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Stress, Burnout, and Depression among African Immigrant Direct Support Professionals Working with Adults with Intellectual Disabilities

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This is to certify that the doctoral dissertation by

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Ph.D. in Industrial & Organizational Psychology

Dissertation Submitted in Partial Fulfillment

Of the Requirements for the Degree of

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Abstract

Stress and burnout are recognized problems among staff working with individuals with intellectual and developmental disabilities (IDDs). However, information on stress and burnout in African immigrant direct support professionals (DSPs) is lacking. The purpose of this correlational mediation study was to investigate whether burnout mediates the relationship between stress and depression among African immigrants working with adults with IDDs. Job stress theory and burnout theory served as the theoretical framework for the study. Overall, 111 DSPs completed self-report questionnaires: the Maslach Burnout Inventory, Parker and DeCotiis' Job Stress Scale, and the Beck Depression Inventory. Results revealed that stress significantly predicted burnout and depression, and remained a significant predictor of depression after controlling for burnout, so full mediation was not supported. Further, job stress predicts burnout and depression in African immigrants working as DSPs in the United States. Disability organizations can use the findings to develop specific training and interventions that target stress and burnout in African immigrants, as well as other DSPs in human services. Qualitative research is recommended for more in-depth exploration of stress, burnout, and depression in this population; further quantitative research is also recommended on the relationship between acculturation stress and job stress in African immigrants working as DSPs. Positive social change implications include a reduction of stress and burnout in DSPs, potentially leading to enhanced well-being for these workers and improved quality of care for individuals with intellectual disabilities.

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Dedication

I dedicate this dissertation and the entire Doctorate Degree Program to Almighty God and my Lord and Savior Jesus Christ seated at the right hand of God the Father. To him be glory, adoration, majesty, dominion, and power forever and ever. I give Thee thanks, who has made this day possible. Jesus is Lord, to the Glory of God the Father, Amen.

I wish to completely dedicate this dissertation to my nuclear family, who has made this adventure possible. First and foremost, I want to acknowledge and specifically commit this dissertation to my rock, my groom, my better half, and my husband, Joseph N. Onyejose. My husband, Joseph, is the best thing that has ever happened to me on this Mother Earth. He has been a constant source of support, energy, and encouragement during the arduous graduate school journey, including work and family life. His words of encouragement and push for tenacity ring in my ears day in day out. Thank you, my dearest husband; you have always loved and supported me unconditionally, irrespective of my missteps, mishaps, or misjudgment. As a husband, your good examples have taught me to work hard for the things I aspire to achieve. Honey, I am genuinely thankful for having you in my life as the man I hundred percent trust and love. Thank you for everything and particularly for your love, faith, and the confidence you have placed in me. I love and cherish you forever, Amen. Without you, I will not be where I am today! To Jesus be the Glory for your life, my dearest husband.

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Table of Contents

List of Tables

List of Figures

Chapter 1: Introduction to the Study

Individuals born with and affected by intellectual and developmental disabilities (IDDs) have severe and chronic mental incapacities that can affect their cognitive and physical functioning. Specifically, IDDs represent conditions often diagnosed after a series of assessments. Individuals with IDDs have limited intellectual function and an intelligence quotient (IQ) of 70 or lower; they can also exhibit limitations in adaptive behaviors (Kerr et al., 2016). These limitations are unique to the level of their disability that can comprise both intellectual functions and adaptive behaviors, including self-care, conceptual and safety skills, practical communication, self-preservation skills, and social skills. According to the Centers for Disease Control and Prevention ([CDC], 2018), developmental disabilities are grouped into four dimensions: physical conditions, language, learning, and behavior.

In the United States, a steady rise continues in the number of individuals born with IDDs, including attention-deficit disorder, autism spectrum disorder (ASD), cerebral palsy, fetal alcohol spectrum disorders, Down syndrome, intellectual disability, fragile x syndrome, spina bifida, and brain injury (CDC, 2018). According to the Zablotsky, Black, and Blumberg (2017), between 2014–2016, the age of children ages 3-17 diagnosed with ASD in the United States was significantly higher in boys ages 3–17 (3.63%) than girls ages 3–17 (1.25%; 2017). Overall, 2.76% of European American, Middle Eastern American, and North African American children are diagnosed with ASD

as opposed to the 1.82% of Hispanic children (2017). Children between the ages of 8–12 (2.88%) were more often diagnosed with ASD than children ages 3–7, of whom 2.23% are diagnosed with ASD (2017). Diagnosis of intellectual disability was lower in younger children than older children: 0.73% in children ages 3–7, 1.45% among children ages 8–12, and 1.40% among ages 13–17 years old (2017). Hosking et al. (2016) observed the mortality rate among individuals with IDDs is higher when compared to the general population.

While the number of individuals with IDDs continues to rise, there are untenable crises with direct service providers (DSPs) working for individuals with IDDs. The DSP workforce is ranked as one of the highest in demand in the United States, while at the same time the annual average turnover rate for the DSP workforce is 45% (President's Committee for People with Intellectual Disabilities, 2017). The crisis in the DSP workforce has come about due to the increase in the survival rate for individuals with IDDs, high turnover rates in the DSP workforce, the growth and aging of the population in the United States, lack of professional recognition, demographic transition whereby fewer people are moving into the DSP field, low wages, and lack of benefits for the DSP workforce (President's Committee for People with Intellectual Disabilities, 2017). The average wage for a DSP with a family of four is below the United States' federal poverty level, and the average pay rate for a DSP in the United States is $10.72 per hour (President's Committee for People with Intellectual Disabilities, 2017). Half of the DSP

workforce depends on government-funded benefits, and most DSPs work two or three jobs to be able to make ends meet (President's Committee for People with Intellectual Disabilities, 2017).

In 2015, 88% of women worked as home care workers compared to 12% of men; 42% were White, 28% were Black or African, 21% were Hispanic, and other races and ethnicity groups made up 9% (Campbell, 2017). In the United States, 1,000,000 immigrants provide direct care services to senior citizens and individuals with IDDs, of which nine in 10 home care workers are women with a median age of 45; immigrant women largely provide personal care to their patients with IDDs and make a median annual income of $19,000 (Campbell, 2017).

Challenging behavior is one of the most serious characteristics adults with intellectual and physical disabilities exhibit, including self-injurious behaviors, verbal and physical aggression toward caregivers, and property destruction. Individuals born with specific genetic disorders, such as Down syndrome, exhibit higher amounts of challenging behaviors; for example, 45–93% exhibited self-injurious behaviors, while 40–74% exhibited aggression (Arron et al., 2011; Waite et al., 2017). Also prevalent in the population of people with IDDs are mental illnesses that negatively affect the way individuals with IDDs live their daily lives. Görmez and Ismet (2017) noted the prevalence of psychiatric comorbidity in adults diagnosed with IDDs. Some characteristics individuals with comorbid IDDs and mental illnesses exhibit include

anxiety, depression, anger, and intermittent explosive disorder (Wieland et al., 2015). Environmental responses through psychological therapies, behavior management programs and techniques, reinforcement, and punishment can help address behaviors clients with IDDs display (Kerr et al., 2016). Although researchers have credited these interventions to be effective in improving the lives of individuals with IDDs (Kerr et al., 2016), DSPs are directly involved and responsible for enforcing behavior management techniques for individuals with IDDs.

Although challenging behavior is prevalent in individuals with IDDs, such behaviors are correlated with negative outcomes for individuals with IDDs, their direct environments, and for DSPs (Heyvaert et al., 2015). Furthermore, deficits in self-preservative, safety, and social skills have been linked to maladaptive behaviors toward self and others (Needham et al., 2019). Challenging behaviors individuals with IDDs display make it difficult for DSPs to provide the best care, safety, and security during challenging episodes. DSPs must be trained and aware of behavioral patterns and triggers that lead to challenging behavior (Heyvaert et al., 2015). To effectively deescalate challenging behavior, DSPs are trained to use behavior management strategies, such as physical crisis intervention, to effectively diffuse challenging behaviors and ensure the safety of both individuals with IDDs and DSPs (Heyvaert et al., 2015).

To live a functional life, adults with IDDs may require ongoing personal care and other support from family members (primary caregivers), foster and adopted parents, and

trained DSPs. Stress and burnout are likely to manifest themselves in caregivers and foster and adoptive parents of individuals with intellectual disabilities. In 2016, the turnover rate from burnout and stress for DSPs across 20 states in the United States ranged from 24.1% to 69.1% (National Core Indicator, 2018). Therefore, providing daily care to individuals with IDDs can create physical and psychological challenges for caregivers and individuals with IDDs. In the United States alone, an estimated 65 million people serve as primary caregivers for their loved ones with IDDs (Friedman, 2018). Stress, burnout, and depression can also manifest among DSPs faced with the daily challenges of giving direct care. Often, DSPs represent the backbone of the lives of individuals with IDDs in that DSPs play a crucial role in maintaining the health and safety of these individuals. The primary role of a DSP includes assisting individuals with IDDs with the activities of daily living, community inclusion, foster choice, and decision making (Brown & McCann, 2019).

Furthermore, DSP roles include assisting individuals with IDDs in leading a self-directed life based on the principles of the person-centered planning process (Claes et al., 2010). Person-centered planning is a process-oriented approach wherein services are individualized to the unique needs of individual with IDDs, and researchers have linked this to improved lifestyle-related outcomes for adults with IDDs (Robertson et al., 2007). Direct support professionals are therefore exposed to the challenging behaviors of adults

with IDDs daily as they provide personal care, support, and safety needs for these individuals (Van Ool et al., 2018).

While DSPs and certified nursing assistants (CNAs) render similar services, there are differences in their job duties, training, and education. Previous research has established that DSPs play a significant role in the social lives of individuals with IDDs (Barnhart et al., 2019; Leser et al., 2018). The specific job duties of a DSP, according to the National Alliance for Direct Support Professionals (NADSP, 2019a), include respecting and adhering to the basic rights and dignity of individuals with IDDs. DSPs also implement behavioral management care plans, document and maintain accurate case management reports, develop and implement plans for achieving greater independence for community inclusion, supervise activities of daily living, administer medication, and must adhere to agency policy and quality program standards (NADSP, 2019a, 2019b). Although there are no mandated state-required employer-based preservice training programs for DSPs, most disability organizations have a minimum requirement for prospective DSPs that includes having a high school diploma and maintaining all state-mandated life-saving training, such as medication administration, cardiopulmonary resuscitation, and behavioral principals, as well as completing strategy training (Hewitt et al., 2008).

An estimated 1.6 million United States citizens receive care in the 16,100 nursing facilities scattered around the country (Center for Disease Control and Prevention, 2014).

CNAs provide direct care services for patients living in nursing facilities; these patients are frail and often have multiple chronic illnesses with cognitive and functional impairments (Congressional Budget Office, 2019). CNAs work in hospitals, long-term care settings, or in patients' homes. CNAs are responsible for providing direct patient care to older adults in long-term facilities (Walsh et al., 2013). Job specifications of a CNA working in a long-term facility include helping patients with bathing, toileting, dressing, and range of motion exercises, as well as turning, repositioning, and transferring patients between beds and wheelchairs, observing and measuring patients' vital signs, and assisting with serving meals (U.S. Bureau of Labor Statistics, 2019c). In the scope of CNA job practice, CNAs must adhere to professional standards, including specific job expectations and responsibilities (McMullen et al., 2015). The Code of Federal Regulations mandates CNAs to be certified in basic nursing care and the skills training needed to care for their patients (McMullen et al., 2015). Some of the training includes repositioning bed-bound patients, catheter/tube care, and direct personal care of their medications (McMullen et al., 2015). CNA educational qualifications include a state-approved educational program in conjunction with a high school degree before they can care for patients (U.S. Bureau of Labor Statistics, 2019b*).* CNAs must also complete on-the-job training to learn about the policies and procedures of a given organization (U.S. Bureau of Labor Statistics, 2019b).

The challenges of working with individuals with IDDs can lead to burnout and high-stress levels in DSPs (Lovell et al., 2014). The challenges associated with caring for individuals with IDDs occur because DSPs constantly face mental, emotional, and physical stressors that can lead to burnout and stress, as well as to difficulties in supporting patients (Lovell & Wetherell, 2016). The challenging behaviors DSPs experience intensify when their stress levels are high, which Manzano-García and Ayala (2017) found was associated with increased EE in caregivers. Because of the intermittent, complex, and dangerous situations DSPs face, Manzano-García and Ayala posited that these situations might lead DSPs to feel insecure, ineffective, and defenseless, and like they lack control in managing individuals with IDDs. Because DSPs work and assist clients with IDDs in challenging and dangerous environments, it is important to understand whether work-related stress predicts burnout and depression and whether burnout mediates stress and depression in African immigrants working with adults with IDD (Espinoza, 2018).

Background

One of the significant barriers in ensuring the best care, safety, and security of individuals with IDDs is the challenging behaviors they exhibit. DSPs working with individuals with IDDs are, therefore, in a unique position to experience stress and burnout on the job. Past research has suggested that work stress is positively associated with burnout and depression among DSPs (Hensel et al., 2015; Lin et al., 2015). Gray-

Stanley et al. (2010) found a positive correlation between stress and depression among DSPs working with populations of individuals with IDDs. The number of individuals with IDDs born in the United States continues to rise; between 2014–2016, there was a significant increase in children diagnosed with any developmental disability from 5.76% in 2014 to 6.99% in 2016. Therefore, with a significant increase in individuals with IDDs, Friedman (2018) noted that there was an increase in the demand for DSPs who work with individuals with IDDs to ensure their overall health and safety. An increase likewise exists in the demand for DSPs to care for these individuals, who are highly dependent on their staff, compared to individuals with other types of illnesses (President's Committee for People with Intellectual Disabilities, 2017). Mutkins et al. (2011) asserted that lack of organizational support and depressive symptoms in DSPs were responsible for DSPs' EE, while reduced social support related to decreased accomplishment in DSPs. For this reason, I will include, burnout, which includes the component *EE*, in the analysis to examine this effect.

Bogenschutz et al. (2015) posited that competency-based training and competitive compensation of DSPs reduce turnover rates. In the United States, the annual average turnover rate for DSPs is 45% (Hiersteiner, 2016). Smyth et al. (2015) found the frequency and the severity of dangerous behavior, burnout, and EE DSPs experienced correlated with DSPs' perceived stress when working with individuals with IDDs. Manzano-García and Ayala (2017) investigated how analyzing burnout helps to

understand the relationship between the psychological capital and psychological well-being of DSPs. Manzano-García and Ayala found psychological capital, the independent variable, had a significant relationship to the dependent variable of psychological well-being. Results also suggested psychological capital results in decreased burnout and increased levels of psychological well-being in DSPs working with individuals with IDDs.

The increase in the demand for DSPs has created the opportunity for foreign-born workers from the continent of Africa to migrate to the United States and work as DSPs. Doki et al. (2018) posited that foreign-born workers in a host country present higher stress levels than native workers. Other research showed foreign-born workers have decreased psychological well-being, a lack of professional organizational support, and experience more mental health issues when compared to native-born workers (Aalto et al., 2014). Covington-Ward et al. (2018) found the manifestations of stress in African immigrants were linked to cultural background issues, such as unrealized expectations, immigration modalities, and acculturation processes. Past researchers suggested foreign-born workers have decreased psychological well-being and experience more mental health issues when compared to native-born workers (Aalto et al., 2014),

Covington-Ward (2017) stipulated African immigrants choose to work as direct healthcare workers because they are passionate about helping others and are interested in making fast money. Other reasons for entering the profession include quick access to

obtaining direct care work that would serve as a bridge to obtaining other professional healthcare jobs in the future. Precipitating factors of mental health disorders among immigrants play a role in DSP stress and burnout rates. Markkula et al. (2017) suggested the risk associated with mental disorders is significantly different across immigrant groups. DSP work and assisting clients with IDDs in challenging and dangerous environments, so it is important to understand whether work-related stress predicts burnout and depression and whether burnout mediates stress and depression in African immigrants working with adults with IDDs (Espinoza, 2018).

Problem Statement

As the number of individuals born with IDD continues to rise in the United States, so has the demand for DSPs who work with patients with IDDs to ensure their care, welfare, safety, and well-being (Friedman, 2018). Some of the most common manifestations of IDDs include Down syndrome, fragile X syndrome, fetal alcohol syndrome, autism spectrum disorder, multiple births, premature birth, low birth weight, infections during pregnancy, and untreated newborn jaundice (CDC, 2018). According to the CDC, 15% of children ages 3–17 have one or multiple IDDs. Furthermore, IDDs occur among all ethnic, racial, social, and economic groups (CDC, 2018). Because IDDs include both cognitive and physical impairments (Kripke, 2018), adults with IDDs exhibit challenging and dangerous behaviors, such as physical aggression, self-injurious behaviors, disruptive behavior, assault on staff, self-harm, and elopement (Matson &

Rivet, 2009). Because of the behavioral difficulties associated with individuals with IDDs, it is not new that DSPs are exposed to challenging bevahior and prone to stress and burnout. DSP experiences relate to the severity of aggressive and disruptive behaviors exhibited by IDD participants (Smyth et al., 2015).

The United States' expansion of access to health care services and direct care workers has led to a proliferation of caregivers in the areas of DSPs, home health aides, CNAs, and personal care aides (Covington-Ward, 2017). The difference between home health aids (HHAs), personal care aids (PCAs), and CNAs is that HHAs and PCAs provide personal care to patients in patients' private homes, while CNAs provide care in long-term facilities (U.S. Bureau of Labor Statistics, 2019a). Irrespective of their ethnic and racial backgrounds, DSPs must work to improve the well-being of and ensure the best care for their patients, as well as encourage community inclusion and participation to enhance the quality of life for adults with IDDs (Hall, 2017). In researching the relationship between psychological capital and psychological well-being, Manzano-García and Ayala (2017) highlighted the need for organizations that provide support to individuals with IDDs to focus on DSPs' strengths. Manzano-García and Ayala found that resilience, optimism, hope, and self-efficacy was linked to lowered burnout rates and to increased degrees of psychological well-being in DSPs.

There is an increasing body of research on the interpersonal skills, knowledge, and abilities DSPs need to perform their job duties effectively. However, turnover

resulting from stress, burnout, and depression that DSPs experience continues to negatively impact the industry. The average annual turnover rate is 45%, with a range of 18–76% turnover in the DSP workforce relating to stress associated with characteristics of the IDD population (Bogenschutz et al., 2015; President's Committee for People with Intellectual Disabilities, 2017).

With the increase of individuals with IDDs, an increase also occurs in the demand for DSPs to care for these individuals, who are highly dependent on their staff when compared to individuals with other types of illnesses (Nam & Park, 2017). However, previous researchers indicated a significant issue continues regarding retention and turnover, which is between 45% and 70% within a single organization in the health care and helping profession (Bogenschutz et al., 2014). This issue is linked to the challenging behaviors clients with IDDs exhibit, low wages, and the DSPs' job stability (Covington-Ward, 2017).

A disproportionate number of DSPs are African immigrants. For example, in 2018, there were 4.3 million direct care workers in the United States, of which 40% were African immigrants (Covington-Ward, 2017). From 2005–2015, the number of African immigrants doubled from 65,000 to 130,000 (Campbell, 2018). Although researchers have linked stress to burnout and depression in DSPs (Bogenschutz et al., 2015), this connection is unknown among African immigrants working with IDD clients (Man Cheung & Carly, 2009; Mutkins et al., 2011), even though 29% of these immigrants work

in the homecare workforce in the United States (Espinoza, 2018). Because DSPs work and assist clients with IDDs in challenging and dangerous environments, it is important to understand whether work-related stress predicts burnout and depression and whether burnout mediates stress and depression in African immigrants working with adults with intellectual disabilities (Espinoza, 2018).

African immigrants are quickly becoming one of the most represented groups of DSPs in the direct care profession (Campbell, 2018; Covington-Ward et al., 2018). Even though the African-born immigrant population is growing astronomically, there has not been much attention (Covington-Ward, 2017; Covington-Ward et al., 2018) on the variables that I focused on in this study. Little is known about whether work-related stress predicts burnout and depression, or if burnout mediates stress and burnout among African immigrants working as DSPs. Covington-Ward et al. (2018) recommended further research to better understand the sources of stress, specific stressors, the manifestation of stress, and strategies to manage stress in African immigrant health workers. The recommendation is important because African immigrants are unlikely to report stress-related feelings or depression, and it was difficult for Covington-Ward et al. to gain understanding from the responses provided during their focus group session. In this study, I addressed the gap in the research by examining whether work-related stress predicts burnout and depression and whether burnout mediates stress and depression among African immigrants working with adults with IDDs.

Purpose of Study

The purpose of this quantitative mediation study was to investigate whether burnout mediates the relationship between stress and depression among African immigrants working with adults with IDD. I designed the study to examine the extent that work-related stress predicts burnout and depression in this population. I sampled individuals from disability provider organizations providing services to individuals with IDDs in Rhode Island. Depression was the criterion or dependent variable; stress was the predictor, independent variable; and burnout was the mediating variable. The results of this study may inform organizations assisting individuals with IDDs about employee stress levels, burnout, and depression in African immigrants working in those organizations.

Research Questions and Hypotheses

Research Question 1 (RQ1): Does work-related stress predict burnout among African immigrant DSPs working with adults with IDD?

Null Hypothesis ($H_0$1): Work-related stress does not predict burnout among African immigrant DSPs working with adults with IDD.

Alternative Hypothesis (H_a1): Work-related stress significantly predicts burnout among African immigrant DSPs working with adults with IDD.

Research Question 2 (RQ2): Does work-related stress predict depression among African immigrant DSPs working with adults with IDD?

Null Hypothesis ($H_0$2): Work-related stress does not predict depression among African immigrant DSPs working with adults with IDD.

Alternative Hypothesis (H_a2): Work-related stress significantly predicts depression among African immigrant DSPs working with adults with IDD.

Research Question 3 (RQ3): Does burnout mediate the relationship between work-related stress and depression among African immigrant DSPs working with adults with IDD?

Null Hypothesis ($H_0$3): Burnout does not mediate the relationship between work-related stress and depression among African immigrant DSPs working with adults with IDD.

Alternative Hypothesis (H_a3): Burnout does mediate the relationship between work-related stress and depression among African immigrant DSPs working with adults with IDD.

Theoretical Framework

To address the research gap, I examined the interrelationships between stress, burnout, and depression in a sample of African immigrant DSPs. I used Parker and DeCotiis' (1983) theory of stress as the theoretical framework for this study. The theory holds that stress is associated with workplace factors and contexts, which can lead to negative responses in employees (Parker & DeCotiis, 1983). The theory helps explain stress at the individual level based on work-related and contextual stressors. Researchers

have used Parker and DeCotiis' theory of stress across all disciplines. Scholars in the field of caregiving for individuals with intellectual disabilities often use stress theory to explain the stress direct caregivers experience (Heinemann & Heinemann, 2017).

Parker and DeCotiis (1983) grouped stressors into six dimensions of job stress to ascertain the extent to which each of the aspects affects individuals: work itself, organizational characteristics, role in organization, relationships, career development, and external commitments and responsibilities. Each dimension of stress, according to Parker et al., is associated with its distinctive pattern of stressors. Organizational sources of stress are common challenges that employees such as DSPs experience in the workplace. Stress is a contributing factor of low-quality employee performance and reduced productivity for the organization at large (Jalagat, 2017).

Another theory I used in the framework was Maslach's (1976) burnout theory and its three dimensions: EE, decreased individual accomplishment, and depersonalization. Maslach observed that burnout was prevalent among individuals who worked closely with others and that the consequences of burnout had severe adverse consequences for these employees and their clients. Burnout is considered an occupational hazard for service- and care-oriented professions, such as human service and healthcare professions (Maslach & Leiter, 2016).

The theoretical framework on stress and burnout is particularly useful in the present study. The situational stress DSPs experience involves working with patients

exhibiting challenging behaviors, including client disabilities and aggression, which can inhibit DSPs' capabilities to perform job duties (Waite et al., 2017), leading to EE, feelings of decreased personal accomplishment, and depersonalization. Parker and DeCotiis' (1983) and Maslach's (1976) theories offer guidance on the work-related stress and the psychological and physiological foundations of burnout, respectively (Heinemann & Heinemann, 2017).

Nature of the Study

I used a quantitative correlational research design involving regression analysis. Quantitative research methods focus on objective measurement using instruments that allow constructs to be represented numerically and statistically analyzed (Davies & Hughes, 2014). The constructs of interest in this study (i.e., stress, burnout, and depression) could be objectively, numerically measured using validated instruments; therefore, a quantitative method was suitable for this study. Correlational research designs focus on relationships between variables that the researcher cannot manipulate or control. A correlational research design that focused on burnout as a mediator in the relationship between stress and depression was well suited for this study because it allows for the effective examination of the relationships between the dependent and the independent variables of stress and depression. The primary limitation of a correlational design is that conclusions about cause and effect cannot be made from the results. An experimental design would allow cause and effect conclusions to be made because the

independent variables could be systematically manipulated, and possible confounding factors could be controlled. However, an experimental design was not appropriate for this study because it was not practically or ethically possible to manipulate participants' levels of work-related stress and burnout. Although the causal conclusions that can be drawn from correlational studies are limited, a correlational design was the most appropriate design to address the purpose and research questions of this study.

Manzano-García and Ayala (2017) found a strong positive relationship between psychological capital and psychological well-being that was mediated by burnout. In order to illuminate the relationships between the variables in this study (i.e., stress, burnout, and depression), I examined the objective ratings of African DSPs. A correlational analysis helped determine if a mediational relationship exists between stress, burnout, and depression in African immigrants working as DSPs with adults with intellectual disabilities. Depression served as the criterion variable (dependent variable), while stress served as the predictor variable (independent variable) and burnout serves as the mediating variable. Depression, as measured by the Beck Depression Inventory, is a numerical representation of how frequently several symptoms of depression occur (i.e., hopelessness and irritability, guilt, or feelings of being punished, and physical symptoms such as fatigue or weight loss).

In this study, I used a quantitative structured data collection method to examine the relationships between the variables of interest. Primary data included responses from

self-report instruments, including the Beck Depression Inventory (Beck et al., 1988) and the Maslach Burnout Inventory Human Services Survey (Maslach et al., 1986), to measure burnout, stress, and depression in African immigrants working as DSPs in IDD organizations.

Definition of Terms

This section includes the conceptual definitions for the terms used throughout the study.

Burnout: Burnout refers to a state of physical, emotional, mental exhaustion, and diminished self-accomplishment related to the demands of a job (Lu & Gursoy, 2016; Thomas et al., 2019). Past researchers have associated burnout with an array of adverse outcomes, such as high job turnover intention, diminished organizational commitment, and overall job dissatisfaction (Schaufeli & Enzmann, 1998).

Depression: Depression is a feeling of sadness and loss of interest relating to how an employee behaves, thinks, and feels about him or herself and the work they do within an occupational environment (Yunus et al., 2018). Researchers have shown that depression in the workplace has influenced the performance of employees in the areas of productivity, absenteeism, and presenteeism (Evans-Lacko & Knapp, 2016; Yunus et al., 2018).

Direct Support Professional: Direct support professionals are employees who provide direct care and activities of daily living for individuals with developmental

disabilities (Davis et al., 2015). Responsibilities of a DSP encompass providing individuals with intellectual disabilities day-to-day personal care. These workers also provide health needs, such as attending medical appointments, administration of medication, planning community engagement, management of financial resources, behavior management, and skills development, including self-preservation skills (Gray-Stanley & Muramatsu, 2011; Hewitt & Larson, 2007).

Intellectual and developmental disability: This is a term used to describe an individual with mild to significant limitations in intellectual functions, such as reasoning and problem-solving, and limitations in adaptive behaviors, such as social, conceptual, and practical skills. Because of lower IQ levels, individuals with IDDs cannot adapt to daily living and must be supported by primary caregivers (family members) or by trained staff (World Health Organization, 2019). Clinical terms associated with individuals with IQs between 70–75 or lower carry a diagnosis of intellectual disability, developmental disability, or cognitive disability (Kerr et al., 2016).

Stress: Stress is an excessive pressure or unfavorable demand placed on employees within the occupational environment (American Psychological Association, 2016; World Health Organization, 2014). Work-related stress leads to higher rates of on-the-job accidents, presentism, depression, and burnout (Marcatto et al., 2016). Although different occupations have unique stressors that are peculiar to the occupation, workplace

stress can negatively affect the health and the output of the organization (Marcatto et al., 2016).

Assumptions

Assumptions of a study include aspects that researchers have no control over and must consider to be true (Boyle et al., 2017). Assumptions are the cornerstone of a study (Boyle et al., 2017). Studies could not exist without assumptions. This study included several assumptions:

- I assumed that the DSPs in the state of Rhode Island experience stress, burnout, and depression.
- I assumed that the DSPs in the state-run organization and private sector were willing to respond to the questionnaire.
- I assumed that there were an adequate number of DSPs to participate and complete all the questions in the survey.
- I assumed that participants completed the survey questionnaire truthfully and to the best of participants' ability.
- I assumed that depending on the time and season of the year, participants' responses may be different.
- I assumed all participants in the study were capable and could complete the survey questionnaire.

Scope and Delimitations

This study had several delimitations. Stress, burnout, and depression were key variables for DSPs providing support to individuals with IDDs. Understanding the correlation between the variables will provide additional research on the problem within the target population. Given the high turnover rate among DSPs working with populations with IDDs, it is important to understand how work-related stress predicts burnout and depression and if burnout mediates the relationship between stress and depression among African immigrants working with patients with IDDs. The key population of the study is African immigrants working as DSPs and supporting individuals with IDDs. The geographical locations of the participants in this study were drawn from the state of Rhode Island's residential and vocational rehabilitation programs. African immigrants targeted for this research were drawn from different organizations that provide services to individuals with IDDs. Although Rhode Island is the smallest state in the United States, there could be some level of generalizability for the results because the types of work done across different organizations in the state may be representative of the different the types of work in the larger population. Limited research exists in this area; therefore, the results of this research may contribute to the gap in the literature regarding this area of study.

Limitations, Challenges, and Barriers

The primary limitation of a quantitative study is that it does not allow a researcher to collect in-depth information about participants' thoughts, feelings, and experiences regarding the topic of interest. The primary limitation of a correlational study is that conclusions about the direction of cause and effect cannot be determined from the results. Potential barriers for collecting primary data using survey instruments include limited access to participants, as well as the time and expenses required to conduct the survey. Although I assumed that participants answered the survey questionnaire truthfully and to the best of participants' ability, another potential limitation was that participants may not have understood the questions or may not have answered truthfully.

Significance

The results of this study provided much-needed insight into stress levels, burnout, and depression in African immigrants working as DSPs in the United States (Campbell, 2018; Covington-Ward, 2017). Campbell (2018) and Covington-Ward (2017) noted the high number of African immigrants working in direct care settings, which are often challenging and stressful. This study may inform organizations providing residential and day habilitation services to individuals with IDDs about the need for strong organizational social support systems and interventions for DSPs. These interventions would help DSPs manage work stressors, especially workers suffering from occupational stress, perhaps exacerbated by issues related to acculturation. The study may also foster

an understanding of racial and ethnic differences as they relate to African immigrants working with individuals with IDDs.

Findings from this study may help formulate stress management programs or interventions to improve mental health, including depression, for employees, especially African immigrants. The study may yield information to provide insight into the development of training needs to help African immigrant DSPs target the unique needs of the individuals with IDDs. Preparation for DSP roles would help foster deeper knowledge, skills, and attitudes required for the job role. Furthermore, insight from this study may lead to positive social change by helping to decrease stress and burnout in DSPs, potentially leading to reduced turnover and enhanced care for individuals with IDD. Finally, findings from this research may also bring about much-needed awareness to help individuals with IDDs by increasing the help and support they receive so they can continue to be productive members of our society.

Social Change

This research is pertinent to the field of human services and social service organizations, specifically to the health and well-being of employees of disability organizations, who are susceptible to stress, burnout, and possible depression. Burnout and stress in DSPs can negatively affect the services provided to individuals with intellectual and developmental disabilities. Personal care, assistance with the activities of daily living, and the behavioral and medical support provided to individuals with IDDs

are important to the overall wellness of individuals with IDDs and, likewise, to the human and social service fields, as well as society as a whole (Leser et al., 2018).

The implication for positive social change for DSPs can be far-reaching, as stress and burnout can affect their overall quality of life (LoPorto, 2020). Alleviating stress, burnout, and depression in DSPs can positively improve service delivery, affect their work environment, and promote healthy relationships between individuals with IDDs, colleagues, and the disability organization. The societal benefits include healthy interpersonal relationships between DSPs, who serve to promote positive psychological development and personal productivity, and individuals with IDDs (Bossink et al., 2019).

Summary

Work-related stress, depression, and burnout continue to be areas of interest for current and future research, as these variables present major challenges for community-based organizations that support adults with IDDs Kinnunen-Amoroso and Liira (2016) posited that workplace stress is a global issue because of the health and socioeconomic problems it poses to the workforce and organizations. Research revealed a relationship between stress, depression, and burnout within the occupational environment (Poursadeghiyan et al., 2016). Researchers have studied the relationship between stress, depression, and burnout among DSPs. However, a gap in the research exists on whether burnout mediates the relationship between stress and depression among African immigrants working with adults with IDDs.

If burnout does mediate the relationship between stress and depression among African immigrants, findings from this study may provide further understanding for how to effectively manage work stressors, especially workers experiencing acculturation that may be related to occupational stress. Study findings may help to inform stress management programs or interventions that would improve mental health, including depression for employees, especially African immigrants. I designed this quantitative study to investigate whether burnout mediates the relationship between stress and depression among African immigrants working with adults with IDDs. I also examined the extent to which work-related stress predicts burnout and depression in this population.

Chapter 2: Literature Review

Burnout continues to be a significant issue DSPs experience because of the challenges associated with the delivery of services to individuals with IDDs (Friedman, 2018). Researchers have implicated burnout in the DSP turnover rate and underperformance relating to the care they provide to individuals with IDDs (Friedman, 2018). The purpose of this quantitative mediation study was to investigate whether burnout mediates the relationship between stress and depression among African immigrants working with adults with intellectual and developmental disabilities. I designed this study to examine the extent to which work-related stress predicts burnout and depression in this population. Determining the extent that work-related stress predicts burnout and depression in African immigrants may help healthcare practitioners and administrators develop effective strategies and other courses of action that could help prevent burnout.

Individuals with IDDs living in community residence facilities rely on DSPs to provide for their daily needs, including personal care assistance, advocacy, transportation, financial duties, medication administration, community integration, and maintaining health and safety needs (Brown & McCann, 2019; Friedman, 2018). Therefore, the loss of DSPs may adversely affect IDDs as they rely on the services DSPs provide. DSP burnout rates related to stress and depression have been suggested to create long-term issues for individuals with IDDs and the organizations that support them (American

Network of Community Options and Resources, 2014). The retention of DSPs is critical to organizational success and to individuals with IDDs; hence, it is vital that the relationship between burnout, stress, and depression among African immigrants be examined.

The purpose of this chapter is to examine the existing literature on burnout, stress, and depression as it relates to the research question. This chapter includes the following key elements: (a) literature search strategy, (b) theoretical framework, (c) literature review, and (d) a summary of the relevant research. Furthermore, in this chapter I specifically focus on the review of existing literature on DSP burnout, stress, and depression related to African immigrants. Because of the limited research on burnout, stress, and depression among African immigrants working with individuals with IDDs, I conducted the review of research literature outside of the limited population to identify research on the key variables.

Literature Search Strategy

I searched the literature between years 2015–2020 using the following multidisciplinary databases: PsycINFO, PsycARTICLES, PsycBOOKS, Psyc TESTS, Pro-Quest CenteralScienceDirect, Medline, Science Direct, Academic Search Premier/Complete, GoogleScholar, SAGE Journals, EBSCO eBooks, and Dissertations. I used the following keywords to locate relevant literature: *stress*, *stress* and *depression*, *burnout*, *burnout*, and *depression*, *stress*, *burnout*, and *depression*, *psychological stress*,

intellectual disability, *mental retardation*, *developmental disabilities*, *group home*,*community residence*, *residential habilitation*, *community supports*, *direct support professional*, *DSP*, *direct care staff*, *African immigrant*, *African Migrant*,and *immigrants from Africa*, *Stress Process Theory (SPT*), *burnout theory*, and *Maslach Burnout Inventory (MBI*). I reviewed reference lists from selected articles for additional sources and gave preference to articles from peer-reviewed journals.

Theoretical Framework

The theoretical foundation for the study included contributions from three sources. The first was Maslach's (1976) burnout theory. Second, I used Parker and Decotiis' (1983) theoretical foundations of the Job Stress Scale (JSS). Finally, I used theoretical underpinnings of the Beck Depression Inventory (BDI; Beck et al., 1988).

Burnout

Maslach (1981) studied the emotional stressors of individuals working in the human service field and theorized that burnout is a syndrome that includes EE, decreased individual accomplishment, and depersonalization. Maslach observed that burnout was prevalent among individuals who served and worked closely with others and that the consequences of burnout had severe adverse consequences for these employees and their clients. Burnout is considered an occupational hazard for service- and people-oriented professions, such as human service and health care organizations, as well as education

(Maslach & Leiter, 2016). Maslach (1982) identified three dimensions of burnout: EE, depersonalization, and decreased personal accomplishment.

Emotional Exhaustion

According to Maslach (2003a), EE refers to a lack of energy and feeling strained both physically and emotionally from excessive job demands. Maslach et al. (2016) described EE as resulting from feelings of low-level frustration. EE (EE) is associated with irritability, feelings of low energy, and mixed emotional states, and, according to Koeske and Koeske (1989), EE is the core component of burnout and the single and most important construct used to measure burnout. LePine et al. (2004) posited that EE is the first link in the burnout process that can intensify with time.

EE leads to employees becoming detached from their workplace identities and tasks because of the strain and stress associated with job responsibilities (Maslach, 20003a). For example, an employee feeling emotionally and physically drained may have considerable difficulty in performing their daily work tasks and may not be motivated or want to come to work. As EE progresses, health service employees, for example, begin to develop burnout and may become detached, physically ill, and fatigued and may not be able to give the required support to patients due to feelings of exhaustion (Cizreliogullari et al., 2019).

Depersonalization

According to Maslach et al. (2016), depersonalization or cynicism is a negative behavioral response employees exhibit that involves diminishment in their interactions with coworkers and with the individuals they serve. Depersonalization involves employees demonstrating a lack of bonding, condescending attitudes, and negative views toward others (Maslach et al., 2016). Additionally, employees experiencing depersonalization will demonstrate an inability to engage in the emotional demands of their assigned job duties. For health service workers, depersonalization may involve distancing themselves from coworkers and individuals in their care (Maslach et al., 2016). These employees may start to exhibit a lack of willingness to assist individuals in their care.

Depersonalization occurs when employees begin to experience feelings of detachment, hostility, and distressing alterations in their employment experiences (Medford et al., 2016). For health service workers, depersonalization is especially troubling because it is characterized by a negative attitude and may involve a lack of interest, concern, and sympathy for individuals in their care (Maslach et al., 2016; Schmidt, 2007), leading to subpar care. Additionally, Benita et al. (2019) found that the antecedents of teachers' depersonalization related to the development of negative attitudes toward their students at the beginning of the school year predicted a disruptive classroom environment. Furthermore, Nesher Shoshan and Sonnentag (2020) found that

customer service employee depersonalization negatively affected customer perceptions, particularly toward the services provided and the organization. According to Maslach et al. (2001), there is an association between EE and depersonalization: increased levels of EE are associated with increased levels of depersonalization.

Maslach and Leiter (1997) explained that depersonalization in health service workers adversely affects not only their well-being and specific job duties but may also negatively affect individuals under their care. Examples of the adverse effects of depersonalization on individuals in the healthcare professions, according to Patel et al. (2018), include feelings of being overextended and drained, depletion of emotional and physical resources, hostile attitudes, and feelings of detachment and loss of productivity due to burnout. Consequently, health care professionals may spend less time with service recipients, become less collaborative with service recipients, and provide diminished person-centered care (Salyers et al., 2017).

Diminished Personal Accomplishment

According to Maslach (2003a), diminished personal accomplishment refers to employees viewing themselves and their contributions to the organization in negative, unhealthy, and unproductive ways. Characteristics of diminished personal accomplishment involve feelings of employees being ill-fit for their jobs, feelings of being overwhelmed, and considering themselves and their efforts at work as failures (Maslach, 2003a). Maslach and Leiter (1997) explained that employees experiencing

diminished personal accomplishment lose confidence in their work-related abilities, which in turn can lead to decreased work performance. For health service workers, because depersonalization involves negative and uncaring or unsympathetic attitudes toward others at work, including those employees care for, depersonalization may lead to decreased services for patients of burned-out heath service workers.

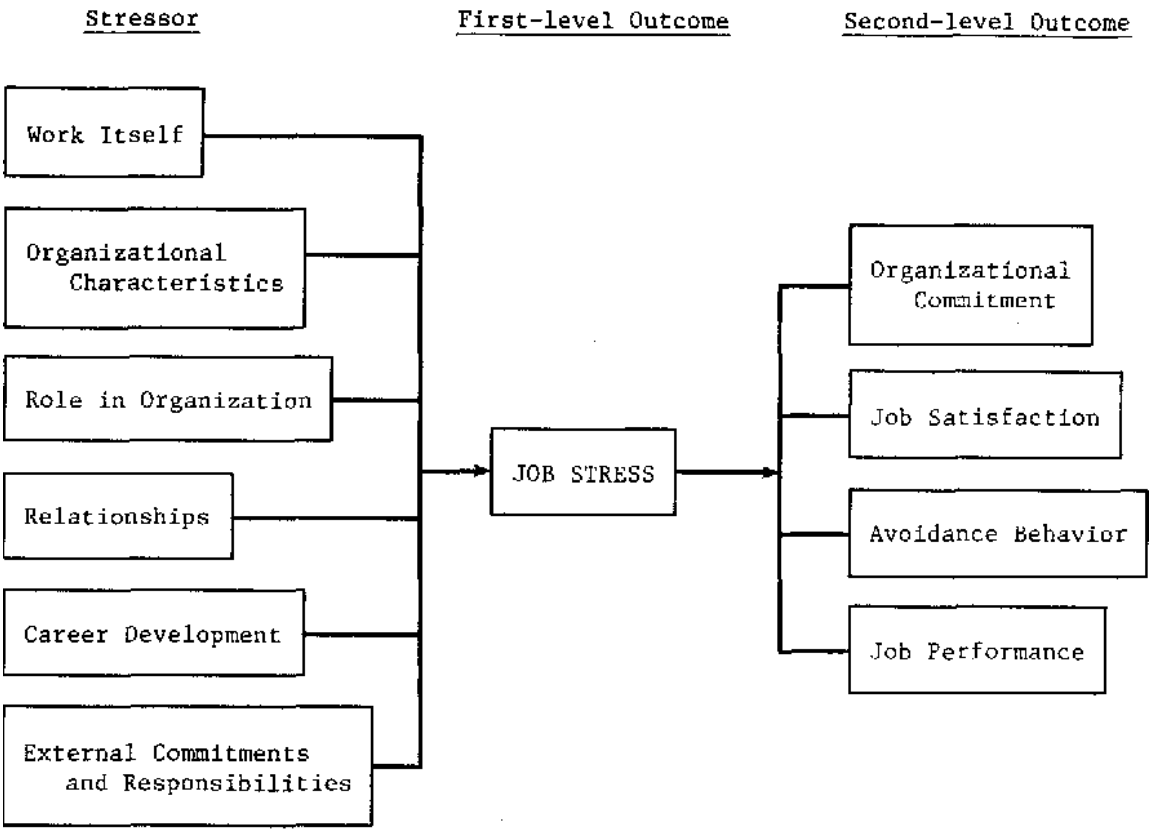
Job Stress

Job stress is increasing at an alarming rate in the workplace, and it poses a significant risk for employees in many sectors; hence, work-related stress is an ongoing concern for employees and organizations (Jalagat, 2017). Stress can adversely affect employees' mental health, physical well-being, and organizational performance (Jalagat, 2017). Parker and DeCotiis (1983) defined stress as the divergence from intrapersonal normality or physiological functioning that gives rise to urgent needs or demands in the immediate environment of the employee. The first level outcome of job stress, according to Parker and DeCotiis (1983), is a feeling of discomfort. The second level of job stress may involve diminished work satisfaction, commitment, and motivation, as well as decreased quality of work and job performance. Stress causes employees to experience psychological and physiological imbalance, and the sources of stress include task demands, role demands, work overload, interpersonal relationships associated with the job, group pressure, poor leadership, and poor perceptions of employment (Bansal, 2018;

Hish et al., 2019). Hish et al. (2019) posited that stress is predictive of burnout. I used Parker and DeCotiis' (1983) theoretical foundation to evaluate job stress.

Figure 1

A Model of Job Stress (Organizational Determinants of Job Stress)



Note. Parket and DeCotiss (1983)

Parker and DeCotiis (1983) grouped stressors into six dimensions of job stress to ascertain the extent to which each of the aspects affects individuals. Each dimension of stress, according to Parker and DeCotiis, is associated with its distinctive pattern of

stressors. Organizational sources of stress are common challenges that employees such as DSPs experience in the workplace environment. Stress is a contributing factor to low-quality employee performance and reduced productivity for the organization at large (Jalagat, 2017).

Characteristics and Conditions of the Job Itself

According to Parker and DeCotiis (1983), the individual reaction to the job characteristics of the work environment has an effect on work and the condition of the job itself. Variables associated with aspects of the job, according to Parker and DeCotiis. (1983), include autonomy, stability, pay-performance, task variety, base salary, and hours worked per week. The imbalance between a job characteristic and the demand of the position relate to the DSP's ability; in the case of dealing with challenging and dangerous behavior, DSPs will experience a higher level of stress. Jalagat (2017) posited that stressors associated with one job varies in magnitude, and it depends on the characteristics related to the workplace environments, as there are harmful outcomes that are unique to different job characteristics.

Stress, according to Kiran et al. (2019), is a negative feeling that can adversely affect the physical and mental health of a workforce employee. The high stress level in a given job and the conditions associated with that job, such as the situation in which DSPs find themselves, could produce high levels of stress for employees and, at the same time, hinder quality care and diminished productivity. Some job characteristics, such as the

work itself, organizational characteristics, role in the organization, relationships, career development, and external commitments demonstrated a relationship to time stress and anxiety, and the variables of stability, pay-performance, task variety, base salary, and hours worked per week were found to have a significant relationship to stress (Parker and DeCotiis, 1983).

Organization's Structure, Climate, and Information Flow

According to Parker et al. (1983), the dimensions of organizational climate include autonomy, trust, cohesiveness, support, recognition, innovation, and fairness. Workforce employees build and maintain positive information exchange within an organization that foster efficiency associated with organizational information flow between organizational employees (Tran et al., 2018). Conducive working atmosphere and information flow are at the core of any paid employment precisely the physical conditions, and the mental demands that exist in executing one's job are critical elements in the execution of once job responsibilities. Jalagat (2017) stated that organizational structure and environment, and recent episodic events, are some of the factors that give rise to stress. When upper management staff are out of touch with their subordinates about the quality of training, and if financial rewards are based on merit, situations like this induce stress in a workforce employee.

Organizational structure and climate conditions must be conducive for home care workers due to the unique pressures from patients, family members, and the organization,

situations such as this could be detrimental to the care worker Zoeckler (2018). Additionally, work conditions that are intense, physical, and where care workers engage in emotional labor, create work environments that become difficult to regulate (Zoeckler, 2018). According to Parker et al. (1983), the variables involving feelings that senior management is out of touch with subordinate staff, the lack of concern shown to subordinates, and the lack of openness of communication were significantly related to increased stress levels. However, the most substantial relationship to anxiety was noted in the area where respondents reported that top management was out of touch with their feelings and problems. The variables of organizational structure climate and information flow and its different domains displayed significant relationships with stress.

Role Related Factors

According to Parker et al. (1983), the dimensions of a workforce employee role in the organization are role conflict, role ambiguity, task orientation, closeness of supervision, tenure in the present job, and supply support problems. Zoeckler (2018) posited that when a demanding role relating to a care worker is not clear, the care worker will experience unstable and unpredictable work lives. Jalagat (2017) stated that role ambiguity, responsibility for people, and work overload are some factors that leadto job stress. The variables of support problem and the closeness of the supervision were positively related to stress (DeCotiis et al., 1983).

Career Development Opportunities

According to Parker et al. (1983), the four variables that made up the career development opportunities are training, promotions, performance, and individual development. Business establishments play a crucial role in the development of their workforce career growth; hence, knowledge gathered from career development opportunities helps employees to increase their career growth and development (Kiran et al., 2019). Jalagat (2017) stated that role conflict, lack of feedback, keeping up with technology, and career growth are some of the factors that induce stress in workforce employees. Kiran et al. (2019) posited that job-related stress and career development significantly affect employee organizational commitment. However, Parker et al. (1983) suggested that promotions based on merit, personal growth, and the quality of training received in preparation for greater responsibility are significantly related to job stress.

Interpersonal Relationships at Work

According to Parker et al. (1983), the three variables that made up the interpersonal relationship at work were trust, support from supervisors, and cohesiveness. Ensuring workforce employees are valued, and building an internal relationship is essential as it allows positive interpersonal relationships to form and strengthen within the work environment. Tran et al. (2018) posited that a positive employee working relationship is responsible for employees' overall well-being and their performance rating. Additionally, Tran et al. (2018) indicated that a high-quality relationship was

noted with supervisors who demonstrated a higher level of trust, obligation, respect, support, and encouragement.

Extra Organizational or Personal

According to Parker et al. (1983), the four variables comprising the extra-organizational/personal dimension are age, sex, number of dependents, and years of education. The onset of stress can begin from the outside or the inside of work. Randall and Bodenmann (2017) posited that external stress could spill over into a workforce environment. Work stress is defined as an employee's reaction to unpleasant work characteristics that seem mentally and physically threatening (Lu et al., 2017). On the other hand, work-family stress is a form of inter-role conflict that appears and makes it difficult for a workforce employee to balance the pressure of work and family (Lu et al., 2017). Lu et al. (2017) indicated that workforce employees faced with job stress would find it difficult to fall asleep and could lead to other health problems such as mental health problems, which could result in the reduction of the employee's productivity.

Stress and burnout are major concerns among African immigrant DSPs because working with individuals with IDDs involves complex and challenging situations that may lead DSPs to feel insecure, powerless, and lacking the ability to control stressful factors, leaving DSPs feeling emotionally drained (Manzano-Garcia & Ayala, 2017). Additionally, because the prevalence of aggression in individuals with IDDs varies broadly from 7–50% of the population (Singh et al., 2016), spontaneous aggression can

induce stress in DSPs. However, little is known about how stress and burnout interact among African immigrants working with individuals with IDDs.

Depression

Depression is characterized by low mood, feelings of guilt, hopelessness, low self-esteem and self-worth, poor appetite, low energy levels, poor concentration, and loss of interest or pleasure (Beck, 1979). Beck's cognitive theory (1979) holds that individuals' experiences guide the way they think, which then gives rise to the development of attitudes or assumptions referred to as schemas. These schemas, attitudes, and beliefs that are formulated by the individual then form a paradigm from which the individual views the world and responds to events (Beck, 1993, 1988, 1979). The negative view that develops within an individual is responsible for the individual's perception of themselves and the circumstance in which they find themselves; when perceptions are negative, this results in distinct feelings and emotions or moods such as depression (Beck, 1979; Seligman, 1979, 1967). Stress has been found to be associated with depression, as it precipitates the depressive episode (Won & Kim, 2016).

The Beck Depression Inventory (BDI) has been used to measure the levels of depression in people who are psychiatrically compromised (Beck et al., 1988). Additionally, the BDI allows for the assessment of the key symptoms of depression, in conjunction with mood, pessimism, a sense of failure, self-dissatisfaction, punishment,

guilt, self-dislike, self-accusation, suicidal ideation, work difficulty, and somatic preoccupation (Beck et al., 1988).

Research on Burnout

Burnout is considered an epidemic detrimental to the workforce and leads to employee shortages across every sector, as burnout has reached unsustainable levels in the United States (Reith, 2018). Burnout continues to be a serious occupational hazard adversely affecting the psychological and physical well-being of employees and the overall performance of organizations (Heinemann & Heinemann, 2017). Burnout accounts for an estimated $125–$190 billion in health care costs in the United States (Kraft, 2018). Additionally, burnout has also been correlated with negative individual outcomes, including type 2 diabetes, coronary heart disease, gastrointestinal issues, high cholesterol, and even death among young adults under age 45 (Kraft, 2018).

Based on this literature review, there is no widely accepted benchmark definition of burnout; however, a broad consensus exists that the burnout phenomenon seems to come about at the individual level, relating to the individual's emotions, attitudes, expectations, and perceptions of the presenting issues at hand.

Maslach and Jackson (1981) asserted that burnout is prevalent in direct care workers and other primary caregivers who provide personal care to patients and clients in the human services field. Rachel and Francesco (2018) found that burnout is prevalent amongst homecare staff, nursing, and residential homes workers who provide support

services for senior citizens. In a CNBC Gallup poll, Kraft (2018) surveyed 7,500 full-time employees, and 44% reported feeling burned out. Furthermore, past studies have indicated that employees experiencing burnout are affected in interpersonal, psychological, and cognitive domains (Kahill, 1988; Maslach & Leiter, 1997). Psychological symptoms can manifest in the form of anxiety, depression, anger, and cynicism, while cognitive symptoms can present themselves in the form of absent-mindedness, depression, hopelessness, and pessimistic thinking (Kahill, 1988; Maslach & Leiter, 1997).

Researchers have studied burnout in direct care providers working with individuals with ASD. To investigate the predictors of burnout in direct care providers supporting individuals with ASD, Bottini et al. (2020) conducted a quantitative study to examine the three dimensions of the MBI to ascertain the relationship between the six areas of work-life balance and burnout. The six areas of work-life balance included workload, control, rewards, community, fairness, and values. Overall, 149 personal care providers (136 females, 13 males) were included in Bottini et al.'s study. The researchers used the MBI for Human Services survey, with 22-item self-report measures, to measure burnout. Bottini et al. also used the Areas of Work-life Survey (AWS), with 28-item self-report measures including six domains. Bottini et al. predicted that workload and fairness would be the strongest predictors of burnout in direct care providers serving individuals with ASD.

Bottini et al. (2020) found that a high number of direct care providers experience moderate to high burnout in terms of EE, and other participants reported substantial stress with respect to personal accomplishment. Furthermore, Bottini et al. found that the domains of workload, reward, fairness, and values were found to be the leading predictors of burnout. Limitations of the study included that Bottini et al. did not make clear if the individuals with ASD were adults or children, and the specific qualifications of direct care providers were not explained. Additionally, Bottini et al. used a small sample size, which could have affected the external validity and reliability of the study results. Since the participation for the study was voluntary, direct care providers' motivation to participate in this study might be different based on the respondents' experiences relating to burnout. Bottini et al.'s study was valuable to understanding burnout in the profession, especially in that work stress and frustration contribute to burnout and that the central component of burnout is EE. Bottini et al.'s study is particularly useful to organizations supporting adults with both ASD and IDDs seeking to understand the predictors of burnout in caregivers and direct support professionals alike.

Researchers have also studied burnout in direct care workers in various settings, including nursing homes. Yeatts et al. (2018) conducted a quantitative study to identify the factors associated with burnout among direct care workers (DCWs) in a nursing home setting. Participants were employees of both private and nonprofit nursing homes in northern Texas. The researchers distributed a self-administered survey instrument and

410 participants completed the survey. Yeatts et al. examined the three dimensions of the MBI. The researchers included 12 independent variables, of which three reflected organizational characteristics, three reflected work design, two variables reflected interpersonal aspects, and the variables of age, month the DCW was hired, commitment, and self-esteem measured personal characteristics. The questionnaire had 112 items. Yeatts et al. found that irrespective of the type of setup within an organization, employee burnout could be caused by several factors at the organization level, such as the policies and procedures of the organization, the design of the work itself, or the interpersonal relationship of the employees in the organization.

Yeatts et al. (2018) helped reframe scholars' understanding of the factors that give rise to burnout. However, several limitations were noted. First, even though the study was a cross-sectional study, a causal relationship could not be ascertained, as data were collected at one point in time. Second, DCWs and the nursing homes were not randomly selected from across the United States, and as such, their findings could not be generalized to all nursing homes and DCWs across the country. Third, Yeatts et al. used a small sample size, which could affect the external validity and reliability of the survey results. Fourth, the questionnaire had 113 items, and some respondents may have found questions on the questionnaire to be too many, leading to inattention. Fifth, based on the number of nursing homes in the United States, there could be voluntary response bias due to the small sample size. It is, therefore, imperative that further research be conducted to

account for the low sample size tolead to a comprehensive understanding of the variables under study and a valid conclusion.

Yeatts et al. (2018) study highlighted the need for organizational policies that would account for fairness of pay, adequate staffing, and providing DCWs with the skills, knowledge, and abilities to carry out their job duties efficiently. When DCWs are underpaid, lack appropriate training and staffing, and feel lack of organizational support or the trust of management or coworker support, DCWs are more likely to experience burnout. Therefore, to reduce burnout among DCWs, policies and procedures must be put in place to help mitigate the factors giving rise to burnout.

Researchers have also studied burnout in general samples of DSPs working with aggressive adults with developmental disabilities (DDs). Nevill and Havercamp (2019) studied the effects of mindfulness, resilience, and coping styles on job retention and burnout in DSPs working with aggressive adults with DDs. Participants worked with physically or verbally aggressive adults with DDs. Nevill and Havercamp used the MBI for Human Services survey as the primary measure of burnout, along with the Kentucky Inventory of Mindfulness Skills, the Brief Coping Orientation to Problem Experience, and the Brief Resilience Scale to investigate the levels of DSPs' mindfulness, coping styles, burnout, and resilience. In all, 97 DSPs from urban and suburban counties in the midwestern United States participated in this quantitative study (Nevill & Havercamp, 2019). Nevill and Havercamp found that burnout was present in DSPs; however,

mindfulness skills emerged as a shield against burnout, while maladaptive coping emerged as a risk factor of burnout.

Nevill and Havercamp (2019) furthered understanding of the factors that create burnout, coping styles, and resilience, especially related to the severity of aggressions in clients with DDs, which showed no differences in the severity of the aggression experienced by the DSPs. However, several limitations were noted. First, the small sample size of 97 DSPs limited Nevill and Havercamp's ability to detect differences in the groups. Second, due to the sensitive nature of the participant sign-up process, there could be bias around the recruitment process of the DSPs. Third, because resilience did not include a direct measure as a construct in the study, Nevill and Havercamp suggested future research that accounts for resilience as a mechanism associated with long-term retention, including psychological outcomes.

Nevill and Havercamp's (2019) study highlighted the need for organizations to develop DSP training focused on mindfulness and problem-focused coping skills to help foster DSPs' positive outcomes in the workplace environment. Training helps DSPs to deescalate challenging behavior in clients with IDDs, and at the same time, could help increase the well-being and quality of life of the clients with DDs receiving support from DSPs, while also helping to assure the DSP safety. While Nevill and Havercamp's findings were not generalizable due to the sample size, which limited the ability to detect

differences in the groups, the findings may be particularly useful to organizations seeking to understand the role burnout plays in their employees.

Researchers have also found that the death of patients of DCWs can cause burnout. Boerneret al. (2017) conducted a mixed-method study to investigate if CNA and HHA bereavement when patients die gives rise to burnout. For the qualitative portion, the researchers conducted semi-structured, in-person interviews with CNAs and HHAs from three large nursing homes in the greater New York region. Study participants were mostly women and from minority backgrounds (Boerneret al., 2017). The researchers used the MBI, with its three domains of EE, depersonalization, and decreased personal accomplishment, to measure burnout. Boerneret al. used other inventories to collect information on staff factors, institutional factors, patient/relational factors, and grief factors. Boerneret al. found out that both CNAs and HHAs demonstrated similar levels of grief related to the MBI burnout dimensions of depersonalization and personal accomplishments, indicating connections between participants' grief over the loss of a patient and these two factors of burnout. However, Boerner et al. also found that organizational support, employee benefits, and coworker support might act as protective factors from burnout.

Boerner et al. (2017) helped provide an understanding of factors that give rise to burnout after the death of a patent; however, the researchers did not account for several job characteristics in the study. Some of these characteristics include the number of

patients assigned to the workers at any given time, case mix, diagnosis of the workers' patients, or their work-related factors that could account for variance in this study. Although there continues to be a growing demand for personal direct support staff, if organizations lack support in managing the grief of their direct care staff, it could lead to burnout and perhaps diminished caregiving to patients. Boerner et al.'s findings highlighted the need for employers to recognize the multiple job characteristics such as client diagnoses, case mix, and the number of patients with IDDs assigned to each DCW, as well as other job requirements previous researchers have found are associated with burnout. Additionally, grief may adversely affect DCWs and lead to burnout.

Research on Stress

As the number of individuals with IDDs in the United States continues to grow (CDC, 2019), DSPs continue to play a vital role in providing care, safety, and security for individuals with IDDs. Past studies have demonstrated that when employees endure sustained levels of stress, such stress can have devastating effects on employees and result in burnout, whereby stress leads to strain characterized by EE, decreased sense of accomplishment, and frequent outbursts toward individuals with IDDs (Bansal, 2018; Gary-Stanley et al., 2011; Maslach& Leiter, 2016; Maslach et al., 2001). The potential sources of stress, according to Bansa (2018), include task demand, role demand, work overload, interpersonal relationships at work, group pressure, organizational leadership, and life change.

To understand the origin of stress, which can lead to burnout, in another population of DCWs, Ravalier et al. (2018) conducted a qualitative study. Ravilier et al. conducted the study with domiciliary care workers and other support workers on zero-hour contracts, which are contracts in which employees are not required to work a minimum number of hours in any given week. Respondents worked for 25 small-to-medium-sized, privately-owned organizations and provided interviews conducted over the phone and audio recorded. The researchers asked participants about the sources of stress in their different roles. In all, Ravalier et al. conducted 29 semi-structured interviews; 14 participants were under standard contracts and 15 participants who were under zero-hour contracts. The respondents indicated they developed positive relationships with service users and family members, as well as that the rewarding nature of the caregiver role was a distinct stress reliever. However, Ravalier et al. found that workers under zero-hour contracts experienced more stress than individuals with contracted hours. Ravalier et al. also found that both groups reported that poor pay rates, maintaining healthy work-life balances, and service users being rude, condescending, and disrespectful exacerbated stress.

Ravalier et al. (2018) helped provide understanding of factors that create stress leading to burnout in zero-hour direct care workers. However, because the study was qualitative, there is a possibility of subjectivity from the researcher. Ravalier et al. highlighted the need for management in support care organizations in the United

Kingdom to assure both professional and social support to the zero-hours contract individuals. This professional and social support should address enhancing employee performance, improving job conditions for caregivers, and ensuring better pay and work-life balance by providing sensitivity training to family members so that employees' health, well-being, and stress can be mitigated (Ravalier et al., 2018). Organizational conditions and work role-related factors may be related to work-related stress in the present study.

Judd et al. (2017) conducted a qualitative study on the lived experiences of disability support workers (DSWs) and workplace stress, burnout, and coping. Judd et al. recruited 12 DSWs (six men and six women) from organizations that support individuals with IDDs in Australia. The researchers used semi-structured interviews to understand factors that lead to burnout, stress, and coping in these participants. The job characteristics that led to burnout and stress included low wages, pressure due to staffing shortages, lack of decision-making, and the lack of insight by management into the jobs DSWs (Judd et al., 2017). However, Judd et al.'s findings suggested stress and burnout were lower in DSWs as a result of their perceptions of positive organizational support during times of challenge.

Judd et al.'s (2017) findings provided information of those factors that lead to stress among DSWs; however, several limitations were noted. The DSWs who participated in this study were employed across a range of settings, such as providing

support for clients with IDDs in various organizations. Therefore, it is possible that the self-reported experience of burnout might be different from other respondents based on their individual understandings of what constitutes burnout. It is, therefore, imperative that further research be conducted to account for these limitations.

Judd et al.'s (2017) research was valuable for researchers to understand stress, burnout, and coping among DSWs. Their findings highlighted the need for organizations to best serve employees by developing policies and strategies that contribute to positive employee beliefs and attitudes about the organizations, especially related to specific job duties. Judd et al. emphasized the importance of conducting more studies with larger sample sizes to extend understanding of the key concepts of the study.

Heckenberg et al. (2018) conducted a qualitative study to identify the characteristics of a workplace that could lead to work-related stress. Heckenberg et al. used components of the contemporary workplace-related stress model and the job demands-resources (JD-R) model to guide focus group sessions about stress in DCWs working in the health services industry. In all, 19 direct care workers from two regional health care organizations located in the northern Victoria region of Australia participated in this study. Funding insecurity, time pressure, hindrance demands, poor systems, emotional engagement, and dealing with client crises were the six themes that emerged from the two semi-structured focus groups (Heckenberg et al., 2018).

Heckenberg et al. (2018) emphasized that professionalism, effective job resources, communication, and time management skills can reduce job strain; however, dealing with clients' challenges and crises place DCWs at increased risk for workplace stress. Heckenberg et al. identified those factors that give rise to job-related stress when working with challenging individuals; however, a limitation was that the work-related characteristics that depict the duties of a DCW were not included in the JD-R model. Additionally, Heckenberg et al.'s conclusion are not generalizable because of the low sample size necessary for qualitative research. However, the researchers emphasized more studies be conducted with larger sample sizes to confirm the findings and offer understanding into work-related characteristics in addition to what the JD-R questionnaire currently holds.

To understand the source of job strain and how strain can be diminished, Zoeckler (2018) conducted a qualitative study to explore the relationship between work-related stressors and agency-level factors. Nine home care agencies located in upstate New York participated in this study, including 25 HHAs (one man and 24 women). Zoeckler conducted in-depth semi-structured interviews with two top agency executives; one interview with senior agency personnel and three HHAs at each agency location. Zoeckler asked participants questions about job autonomy, workplace support, efforts versus reward, and work demands. Questions were supplemented by a discussion of how work environments can be stressful. Zoeckler found that lack of workplace support is a

contributing factor to work-related stress, especially in the presence of work demands. Furthermore, organizational practice should center on enhanced work arrangements and competitive payment schemes (Zoeckler, 2018).

Zoeckler's (2018) findings led to a discussion of quality training and increased pay rates. Zoeckler identified factors that lead to occupational stress. However, Zoeckler conducted the study in a nursing home setting, there could have been voluntary response bias due to the small sample size. Zoeckler's (2018) study was valuable to my understanding of occupational stress among home healthcare workers, especially stress stemming from occupational hazards related specifically to injuries sustained by DSPs from dangerous behaviors exhibited by individuals with IDDs.

Research on Depression

According to the World Health Organization (2020d), depression is a mental health disorder that affects over 264 million people globally, and depression is considered one of the most serious health issues that immigrant populations experience in the United States (Ezeobele et al., 2019). Additionally, Yunus et al. (2018) stated that depression is a disease that affects over 300 million people globally, and it is considered the second leading cause of disability. According to DSM-V (APA, 2013), depression is defined as a depressed mood for a minimum of two weeks in which the person loses interest or pleasure. A depression diagnosis is the most pervasive psychiatric disorder in the world (Yunus et al., 2018). Descalzi et al. (2017) stated that depression is a chronic illness that

is genetically based and has the potential to induce prolonged stress due to factors such as socioeconomic status, marital stress, work-related stress, and physical illness.

Researchers have found the symptoms of depression cause impairment in important areas of individual daily functioning, including occupational and social areas (Yunus et al., 2018). Depression may be induced by stress and may occur after exposure to one or more risk factors, including stress and environmental factors. Assari and Caldwell (2018) noted that culturally based expression among African Americans and non-conventional symptoms such as hypertension is prevalent among the African population. Researchers have noted depression in the workplace as an area of increasing concern and linked depression to serious mental health problems in the workplace (Yunus et al., 2018). Workplace depression is a contributing factor to the loss of productivity, and in the United States alone employers spend $44 billion each year in lost productivity due to depression-related issues (American Psychiatric Association Foundation, 2020). Additionally, Yunus et al. (2018) estimated that the United Kingdom lost a total output of 1.5% of their gross domestic product due to employee depression.

The chief consequences of depression are the inability of an individual to perform their usual role of work or other functions as deemed necessary. Stressors such as job pressure in the workplace play a significant role in employee well-being and performance; hence, employee psychological and physical health is vital to their mental health status (Naseem & Ahmed, 2020). Role impairment in work functions is associated

with medical conditions such as depression or anxiety disorders (Enns et al., 2018). According to Caru et al. (2018), depression is associated with poor physical health, a decline in physical ability, and cardiac issues. Moreover, family members caring for individuals with depression also experience negative impacts to their health while caring for loved ones (Smith et al., 2017). Additionally, individuals between childhood and early adulthood whose parents have depression have an elevated risk of depression (Loechner et al., 2019). The effect of depression is widespread. Li (2019) stated that workplace depression is responsible for the greatest negative impact on productivity and time management when compared to other health disorders.

Stress and burnout can drain employees' physical and mental resources, leading to depression (Lin et al., 2016). Symptoms of depression manifest in different ways, especially from one culture to another, which has made it difficult to pinpoint and classify symptoms of depression across various cultures (Kleinman& Good, 1985). However, Ekwemalor et al. (2019) concluded that depression is one of the leading health issues immigrants face outside of their home countries because of the challenges associated with acculturation. While depression in the immigrant population is considered one of the most severe health-related issues (Ezeobele et al., 2019), depression, which has been linked to serious mental health problems, continues to be a significant concern in the workplace for immigrants as well (Yunus et al., 2018). Because of acculturation issues, immigrant populations must contend with language barriers and

different perceptions of values, beliefs, customs, work habits, and activity levels; therefore, DSPs who are African immigrants may experience stress leading to depression at higher levels than non-immigrant workers do.

Burnout is one possible outcome of unresolvable work-related issues related to stress (Maslac& Leiter, 2016); however, Pizzagalli (2014) indicated that stressors play a significant role in the diagnosis of depression. Researchers have paid little attention to the link between stress, burnout, and depression in employees who are African immigrants (Covington-Ward, 2018). Due to the limited number of studies conducted in the United States, knowledge about African immigrants' health and well-being related to stress, burnout, and depression is limited.

Researchers have studied well-being among direct support staff working with individuals with ASD. Manzano-García and Ayala (2017) conducted a quantitative study to examine the relationship between psychological capital and psychological well-being among direct support staff working with individuals with ASD. The researchers also sought to determine whether burnout mediated the relationship between psychological capital and psychological well-being. Participants were employees of a large autism center located in the La Rioja region of Spain. In all, 56 direct support staff, of which most were women, participated in the study. The researchers measured psychological capital using the Spanish version of the Psychological Capital Questionnaire, and used the MBI (Spanish version), with its three domains (EE, depersonalization, and decreased

personal accomplishment), to measure burnout. The researchers used the Spanish version of Van Dierdonck's psychological well-being (PWB) questionnaire to measure participants' PWB. Manzano-García et al. predicted that the psychological capital of direct support staff would be positively associated with PWB, and burnout would mediate the relationship between psychological capital and PWB. Manzano-García et al. found that psychological capital has a significant positive effect on PWB and that DSS with high levels of psychological capital reported lower burnout, leading to higher levels of PWB.

Manzano-García et al. (2017) helped understand the relationship between psychological capital and psychological well-being, especially when high levels of psychological capital are found to be positively related to employee performance and job satisfaction. However, limitations were noted; for example, the study included a small sample size, which could have affected the study's results. Additionally, psychological capital and burnout were measured on an individual level, as the researchers did not consider the contribution of group resources. However, Manzano-García et al.'s findings highlighted the importance of psychological capital and how it can be improved through training and enhance well-being by helping to prevent stress and burnout in DDS. The research is valuable to my understanding of the PWB of DSPs, specifically well-being as related to stress leading to depression when working with individuals with challenging behavior, such as those with IDDs. Manzano-García et al.'s findings are particularly

useful to home health and human service organizations seeking to understand the relationship between psychological capital and PWB. However, Manzano-García et al. emphasized more studies should be conducted with larger sample sizes.

Outar and Rose (2017) conducted a cross-sectional correlational study to investigate the relationship between work demands, role identity, and burnout in direct care staff working with individuals with intellectual disabilities in community settings. The purpose of Outar and Rose's study was to ascertain if a relationship exists between work demand and staff burnout, as well as to determine whether role identity mediates this relationship. In all, 70 respondents from 14 service organizations participated in this study. Outar and Rose used a demographic information questionnaire, the Demands of the Job Inventory, a self-determination inventory, a role identity inventory, and the MBI for Human Services for this study. EE, depersonalization, and personal accomplishment constituted the three domains of burnout in direct care workers. Outar and Rose predicted that there would be a relationship between work demand and staff burnout, and that role identity would mediate this relationship.

Outar and Rose (2017) found a relationship exists between work demand, burnout, personal accomplishment, role identity, and self-determination. Findings revealed that work demand was linked to EE in direct care staff and work demand was positively associated with increased levels of burnout. Additionally, the more direct care staff members are exposed to work pressures, the more pessimistic they become.

However, there was no relationship between the way the direct care workers view their role and how they interact with individuals with IDD. Outar and Rose indicated that longitudinal research is needed to understand the relationship between these factors over time.

Outar and Rose (2017) discovered factors that lead to burnout among DSWs; however, there were several limitations to their study. First, response bias posed a threat as respondents may have answered questions in a manner that would be viewed as favorable, or respondents may have under-reported. Second, although the alpha level of the self-determination questionnaire was 0.7, this level may not be reliable as the self-determination questionnaire is considered new in the market. Third, Outar and Rose's study was also exposed to other forms of bias as it was difficult to ascertain the level of interference of the organization's unit managers who were taxed to remind the direct care staff to complete the questionnaire. However, Outar and Rose's cross-sectional study into the relationship between work demand and staff burnout was valuable to my understanding of factors that give rise to burnout. In order to reduce stress in DCWs, organizations should investin stress relief training programs and improved work designs of direct care workers.

Cultural Implications of Stress, Burnout, and Depression

Demographics and cultural diversity continue to change in the United States (Hughes et al., 2020). In 2018, 23.3% of foreign-born workers were hired to work in the

service industry, while only 15.9% of the native-born were hired to work in the service industry (U.S. Bureau of Labor Statistics, 2016a). Past studies have suggested that culture is a collectively held value of people where their group behaviors are guided by a set of belief systems and attitudes (Györkös et al., 2012; Huhtala et al., 2016; Stoermer et al., 2016). Hofstede defined culture as "the collective programming of the human mind that distinguishes the members of one human group from those of another" (1981, p. 24). How an immigrant perceives stress is contingent on what that individual perceives as a stressful situation (Liu et al., 2007). Therefore, individual differences based on specific cultures can influence the outcomes of individuals' stress because perceptions of stress can be influenced by cultural understanding (Györkös et al., 2012).

African immigrant workers experience cultural differences and have issues adjusting to different cultures based on changes to their lifestyles when adjusting to the host country culture (Cervantes et al., 2016). For example, Doki et al. (2018) stated that it is less stressful for a native-born person to work in his or her country than for a foreign-born person working in the host country because of issues associated with acculturation for foreign-born workers. Furthermore, past research has suggested that immigrants working in a host country displayed more mental health issues due to psychological stress associated with the job and lack professional support in the work environment, leading to diminished well-being (Aalto et al., 2014; Font et al., 2012). Researchers have suggested

that psychological stress in foreign-born immigrants can lead to adjustment disorders and depression (Al-Maskar et al., 2011; Wang & Takeuchi, 2007).

Researchers have studied burnout in native and foreign-born female DCWs working with individuals with IDDs. To understand burnout in DCWs, Lin et al. (2015) conducted a quantitative study in which they compared burnout and life satisfaction of native and foreign-born female DCWs working with individuals with IDDs. The researchers conducted a cross-sectional survey including 46 women (23 native-born women and 23 foreign-born women) from two developmental disability organizations in Taiwan. Measurement instruments for this study included the Subjective Happiness Scale (SHS) to measure subjective happiness or well-being. Lin et al. used the Demographic Characteristics Questionnaire for demographics, the Satisfaction with Life Scale (SWLS) to measure life satisfaction, and the Copenhagen Burnout Inventory (CBI) with its three domains to measure job burnout. The three domains of the CBI include personal burnout score (PBS), work-related burnout score (WBS), and client burnout score (CBS).

Lin et al. (2015) found that burnout was slightly higher for native-born workers in comparison to foreign-born DCWs, especially in the areas of PBS scores and WBS scores. Furthermore, foreign-born DCWs were slightly happier, reported more life satisfaction, felt less stress, and were more religious regarding life satisfaction than the native-born DCWs. However, the Taiwanese depression questionnaire survey in Lin et al.'s study indicated that more than one-fifth of caregivers were at risk for mental health

issues, stress, and depression. Although burnout was slightly higher in native-born workers in Lin et al.'s study, I am expecting to find higher stress, burnout, and depression levels in African immigrants who work as DSPs because of issues of acculturation (see Covington-Ward, 2017) than in native-born DSPs. Even though Manzano-García et al. (2017) suggested that all direct care staff working with individuals with IDDs are prone to stress, burnout, and depression, the manifestations of the stress in African immigrants are tied to cultural background issues, such as unrealized expectations, immigration modalities, and acculturation processes (Covington-Ward et al., 2018).

Although Lin et al.'s study (2015) helped others understand burnout and life satisfaction between native and foreign-born DCWs who works with individuals with IDDs, the study had limitations. First, Lin et al. used a small sample size, which could affect the external validity and reliability of the survey's results. Second, because this study was conducted in two developmental disability organizations in Taiwan, there could be voluntary response bias due to the small sample size. It is, therefore, imperative that future researchers conduct similar studies with adequate sample sizes. As a quantitative cross-sectional study conducted to investigate burnout and life satisfaction of native and foreign-born female DCWs working with individuals with IDDs, Lin et al.'s study was valuable for my understanding of factors that lead to burnout and life satisfaction between native-born and foreign-born DCWs.

Cooper et al. (2016) conducted a systematic literature review to ascertain burnout factors in nursing home health care aides. Cooper et al. selected 10 quantitative studies, mostly conducted in the United States. Six studies included the domains of the MBI (EE, depersonalization, and decreased personal accomplishment) or the Staff Burnout Scale for Health Professionals Inventory, with burnout as the dependent variable, while the remaining four studies included one or multiple dimensions from the MBI (Cooper et al., 2016). Although Cooper et al. predicted that HCAs would experience burnout, HCAs' ethnic identities were connected to a reduction in burnout scores. The manifestations of stress in African immigrants are tied to cultural background issues, such as immigration modalities and acculturation processes (Covington-Ward et al., 2018). However, Cooper et al. also found that factors that lead to burnout include organizational characteristics and the time required to complete a given task. Lin et al.'s (2015) findings suggested that burnout in native-born direct care workers is slightly higher than foreign-born workers. However, Covington-Ward et al.'s research indicated that understanding the sources of stress and burnout in African immigrant health workers is critical. Investigating whether work-related stress predicts burnout and depression and whether burnout mediates stress and depression among African immigrants working with adults with IDDs can help facilitate much-needed insight into stress levels, burnout, and depression in African immigrants working as DSPs in the United States (Campbell, 2018; Covington-Ward, 2017).

Additionally, in relation to demographic factors, Cooper et al. (2016) found that being married, being older, years of education, and years of work impact DSWs' feelings of reduced depersonalization. Cooper et al. also found that gender and relationship status had a significant effect on personal accomplishment and EE. Organizational buffering factors such as a reduction in work strain and personal accomplishment scores of HCAs' subjective appraisal of the work environment was prevalent in most of the studies reviewed, with a significant degree of heterogeneity noted across the different individual buffering factors (Cooper et al., 2016). Cooper et al. indicated that more research is needed to understand further the different factors that could create burnout in HCAs working in nursing homes, including a more comprehensive understanding of the variables under investigation, especially in the areas of EE, depersonalization, and accomplishment.

Summary

Although research has demonstrated that stress and burnout manifest themselves differently in individual employees, the review of literature illustrates the need for additional research on the relationship between stress and burnout among African immigrant DSPs. DSPs are faced with challenges such as physical and verbal aggression, which can lead to stress and burnout. The estimated turnover rate of DSP positions is 45% and ranges between 24–69%; additionally, 38% of DSPs abandon their positions in less than six months of employment, and 21% abandon their job within 6–12 months of

employment (National Core Indicator, 2018; U.S. Bureau of Labor Statistics, 2018b). The prevalence and impact of stress and burnout in African immigrant DSPs must be studied because African immigrants make up 10% of the population of DSPs working with individuals with IDDs (Yunus et al., 2018).

Based on the literature review, stress can also lead to depression in the organizational workforce, and depression is the most prevalent cause of absenteeism in the workplace (Yunus et al., 2018). Furthermore, stress plays a crucial role in the etiology of depression (Dalton & Hammen, 2018; Hammen, 2005). DSPs are crucial to the overall health and safety of individuals with IDDs and identifying the sources of stress and burnout in African immigrants working with individuals with IDDs may lead to information to help alleviate burnout in this population (Hish et al., 2019). Stress management programs are considered one of the major and leading strategies for promoting healthy work environments because stress management interventions help to improve mental health issues such as depression (Yunus et al., 2018).

In Chapter 3, I discuss the study design and methodology, along with the study instruments. Chapter 3 also includes my discussion of the study procedures, the rationale for the methodology, the research questions, and the design of the study.

Chapter 3: Research Method

The central focus of this quantitative mediation study was to investigate whether burnout mediates the relationship between stress and depression among African immigrants working with adults with IDD. I selected this design because I could examine the extent that work-related stress predicts burnout and depression in this population. Depression was the criterion or dependent variable, stress was the predictor (independent) variable, and burnout was the mediating variable. Assessing the relationships between variables for the target population helped me understand the problem and may help guide appropriate intervention strategies. The results of this study may also suggest if work-related stress predicts burnout and depression and whether burnout mediates the relationship between stress and depression in African immigrants working with adults with IDDs.

In this section I detail the methodological choices and procedures of the study. First, I present the rationale for the selected research design. Next, I describe the details of the methodology, including the population and sample, procedures for data collection, instrumentation, and data analysis procedures. This section concludes with my discussions of validity and ethical procedures.

Research Design and Rationale

In this study, the independent (predictor) variable was stress, the dependent (criterion) variable was depression, and the mediating variable was burnout. The research

design I selected for this quantitative study is a non-experimental, correlational research design. According to Manzano-García and Ayala (2017), researchers use correlational designs to predict one variable at a time so they can enter several variables. This can be advantageous in examining several relationships between the research variables.

I determined a correlational research design was the appropriate design for this study in comparison to an experimental approach. Unlike the experimental approach, where researchers introduce an intervention into an experiment, researchers use correlational studies when seeking to understand the kind of relationship that exists between two or more variables. I decided a correlational design was most appropriate because my research questions involved determining the relationships between stress, depression, and burnout. Additionally, because levels of stress, depression, and burnout could not be manipulated or randomly assigned, I decided an experimental design was not appropriate for my study. Understanding the relationship between the variables in this study may provide organizations that support adults with IDDs with insight into stress levels, burnout, and depression in African immigrants working as DSPs in the United States and burnout interventions.

Methodology

Population

The population for this study was African immigrants working as DSPs with individuals with IDDs. From 2005–2015, 183,000–284,000 African immigrants worked

as direct care workers in the United States (Campbell, 2018). The study's population is the individuals to whom the findings of the study are meant to be generalized. Although Rhode Island is the smallest state in the United States, with a population of 1,059,361 million people (United States Census Bureau, 2019), for the scope of this study, it was not practical both in terms of cost and time constraints, especially for a dissertation research study, to include a large group of individuals. The target population for this study included individuals from six disability provider organizations that provide services to individuals with IDDs in the state of Rhode Island.

Sampling and Sampling Procedures

Sampling is a process for systematically selecting suitable participants to determine the characteristics of the whole population from which the sample was drawn (Moser & Korstjens, 2018; Sharma, 2017). I selected this population because of the high risk of burnout associated with the helping profession. I selected participants for this study from six disability provider organizations supporting adults with IDDs located in several cities and towns in the state of Rhode Island. All organizations I selected have been in operation between 10–45 years. The disability organizations supporting adults with IDDs I selected for this study were representative of the other disability organizations in the state of Rhode Island. I employed a snowball sampling procedure to obtain a sufficient number of participants that would fit the study inclusion criteria, which was appropriate for the dynamics of disability organizations and African immigrants.

This sampling method helped me establish a chain of referrals whereby the first participants helped recruit other participants in the identified population (Sharma, 2017).

To be included in this study, participants had to have been working as direct care professionals in a disability provider organization supporting adults with IDDs. Participants had to have been hired for a full-time or part-time position and could work day shifts (9 am – 3 pm), afternoon shifts (3 pm – 11 pm), and overnight shifts (11 pm – 9 am). Participants had to be at least 18 years old, able to read and write English fluently, and employed with the organization they were currently with for at least 6 months.

The statistical power analysis test is a critical part of conducting a quantitative study (Green & MacLeod, 2016). A researcher uses a power analysis test to ascertain the smallest sample size acceptable in a study (Green & MacLeod, 2016). The effect size is the numerical measure of the strength of the relationship; the larger the effect size, the stronger the relationship between two variables (Ferguson, 2016). Additionally, the effect size and the *p*-value are reported in a study based on the research outcome. I conducted a power analysis with G*Power to ascertain the number of participants needed for this study. I used the acceptable standard alpha level of .05 with an effect size of .15 and a power level of .80. Based on these parameters, the sample size needed for the study was 68 participants (see Appendix A). Geuter et al. (2018) noted that studies with a small sample size generate low statistical power to effectively detect true effects.

Although a low response rate by itself does not invalidate the findings of a survey, the response rate is essential in a research study, and a lack of responses may pose challenges for researchers (Nix et al., 2019). A reduced sample size could lead to sampling error and lower statistical power that, in turn, increases the risk of Type II errors (Cohen, 1988). In any study, there is a possibility of low response rate whereby the researcher fails to elicit cooperation from individuals who were contacted for the study (Nix et al., 2019). Lower than expected response rates could be due to the lack of an updated and accurate email address list for participants (Nix et al., 2019; Saleh & Bista, 2017). I recruited 111 participants in this study. Therefore, there was no need for me to extend the data collection period nor send reminders to participants to elicit more responses.

Procedures for Recruitment, Participation, and Data Collection

I conducted this study in accordance with Walden University's Institutional Review Board's (IRB) general guidelines for conducting research with human participants and managing participants' personal data. After I obtained IRB approval for this study, I obtained a list of contacts of disability organizations in the state of Rhode Island from the Community Provider Network of Rhode Island (CPNRI). CPNRI is a nonprofit trade association for private disability providers of services and supports to individuals with IDDs. I sent a letter (see Appendix B) to the disability organizations describing the aim of the study and requesting their permission to access direct support

professionals working in their organization. I also sent an introductory letter to the executive director of CPNRI to secure support for the research. Further, I sent a letter of cooperation (see Appendix C) for the organization to sign and return to ensure they provided permission for my to conduct research activities in their organization.

I requested a list of contact information of the African immigrants working in the different group homes from the executive directors of the disability organizations. I sent emails to DSPs as invitations to participate in my study. Additionally, some organization directors asked me if they could forward the email invite and the SurveyMonkey link to to their DSPs. The email invitation I sent to participants included a link to the survey via Surveymonkey.com, the informed consent form, and instruments. Surveymonkey.com is an online platform for surveys commonly used in the field of social science research and other disciplines (SurveyMonkey, 2017). The email notification included the invitation letter of participation (see Appendix E) and a statement of informed consent (see Appendix D). The email also included an introduction to the study, my brief biography, the purpose of the study, an overview of the study, a statement of voluntary participation, ethical concerns, and directions to read the attached informed consent form. An informed consent form is a standard document of introduction to the research project, the background of the study and researcher, and the directions to access the survey site. The informed consent form included information about eligibility criteria to participate, the amount of time participants could expect to take to complete the survey, a description of

the survey, and a disclosure of any unforeseen risks and benefits of participation. When a DSP agreed to voluntarily participate in the study, they completed the informed consent form and survey. Those individuals who decided against volunteering for the study exited the survey website. I sent a follow-up email to remind participants about the survey.

I asked DSPs to sign the informed consent form to indicate their voluntary participation in the study. I assured participants' anonymity and told participants that their responses would only be used in the dissertation and for no financial gain after the completion of the dissertation. I also told participants they may withdraw from the study at any time without repercussion. I informed participants that I was not instructed or mandated by the participants' employer to conduct this study and that their responses would be strictly confidential.

I informed participants that if they experienced any discomfort due to their participation in this study, they would reach out to counselors from two counseling centers in the area for help. Additionally, I ensured participants knew these two centers assured client confidentiality and were in full compliance with the Health Insurance Portability and Accountability Act.

I used a demographic questionnaire to gather descriptive information from participants. DSPs who participated completed a demographic questionnaire (Appendix F). The demographic information included gender, age, race or ethnicity, marital status, highest level of education, employment status (full or part-time), work experience, length

of time in the current organization, whether they were currently employed with an organization that supports adults with IDDs, years of experience in the field, and how many years they had resided in the United States. I expected participants took approximately 5–6 minutes to complete the demographic questionnaire. Upon completion of the demographic survey, participants completed the MBI-HSS 22-item questionnaire, the 22-item Beck Depression Inventory, and the 13-item JSS (by Parker & DeCotiis). I received permission to use all instruments (Appendices G-I). I did not compensate participants in this study for their time. However, I created a thank you message to display on the screen after participants finished the last survey.

Instrumentation and Operationalization of Constructs

I used survey methods to numerically describe the population under investigation. The instruments I selected to conduct this study and collect data included the BDI, MBI-HSS, and JSS. I describe these instruments in this section.

Maslach Burnout Inventory-Human Services Survey

I used the MBI-HSS to assess burnout in the DSPs. The MBI has strong psychometric properties, and researchers prefer it is the preferred measure use to assess burnout (Maslach et al., 2001). Researchers use the MBI-HSS survey tool most commonly to access burnout in professionals in the human services field (Angerer, 2003). The MBI-HSS measures EE, depersonalization, and personal accomplishment (Maslach et al., 2016). The primary use of the MBI scale is to measure burnout among working

adults across different fields (Schwarzkopf et al., 2019). I decided the MBI-HSS the appropriate instrument for this study to assess burnout because it measures the level of burnout explicitly in employees working in the human service field, and it has been shown to be a reliable and valid measure of burnout.

Researchers use the MBI-HSS to measure three dimensions of burnout. Nine items measure EE, five items consist of depersonalization, and eight items measure personal accomplishment (Maslach et al., 1986). This instrument consists of 22 total self-report items that respondents rate using a 7-point Likert-type scale ranging from 0 (*never*) to 6 (*every day*). Researchers use the EE subscale to assess respondents' feelings of being an excessive burden by the workforce employee work and their level of EE (Maslach et al., 2016). An example of the survey item that assesses EE is "I feel fatigued when I get up in the morning and have to face another day on the job" (Maslach et al., 2016). The depersonalization subscale is used to assess participants feeling of detachment toward clients receiving supports and services from the workforce employee (Maslach et al., 2016). An example of the survey item that assesses depersonalization is "I've become more callous toward people since I took this job" (Maslach et al., 2016). The personal accomplishment subscale is used to assess a respondents' feeling of accomplishment and their competence in the respondent's work toward other individuals in the workplace environment (Maslach et al., 2016). An example of an item that assesses personal

accomplishments is "I have accomplished many worthwhile things in this job" (Maslach et al., 2016).

According to Maslach et al. (2016), scores generated from the subscale should not be combined to attain a total burnout score; however, high levels of scores on burnout are reflected only on the EE and depersonalization subscale (≥ 27 and ≤ 13, respectively). Additionally, Maslach et al. (2016) indicated that low scores generated from the personal accomplishment subscale (17–26, 7–12, and 38–32, respectively) demonstrate an average level of burnout. Maslach et al. (2016) posited that low-level score generated from the subscale of EE and depersonalization (≤ 16 and ≤ 6, respectively) and high-level score (≥ 39) generated from the personal accomplishment subscale demonstrates low levels of burnout of a workforce employee.

The MBI is a self-administered tool that takes an average of 10–15 minutes to complete (Maslach et al., 2016). The normal and standard group for which the MBI-HSS is used to assess burnout is professionals in work environments requiring direct contact with clients in need of services and supports. Maslach et al. (2016) listed several settings that use the MBI-HSS, including hospitals, group homes and halfway houses, medical offices, and centers that provide services to intellectual and mental health centers, among others.

Reliability and Validity of the MBI-HSS

Researchers have suggested that the MBI-HSS scale is highly ranked in distinguishing between burnout related factors and mental health issues such as anxiety or depression (Gan et al., 2019; Haile et al., 2019). The MBI-HSS is considered a reliable and valid instrument as it has consistently demonstrated good convergent and discriminant validity and reliability (Maslach et al., 2016). Maslach et al. established the reliability of each of the three subscales based on a normative sample of 1,316 participants. The researchers calculated the mean for EE as 20.99 (*SD* = 10.75), with a Cronbach's α =.90; the mean score for depersonalization was 8.73 (*SD* = 5.89) with a Cronbach's α =.79, and the mean score for personal accomplishment was 34.58 (*SD* = 7.11) with a Cronbach's α = .71 (Maslach et al., 2016). The standard error of measurements for the MBI-HSS subscale was 3.80 for EE, 3.16 for depersonalization, and 3.73 for personal accomplishment (Maslach et al., 2016). The researchers performed a longitudinal study on the MBI-HSS and found the MBI had a high degree of consistency and noted no marked difference from a period of one month to a year (Maslach et al., 2016). According to Maslach et al. (2016), a test-retest study conducted with 53 graduate students and administrators of health agency over a two-week period, the reliability of the instrument held at .82 for EE, depersonalization was .60, and personal accomplishment was .80.

According to Maslach et al. (2016), three studies helped establish convergent validity. The first study was a correlational study conducted with participants and other individuals who knew the participants, such as a coworker or spouse. The MBI-HSS correlation between the self and other ratings was $r = .68$, $p < .01$. Additionally, the researchers correlated known job characteristics that contribute to burnout and outcomes related to burnout. Researchers also established validity of the MBI for correlational studies on burnout. Maslach et al. (2016) also obtained the discriminant validity of the MBI-HSS in a study to ascertain whether burnout could be distinguished from job stress, depression, anxiety, and job dissatisfaction. For example, job satisfaction was moderately correlated with EE ($r = -.23$, $p < .05$) and depersonalization ($r = -.22$, $p < .02$). However, personal accomplishment was slightly positively correlated ($r = .17$, $p < .06$). Depression was correlated with the above variables, EE ($r = .33$), depersonalization ($r = .30$), and personal accomplishment ($r = .14$). Additionally, to assess the discriminate validity of the MBI-HSS, researchers also assessed response bias using the MBI-HSS and the social desirability scale (SD). Maslach et al. (2016) posited that the study demonstrated no significant correlation of the subscale with the SD scale ($p < .05$). The various outcomes of these researchers, according to Maslach et al. (2016), demonstrated that the psychometric properties of the MBI-HSS survey tool is strong. I used the MBI-HSS survey tool precisely of its power to assess the construct of burnout in this study and in conjunction with the established reliability and validity.

Job Stress Scale

Researchers use Parker and Decotiis' (1983) JSS to measure job stress through 13-items over two broad dimensions. Parker and DeCotiis (1983) defined stress as the divergence from intrapersonal normality or physiological functioning that gives rise to urgent need or demand in the immediate job place, which causes a workforce employee to experience psychological and physiological imbalance. The JSS is a 13-item self-rating survey tool to measure the overall job stress using a Likert-type rating scale that ranges from 1 (*strongly disagree*) to 5 (*strongly agree*). The anxiety and time stress components of the JSS are measured through five and eight statements in succession, and respondents select the appropriate response to each question. Factor analysis has revealed the JSS is multidimensional (Parker et al., 1983). Some of the anxiety and time stress questions include: *"I have felt fidgety or nervous as a result of my job," "I have too much work and too little time to do it in," "I spend so much time at work, I can't see the forest for the trees,"* and *"Sometimes when I think about my job, I get a tight feeling in my chest."* The scale score ranges from 13–65 points, with higher scores indicating higher levels of job stress, and lower scores indicate lower stress levels. I used the original Parker and DeCotiis' JSS to evaluate employee stress perception in the workplace environment.

The JSS also has a shortened version with nine items: five items measure anxiety, and four items measure time stress. The shortened version, however, uses the same dimension to measure time stress and anxiety (Jamal & Baba, 1992). Researchers have

shown the original version of the JSS, with the 13-items, and the shortened version, are valid and have demonstrated internal consistency (Jamal & Baba, 1992; Parker et al. 1983). In a subsequent study conducted using the longer version of the JSS and the shorter version, alpha coefficients range from .71 to .83 (Jamal & Baba, 1992; Xie & Johns, 1995).

The dimension of anxiety assesses employee job-related feelings about anxiety on the job, while the time stress dimension assesses employee feelings of being under sustained pressure (Parker et al., 1983). Parker et al. reported the mean score for time stress was 2.47, with a standard deviation of .682, and Cronbach alpha for the items was .86; the mean for anxiety was 1.93, with a standard deviation of .649 and Cronbach alpha for the items was .74. The correlated item-total score for stress ranges from .61 to .79, anxiety ranges from .61 to .75; and the inter-factor correlations between the factors in the scales (time stress and anxiety) was .54, indicating nonoverlapping variance in the dimension of anxiety and time stress (Parker et al., 1983). Xie and Johns (1995) demonstrated the dimensions of anxiety and time stress to be distinct and recognizable constructs. Parker et al. (1983) conducted principal component factor analysis; the two distinct dimensions that accounted for 48.8% for the scales item variance with the absence of factor loading that was noted below .50 as the criterion for item retention. There was no cross-loading greater than .35; two components were extracted, explaining 77.5% of the variance (Parker et al., 1983). Xie and Johns (1995) confirmed the JSS

dimensionality for time stress and anxiety by using factor analysis on the scale's dimensionality.

Jamal and Baba (2003) established the concurrent validity of the JSS by testing the correlation of theoretically related variables such as low job performance, turnover intentions, and diminished satisfaction. Jamal and Baba found significant associations in a sample of 175 hospital employees between JSS and four items on the job satisfaction scale (r = -.34, p = <.01), on the turnover intention items (r = .31, p = < .01) and Jamal (2007) reported (r = -.42, p = < .01) on the overall global performance rating scale. The JSS demonstrated high internal consistency reliability, ranging from .74 to .89, across different occupational groups and culture (Addea & Wang, 2006; Jamal, 2007; Parker et al., 1983; Xie & Johns, 1996).

The various outcomes of these researchers' work, according to Parker et al. (1983), demonstrated that the psychometric properties of the JSS tool are strong. The internal consistency is reliable; for example, research among nurses working in the health care facility in a Canadian hospital reported a Cronbach alpha of .84 (Jamal & Baba, 2000). Therefore, my rationale for using this survey is the JSS' ability to assess the construct of stress in this study based on the established reliability and validity other researchers have established.

Beck Depression Inventory

Depression is a disabling disorder that incapacitates an individual and undermines their ability to function by depriving them of activities they once enjoyed, such as their sleeping pattern, ability to study, and work (Lim et al., 2019). The BDI was the third instrument used in this study. Beck et al. (1961) created and introduced this 21-question multiple-choice, self-report inventory in 1961. There are three versions of the Beck Depression Scale. Beck et al. created the original BDI in 1961, followed by the revised version (BDI-1A) in 1978. This updated version of the BDI-II is a 21-item self-rating survey that can measure the level of depression severity for children ages 13 and up. Beck et al. released the BDI-II in 1996. Professionals use the BDI scale to assess the presence or absence of the psychological component of depression in an individual (Beck et al., 1988a).

Beck et al. (1961) originally created the BDI to address attitudes and symptoms mental health patients exhibited; however, the BDI is currently widely used as an assessment tool by both researchers and health care professionals and for detecting depression in normal populations (Steer et al., 1986). Although initially intended to be administered by a trained professional, the BDI tool can be self-administered and takes 5–10 minutes to self-administer the survey (Beck et al., 1988). The BDI is the most notable and commonly cited self-report measure of depression (Beck, 1967). Beck et al. (1979) revised the was revised in 1971 and was copyrighted the instrument in 1978. Teri

(1982) showed the Flesch score demonstrates the BDI tool is easy to read, requiring approximately a fifth grade reading level, which therefore makes it easily understandable for the individuals taking the survey. However, Berndt et al. (1983) indicated that the Flesch score is approximately a sixth-grade level.

The BDI has become the standard by which other psychological scales are evaluated because of its well-established construct reliability (Piotrowski, 2018). The BDI is a 21-item, self-report rating inventory that measures an individual's characteristics, attitudes, and manifestations of depression (Beck et al., 1961). The BDI scale is easy to administer, it is brief, and it is widely available in diverse forms for different cultures, populations, and age groups. For example, there are Spanish and German versions of the BDI (Beck, 1988a). Arbisi (1993) stated that the fundamental presumption for assessing depression in the first place is to evaluate negative attitudes toward self, to access performance impairment, and to assess somatic (bodily) disturbance. Items on the BDI tool consist of four statements that describe increasing depressive symptomatology (Beck et al., 1961). Beck et al. (1988) explained that the symptoms and attitudes components of the BDI were systematically consolidated in terms of the intensity of the depression, as the items on the scale were not selected to reflect a particular theory of depression. For example, some of the symptoms and attitudes include mood, pessimism, sense of failure, 2orthlessness, guilty feelings, self-

dislike, crying, irritability, social withdrawal, work inhibition, and somatic preoccupation (Beck et al., 1988).

The BDI has two subscales: the cognitive-affective subscale and the somatic-performance subscale. BDI scales are scored on a 4-point continuum, (0 is rated least, and 3 is rated most). The total score range of the BDI is from 0–63, and higher scores on the BDI tool indicate a higher depressive severity (Beck et al., 1988). The cut-off scores for the BDI are based on the clinical decision for which the survey tool was intended (Beck & Beamesderfer, 1974). For example, the cut-off scores of individuals diagnosed with affective disorder are noted as follows: minimal depression range is < 10; mild to moderate depression range is 10–18; moderate to severe depression range is 19–29; and serve depression range is from 30–63 (Beck et al., 1988). The mean BDI scores for minimal depression is 10.9 (*SD* = 8.1), mild depression is 18.7 (*SD* = 10.2), moderate depression is 25.4 (*SD* = 9.6), and severe depression is 30.0 (*SD* = 10.4; Beck, 1967).

Researchers have also used tested BDI with the nonclinical populations as well as in clinical populations to determine its reliability (Barral et al., 2016; Erford et al., 2016; Hesse, 2006). According to Beck et al. (1988) the internal consistency of the total score of the BDI is 0.86 for psychiatric patients (Beck et al., 1988). The BDI internal consistency ranges from .37 to .92 with a mean of .86 with an alpha coefficient of .86 and .81 for both psychiatric and nonpsychiatric populations. Beck et al. (1988) conducted a meta-analysis of internal consistency on 25 studies using the BDI for both psychiatric and

nonpsychiatric populations. Analysis of the internal consistency of the psychiatric population revealed coefficient alphas ranged from 0.76 through 0.95, and the mean coefficient alpha was 0.86. For the 15 nonpsychiatric samples, the mean alpha noted was 0.81; the range was from 0.73 to 0.92 (Beck et al., 1988).

Beck et al. (1988) also reported on the stability of the BDI in 10 studies relating to pre-and posttest administrations of this tool. Using the Pearson product-moment correlation coefficients, the psychiatric patient's range was noted from 0.48 to 0.86, and the coefficient for the nonpsychiatric participants ranged from 0.60 to 0.83 (Beck et al., 1988). The high correlation for the nonpsychiatric participants indicated that the BDI tool demonstrates significant stability (Beck et al., 1988).

Beck et al. (1988) reported that over 35 studies have shown a correlation between the BDI and a variety of concurrent measures of depression based on the Pearson product-moment correlations. For example, Hamilton Psychiatric Rating Scale for Depression (HRSD; Hamilton, 1960), Zung Self-reported Depression Scale (Zung et al., 1965) the MMPI Depression Scale (MMPI-D, Dempsey, 1964) all demonstrate concurrent measures of depression. In the area of demographic correlates of the BDI, Beck et al. (1988) reported that the mean scores of women are higher than those of men; however, Oliver and Simmons (1985) indicated that in a sample of 298 adult participants, men scored two points lower than women. Other researchers reported that no significant relationship was noted between sex and the BDI (Plumb & Holland, 1977; Schwab et al.,

1967). Studies have also shown that educational attainment was inversely related to the BDI (Beck, 1967; Dorus & Senay, 1980). However, in a sample of 298 participants, Oliver and Simon (1985) conducted a correlational study between educational level and the BDI was noted as -0.34 ($p < .001$).

In the area of age, BDI scores were higher for older psychiatric participants compared to younger psychiatric patients (Schnurr et al., 1976). Other researchers have also reported higher scores in adolescents on the BDI when compared to adults, signifying that adolescents are prone to be more depressed than adults (Albert & Beck, 1975; Teri, 1982). In the area of race, Beck et al. (1974) first described the mean score of the BDI between people who are Blacks and people who are White were comparable. However, other researcher have since discovered that participants who are Black had 1–point higher mean BDI scores when compared to White participants (Cavanaugh, 1983; Schwab et al., 1967). Furthermore, Black women show higher mean BDI scores when compared to men or White women (Nielsen & Williams, 1980). Overall, Oliver and Simon (1985) noted that non-Whites' scores for depression were significantly higher when compared to White people.

The various outcomes of these researchers' work, according to Beck et al. (1988), demonstrated that the psychometric properties of the BDI survey tool are strong. The internal consistency in both psychiatric and nonpsychiatric samples is high, as the mean internal consistency estimate, the alpha coefficient, was 0.87 (Beck et al., 1988). The BDI

correlations are higher than 0.60 for test-retest reliability and concurrent validity is high when compared to other measures of depression tool (Beck et al., 1988). The BDI construct validity is strong, and most importantly, the BDI appears to differentiate subtypes of depression (Beck et al., 1988). The ability of the BDI survey tool to assess the construct of depression in this study and in conjunction with the established reliability and validity from other researchers led to my determination that this was the best instrument for my study.

Data Analysis

I compiled data into an electronic spreadsheet and analyzed them using the Statistical Package for Social Sciences version 26 (SPSS). Initial data analysis is a process that allows researchers to inspect and screen data to ensure that later statistical analysis is not compromised, leading to incorrect and misleading results (Huebner et al., 2016). Before analysis, I screened all data for any missing responses or outliers. I excluded participants with missing responses from the analysis. I calculated composite scores for stress (as measured by the JSS), depression (as measured by the BDI), and burnout (as measured by the EE subscale of the MBI). I calculated the composite scores following the authors' instructions for each instrument. I checked the composite scores for outliers by computing standardized values. According to Tabachnick and Fidell (2013), standardized values greater than 3.29 may be considered outliers. I conducted a series of regression analyses to address the following research questions and hypotheses:

RQ1: Does work-related stress predict burnout among African immigrant DSPs working with adults with IDD?

$H_0$1: Work-related stress does not predict burnout among African immigrant DSPs working with adults with IDD.

H_a1: Work-related stress significantly predicts burnout among African immigrant DSPs working with adults with IDD.

RQ2: Does work-related stress predict depression among African immigrant DSPs working with adults with IDD?

$H_0$2: Work-related stress does not predict depression among African immigrant DSPs working with adults with IDD.

H_a2: Work-related stress significantly predicts depression among African immigrant DSPs working with adults with IDD.

RQ3: Does burnout mediate the relationship between work-related stress and depression among African immigrant DSPs working with adults with IDD?

$H_0$3: Burnout does not mediate the relationship between work-related stress and depression among African immigrant DSPs working with adults with IDD.

H_a3: Burnout does mediate the relationship between work-related stress and depression among African immigrant DSPs working with adults with IDD.

Baron and Kenny (1986) conducted a mediation analysis through a series of regressions. Researchers use multiple regression analysis to determine the presence of

any mediation effect and quantify and test the pathways of the influences from the independent to the dependent variable (Montoya & Hayes, 2017). To test the first step of the mediation analysis and address RQ1, I conducted a linear regression with stress as the predictor variable and burnout as the criterion variable. If the regression model was significant at an alpha level of .05, the first requirement of mediation would be met and I could reject the null hypothesis for RQ1. To test the second step of the mediation analysis and address RQ2, I conducted a linear regression with stress as the predictor variable and depression as the criterion variable. If the regression model was significant at an alpha level of .05, I could consider the second requirement of mediation met and reject the null hypothesis for RQ2 may. To test the third step of the mediation analysis and address Research Question 3, a linear regression will be conducted with stress and burnout as the predictor variables and depression as the criterion variable. If stress was no longer a significant predictor of depression (at an alpha level of .05) after including burnout in the regression model, there would be evidence of full mediation and I could reject the null hypothesis for RQ3.

I verified the assumptions of linear regression prior to performing the multiple regression, as Yang and Mathew (2018) suggested. I analyzed the normality of data based on a Q-Q scatterplot of the regression residuals. I conducted tests for homoscedasticity and the linearity assumptions to ensure a linear relationship between the dependent and the independent variables by analyzing the scatterplots. I also assessed multicollinearity

through variance inflation factors, with variance inflation factor values greater than 10 indicating severe multicollinearity.

Threats to Validity

I took all foreseen precautionary measures to mitigate threats to validity throughout the research process. Conducting anonymous research may promote truthful responses and curtail the potential for threats to validity. According to McKibben and Silvia (2016), research participants may react differently to the content of a questionnaire due to inattentiveness or social desirability. These two sources of bias, according to McKibben and Silvia (2016), could inject error into the data, thereby leading to validity issues that could affect the conclusion inferred from the study. External validity is the degree to which the results of a study are true or could apply to other contexts (Andrade, 2018; Peters et al., 2016). In my study, external validity meant that my research findings could be applied to other organizations supporting adults with IDDs and the DSPs working for those organizations.

External validity threats occur when researchers inaccurately generate inferences from the sample data and make generalizations based on those inferences. I strengthened external validity in this study by ensuring proper sampling. I limited this study to a population of African immigrants working with adults with IDDs residing in a group home in the state of Rhode Island, thereby making this convenience sample a potential threat. Bias can occur when findings in a study are significantly different from results

found with other populations (Peters et al., 2016). Participants in this study were African immigrants DSPs working with individuals with IDDs. Therefore, the findings of this study may not be generalized to all DSPs working with individuals with IDDs. DSPs may have indicated they did not experience burnout, stress, or depression due to fear of reporting information to either their supervisors or top management. To address this validity issue, I explained and ensured the participants understood the study was confidential and their privacy was guaranteed throughout the research process and thereafter.

There was a potential for confounding variables to affect the outcome of this study. However, my examination of the demographic variables of the participant's age, length of work experience, and how long they had worked for the organization may reduce the bias. According to McKibben and Silvia (2016), social desirability bias poses a threat to internal validity when the respondents answer the survey question in a way that will be favorable by others. However, I assumed response bias was minimal in this study because this research topic was not sensitive in nature. The internal and external threats to validity in this study required on-going monitoring procedures to ensure they did not have effects on the overall outcome of this study. Additionally, as I have previously discussed, past researchers have established reliability and validity standards for the instruments used in this study, including the BDI, MBI-HSS, and the JSS.

Ethical Procedures

I gave careful consideration of ethical issues. Ethics in research involve obtaining informed consent, avoiding psychological harm to participants, protection of dignity and well-being, and confidentiality of the participants in the study (Moss et al., 2019). Prior to contacting any participants, I submitted the research proposal to the Walden University IRB for approval. To ensure anonymity and ethical treatment of the participants, I established safeguards. For example, prior to the completion of any of the survey instruments, I sent information about the proposed study to all potential participants with an invitation to fill out the demographic form. Participants were not required to offer identifying material in the demographic survey. With support from the administrative top management staff, via signed letters of cooperation, I provided potential participants with an informed consent form. The informed consent form contained the purpose, procedures, expected time frame to complete the study, and a statement about no penalties or repercussions for non-participation, and indication that participants could withdraw voluntarily at any point in time during the study. There were only minimal physical and psychological risks to participants in this study, as they did not undergo any physical or psychological harm. Participants in this study remained protected from harm, as I did not apply any form of intervention for this study.

Participants' decision to participate did not affect their employment status in their organization, as the study information was not provided to their employers. To limit

ethical concerns, there was no contact between the participants and me, I did not collect names of participants, and I will store data associated with this study for 5 years, encrypted on a personal computer with a password-protected secured server. Research data will be deleted from my computer server after 5 years. Additionally, only myself and my dissertation committee members, who are directly overseeing this research, may access the data.

Summary

In this chapter I described the research methodology for this quantitative mediation study. The purpose of this research was to determine whether burnout mediates the relationship between stress and depression among African immigrants working with adults with IDDs. I also outlined the rationale for the research design was explored as well as the population, sample, instruments, sampling procedures, procedures for recruiting participants, ethical considerations, data collection, and data analysis procedures.

I surveyed study participants using the BDI, MBI-HSS, and JSS questionnaires. I performed a Baron and Kenny (1986) mediation analysis using multiple regression to determine the predictive quality of the independent variable of stress and the mediator variable of burnout on the dependent variable of depression. Upon the completion of participant surveys, I analyzed data using SPSS software, and in Chapter 4 I report the

results of the study. In Chapter 5 I discuss the research findings and the implications of the information based on data analysis.

Chapter 4: Results

Introduction

The purpose of this quantitative mediation study was to investigate whether burnout mediates the relationship between stress and depression among African immigrants working with adults with intellectual and developmental disabilities within the state of Rhode Island. By using this design I examined the extent that work-related stress predicts burnout and depression in this population. The research questions and hypotheses of the study were as follows:

RQ1: Does work-related stress predict burnout among African immigrant DSPs working with adults with IDD?

$H_0$1: Work-related stress does not predict burnout among African immigrant DSPs working with adults with IDD.

H_a1: Work-related stress significantly predicts burnout among African immigrant DSPs working with adults with IDD.

RQ2: Does work-related stress predict depression among African immigrant DSPs working with adults with IDD?

$H_0$2: Work-related stress does not predict depression among African immigrant DSPs working with adults with IDD.

H_a2: Work-related stress significantly predicts depression among African immigrant DSPs working with adults with IDD.

RQ3: Does burnout mediate the relationship between work-related stress and depression among African immigrant DSPs working with adults with IDD?

$H_0$3: Burnout does not mediate the relationship between work-related stress and depression among African immigrant DSPs working with adults with IDD.

H_a3: Burnout does mediate the relationship between work-related stress and depression among African immigrant DSPs working with adults with IDD.

In this chapter, I present results of data analysis, which I obtained using SPSS. Additionally, I discuss the data collection process, including participant response rates and descriptive and demographic characteristics of the sample. I present these using tables and figures to illustrate. Chapter 4 concludes with a summary of findings and transition into Chapter 5.

Data Collection

I obtained IRB approval prior to the start of data collection (approval no. 11-13-20-0175082). I sent e-mail invitations to participate in the research study to disability organizations in the state of Rhode Island. I collected data from several organizations that support adults with IDDs. I asked disability organizations to forward the survey link to African immigrants working as DSPs in the organizations. I obtained the initial list of organizations through a trade organization called CPNRI. The e-mail notification included the invitation to participate, a link to the Survey Monkey site, a statement of

informed consent, demographic information, the JSS instrument, the MBI instrument, the BDI instrument, and a thank you statement at the end of the survey.

I collected data from DSPs working at several organizations in Rhode Island over a 5-week period. One hundred fifty-seven participants submitted surveys. After removing test responses from participants who did not complete the entire survey, I analyzed responses from 111 complete surveys. My sample size estimation indicated that I needed 68 participants for the sample to have the desired level of statistical power (.80). This sample size satisfied the minimum needed ($N = 68$) according to the power analysis. I followed the data collection plan I presented in Chapter 3, and there were no discrepancies. I scored all surveys based on the scales provided and reviewed them to ensure accuracy.

The demographic characteristics of the sample are displayed in Table 1. Most participants were women ($n = 58$, 52%), and the highest proportion of participants were between 36–45 years old ($n = 37$, 33%). Most participants reported their ethnicity as African immigrant ($n = 55$, 50%), and most participants were from Nigeria ($n = 73$, 66%). On average, participants had been in the United States for 13.64 years ($SD = 9.76$). Most participants had either a high school or associates degree, each with an observed frequency of 34 (31%). Most participants were married ($n = 73$, 66%). Many participants also reported having family support ($n = 68$, 61%); siblings were the most common source of support ($n = 42$, 38%). The largest proportion of participants had 1–5 years of

experience (n = 48, 43%) and had been in their organization for 1–5 years (n = 57, 51%). Finally, many participants worked day shifts (n = 46, 41%).

Table 1

Sample Demographic Characteristics

Variable	*n*	*%*
Gender		
Female	58	52.25
Male	53	47.75
Age		
18-25	11	9.91
26-35	15	13.51
36-45	37	33.33
46-55	31	27.93
56-64	9	8.11
65+	8	7.21
Ethnicity		
Black/African American (Non-Hispanic)	51	45.95
Caucasian/White	4	3.60
African Immigrants (migrated to the US)	55	49.55
Latino/Hispanic	1	0.90
Country		
Nigeria	73	65.77
West Africa/Liberia	21	18.92
Ivory Coast	3	2.70
Kenya	3	2.70
Ghana	2	1.80
Guine-Bissau	1	0.90
Senegal	1	0.90
Zimbabwe	1	0.90
United States	2	1.80
Other or N/A	2	1.80
Missing	2	1.80
Education		
High School	34	30.63
Associate Degree	34	30.63
Bachelor's Degree	29	26.13
Master's Degree	14	12.61

continued

Variable	*n*	*%*
Relationship Status		
Single	22	19.82
Married	73	65.77
Divorced/Separate	6	5.41
Committed Relationship	6	5.41
Widowed	4	3.60
Family Support		
Yes	68	61.26
No	43	38.74
Type of Family Support		
Siblings	42	37.84
Uncle	24	21.62
Aunt	23	20.72
Parent(s)	31	27.93
Cousins	25	22.52
Nephew	24	21.62
Niece	26	23.42
Other	21	18.92
Years of experience		
0–1	5	4.50
1–5	48	43.24
6–10	27	24.32
11–15	14	12.61
16–20	13	11.71
21 or more	4	3.60
Years in organization		
0–1	18	16.22
1–5	57	51.35
6–10	19	17.12
11–15	12	10.81
16–20	5	4.50
Shift		
First Shift - Days	46	41.44
Second Shift - Afternoons	36	32.43
Third Shift - Overnights	29	26.13

Results

I computed composite scores for the study variables of stress, burnout, and depression according to the author's instructions for each instrument. I used the EE subscale of the MBI to measure burnout. I checked the composite scores for the variables of interest for outliers prior to the analyses. An outlier is any value that falls outside the range of +/- 3.29 standard deviations from the mean (Tabachnick & Fidell, 2019). I found two outliers for EE and removed them before conducting the analyses. Descriptive statistics for each of the study variables are presented in Table 2.

Table 2

Descriptive Statistics for Study Variables

Variable	*M*	*SD*	*n*	S_M	Min	Max	Skewness	Kurtosis
EE	7.43	7.65	109	0.73	0.00	30.00	0.97	-0.11
Depression	4.22	5.71	111	0.54	0.00	23.00	1.70	2.12
Stress	1.87	0.60	111	0.06	1.00	3.46	0.34	-0.56

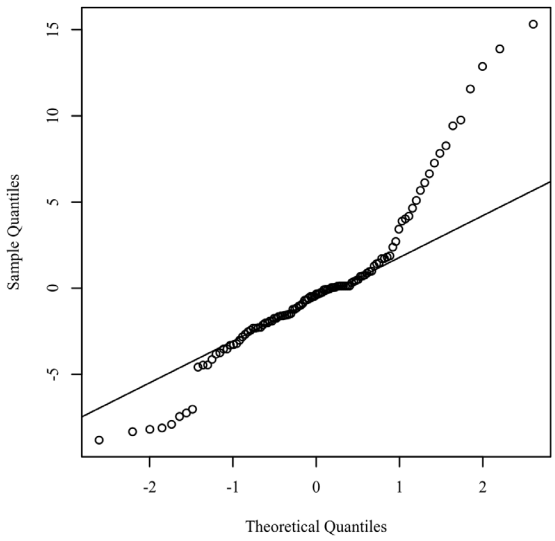
I conducted a Baron and Kenny mediation analysis to assess if EE (burnout) mediated the relationship between stress and depression. To determine whether a mediating relationship was supported by the data, I conducted three regressions. For mediation to be supported, four conditions must be met: (a) the independent variable must be related to the mediator variable, (b) the independent variable must be related the dependent variable, (c) the mediator must be related to the dependent variable while in the presence of the independent variable, and (d) the independent variable should no longer be a significant predictor of the dependent variable in the presence of the mediator

variable (Baron & Kenny, 1986). In this analysis, the independent variable was stress, the mediator was EE, and the dependent variable was depression.

DeCarlo (1997) suggested assessing assumptions of normality by plotting the quantiles of the model residuals against the quantiles of a Chi-square distribution, also called a Q-Q scatterplot, which I followed in my study. Figure 1 presents a Q-Q scatterplot of model residuals. The strong deviation from the normal line indicated that my assumption of data normality was not met. To correct the problem, I applied a cube root transformation to the variables (see Figure 2). However, the results of the mediation analysis did not change after I applied the cube root transformation, so I present the results for the untransformed variables.

Figure 2

Q-Q Scatterplot for Normality of the Residuals for the Regression Model



I evaluated homoscedasticity by plotting the residuals against the predicted values (Bates et al., 2015; Field, 2017; Osborne & Walters, 2002). The assumption of homoscedasticity is met if the points appear randomly distributed with a mean of zero and no apparent curvature. Figure 3 presents a scatterplot of predicted values and model residuals. The points were approximately randomly distributed throughout the plot, indicating that the assumption of homoscedasticity was met.

Figure 3

Q-Q Scatterplot for Normality of the Residuals for the Regression Model With Cube Root Transformation

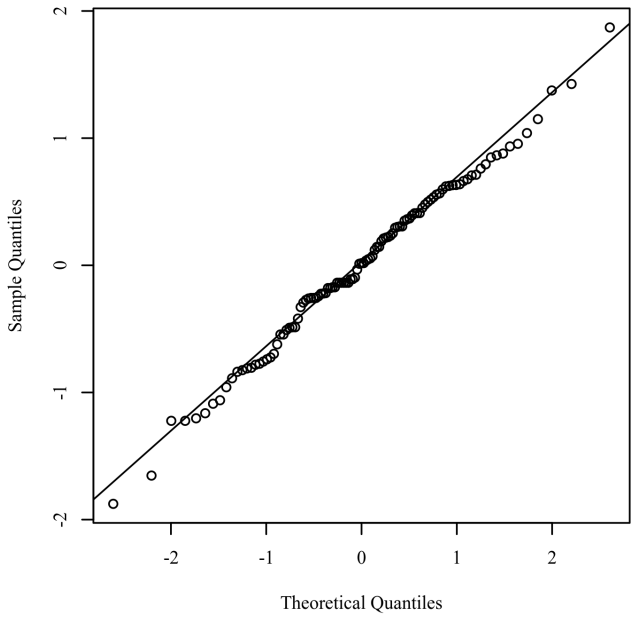
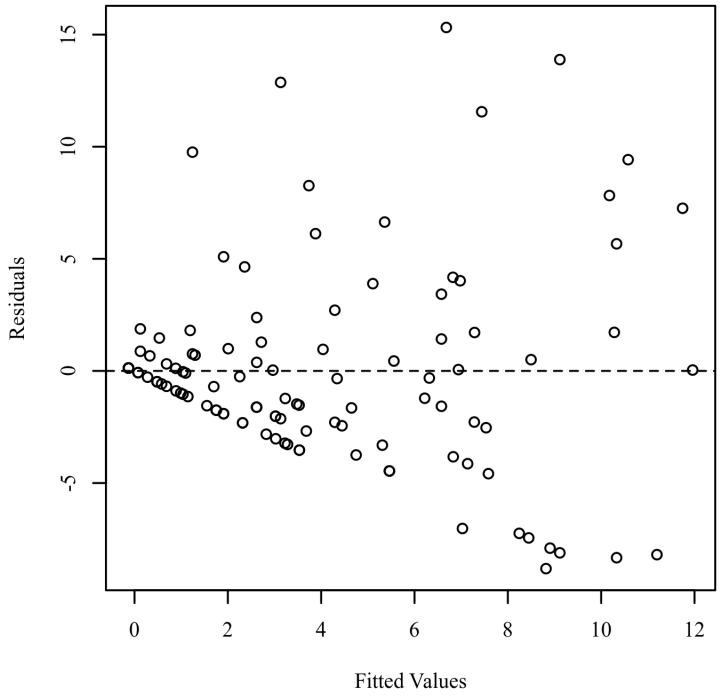


Figure 4

Residuals Scatterplot Testing Homoscedasticity



I calculated variance inflation factors (VIFs) to detect the presence of multicollinearity between predictors. High VIFs indicate increased effects of multicollinearity in the model. VIFs greater than five are cause for concern, whereas VIFs of 10 should be considered the maximum upper limit (Menard, 2009). All predictors in the regression model had VIFs less than 10. Table 8 presents the VIF for each predictor in the model.

Table 3

Variance Inflation Factors for Stress and EE

Variable	VIF
Stress	2.03
EE	2.03

First, to address RQ1, I conducted the regression with stress predicting EE. The regression of EE on stress was significant, $F(1, 107) = 109.86$, $p < .001$. The results showed that stress was a significant predictor of EE, $B = 9.27$, $p < .001$, indicating that this criterion for mediation was satisfied. Thus, I rejected $H_0 1$ for RQ1.

Second, to address RQ2, I conducted the regression with stress predicting depression. The regression of depression on stress was significant, $F(1, 107) = 42.81$, $p < .001$. The results showed that stress was a significant predictor of depression, $B = 4.99$, $p < .001$, indicating that this criterion for mediation was satisfied. I rejected $H_0 2$ for RQ2.

Finally, to address RQ3, I conducted a regression with stress and EE predicting depression. The regression of depression on stress and EE was significant, $F(2, 106) = 28.19$, $p < .001$, suggesting that stress and EE accounted for a significant amount of variance in depression. I examined the individual predictors further. The results showed that EE significantly predicted depression when I included stress in the model, $B = 0.25$, $p = .002$, indicating that the third criterion for mediation was satisfied. The results showed that stress significantly predicted depression when I included EE in the model, $B = 2.65$, $p = .013$, indicating that the fourth criterion for mediation was not satisfied, and

full mediation could not be supported. I failed to reject $H_0$3 for RQ3. The results of the mediation are presented in Table 4.

Table 4

Mediation Results for Depression Predicting Stress Mediated by EE

Dependent	Independent	*B*	*SE*	*t*	*p*
Regression 1:					
EE	Stress	9.27	0.88	10.48	< .001
Regression 2:					
Depression	Stress	4.99	0.76	6.54	< .001
Regression 3:					
Depression	Stress	2.65	1.04	2.54	.013
	EE	0.25	0.08	3.16	.002

Summary

I conducted a series of linear regressions to address the research questions. For RQ1, results showed that stress significantly predicted burnout (as measured by EE); I rejected $H_0$1. For RQ2, the results showed that stress significantly predicted depression; I rejected $H_0$2. For RQ3, the results showed that stress remained a significant predictor of depression after controlling for burnout, which did not support full mediation; therefore, I failed to reject $H_0$3. Chapter 5 will include my discussion of these findings and recommendations for future research.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this quantitative mediation study was to investigate whether burnout mediates the relationship between stress and depression among African immigrants working with adults with IDDs. Researchers have implicated burnout, which is prevalent among DSPs, in the DSP turnover rate and underperformance relating to the care DSPs provide to individuals with IDDs (Friedman, 2018; Rachel & Francesco, 2018). Additionally, the effect of burnout is not limited to direct care staff or their well-being; burnout can adversely affect DSPs' performance, leading to diminished care of individuals they support (Reith, 2018). DSPs may be unprepared for the experiences of stress and burnout related to the profession (Friedman, 2018).

The present study provides insight into the issues of stress, burnout, and depression among African immigrants working as DSPs with adults with IDDs. I developed a correlational research design to explore burnout as a mediator in the relationship between stress and depression because I could use this design to examine the relationships between the dependent and the independent variables of stress and depression. Depression was the criterion variable (dependent variable), while stress was the predictor variable (independent variable), and burnout was the mediating variable. I measured these variables in the target population with the BDI (Beck et al., 1988), the MBI-HSS (Maslach et al., 1986), and the JSS (Parker & DeCotiis, 1983).

Analysis of the data derived from linear regressions revealed, for RQ1, that stress significantly predicted burnout, so I rejected $H_0$1. For RQ2, analysis revealed that stress significantly predicted depression; I rejected $H_0$2. For RQ3, the results showed that stress remained a significant predictor of depression after controlling for burnout, so full mediation was not supported; therefore, I did not reject $H_0$3. Chapter 5 contains an interpretation of the results, a review of study limitations, recommendations for further research, and a discussion of implications for practice and social change.

Interpretation of the Findings

I conducted this study on a sample of African immigrants working as DSPs with adults with IDDs. Study findings confirmed and extended the extant knowledge in the area of caregiving. For example, Power et al. (2019) found that caregivers working with individuals who have cerebral palsy reported a significantly higher risk of depression and stress. African immigrants who participated in my study were at an increased likelihood of developing burnout and stress, which extends the findings of past researchers and the range of other caregivers who may be prone to developing stress, burnout, and depression.

Additionally, compared with previous research, I also identified similar stress levels among participants in my study. Ryan et al. (2019) found that strain and pressure associated with work-related stress and burnout are internationally experienced issues in the direct care profession. Challenging behavior among individuals with IDDs

contributes significantly to the stress of direct care professionals, adversely affecting their well-being. Klaver et al. (2021) found strong relationships between levels of challenging behaviors individuals with IDDs exhibited and the increase in burnout symptoms in staff providing direct care and support to these individuals. Flynn et al. (2018) investigated whether the amount of exposure to challenging aggressive behaviors affects the well-being of DCWs; however, they found little correlation between staff exposure to aggressive behavior and their well-being. Costello et al. (2019) found stress and burnout are correlated factors in staff working with individuals living with dementia in a care home facility and Kriakous et al. (2019) found that direct care workers experience a significant level of stress while working with individuals with challenging behavior.

The results of the present study also confirm the presence of stress and burnout in the caregiving profession. The theoretical framework for the study included Maslach's (1976) burnout theory and Parker and Decotiis's (1983) theory of stress, which are based on research that burnout was prevalent among individuals who serve and work closely with others in support capacities. The consequences of burnout can have severe adverse consequences not only for DSPs but also for their clients (Reith, 2018). Discussion of the results of each research question appears below.

Research Question 1

I developed RQ1 to examine whether work-related stress predicts EE in African immigrants working with adults with intellectual and developmental disabilities. The

findings indicated that stress was a significant predictor of EE, $B = 9.27$, $p < .001$. Therefore, I rejected the null hypothesis for RQ1. DSPs reported high levels of EE, depersonalization, and high levels of personal accomplishment that resulted in a statistically significant burnout.

Maslach (2003a) defined EE as a lack of energy and feeling strained both physically and emotionally from excessive job demands. EE is further associated with irritability, feelings of low energy, and mixed emotional states (Maslach (2003a). According to Koeske and Koeske (1989), EE is the core component of burnout, which can intensify over time, making it important to identify and address EE.

My finding of burnout among DSPs supports past research on burnout, which showed a high number of direct care providers experience moderate to high levels of burnout in terms of EE (Bottini et al., 2020). Bottini et al. (2020) also found that participants reported substantial stress with respect to personal accomplishment. Manzano-García and Ayala (2017) found a strong positive relationship between psychological capital and psychological well-being mediated by burnout. Additionally, DCWs experience work-related stress and strain both on national and international levels (Ryan et al., 2019). Outar and Rose (2017) also found a link between work demand and EE in direct care staff and that work demand was positively associated with increased levels of burnout. Furthermore, the more direct care staff members are exposed to work pressures, the more pessimistic they become (Outar & Rose, 2017).

Individuals with IDDs who engage in challenging behaviors for their DCWs contribute substantially to the stress of these workers, which can adversely affect workers' well-being and performance (Ryan et al., 2019). Burnout also negatively affects organizations through diminished employee performance (Reith, 2018). In the present study, findings related to RQ1 indicate that African immigrants are not immune from stress and exhaustion while they work with individuals with IDDs. Because of the challenging and sometimes dangerous nature of working with individuals with IDDs, DSPs experience high levels of stress leading to exhaustion despite their ethnicity.

Research Question 2

I created RQ2 to examine whether work-related stress predicts depression in African immigrants working with adults with IDDs and report depression using the BDI. DSPs reported high levels of stress, and the results showed that stress was a significant predictor of depression, $B = 4.99$, $p < .001$. I rejected $H_0 2$ for RQ2.

Beck (1979) referred to depression as exhibiting low mood, feelings of guilt, hopelessness, low self-esteem and self-worth, poor appetite, low energy levels, poor concentration, and loss of interest or pleasure. These symptoms further lead to the formulation of negative views and schema though which individuals perceive themselves, others, and events (Beck, 1979). Aspects related to depression, such as low energy levels, poor concentration, a sense of failure, and self-dissatisfaction, can lead to adverse work-

related outcomes for workers, making it important to identify and address depression in DSPs.

This finding supports past research on stress and depression, which showed that work stress was positively correlated with depression in DSPs caring for other types of patients (Pappa et al., 2020). Lin et al. (2016) found that stress and burnout could drain employees' physical and mental resources, leading to depression. Stress is a negative feeling that can adversely affect an employee's physical and mental health, and for DSPs stress and depression can also hinder care quality and diminish productivity (Kiran et al., 2019).

Depression has been associated with stress and anxiety in healthcare workers generally (Salari et al., 2020), and researchers have noted depression in the workplace is an increasing concern linked to severe mental health problems in the workplace (Yunus et al., 2018). Workplace depression is responsible for the greatest negative impact on productivity and time management when compared to other health disorders (Li, 2019). Additionally, Descalzi et al. (2017) found that depression can induce prolonged work-related stress. Stress also often precipitates depressive episodes (Won & Kim, 2016). The findings from RQ2 indicate that stress predicts depression in African immigrants working with adults with IDDs.

Additionally, because of cultural differences, African immigrant workers may experience challenges associated with adjusting to their host country's culture (Cervantes

et al., 2016). Generally, psychological stress from acculturation in foreign-born immigrants can lead to adjustment disorders and depression (Al-Maskar et al., 2011; Campbell, 2018; Wang & Takeuchi, 2007). Lin et al. (2015) found that that over one-fifth of foreign-born DSPs in their study were at risk for mental health issues, stress, and depression. Covington-Ward et al. (2018) found that stress in African immigrants was linked to issues associated with cultural transition, including unrealized expectations, immigration procedures, and acculturation processes. African immigrants who are DSPs for individuals with IDDs face professional stress leading to depression possibly in conjunction acculturation stress, unlike caregiver populations from the United States. Knowledge of the link between acculturation issues and depression is needed for African immigrants who are DSPs and for foreign-born DSPs in general.

Research Question 3

I developed RQ3 to examine whether burnout mediates the relationship between stress and depression in African immigrants working with adults with IDDs. For RQ3, I used the BDI to measure depression, the MBI-HSS to measure burnout, and the JSS to measure stress. The results indicated that stress remained a significant predictor of depression after controlling for burnout, so full mediation was not supported. There I could not reject $H_0 3$.

Maslach and Jackson (1981) defined burnout as a state of physical, emotional, and mental exhaustion leading to diminished self-accomplishment related to job demands.

Maslach and Jackson asserted that burnout is prevalent in DCWs and other primary caregivers in the human services field who provide personal care to patients and clients. Reith (2018) further argued that burnout is an epidemic detrimental to the workforce and leads to employee shortages across every sector. Burnout continues to be a severe occupational hazard adversely affecting employees' psychological and physical well-being, leading to overall decreased organizational performance and productivity (Heinemann & Heinemann, 2017).

Rachel and Francesco (2018) found that burnout is prevalent among homecare staff, nursing, and residential home workers who support senior citizens. Bottini et al. (2020) found that a high number of DSPs experience moderate to high burnout in terms of EE. Bottini et al. furthermore found that the domains of workload, reward, fairness, and values were the leading predictors of burnout. Even though previous research indicated that direct care workers experience burnout in performing their jobs, the findings of RQ3 indicated that burnout does not mediate the relationship between stress and depression, although RQ2 indicated that stress predicts depression.

Although it is not clear to what extent culture played a role in the relationship between stress and depression among African immigrant DSPs working with adults with IDDs, it may be that culture mediates the relation between stress and depression rather than burnout. How an immigrant perceives stress is contingent on what that individual perceives as a stressful situation, which may be culturally informed (Liu et al., 2007).

Culture is a collectively held set of values of people wherein their group behaviors are guided by a set of belief systems and attitudes (Györkös et al., 2012; Huhtala et al., 2016; Stoermer et al., 2016), and perceptions of stress can be influenced by cultural understanding (Györkös et al., 2012). At the social-environmental level, researchers have linked stress to issues associated with cultural transition, immigration procedures, and acculturation processes (Covington-Ward, 2018). Furthermore, employee burnout can also be influenced by several factors at the organization level, including organizations' policies and procedures, the nature of the work itself, and the interpersonal relationships among employees, which may also be related to cultural differences (Yeatts et al., 2018).

Limitations of the Study

Several study limitations may have affected the results of the study, and these limitations should be kept in mind when interpreting the results. Although I used a mediation, correlational design to make predictions about the relationships between variables, I can make no definitive conclusions about the causality between variables. Additionally, I examined the demographic variables of gender, age, and length of work experience to avoid a potential limitation with confounding variables. However, demographics I did not measure could have affected the study outcome. The environmental conditions of the workplace, such as the social environment, physical condition, and the psychological setting of the workplace, may have confounded the

study. Other variables that could have affected findings include organizational issues such as the lack of autonomy, advancement recognition, or participants' personal issues.

In the present study, the sample population included African immigrant DSPs working with adults with IDDs in the state of Rhode Island; however, the findings may generalize well to the larger target population. I identified a minimum of 68 participants through power analysis and recruited 111 participants who took the survey, well over the sample size needed to confer 80% power. However, individuals participated in this study voluntarily; random selection may have increased validity.

One of the primary limitations of the study involved the use of self-report surveys for the measurement of stress (JSS), burnout (MBI-HSS), and depression (BDI). Nayak and Narayan (2019) noted that self-report instruments are linked to and might limit a study's validity due to the participants' assumptions in filling out the survey instrument. Therefore, it is unclear how accurate the participants were in their ability to complete the survey correctly and to analyze their behaviors and other personal characteristics accurately. Additionally, I conducted the study using an online computer-based data collection process through the SurveyMonkey platform. Because online survey research is relatively new and evolving, Nayak and Narayan (2019) noted that researchers cannot ensure sample populations are specifically from the targeted population.

Another potential limitation is that DSPs experiencing stress and burnout may have chosen not to participate in the study. These DSPs may have been stressed,

exhausted, or depressed. Individuals who did not participate in the study because of feeling overwhelmed or emotionally drained could have affected the outcome of the study because the scores may underrepresent the phenomenon.

Recommendations

I developed several recommendations for further research based on the study's findings. Stress was a significant predictor of burnout and depression among African immigrants working as DSPs. Because of varying state regulations, future researchers should conduct similar studies in other states to obtain further information on the phenomenon related to different regulations. Although DSPs from several African countries participated in this study, future research should also focus on burnout and depression in other ethnic populations of DSPs.

I also recommend different types of studies. Researchers could conduct qualitative studies, for example, to explore how DSPs cope with burnout and stress to understand coping better and what steps are needed to assist with coping strategies. Researchers could also use qualitative designs to explore other factors that could aid DSPs in preventing the development of burnout and stress associated with providing care to individuals with IDD. Additionally, researchers could conduct longitudinal studies, with data collected over time, to understand the progression of stress and burnout in DSPs.

Finally, a mixed-method design may yield more information than using only quantitative survey tools. For example, participants in the present study did not have the opportunity to discuss their individual experiences related to stress, burnout, and depression. Because participants in this study were African immigrants with varied cultural and traditional beliefs, it is unclear whether the participants uniformly understood stress, burnout, and even depression due to their unique belief systems. Adding qualitative components to future quantitative studies would allow researchers to probe such cultural issues in depth and help interpret quantitative data more comprehensively.

Implications

The results of this study led to much-needed insight into stress levels, burnout, and depression in African immigrants working as DSPs in the United States, and there are many implications for practice and positive social change. The study is significant because the findings may positively influence both organizations and employees. Professionals could use the findings to inform how DSPs respond to stress and burnout, as well as to how their organizations respond to employee stress and burnout. This could lead to positive social change in the form of healthier workers who may subsequently care more effectively for individuals with IDDs.

Organizations can use the findings to help develop specific training and interventions that target stress and burnout in African immigrants and other DCWs in the field of human services. This could include training in self-care for workers.

Additionally, this study may inform organizations providing residential and day habilitation services to individuals with IDDs about the need for strong organizational social and administrative support systems for DSPs. These interventions would help DSPs manage work stressors, especially workers suffering from occupational stress, perhaps exacerbated by issues related to acculturation. The study may also foster an understanding of racial and ethnic differences among African immigrants working with individuals with IDDs. Disability organizations must develop and implement preventive measures to address burnout, stress, and depression in DCWs.

Furthermore, study findings could lead to positive social change by decreasing stress and burnout in DSPs. Decreasing stress and burnout in DSPs could potentially lead to reduced turnover and enhanced care for individuals with IDDs. Finally, the findings from this research may bring about much-needed awareness to help individuals with IDDs by increasing the help and support they receive to continue to be productive members of society.

Conclusion

I designed this study to investigate whether burnout mediates the relationship between stress and depression among African immigrants working with adults with IDDs. The study revealed that stress was a significant predictor of burnout and depression among Africans working as DSPs. This finding aligns with existing literature on the impact of stress and burnout on caregivers (Lin et al., 2016). It also adds to the research

on the relationship between work-related stress, burnout, and depression among African DSPs that was minimally documented in the literature. Furthermore, the findings suggest the importance of resources and interventions to support staff members' mental health and well-being by preventing and reducing stress and burnout. The research underscores the need for robust organizational support systems and interventions to help direct support professionals and other caregivers manage work stressors.

I also designed the study to examine the relationships between work-related stress among African immigrants and the demographics of this target population, including their age, gender, and the length of their work experience. Hence, I concluded that stress continues to be a significant predictor of burnout and depression indirect caregivers, including DSPs. DCWs and healthcare administrators should be aware of the potential risk involved in working with adults with IDDs, as there are potential risks associated with working with mentally disabled individuals with spontaneous and severely challenging behaviors.

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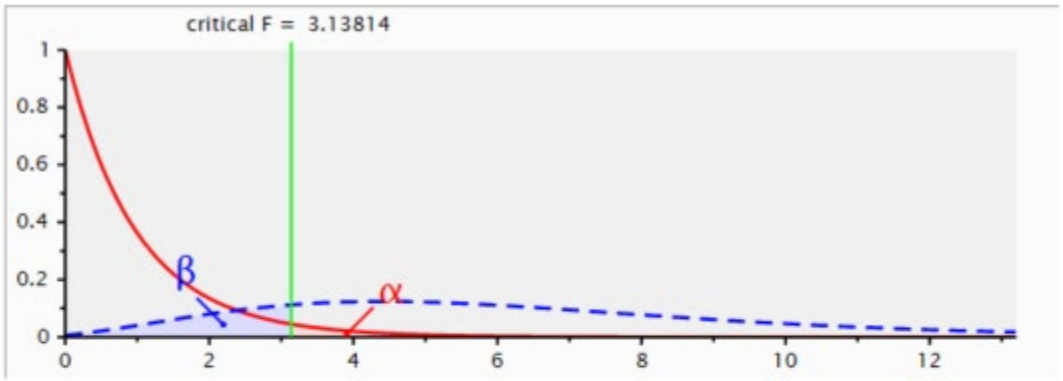
Appendix A

G* Statistical Power Analysis



Test family: F tests

Statistical test: Linear multiple regression: Fixed model, R^2 deviation from zero

Type of power analysis: A priori: Compute required sample size – given α, power, and effect size

Input Parameters		Output Parameters	
Determine =>		Noncentrality parameter λ	10.2000000
Effect size f^2	0.15	Critical F	3.1381419
α err prob	0.05	Numerator df	2
Power (1–β err prob)	0.80	Denominator df	65
Number of predictors	2	Total sample size	68
		Actual power	0.8044183

Appendix B

Letter to Disability Organization

Dear Disability Provider Organization,

My name is Mary A. Onyejose, and I am a doctoral student in the Psychology program at Walden University. I am conducting a correlational study for my dissertation; the central focus of this quantitative mediation study is to investigate whether burnout mediates the relationship between stress and depression among African immigrants working with adults with intellectual and developmental disabilities (IDD). The results of this study would contribute to the understanding of how African immigrants deal with the stress associated with their role as DSPs. The outcomes of this study may also shed light on interventions that may be helpful to sustain DSPs, their health, and welfare, including their productivity as they discharge their day-to-day job duties. This study has been approved by the Walden University Institutional Review Board. I am reaching out to you in hopes of obtaining information from your employees who work as Direct Support Professionals (DSP) in your organization and in the State of Rhode Island.

The study will utilize survey instruments that were designed to ask your organizational members (African immigrants) questions regarding stress, burnout, and depression. Participation in this research study is entirely voluntary. Your employees may refuse to participate without consequence or can withdraw from the study at any time after they begin. If you agree, your agency members will be invited to participate in the research and will be notified of the informed consent procedure. The survey will take approximately 25-35 minutes to complete. The DSPs that participat~~e~~ in this research will not receive any compensation for participating in this study. Participant information will be protected by reporting this study in aggregate. Furthermore, results from this study will add to literature on this topic and may be informative for organizations that provide services to individuals with IDD. Neither the researcher nor the university has a conflict of interest with the results

As the Executive Director of *XYZ* organization, I would appreciate your help in identifying the number of potential participants of your different programs that may qualify for my study. I am seeking both full-time and part-time employees form African descent that regularly works in your organization. Employees may work during the workday, afternoon, and/or overtime shifts. Upon your provision of the number or email addresses of employees that fit the above criteria, I will forward a survey link to them whereby they would follow the instruction and complete the survey instrument. I intend to conduct anonymous research to protect all who may choose to participate.

The data collected from this study will be securely stored for five years. There are no known minimal risks or discomforts associated with participation in this research. I

will follow up with you, in the near future, to determine the number of employees at your organization that qualify for my study.

Thank you very much for taking the time to read this letter and I look forward to your response.

Sincerely
Mary A. Onyejose
Ph.D. Candidate-Walden University

Appendix C

Letter of Cooperation

On organizational letterhead Date

Mary Onyejose, a researcher, has described her proposed research to me. The purpose of her quantitative study "is to investigate whether burnout mediates the relationship between stress and depression among African immigrants working with adults with intellectual and developmental disabilities."

This is a letter of authorization granted to Ms. Mary A. Onyejose, a Ph.D. candidate in the School of Psychology at Walden University, to conduct her dissertation research in our organization. Specifically, I give support to Ms. Onyejose to access our DSPs in an effort to collect her survey data. I understand that research participation for her study is voluntary and that Anonymity will be ensured. Participants will be given four instruments to complete: a demographic data sheet, the Job Stress Scale, Beck Depression Questionnaire, and the Maslach Burnout Inventory. I also agree to provide additional information needed, such as the size of the organization and the locations where African DSPs work. The Anonymity of the facility is also safeguarded

As the president of XYZ Inc, I am pleased to support Ms. Onyejose in her research project and for this research to occur with our employees and administrative records as deem appropriate.

If you have any question, please call me at #_____.

Sincerely,

_____

(Authorized organizational representative)

Appendix E

Email to Direct Support Professionals

Hello, my name is Mary A. Onyejose, and I am a doctoral student in the Psychology program at Walden University. I am writing to invite you to participate in my online research study. The central focus of this study is to investigate whether burnout mediates the relationship between stress and depression among African immigrants working with adults with intellectual and developmental disabilities (IDD). The results of this study would contribute to the understanding of how African immigrants deal with the stress associated with their role as direct support professionals (DSP). The outcomes of this study may also shed light on interventions that may be helpful to sustain DSPs, their health, and welfare, including their productivity as they discharge their day-to-day job duties. If interested, please follow the link below, which will provide additional information about the research and allow you to complete the survey, which this researcher anticipate will take approximately 25-35 minutes of your time. The survey can be found by following this link below

https://www.surveymonkey.com (TBD as soon as I am approved)

I appreciate your consideration

Sincerely

Mary A. Onyejose

Appendix F

Demographic Survey Questionnaire

Instructions:

for the purpose of this study, please answer the questions below by checking the box that is most descriptive of you.

Please do not write your name on this form.

What is your gender:

Female ☐ Male☐

What is your age range?

☐ 18 - 25 ☐ 26- 35 ☐ 36 – 45 ☐ 46 – 55 ☐ 56 – 64 ☐ 65+

What is your ethnicity?

☐ Asian or Pacific Islander ☐Asian Indian

☐ Black/African American (Non- Hispanic) ☐Caucasian/White

☐African Immigrants (migrated to the US) ☐Latino/Hispanic

☐Multiracial ☐Other

What country in Africa are you from? _____

What is your highest level of education?

☐ High School ☐Associate Degree ☐Bachelor's Degree ☐ Master's Degree ☐ Ph.D. or Other doctoral degrees

What is your relationship status?

☐Single ☐Married ☐Divorced/Separate ☐Committed Relationship

☐Widowed

How many years of experience do you have working with individuals with intellectual and developmental disabilities?

☐ 0-1 year ☐1-5 years ☐6-10 years ☐11-15 years ☐ 16-20 years ☐21 or more.

How long have you worked for this organization?

☐ 0-1 year ☐1-5 years ☐6-10 years ☐11-15 years ☐ 16-20 years

What shift do you currently work?

☐First Shift-Days ☐Second Shits-Afternoons ☐Third Shifts-Overnights

How many years have you resided in the United States? _____

Thank you for completing this questionnaire. Please proceed to the next survey.

Appendix G

Permission to Use the MBI-HSS

Sat, May 16, 2020 at 5:14 PM <wrote:

Message from Mary A. Onyejose

Customer name: Mary A. Onyejose

Customer e-mail address:

Customer message: Good Day,

My name is Mary A. Onyejose, and I am a doctoral student at Walden University. I am currently working on my dissertation to investigate whether burnout mediates the relationship between stress and depression among African immigrants working with adults with Intellectual and Developmental Disabilities (IDD). In accordance with the International Review Board of Walden University, I am requesting permission to utilize the Maslach Burnout Inventory-Human Services Survey for my quantitative research study. I will be conducting a paper survey and will be purchasing a license along with copies of the instrument. Thank you for your help with this matter.

Sincerely

Ph.D. Candidate-Walden University

Company: Walden University

Country: United States

How did you hear about us: from other students

Maslach Burnout Inventory

Instruments and Scoring Keys

Includes MBI Forms:
Human Services - MBI-HSS
Medical Personnel- MBI-HSS(MP)
Educators - MBI-ES
General- MBI-GS
Students - MBI-GS (S)

Published by Mind Garden, Inc.

Appendix H

Permission to Use the BDI-II

Permission Letter for the Beck Depression Inventory

I am a doctoral student at Walden University, completing my dissertation in Psychology. I am writing to ask for written permission to use the Beck Depression Inventory in my research study. I am conducting a study to investigate whether burnout mediates the relationship between stress and depression among African immigrants working with adults with Intellectual and Developmental Disabilities (IDD). I do not plan on modifying or adapting any of the questions.

I would also appreciate receiving copies of your supplemental material that will help me administer the test and analyze the results; for example, (1) the test questionnaire, (2) the standard instructions for administering the test, and (3) scoring procedures.

In addition to using the instrument, I also ask your permission to reproduce it in my dissertation appendix. The dissertation will be published in the UHCL Institutional Repository and deposited in the ProQuest Dissertations & Theses database.

I would like to use and reproduce your instrument under the following conditions:

- I used the BDI only for my research study and will not sell or use it for any other purposes
- I will include a statement of attribution and copyright on all copies of the instrument. If you have a specific statement of attribution that you would like for me to include, please provide it in your response.
- At your request, I will send a copy of my completed research study to you upon completion of the study and/or provide a hyperlink to the final manuscript

If you do not control the copyright for these materials, I would appreciate any information you can provide concerning the proper person or organization I should contact.

If these are acceptable terms and conditions, please indicate so by replying to me through e-mail.

Sincerely,

Thank you for contacting Pearson about use of the BDI-II in your dissertation.

As long as you will not be modifying the test in any way (content or delivery format), there is no need to obtain permission from Pearson to use it.

Good luck with your dissertation!

Pearson Clinical Assessment

And check out our digital home-based intervention offerings HERE!

>

Sent: Friday, September 18, 2020 7:13 PM>

Subject: Fw: Your assistance is needed

I believe this would fall under you. Doctoral student.

Thank you,

TELEPRACTICE INFORMATION

Schedule a Call!

Pearson Clinical

Pearson

Maryland's New Reading Legislation and What it means for you! CLICK HERE!

Learn more at pearson.com

Appendix I

Permission to Use the Job Stress Survey

I am a doctoral student at Walden University, completing my dissertation in Psychology. I am writing to ask for written permission to use the Job Stress Survey Questionnaire in my research study. I am conducting a study to investigate whether burnout mediates the relationship between stress and depression among African immigrants working with adults with Intellectual and Developmental Disabilities (IDD). I do not plan on modifying or adapting any of the questions. However, I am going to be using a survey monkey platform to collect my data.

Thank you very much for providing that information for me, and I too apologise for my late response in replying to your email, as I was not available for the past few days. Based on the information you provided, I can see that this work is licensed under the Creative Commons Attribution-NonCommercial-NoDerivs license, which permits non-commercial use of the work as published, without adaptation or alteration provided the work is fully attributed.

Under the following terms:

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- Select your type of use (TOU) and enter all information required. Select **Quick Price** and a price will automatically be generated depending on the information entered. Click **Continue**.
- Enter all information pertaining to you work in the **About Work** section. Click **Continue**
- Enter all additional information if applicable and click **Continue**

- Review your order details and proceed to view payment options.

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I wish you all the best moving forward!

Kind regards,