studies with these instruments to confirm the validity and reliability of this study. Chapter 4 will present the results.

## Chapter 4: Results

### **Introduction**

The purpose of this quantitative nonexperimental study was to determine whether stress, obesity, depression, and codependency, individually or in a linear combination, were adequate predictors of UC among African American senior pastors who pastor congregationally led churches without the benefit of paid support staff. This chapter begins with information on data collection. I also report baseline descriptive statistics and sample demographics. Finally, I present the survey results to answer the RQ.

### **Data Collection**

I conducted simple regression to test Hypotheses 1–4 and the standard MLR, using the enter method, to test Hypothesis 5. The enter method involves simultaneously entering all independent variables (predictors) into the model. Evaluation of the variables centered on what contributed to the prediction of the dependent variable, which differed from the predictability provided by the other predictors in the model. The F test was the statistic used to assess whether the set of independent variables, collectively, were predictors of the dependent variable. I used and reported the  $R^2$ —the multiple correlation coefficient of determination—to determine how much the independent variables result in variance in the dependent variable. The t-test was the means to assess the significance of each predictor, and the beta coefficient helped determine the extent of prediction for each

independent variable. For significant predictors, every one-unit increase in the predictor correlates with an increase or decrease in the dependent variable by the number of unstandardized beta coefficients.

Data collection started on April 18, 2022, and ended on July 21, 2022; it took 93 days to meet the target number of participants needed for the study. Initially, I disseminated the flyer (see Appendix A) via Facebook. I targeted Facebook platforms geared to pastors, especially those specific to African American clergy. I provided a link to the SurveyMonkey platform along with the flyer. After reading the first document, the informed consent, the pastors clicked “next” if they chose to participate in the study and advanced to the demographic checklist (see Appendix B). After completing the checklist, the participant clicked “next” to complete the four surveys (see Appendices C–F). One hundred and seventy-two pastors filled out the survey. I selected those who only pastored congregationally led churches, identified as African American, did not have paid support staff, and had not missed answers. The final sample size was 133.

## **Results**

### **Participant Characteristics**

The study included 133 pastors; 108 (81%) identified as male, and 25 (19%) identified as female. Table 3 shows the health characteristics of the participants specific to their BMI and level of depression. The BMI scores ranged from 19.76 to 61.43, averaging 32.60 ( $SD = 7.62$ ). As shown, most participants’ BMIs put them in the overweight or obese ranges. Most participants (60%;  $n = 80$ ) did not report any form of

clinical depression; 30% ( $n = 41$ ) reported mild levels of depression. Less than 10% of participants reported moderate or moderately severe forms of depression.

**Table 3**

*Participants' Health Characteristics*

Characteristic	<i>n</i>	%
<b>Body mass index</b>		
Normal	18	13.5
Overweight	37	27.8
Obese	78	58.6
<b>Depression</b>		
None	80	60.2
Mild	41	30.8
Moderate	10	7.5
Moderately severe	2	1.5

*Note.*  $N = 133$ .

The participants ranged in age from 28 to 75, averaging 53.31 years ( $SD = 11.13$ ; see Table 4). The reported years of pastoring ranged from 4 to 49 years, with an average of 17.33 years ( $SD = 10.50$ ). There was a wide range of pastoral experiences among the sample.

**Table 4**

*Participants' Background Characteristics*

Characteristic	Min	Max	<i>M</i>	<i>SD</i>
Age	28	75	53.31	11.13
Years of pastoring	4.00	49.00	17.33	10.50

*Note.*  $N = 133$ .



## **Descriptive Statistics**

Table 5 shows the descriptive statistics for the following scaled variables: UC, perceived stress, depression, composite codependency, and the self-sacrifice subscale of composite codependency. UC ranged from 1 to 5 (the highest possible score), with average scores (mean) of 3.35 ( $SD = 1.09$ ). The perceived stress scores also ranged from 1 to 5 (the highest possible score), with an average score (mean) of 2.97 ( $SD = 0.45$ ). For depression, the scores ranged from 1 to 3, with a mean score of 1.36 ( $SD = 0.51$ ). The composite codependency scores ranged from 1 to 4, with a mean score of 2.89 ( $SD = 0.92$ ). Finally, the self-sacrifice subscale scores ranged from 1 to 5 (the highest possible score), with a mean score of 3.30 ( $SD = 0.90$ ).

## **Model Assumptions**

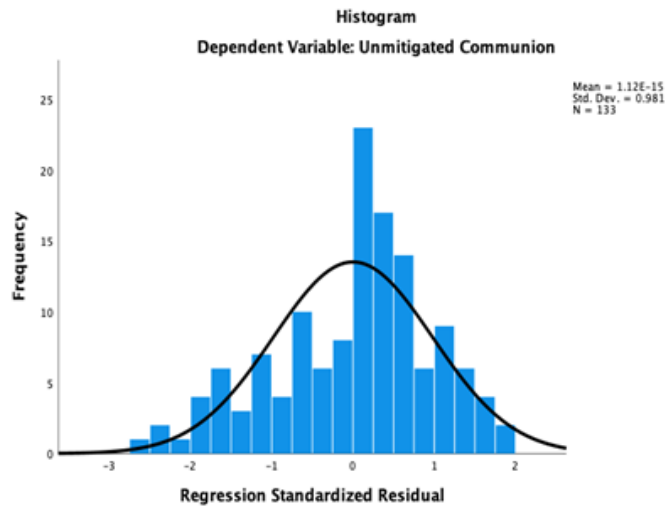
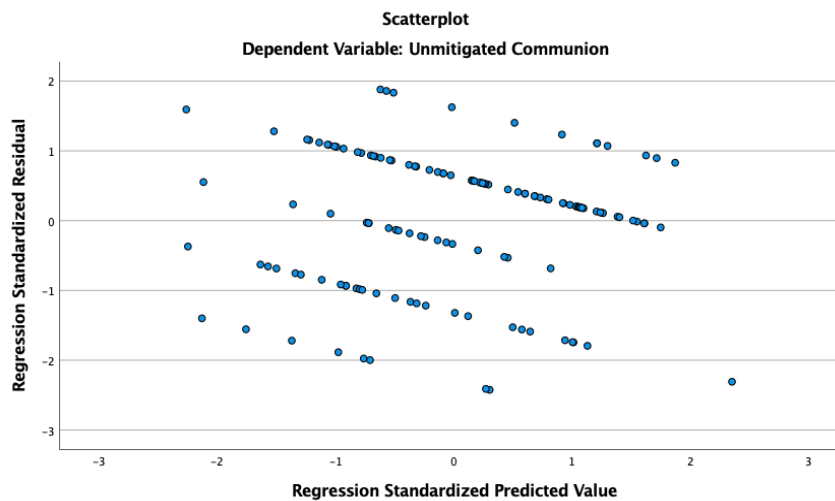
### ***Simple Linear Regression***

I used simple linear regression to assess Hypothesis 1–4. Simple linear regression is a statistic used to predict one variable using another variable and determine the numerical relationship between two variables. The assumption of normality was met after observing the histograms. The assumption of normality requires that the residuals from the model be normally distributed. Linearity assumes that the relationship between the independent and dependent variables is linear. The linearity assumption was met after viewing and observing the normal P-P plot of regression standardized residuals; the relationships were linear. Homoscedasticity was not met. Homoscedasticity means that for all observations, the variance of the residual is the same.

### ***Multiple Linear Regression***

I used multiple regression to examine whether, when in a linear combination, stress, obesity, depression, and codependency were adequate predictors of UC among African American pastors serving congregationally led churches without paid support staff. A statistically significant  $F$  value for the complete model provided statistical support for Hypothesis 5. I tested the assumptions of MLR before starting the statistical analysis.

The Mahalanobis distance scores identified no statistical outliers; therefore, no participant was removed from this statistical analysis. I visually inspected a histogram and normal Q-Q plots on the study's criterion variable to check for deviations from the normality assumption. The normality assumption was met. I developed the plot of residuals by performing a regression analysis to confirm multicollinearity. All assumptions of multiple regression were met. As shown in Table 7, there were no threats of multicollinearity. The tolerance (normal range is above 0.20) and variance inflation factors statistics (normal ranges are below 4.00) indicated that all variables fell within normal ranges. The standardized regression residuals formed a normal distribution, which shows adherence to the normality assumption of regression (see Figure 1). Thus, the homoscedasticity assumption was not met (see Figure 2).

**Figure 1***Hypothesis 5: Normality of Residuals***Figure 2***Hypothesis 5: Homoscedasticity*

Skewness indicates the symmetry of the distribution. Normal distributions have a skewness value of 0, which indicates perfect symmetry. Skewness between -0.5 and 0.5 means the data are relatively symmetrical. The data are moderately skewed if the

skewness is between -1 and -0.5 or between 0.5 and 1. As shown in Table 5, all skewness scores for all measures fell within the appropriate range. The skewness values for the UC, perceived stress, composite codependency, and self-sacrifice measures were negative, indicating that most scores across all scales and subscales tended to be on the higher end of the score distributions, with relatively few extremely low scores being reported. The depression (patient health) measure had a positive skewness value, which indicates that most scores tended to be on the lower end of the score distribution, with relatively few extremely high scores being reported.

**Table 5**

*Descriptive Statistics of Scaled Variables*

Variable	Min.	Max.	<i>M</i>	<i>SD</i>	Skewness	Kurtosis
Unmitigated communion	1.00	5.00	3.35	1.09	-0.58	-0.66
Perceived stress	1.00	4.00	2.97	0.45	-0.86	3.84
Depression: Patient health	1.00	3.00	1.36	0.51	0.93	-0.40
Composite codependency	1.00	4.00	2.89	0.92	-0.21	-1.04
Self-sacrifice subscale	1.00	5.00	3.30	0.90	-0.47	-0.47

*Note.*  $N = 133$ .

Kurtosis indicates the steepness of the distribution curve, with normal distributions having a 0 value. As shown in Table 5, kurtosis values for nearly all measures fell between -3 to +3. The kurtosis value of 3.84 for perceived stress indicates that the distribution of scores is extremely leptokurtic or narrower than what is expected of a normal distribution. The other negative kurtosis values indicate slight platykurtic

distributions slightly wider than expected for a normal distribution. The reported skewness and kurtosis values indicate that the sample distribution approximates a normal distribution. Thus, a parametric statistical analysis, specifically MLR, was appropriate for use in this study.

### **Scale Reliabilities**

Table 6 shows the internal reliabilities (Cronbach's  $\alpha$ ) for the following measures: UC, perceived stress, depression, composite codependency, and the self-sacrifice subscale of composite codependency. All measures had strong internal reliability as indicated by Cronbach's alphas ranging from 0.71 to 0.86 (see Table 6). The CCS had the strongest reliability ( $\alpha = 0.86$ ), whereas the UCS had the lowest reliability ( $\alpha = 0.71$ ).

Notably, the PSS with the original 10 items had an extremely low reliability ( $\alpha = 0.15$ ). Therefore, subsequent analyses that include perceived stress used the composite score, including seven and not 10 items. I removed the three items with the lowest intercorrelations, which increased internal reliability.

**Table 6**

*Scale Reliability for the Study Measures*

Variable	Number of scale items	Cronbach's $\alpha$
Unmitigated communion	9	0.71
Perceived stress	10	0.15
Depression: Patient health	7	0.77
Composite codependency	10	0.84
Self-sacrifice subscale	19	0.86

### Test of Hypotheses

The study had one RQ and five hypotheses. I used simple regression to analyze Hypotheses 1–4 and MLR to analyze Hypothesis 5.  $H_{01}$  predicted that stress, as measured with the PSS, was not a statistically significant predictor of UC, as measured with the UCS, among African American pastors serving congregationally led churches without paid support staff. Table 7 shows that perceived stress is not a statistically significant predictor of UC ( $\beta = 0.10$ ,  $t = 1.14$ ,  $F = 1.30$ ,  $p = 0.26$ ).  $H_{01}$  was retained, and  $H_{A1}$  was set aside, as stress is not a significant predictor of UC.

**Table 7**

*Analysis of Variance<sup>a</sup> for Perceived Stress*

Model	SS	df	MS	F	Sig.
1. Regression	1.533	1	1.553	1.300	<.001 <sup>b</sup>
Residual	156.537	131	1.195		
Total	156.090	132			

*Note.* a. Dependent variable: unmitigated communion; b. Predictors: (constant) perceived stress.

$H_{02}$  predicted that obesity, as measured via BMI, is not an adequate predictor of UC, as measured with the UCS, among African American pastors serving congregationally led churches without paid support staff. Table 8 shows that obesity (as measured by BMI) was not a statistically significant predictor of UC ( $\beta = 0.08$ ,  $t = 0.95$ ,  $F = 0.906$ ,  $p = 0.34$ ). Thus, the  $H_{02}$  is retained, and the  $H_{A2}$  is set aside; obesity is not a significant predictor of UC.

**Table 8***Analysis of Variance<sup>a</sup> for Body Mass Index*

Model	SS	df	MS	F	Sig.
1. Regression	1.086	1	1.085	1.906	<.001 <sup>b</sup>
Residual	157.004	131	1.199		
Total	156.090	132			

*Note.* a. Dependent variable: unmitigated communion; b. Predictors: (constant) body mass index.

$H_{03}$  predicted that depression, as measured with the PHQ, is not an adequate predictor of UC, as measured with the UCS, among African American senior pastors serving congregationally led churches without paid support staff. As shown in Tables 9 and 10, the results showed that the regression model is statistically significant, indicating that depression is a statistically significant predictor of UC ( $\beta = 0.21$ ,  $t = 2.43$ ,  $F = 5.922$ ,  $p < 0.05$ ). Specifically, every one-unit increase in depression is associated with a 0.21 increase in pastors' UC scores. Thus, the  $H_{03}$  is set aside, and the  $H_{A3}$  is retained; depression is a statistically significant predictor of UC.

**Table 9***Analysis of Variance<sup>a</sup> for Depression: Patient Health*

Model	SS	df	MS	F	Sig.
1. Regression	6.838	1	6.838	5.922	<.016 <sup>b</sup>
Residual	151.252	131	1.155		
Total	158.090	132			

Note. a. Dependent variable: unmitigated communion; b. Predictors: (constant), depression: patient health.

**Table 10**

*Coefficients<sup>a</sup>*

Model	Unstandardized coefficients		Standardized coefficient	<i>t</i>	Sig.	95% CI	
	B	Std. error	$\beta$			Lower bound	Upper bound
(Constant)	2.742	0.265		10.336	0.0000	2.217	3.266
Depression: Patient health	03444	0.182	0.208	2.434	0.016	0.083	0.805

Note. a. Dependent variable: unmitigated communion. Model:  $p = .016$ ,  $R^2 = .208$ .

$H_04$  predicted that codependency, as measured with the CCS, is not an adequate predictor of UC, as measured with the UCS, among African American senior pastors serving congregationally led churches without paid support staff. The results in Tables 11 and 12 showed that the regression model is a statistically significant predictor ( $\beta = 0.35$ ,  $t = 4.34$ ,  $F = 18.813$ ,  $p < 0.001$ ).

Codependency accounts for about 35% of the variance in UC. Thus, the  $H_04$  is set aside and the  $H_{A4}$  is retained; codependency is a statistically significant predictor of UC. Specifically, every one-unit increase in codependency is associated with a 0.35 increase in pastors' UCS scores.



**Table 11***Analysis of Variance<sup>a</sup> for Composite Codependency*

Model	SS	df	MS	F	Sig.
1. Regression	19.852	1	19.852	18.813	.016 <sup>b</sup>
Residual	138.238	131	1.055		
Total	158.090	132			

*Note.* a. Dependent variable: unmitigated communion; b. Predictors: (constant), composite codependency.

**Table 12***Coefficients<sup>a</sup>*

Model	Unstandardized coefficients		Standardized coefficient	<i>t</i>	Sig.	95% CI	
	B	Std. error	$\beta$			Lower bound	Upper bound
(Constant)	2.119	0.297		7.146	0.000	1.532	2.706
Composite: CCS.	0.424	0.098	0.354	4.337	0.000	0.231	0.617

*Note.* a. Dependent variable: unmitigated communion. Model:  $p = 0.00$ ,  $R^2 = .354$ .

$H_{05}$  predicted that when in a linear combination, stress, obesity, depression, and codependency are inadequate predictors of UC among African American pastors serving congregationally led churches without paid support staff. As shown in Tables 13 and 14, the model contained stress, obesity, depression, and codependency as predictors of UC, explaining about 16% ( $R^2 = 0.16$ ) of the variance in UC, which was a statistically significant amount of explained variance ( $F(4, 128) = 5.86$ ,  $F = 5.860$ ,  $p < .001$ ).

**Table 13***Model Summary*

Model	<i>R</i>	<i>R</i> <sup>2</sup>	Adjusted <i>R</i> <sup>2</sup>	<i>SE</i>	Durbin-Watson
1	.393 <sup>a</sup>	0.155	0.128	1.02172	2.259

*Note.* a. Predictors: (constant), composite codependency, BMI, perceived stress, depression: patient health. b. Dependent variable: unmitigated communion.

**Table 14***Analysis of Variance<sup>a</sup>*

Model	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	Sig.
1. Regression	24.468	4	6.177	5.860	.001 <sup>b</sup>
Residual	133.622	128	1.044		
Total	158.090	13			

*Note.* a. Dependent variable: unmitigated communion; b. Predictors: (constant), composite codependency, BMI, perceived stress, depression: patient health.

As shown in Table 15, codependency remained the sole statistically significant predictor of UC when all other variables were included simultaneously in the multiple regression analysis,  $\beta = 0.35$ ,  $t = 3.67$ ,  $p < .001$ . Specifically, every one-unit increase in codependency is associated with a 0.42 score increase in pastors' UC scores. Perceived stress was a statistically significant predictor of IC ( $\beta = 0.17$ ,  $t = 2.02$ ,  $F = 5.860$ ,  $p < .005$ ), such that high perceived stress was associated with high UC scores. Thus, the  $H_{05}$  is retained, and  $H_{A5}$  is set aside. Stress, obesity, depression, and codependency are not

adequate statistically significant predictors of UC in the linear combination. Notably, when all the variables are entered simultaneously in the model, including those that were not statistically significant individually, it may lessen the predictive ability of the significant predictors.

**Table 15***Coefficients<sup>a</sup>*

Model	Unstandardized coefficients		Standardized coefficients	<i>t</i>	Sig.	95% CI for B		Collinearity statistics		
	B	Std. Error	$\beta$			Lower bound	Upper bound	Part	Tolerance	<i>VF</i>
1. (Constant)	-0.743	1.399		-0.531	0.596	-3.511	2.027			
Perceived stress	0.767	0.379	0.168	2.023	0.045	-0.017	1.518	0.143	0.954	1.049
BMI	0.008	0.012	0.059	0.712	0.478	-0.015	0.032	0.026	0.960	1.041
Depression: patient health	0.093	0.204	0.043	0.454	0.650	-0.311	0.497	0.066	0.722	1.385
Composite codependency	0.401	0.350	0.350	0.670	0.000	-0.193	.0645	0.037	0.724	1.380

### **Summary**

In this study, I used survey data from 133 African American seniors pastor to determine whether stress, obesity, depression, and codependency, individually or in a linear combination, were adequate predictors of UC among African American senior pastors who pastor congregationally led churches without the benefit of paid support staff individually or in the linear combination. Chapter 5 will provide a discussion of the strengths and limitations of this study. I will describe the results and findings regarding the theoretical framework of social learning theory, which indicates that individuals learn through observation, imitation, and modeling (Bandura, 1977; Kretchmar, 2019). Using social learning theory, the study presents guidance on the importance of modeling behaviors that provide the best self-care practices and developing a culture within the African American pastoring community that stresses the importance of soul care.

## Chapter 5: Discussion, Conclusions, and Recommendations

### **Introduction**

In this quantitative nonexperimental study, I sought to determine whether stress, obesity, depression, and codependency, individually or in a linear combination, were adequate predictors of UC among African American senior pastors serving congregations that are congregationally led without the benefit of paid support staff. Simple regression and MLR were used to analyze data. I used the UCS to measure UC, the PSS to measure stress, the BMI scale to measure obesity, the PHQ-9 to measure depression, and the CCS to measure codependency. The independent variables were stress, obesity, depression, and codependency, and the dependent variable was UC.

The study helps to address gaps in the literature, which showed a lack of examination of UC in a population such as pastors. A growing body of research has focused on how pastors fail to provide self-care and continuously neglect themselves to care for the needs of others (Walther et al., 2015). However, according to my review of the literature, no researchers have examined behaviors that might predict UC in pastors, especially African American pastors. Pastors who take care of others to their detriment demonstrate UC, an imbalance characterized as the capacity to provide support for others and the inability to request or receive help to support oneself (Helgeson et al., 2015). To a large extent, pastors remain underrepresented in clinical research studies and are a vulnerable group regarding life stressors (Edwards et al., 2020; Helgeson et al., 2015; Salwen et al., 2017; Walther et al., 2015). Therefore, I found it appropriate to look at

some possible predictors of UC in African American pastors who do not have the benefit of paid support staff.

### **Interpretation of the Findings**

The peer-reviewed journal articles presented in Chapter 2 showed behaviors and factors that adversely affect the lives of African Americans pastors and others in the helping field. However, in reviewing the literature I found that no scholars have investigated predictive factors in individuals who demonstrate high UC, especially those in the clergy community or other fields where individuals are considered professional helpers or first responders. I used codependency as a variable in this study, which researchers have rarely used outside of the addiction community. The study showed that depression and codependency were factors in the study participants' lives and were statistically significant predictors of UC. The results aligned with research showing that obesity and stress are significant issues in the daily lives of pastors, although they were not statistically significant predictors of UC individually. The results further showed that in a linear combination, obesity, stress, depression, and codependency were statistically significant predictors of UC in African American senior pastors without the benefit of paid support staff.

In Chapter 2, I also discussed social learning theory (Bandura, 1977), which was this study's theoretical framework. According to SCT, role modeling enables individuals to learn what to do and how to behave and, as a result, emulate the behaviors they observe (Garcia et al., 2019). Many individuals are not ethically self-sufficient; therefore, they look outside themselves to individuals who exhibit ethical leadership for guidance.

The social learning process commences when observers look to others for modeled behaviors. Active role models capture the observer's attention based on several paradigms, including nurturance, competence, and power (Brown & Treviño, 2014). Observational learning, imitation, and modeling could explain how pastors learn and internalize the behaviors they witness, thereby influencing how and why pastors engage in relationships with their practitioners in ways that could be detrimental to their health.

The SCT was a vital component of the study because it provided a basis for understanding the participating pastors' behaviors. Also, by using the SCT, I was able to study the influence of multiple determinants in pastors' pastoring styles. I used the SCT to indicate how pastors adopt behaviors that could put them in emotional and physical crisis. The theory was essential to this study because it helped me make sense of specific behavioral patterns, which could be catalysts for multiple health concerns.

### **Limitations of the Study**

The limitations of the study include the study design, including instrumentation, and sample size. Participant recruitment involved nonprobability purposive or judgmental sampling. Quantitative researchers use purposive sampling when they have a particular purpose and when the specific population addresses the needs of the study (Burkholder et al., 2016; Creswell & Creswell, 2018). Researchers use nonprobability purposive sampling when they are interested in the characteristics of a specific group. This sampling technique was appropriate for this quantitative study because it enabled me to use my judgment in selecting specific cases to address the study's needs.



A weakness of purposive sampling is that the sample might not represent the larger population (Burkholder et al., 2016). Therefore, I had to be mindful of the potential limitation of selection bias and bias with self-reporting measures. Selection bias was challenging to address because of the study's focus on a specific population that was hard to reach. I addressed the possible bias of self-reporting measures by not asking for personal identifying information and reassuring the participants that all information provided would be confidential. I used standard, previously validated measures with demonstrated strong reliability and validity to further mitigate bias. Controlling the threat to instrumentation consisted of administering the same instrument to all the participants for uniformity in procedures.

I conducted a priori power analysis using G\*Power for multiple regression with four predictor variables. The multiple regression occurred with a medium effect size ( $f^2 = 0.15$ ), an alpha level of .05, and a power level of .95. The results indicated a minimum sample size of 129. Of the 172 pastors who completed the survey, I selected participants who only pastored congregationally led churches, identified as African American, did not have paid support staff, and had not skipped answers, reducing the sample size to 133 individuals.

### **Recommendations**

There are several recommendations for further research. Researchers could expand the study to examine and determine the setting in which a pastor has influence. The study could include pastors of other ethnic groups to examine if the results differ. In

addition, scholars could expand the population to others working in the helping field to see if the results are similar, different, or the same.

### **Implications**

The research study could provide clergy and other helping professionals with an understanding of the importance of soul care. This study could inform professional practice with practical applications to contribute to positive social change. Clergy could use the results to understand that obesity, stress, depression, and codependency in linear combination are statistically significant predictors of UC. Teachers, nurses, pastors, counselors, and other professional helpers could use the study's results to understand the significance of balancing their private and personal life. Additionally, the study could be a way to inform individuals who supervise professional helpers and educational institutions of some of the dangers of UC and the importance of creating an environment where soul care is not an option.

### **Conclusion**

When conducting the literature review, I found little research geared toward the health and well-being of pastors, especially African American pastors. There was significant research about how pastors care for others and not the importance of providing care for themselves. Pastors are not immune to the stressors that impact other professional helpers. For example, multiple chronic diseases disproportionately affect clergy (Salwen et al., 2017). A pastor's psychological and physical health can significantly impact the church, the community, and the nation (Hough et al., 2018; Salwen et al., 2017; Webb & Bopp, 2017). Many pastors face unrealistic expectations,

and if they try to live up to them, they might compromise their physical and psychological well-being. Self-care is an intentional, proactive act that results in personal care. Proper soul care occurs when individuals care for their physical, mental, emotional, spiritual, and relational needs (Poppa, 2019).

Many pastors cater to others but often do not attend to their own needs. Pastors might settle for what crumbs while giving loaves to their congregants (Vaccarino & Gerritsen, 2013). This study showed that UC might unduly impact pastors. Although obesity and stress were not statistically significant predictors in individual combinations, most of the pastors in the study were obese and had high-stress levels. However, the study did show that depression and codependency in linear combination were statistically significant predictors individually. In addition, obesity, stress, depression, and obesity, when in a linear combination, were statistically significant predictors of UC. The results suggest that African American pastors need to learn to pastor differently, which could, in turn, help them take better of themselves. Also, the study indicates that older individuals must model and show younger pastors the importance of soul care.

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## Appendix A: Recruitment Flyer

## **Online survey study seeks participants: African American Senior Pastors**

There is a new study called *Stress, Obesity, Depression, and Codependency as Predictors of Unmitigated Communion in African American Pastors* that could help African American senior pastors better understand the predictors of unmitigated communion and the to provide appropriate self-care. For this study, you are invited to fully complete four instruments.

This survey is part of the doctoral study for Troy T. Johnson, a Ph.D. student at Walden University.

### **About the study:**

- Four online surveys that may take 25–35 minutes to complete.
- All surveys must be fully completed.
- To protect your privacy, no names will be collected.

### **Volunteers must meet these requirements:**

- 18 years old or older
- African American Senior Pastor:
  - ✓ Pastors who pastor churches that are congregationally led or self-governed.
  - ✓ Pastors who do not have paid ministerial support staff.
  - ✓ Pastoring for 2 or more years.

## Appendix B: Demographic Checklist

1. Ethnicity \_\_\_\_\_
2. Gender \_\_\_\_\_
3. Age \_\_\_\_\_
4. Church: \_\_\_\_\_ Self-governed/congregationally led  
\_\_\_\_\_ Governed by a larger body
5. Years pastoring \_\_\_\_\_
6. Is your church congregationally led, or is it governed by a larger affiliation?  
\_\_\_\_\_
7. Do you have paid pastors other than yourself? \_\_\_\_ yes \_\_\_\_ no
8. Weight \_\_\_\_\_
9. Height \_\_\_\_\_

- Appendix C: Revised Unmitigated Communion Scale

### Items

Instructions: Using the scale below, place a number beside each statement that indicates the extent to which you agree or disagree. Think of the people close to you-friends or family- in responding to each statement.

- | Strongly<br>disagree | Slightly<br>disagree | Neither<br>agree nor disagree | Slightly<br>agree | Strongly<br>agree |
|----------------------|----------------------|-------------------------------|-------------------|-------------------|
| 1                    | 2                    | 3                             | 4                 | 5                 |
| _____                |                      |                               |                   |                   |
|                      | _____                |                               |                   |                   |
|                      |                      | _____                         |                   |                   |
|                      |                      |                               | _____             |                   |
|                      |                      |                               |                   | _____             |
| _____                |                      |                               |                   |                   |
|                      | _____                |                               |                   |                   |
|                      |                      | _____                         |                   |                   |
|                      |                      |                               | _____             |                   |
|                      |                      |                               |                   | _____             |
1. I always place the needs of others above my own.
  2. I never find myself getting overly involved in others' problems. (R)
  3. For me to be happy, I need others to be happy.
  4. I worry about how other people get along without me when I am not there.
  5. I have no trouble getting to sleep at night when other people are upset. (R)
  6. It is impossible for me to satisfy my own needs when they interfere with the needs of others.
  7. I can't say no when someone asks me for help.
  8. Even when exhausted, I will always help other people.
  9. I often worry about others' problems.

*Note.* Items 2 and 5 are reverse-scored.

### Appendix D: Perceived Stress Scale

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

0 = never, 1 = almost never, 2 = sometimes, 3 = fairly often, 4 = very often

1. In the last month, how often have you been upset because of something that happened unexpectedly? 0 1 2 3 4
2. In the last month, how often have you felt that you were unable to control the important things in your life? 0 1 2 3 4
3. In the last month, how often have you felt nervous and “stressed”? 0 1 2 3 4
4. In the last month, how often have you felt confident about your ability to handle your personal problems? 0 1 2 3 4
5. In the last month, how often have you felt that things were going your way? 0 1 2 3 4
6. In the last month, how often have you found that you could not cope with all the things that you had to do? 0 1 2 3 4
7. In the last month, how often have you been able to control irritations in your life?  
0 1 2 3 4
8. In the last month, how often have you felt that you were on top of things? 0 1 2 3 4
9. In the last month, how often have you been angered because of things that were outside of your control? 0 1 2 3 4
10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them? 0 1 2 3

### Appendix E: Composite Codependency Scale

Marks, A. D. G., Blore, R. L., Hine, D. W., & Dear, G. (2012). Development and validation of a revised measure of codependency. *Australian Journal of Psychology*, *64*, 119–127.

Please indicate the extent to which you agree with each of the following statements on a scale of 1 (strongly disagree) to 5 (strongly agree):

1. Because it is selfish, I cannot put my own needs before the needs of others.
2. I try to control events and people through helplessness, guilt, coercion, threats, advice-giving, manipulation, or domination.
3. It makes me uncomfortable to share my feelings with others.
4. It is my responsibility to devote my energies to helping loved ones solve their problems.
5. What I feel isn't important as long as those I love are okay.
6. I feel compelled or forced to help people solve their problems (e.g., offer advice).
7. I am very open with others about my feelings, no matter what they are. (R)
8. I keep my feelings to myself and put up a good front.
9. I push painful thoughts and feelings out of my awareness.
10. My mood is fairly stable and unaffected by the problems and moods of those close to me. (R)
11. I try to control events and how other people should behave.
12. Feelings often build up inside me that I do not express.
13. I always put the needs of my family before my own needs.
14. No matter what happens the family always comes first.
15. I become afraid to let other people be who they are and allow events to happen naturally.

16. I often put the needs of others ahead of my own.
17. I feel that without my effort and attention, everything would fall apart.
18. I live too much by other people's standards.
19. I keep my emotions under tight control.

**FACTORS:**

Interpersonal control:

2, 6, -10, 11, 15, 17, 18

Self-sacrifice:

1, 4, 5, 13, 14, 16

Emotional suppression:

3, -7, 8, 9, 12, 19

*Note.* Items 7 and 10 are reverse-scored. Calculate mean scores (out of 5) for each subscale and overall

## Appendix F: Patient Health Questionnaire

<b>Patient Health Questionnaire</b>	
<b>Over the last two weeks, how often have you been bothered by any of the following problems?</b>	
Little interest or pleasure in doing things	Not at all More than half the days Nearly every day
Feeling down, depressed, or hopeless?	Not at all More than half the days Nearly every day
Trouble falling asleep or staying asleep, or sleeping too much?	Not at all More than half the days Nearly every day
Feeling tired or having little energy?	Not at all More than half the days Nearly every day
Poor appetite or overeating?	Not at all More than half the days Nearly every day
Feeling bad about yourself, or that you are a failure or have let yourself or your family down?	Not at all More than half the days Nearly every day
Trouble concentrating on things, such as reading the newspaper or watching television?	Not at all More than half the days Nearly every day
Moving or speaking so slowly that other people have noticed? Or the opposite: Being so fidgety or restless that you have been moving around a lot more than usual?	Not at all More than half the days Nearly every day
Thoughts that you would be better off dead, or of hurting yourself in some way?	Not at all More than half the days Nearly every day
Total = <input type="text"/> /27	<input type="text"/>
Depression severity: 0–4 none, 5–9 mild, 10–14 moderate, 15–19 moderately severe, 20–27 severe.	