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Maureen E. Templeman
University of South Florida

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Stressors, Resources, and Psychological Well-Being Among Working Black and White Caregivers in the United States

by

Maureen E. Templeman

A dissertation submitted in partial fulfillment
of the requirements for the degree of
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University of South Florida

Major Professor: William E. Haley, Ph.D.
Debra Dobbs, Ph.D.
Sara E. Green, Ph.D.
Soomi Lee, Ph.D.
Victor Molinari, Ph.D.

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DEDICATION

This dissertation is dedicated to my mother, Mary K. Templeman (1944-2011), whose death propelled me to pursue a Ph.D. in Aging Studies. Her life encouraged me to follow a career path dedicated to helping others cope with the inevitable changes that occur across the life course, and her death allowed me to vividly experience the simultaneous loss and growth that can accompany trauma. I will be forever grateful to have had her in my life, and her influence on me has lived far beyond her physical presence.

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ABSTRACT

By the year 2060 in the United States (U.S.), not only will the number of adults aged 65 and older double, non-Hispanic Whites (Whites), who currently constitute 77% of the older adult population, will constitute just slightly more than half of older adults. As the older adult population diversifies, so will their caregivers. Over 60% of informal caregivers of older adults (caregivers) are employed, and the majority of these are employed full time. Little is known about the unique experiences of working Black or African American (Black/AA) and White caregivers and non-caregivers in the U.S. This dissertation consists of three studies that examine stressors, resources, and psychological well-being among working Black/AA and White caregivers and non-caregivers using data from the Midlife in the United States (MIDUS) study.

Study One investigated differences in perceived general discrimination (lifetime and everyday) and workplace discrimination (chronic job discrimination and work inequality) among working Black/AA caregivers (*n* = 50), working Black/AA non-caregivers (*n* = 396), working White caregivers (*n* = 266), and working White non-caregivers (*n* = 2895). Working Black/AA participants reported higher lifetime discrimination, everyday discrimination, and work inequality than working White participants. Working caregivers also reported higher lifetime discrimination than working non-caregivers. There were also key demographic and work-related differences for all kinds of discrimination. Results point to the importance of considering discrimination in the stress process for diverse working adults. They also illuminate the need to examine ways in which caregiving status is related to discriminatory experiences.

Study Two examined differences in directions and domains of multi-dimensional work-family spillover among working Black/AA (n = 50) and White (n = 260) caregivers. While no racial differences were found for the directions and domains of spillover, there were important differences for demographic, caregiving, and workplace factors. Results suggest that race alone is not an adequate predictor of work-family spillover for working caregivers, but that other modifiable factors, especially those related to the workplace, should be the focus of future research and interventions aimed at reducing negative spillover and increasing positive spillover for working caregivers.

Study Three examined individual differences in predictors of well-being, as measured by life satisfaction, positive affect, and negative affect, among working Black/AA (n = 49) and White (n = 250) caregivers. Results of hierarchical regression analyses demonstrated that secondary role stressors from the workplace were better predictors of all three well-being outcomes than caregiving stressors. In addition, perceived control, optimism, and family support were important resources for improved well-being for both groups. Race independently predicted life satisfaction and negative affect after controlling for caregiving and work characteristics. Finally, working Black/AA caregivers reported more negative work-to-family conflict, perceived control, religious/spiritual coping, and negative affect than working White caregivers. Results highlight the appropriateness of the workplace as a setting for interventions aimed at improving the well-being of working Black/AA and White caregivers.

Overall, this dissertation highlights the importance of understanding the role of unique stressors and resources as they relate to well-being among diverse working caregivers. Future research should examine cultural factors that contribute to racial differences in the stress process for diverse working caregivers to illuminate pathways for improving the experience of simultaneously working and providing informal care for an older adult.

CHAPTER ONE. INTRODUCTION

Increased life expectancy and the aging of the Baby Boom generation is resulting in a major demographic shift in the United States (U.S.). It is estimated that by the year 2060, the older adult population (adults ages 65+) in the U.S. will almost double, increasing from 52 million to 95 million, with older adults constituting nearly 25% of the U.S. population (Mather et al., 2019). Furthermore, the racial and ethnic diversity of older adults is growing, and by the year 2060, non-Hispanic Whites (henceforth referred to as Whites) will decrease from the current 77% of the older adult population to just slightly more than 50% (Mather et al., 2019).

Despite an increase in life expectancy, as people age, the likelihood of disability and functional limitations increases. In 2011, 26% of community-dwelling Medicare beneficiaries aged 65 and older had limitations in performing activities of daily living (ADL; getting in and out of bed and chairs, getting dressed, and bathing) and/or instrumental activities of daily living (IADL; transportation, shopping, and household chores) due to health or functioning reasons (National Academies of Sciences, Engineering, and Medicine, 2016). In 2018, approximately 34% of older adults in the U.S. reported a disability, defined as difficulty with hearing, vision, cognition, ambulation, self-care, or independent living (Administration on Aging, 2020). Limitations and disabilities may be especially pronounced among racially and ethnically diverse older adults due to persistent health disparities (Scommegna et al., 2018). Because 80% of older adults prefer to age in place (remain at home as they age; AARP, 2018), there is an increased need for informal caregivers of older adults (National Academies of Sciences, Engineering, and Medicine, 2016), especially for racial and ethnic minority older adults.

Informal caregivers of older adults (henceforth referred to as caregivers), most commonly spouses and children, provide unpaid care for older adults with limitations, such as being unable to perform ADL and/or IADL (National Academies of Sciences, Engineering, and Medicine, 2016). In 2020, approximately 17% of Americans provided care for an adult over the age of 50, a 2.5% increase from 2015 (National Alliance for Caregiving and AARP Public Policy Institute, 2020). In the U.S., 61% of caregivers identify as White and 14% identify as non-Hispanic Black or African American (henceforth referred to as Black/AA; National Alliance for Caregiving and AARP Public Policy Institute, 2020), and there are several important demographic differences between Black/AA and White caregivers and their care recipients. Black/AA caregivers are younger and provide care for younger care recipients (average age of 48 and 65, respectively) than White caregivers and their care recipients (average age of 52 and 71, respectively; National Alliance for Caregiving and AARP Public Policy Institute, 2020). Black/AA caregivers are much less likely to be married than White caregivers (33% and 62%, respectively), and are more likely to report lower income (earning $50,000 or less per year) than White caregivers (47% and 32%, respectively; National Alliance for Caregiving and AARP Public Policy Institute, 2020). Further, Black/AA caregivers provide more care than White caregivers (31 and 21 hours per week, respectively; National Alliance for Caregiving and AARP Public Policy Institute, 2020). With increasing numbers of diverse older adults and their caregivers in the U.S., it is important to understand how sociocultural differences relate to various aspects of caregiving and to caregiver well-being.

In addition to demographic changes in the U.S., social shifts in the 20th century have transformed gender roles, resulting in an equal number of men and women in the workforce

(U.S. Department of Labor, 2016). Among other things, this change has affected how and when we care for our loved ones. While the caregiving gender gap has narrowed slightly in the past decade and a half – the percentage of male primary caregivers increased from 32% in 1999 to 36% in 2015 (Wolff et al., 2018) – caregiving is still a largely female occupied role. Over 60% of caregivers are involved in the dual roles of caregiving and working, and 75% of these caregivers work at least 30 hours per week (National Alliance for Caregiving and AARP Public Policy Institute, 2020). For many caregivers, this is in addition to having family responsibilities to a partner and children.

Working and non-working caregivers and their care recipients differ in several ways. Working caregivers are more likely to be younger (under age 65), male, have more education, and be providing care for a parent or parent-in-law (as opposed to a spouse or someone else); whereas caregivers who are not working are more likely to be older (age 65 and older), female, less educated, providing higher-intensity and more hours of care, and living with their care recipient (National Alliance for Caregiving and AARP Public Policy Institute, 2020). Over half of working caregivers are paid hourly, and hourly employees are much less likely to have workplace benefits like paid sick days, the option to telecommute, and family leave (National Alliance for Caregiving and AARP Public Policy Institute, 2020). Although equal percentages of Black/AA and White caregivers are simultaneously working and providing care to an older adult (National Alliance for Caregiving and AARP Public Policy Institute, 2020), examining the impacts of working and caregiving in both racial groups can provide insight into sociocultural factors that make the experience unique for working caregivers.

Theoretical Framework

Models of stress and coping are central to understanding factors that contribute to well-being among diverse working caregivers. According to the transactional model of stress and coping, stress is a person-environment relationship that includes external stressors, appraisals, internal and external resources, and outcomes (Haley et al., 1987; Lazarus & Folkman, 1984). Based on this view, stress is a highly subjective process that affects different people in different ways depending on individual factors, especially an individual's appraisal of resources available to cope with stressors. When considering caregivers, stressors can include care recipient dependence and problematic care recipient behaviors; individual factors can include subjective appraisals of caregiving, resources available to the caregiver like respite services, and problem or emotion-focused coping efforts; and outcomes can include caregiver well-being and mental health. This model serves as an excellent framework for understanding stress among caregivers in general. However, when considering diverse working caregivers, it is essential to also consider background characteristics, including race/ethnicity, age, and gender, in addition to the different roles in which caregivers are engaged.

The caregiving stress process model advanced by Pearlin and colleagues (1990), emphasizes background characteristics (e.g., socioeconomic status, family composition) as directly and indirectly influential to all other components of the model, including stressors, strains, and outcomes. Pearlin's model also differentiates primary stressors, or those directly related to caregiving, from secondary strains (role-based and intrapsychic strains) that are a result of background characteristics and primary stressors (Pearlin et al., 1990). According to this model, primary stressors include care recipient dependence and caregiver role overload; role-based secondary strains include conflict among family members and work-caregiving conflict;

and secondary intrapsychic strains include issues related to self-concept, including self-esteem, mastery, role engulfment, and loss of self (Pearlin et al., 1990; Skaff & Pearlin, 1992). The inclusion of role-related strains adds to the utility of this model for examining stress and well-being among working caregivers, as this is also a key concept in the work-family literature. Finally, like the transactional model, the Pearlin caregiving stress process model suggests that certain resources, such as coping and social support, can have a protective relationship with primary stressors, secondary strains, and outcomes (e.g., well-being or abandonment of the caregiving role; Pearlin et al., 1990).

Among the important stressors to consider in the stress process for people belonging to minority groups is prejudice and discrimination encountered over the life course and in a variety of situations (Meyer, 2003; Pearlin et al., 2005). These experiences constitute a threat to one's identity and basic rights, which has detrimental effects on minority group member mental health outcomes (Pearlin et al., 2005). Further, chronic exposure to such stressors may contribute to stress proliferation, wherein other stressors are exacerbated (Pearlin et al., 2005). Much like the caregiving stress process, minority stress theory is a transactional model that considers both the environment (e.g., socioeconomic status) and the individual's minority status, which together determine the person's exposure to stressors and coping resources (Meyer, 2003). Originally developed through studies of sexual minority group members, the theory has also been applied to other minority groups, including racial and ethnic minority groups. Minority stress theory also differentiates stressors into two interdependent types that can influence mental health outcomes: general stressors that apply to both minority and non-minority group members (e.g., caregiving); and minority stressors, which are unique to minority group members. Minority stressors are further categorized as distal and proximal (Meyer, 2003). Much like Lazarus and Folkman's

(1984) notion of distal concepts, which are defined as objective environmental conditions, distal minority stressors are external, like job discrimination, whereas proximal concepts are defined as a person’s subjective appraisals and reactions to environmental conditions, like internalization of biases (Meyer, 2003; Velez et al., 2013). While conceptually similar, specific minority stressors are distinguishable from general stress in that they are unique to people from minority groups, chronic, and socially based (a result of prejudice and discrimination; Meyer, 2003). Finally, the salience of a person’s minority status self-identity can influence their proximal minority stressors (e.g., expectations of rejection), in addition to mental health outcomes. This influence of identity salience is similar to Lazarus and Folkman’s (1984) notion of perceptions of psychological vulnerability, or the adequacy of a person’s perceived resources to cope with stress, which is lower when a stressor threatens something of importance to them. However, minority status self-identity can also be a source of resilience when it is accompanied by opportunities for social support and coping (Meyer, 2003).

In addition to one’s identity, involvement in various roles is critical to examining how workplace factors may contribute to well-being among diverse working caregivers. Perhaps the most widely known role-based model in the work-family literature is role conflict theory. Role conflict theory derives from a scarcity perspective, suggesting that people have a fixed amount of time to dedicate to various aspects of their lives, and that being involved in multiple roles ultimately results in conflict. This is an intuitive perspective, and indeed, the common framework that guides much of the empirical research on the work-family interface. Role conflict is defined as pressure from one role resulting in difficulty complying with demands from another concurrent role (Kahn et al., 1964).

Building on role conflict, Greenhaus and Beutell (1985) conceptualized work-family conflict as an inter-role conflict that results from an incongruity between tensions from the realms of workplace and family. They described three main types of work-family conflict: time-based (when time pressures from one role make fulfilling another role difficult), strain-based (when strain produced by one role impacts performance of another role), and behavior-based (when expected behaviors in one domain are inconsistent with expected behaviors in the other domain) (Greenhaus & Beutell, 1985). Further, Carlson & Frone differentiated the concepts of external conflict, which can include time-based, strain-based, and behavior-based conflict; and internal conflict, which is a cognitive or emotional conflict occurring within a person, such as ruminating on work-related issues at home or vice versa (2003). Finally, two sources, or directions, of work-family conflict are considered to emphasize the role that is putting greater strain on the other role. The first direction, referred to as ‘work interference with family’ or ‘work-to-family conflict’ (distinct from the general concept of ‘work-family conflict’) refers to work-related sources of conflict that create obstacles to performing family-related roles and responsibilities. The other direction, referred to as ‘family interference with work’ or ‘family-to-work conflict’ refers to family-related sources of conflict that create obstacles to performing work-related roles and responsibilities (Greenhaus & Beutell, 1985). The multi-dimensional construct of work-family conflict can be viewed as an example of a secondary strain in the caregiving stress process and is useful when analyzing various aspects of the work-family interface for diverse working caregivers.

The concept of work-family conflict is echoed in caregiving literature with the notion of role spillover, which can be positive or negative (or both) (Stephens et al., 1997). Like work-family conflict, negative role spillover is bi-directional and occurs when either the work or caregiving role is neglected because of negative experiences or heavy demands in the other role (Stephens et al., 1997). Negative role spillover is also referred to as work to caregiving conflict (or work interference with caregiving) or caregiving to work conflict (or caregiving interference with work), depending on the source of the conflict (Gordon et al., 2012). On the other hand, positive role spillover occurs when either the work or caregiving role is enhanced because of positive experiences in the other role (Stephens et al., 1997). The latter is consistent with an enrichment, rather than a scarcity perspective, which, although not a major emphasis in the work-family literature, is also important to consider when studying diverse working caregivers.

The concept of role enhancement, much like the concept of positive spillover, suggests that when individuals occupy multiple roles, they may experience benefits, and these benefits can be a result of the additive effects of positive work and family experiences, protecting against distress in one role due to another more satisfying role, or the experiences or resources from one role being transferred to the other role (Greenhaus & Powell, 2006). Thus, work-family enrichment refers to "the extent to which experiences in one role improve quality of life in the other role," wherein quality of life is defined as positive affect and high performance (Greenhaus & Powell, 2006). For example, if a person has a fulfilling family role, positive emotions from that role can spill over into the more stressful work role, causing the person to be more successful at their job. Likewise, when there is strain from the family domain, positive aspects of the work domain might provide the person with a sense of relief and ease that can carry over into increased patience in the more stressful family domain. Work-family enhancement can also be augmented by external sources, including work-family organizational cultures and policies (Sok et al., 2014). The enhancement perspective may be especially useful for identifying resources and resilience factors that are protective for diverse working caregivers.

Literature also suggests that the conflict and enhancement perspectives are not mutually exclusive. For example, while experiencing profound distress, a person can also experience 'positive psychological states,' described as positive states of mind and positive affect (Folkman, 1997). High levels of both positive and negative affect are more likely to meaningfully co-occur when a person is involved in a valued activity (Folkman, 1997). This adds another dimension to the concept of role salience, which posits that stressors that arise in roles that are highly valued by an individual have the potential for more negative effects on the individual's health and well-being than those that arise in less valued roles (Stryker, 2001; Thoits, 1991). This scarcity perspective is also emphasized in the work-family literature, which reports that the likelihood of experiencing work-family conflict is heightened the more a person's identity is enmeshed in one of their roles, perhaps because impinging upon more salient roles erodes a person's sense of meaning in life (Greenhaus & Beutell, 1985; Krause, 2004). However, it has also been suggested that when the role receiving the conflict has low salience, involvement in the more salient role may protect against the conflict (Bagger & Li, 2012; Skaff & Pearlin, 1992).

Folkman's revised model of stress and coping, which includes positive psychological states, suggests that through meaning-based processes that enhance coping (e.g., positive reappraisal, problem-focused coping, spiritually driven meaning finding) and active creation of positive psychological states, distress and positive states can co-exist (1997). An example of meaning-based processes for caregivers is the concept of cultural justifications for caregiving, which are reasons that people provide care to a loved one that are believed to stem from cultural values (Dilworth-Anderson et al., 2005). Examples of cultural justifications for caregiving are beliefs that it is one's duty to provide care to older adult relatives, that providing care is aligned with one's spiritual or religious beliefs, and that providing care to family members is a form of reciprocity (Dilworth-Anderson et al., 2005). In other words, cultural justifications for caregiving are a way of ascribing meaning to the caregiving role and may result in more positive psychological states, despite stressors that may arise. Further, the more cultural justifications a person has for caregiving, the more valued or salient the role may be. As a result, cultural justifications for caregiving can point to a potential source of resilience for working Black/AA caregivers for whom the caregiving role is an integral part of their cultural self-concept, but also a potential enhanced vulnerability to work-family conflict.

Overview of Dissertation

Guided by these theoretical frameworks, this dissertation consists of three interrelated studies that examine the intersection of race, caregiving, and work for working Black/AA and White caregivers. Chapter two of this dissertation provides an overview of literature related to the prevalence of and factors associated with perceived general and workplace discrimination. It then describes the first study, which examines the relationship between perceived general and workplace discrimination among working caregivers and non-caregivers. Chapter three provides an overview of existing literature related to work-family spillover for working adults, including caregivers, in addition to factors relating to work-family spillover for Black/AA and White working adults. It then describes the second study, which examines differences in work-family spillover for working Black/AA and White caregivers. Chapter four provides an overview of existing literature related to caregiver well-being, racial differences in caregiving, and racial differences in well-being, including internal and external resources that may be protective for caregivers. It then describes the third study of this dissertation, which examines individual predictors of well-being, including primary and secondary stressors and resources for working Black/AA and White caregivers. Specific aims and hypotheses of each study are described in relevant chapters. The dissertation uses data from the Midlife in the United States (MIDUS) study, a population-based study that is well-suited to examining these issues. The overall objective of the dissertation is to lay the groundwork for future researchers to examine race, caregiving, and employment-related research questions and design primary data collection projects. Further, it is my hope that the results of these studies will ignite discussion about the needs of diverse working caregivers and contribute to innovative ways to support these caregivers, so they are able to successfully balance workplace and family demands and maintain positive well-being. Finally, this is an especially timely topic due to recent concerns about COVID-19 related pressures on family members in both employment and caregiving, in addition to how these pressures impact different racial communities disparately.

Midlife in the United States (MIDUS) Study

This dissertation addresses the intersection of race, caregiving, and employment using data from MIDUS, a national longitudinal study of community-dwelling, English-speaking American adults. The aim of MIDUS is to examine the role of behavioral, psychological, and social aspects of midlife development in age-related differences in health and well-being (MIDUS, 2011). Data for the first survey (MIDUS 1) were collected from 1995-1996 (Brim et al., 2020). A main, national probability sample and an oversample from five U.S. metropolitan areas were recruited by telephone using random digit dialing, generated from working telephone banks. A list of people aged 25-74 in each household was created and one person was then randomly selected to participate, oversampling for men and older adults. This strategy resulted in 3,487 participants in the main sample and 757 participants from the metropolitan over samples. Siblings of participants in the main sample were randomly selected to participate, resulting in 950 participants. Finally, twin pairs were recruited from existing national omnibus surveys, and those who provided permission were contacted for recruitment, resulting in an additional 1,914 participants. The final sample of 7,108 participants ranged in age 25-74. Participants were administered a 30-minute phone interview and subsequently mailed two 45-page self-administered questionnaire (SAQ) instruments.

Data for the first longitudinal follow-up wave (MIDUS 2) were collected from 2004-2006 (Ryff, Almeida, Ayanian, Carr et al., 2017). There was no additional recruitment for this wave; only MIDUS 1 participants were contacted for participation. This wave resulted in 4,963 participants aged 35-86 from the same four sub-samples as MIDUS 1. Participants were administered a 30-minute phone interview and subsequently mailed two 55-page SAQ instruments. A refresher sample was recruited from 2011-2014 (MIDUS Refresher) to increase the sample size of the study and to assess the effects of the 2008 recession (Ryff, Almeida, Ayanian, Binkley et al., 2017). This sample resulted in 3,577 participants aged 25-74, with a sub-sample composition mirroring that of the previous waves. Participants were administered a 30-minute phone interview and subsequently mailed two 50-page SAQ instruments. Data for the second longitudinal follow-up wave (MIDUS 3) were collected from 2013-2014 (Ryff et al., 2019). This wave resulted in 3,294 participants aged 40-94 from the same four sub-samples as MIDUS 1 and MIDUS 2. Participants were administered a 45-minute phone interview and subsequently mailed a 100-page SAQ instrument. The same protocol that was used in the larger MIDUS study was used to recruit a sub-sample of Black/AA participants to correspond with MIDUS 2, the MIDUS Refresher, and MIDUS 3. Participants completed a Computer Assisted Personal Interview (CAPI) and were then mailed a 50-page SAQ instrument. Participants who completed data collection were compensated $70. These oversamples resulted in 592 Black/AA participants corresponding to MIDUS 2, 508 Black/AA participants corresponding to the MIDUS Refresher, and 389 Black/AA participants corresponding to MIDUS 3 (Ryff et al., Mar. 2018; Ryff et al., Oct. 2018; Ryff et al., Sept. 2018).

Because additional caregiving questions were added in MIDUS 2, this is the first wave of data that was used in this dissertation, in addition to the MIDUS Refresher and the corresponding Milwaukee sub-samples. MIDUS has several unique features that make it advantageous for studies addressing caregiving, work, and race. First, it includes robust measures of work-related and psychosocial constructs administered to a national sample that is diverse in socioeconomic status and geography (Brim et al., 2004). Examples of work-related constructs in MIDUS include work-family spillover, job characteristics (including job control, job demands, and co-worker and supervisor support), and job discrimination. Among the numerous psychological constructs are depression, anxiety, life satisfaction, positive and negative affect, psychological well-being, and perceived discrimination (Brim et al., 2004). This wide variety of measures allows researchers to understand how various aspects of the work domain relate more deeply to different aspects of well-being in a large sample of diverse U.S. Americans. The Milwaukee oversamples are another strength of MIDUS for studies examining race. For example, Black/AA participants make up just 5% of the core MIDUS 2 sample, but with the Milwaukee oversamples, this percentage increases to almost 15%. The sample is also diverse in age, with participants ranging from 25-74 years, which allows for comparisons between individuals at different ages.

There are also some limitations to MIDUS that should be noted. As mentioned previously, the core MIDUS samples are not racially or ethnically diverse. For example, 90% of participants in the core MIDUS 2 sample (not including the Milwaukee oversample) are White, 5% are Black/AA, and less than 4% are of Spanish/Hispanic/Latino descent. While the Milwaukee oversamples, discussed previously, add to the racial diversity of participants, there are very few participants from races or ethnicities other than White and Black/AA. Another limitation of MIDUS is the lack of detailed caregiving measures. Caregiving measures in MIDUS are mainly descriptive and objective, including the relationship of care recipient to caregiver, sex of care recipient, the illness or condition that caused the care recipient to need care, hours and duration of care provided, whether care recipient lives in the same household as the caregiver, and provision of ADL/IADL assistance. While some of these measures represent potential caregiving stressors, MIDUS does not contain measures that assess caregiver subjective perceptions of care provision, including burnout, overload, exhaustion, confidence, or satisfaction resulting from caregiving. This limits the ability of researchers to assess some key elements of widely used theories of the caregiving stress process.

CHAPTER TWO. STUDY ONE:

DIFFERENCES IN PERCEIVED DISCRIMINATION AMONG WORKING BLACK/AA AND WHITE CAREGIVERS AND NON-CAREGIVERS

Introduction

Research interest in family caregiving has grown rapidly over the past several decades, due in large part to changing demographics and family structures in the United States (U.S.). Caregivers are an essential part of the fabric of society, playing an indispensable role in caring for older adult loved ones and deflecting major economic issues that would stem from exclusive reliance on formal care for older adults who are unable to care for themselves independently. Caregivers provide care for a mean of 24 hours a week – the equivalent of a part-time job – and for an average duration of 4.5 years (National Alliance for Caregiving and AARP Public Policy Institute, 2020). The annual cost to replace caregivers with unskilled paid care would be over two billion dollars, and with skilled paid care, over six billion dollars (Chari et al., 2015), making their service invaluable to their loved ones and to society.

Over half of caregivers are both working and providing care, and these caregivers contend with additional stressors on top of those directly related to caregiving. Work-related stressors that have been examined in the literature for working caregivers include workplace factors like job demands and work-family conflict (Gordon et al., 2012; Templeman, 2019). While these are important factors, they overlook a potentially important aspect of the stress process for working caregivers who identify with marginalized groups – prejudice and discrimination. Not only is discrimination a broad concern for individuals belonging to marginalized groups, it can also be an issue in the workplace, and working caregivers who identify with a marginalized group may be subject to discrimination to an even greater extent – a potential double jeopardy effect. As a result, it is important to investigate the role of discrimination in the stress process for diverse working caregivers.

General Discrimination

It is widely understood that discrimination, or the differential treatment of racial minority groups (especially Black/AA people in the U.S.) by individuals and social institutions has negative consequences (Williams, 2017). Discrimination is a stressor with conceptually distinct forms, including major/lifetime discrimination and everyday discrimination (American Psychological Association, 2016; Williams et al., 2008; Williams et al., 1997). Major/lifetime discrimination is acute and of a structural nature, including not being hired for a job or being hassled by the police (American Psychological Association, 2016; Williams et al., 2008). Everyday discrimination is chronic and of an interpersonal nature, including being treated less respectfully than others and receiving inferior service in stores (American Psychological Association, 2016; Williams et al., 1997). Approximately 47% of adults in the U.S. report having experienced major/lifetime discrimination, and 61% report having experienced everyday discrimination (American Psychological Association, 2016). Further, discrimination is reported less by White non-Hispanic Americans than any other racial/ethnic group in the U.S. (American Psychological Association, 2016).

Discrimination is important because it has been linked to poor mental health outcomes, including increased depression, anxiety, and psychological distress (Lewis et al., 2015).

Although some studies indicate that everyday discrimination is more closely linked to depression and life satisfaction than lifetime discrimination for both Black/AA and White adults, it remains important to examine both kinds of general discrimination to elucidate distinct causes of stress (Ayalon & Gum, 2010; Wheaton et al., 2018). Discrimination also contributes to social inequalities, and these inequalities may induce stress proliferation, which exacerbates other stressors (Pearlin et al., 2005). Because working caregivers contend with various stressors from both the work and family domains, it is important to understand additional upstream stressors like discrimination that may shape their overall stress process.

Workplace Discrimination

Workplace discrimination is defined as differential and unfair treatment based on personal characteristics unrelated to job duties that results in disadvantages and reduced opportunities (Tomei, 2003). Although illegal in the U.S. since the passage of the Civil Rights Act in 1964, workplace discrimination based on race persists in many forms, including Black/AA workers occupying fewer managerial positions, Black/AA workers receiving lower earnings, and Black/AA workers receiving fewer job offers than White workers (Frevert et al., 2015; Pager et al., 2009). Older workers from racial and ethnic minority groups in particular report greater perceived workplace discrimination than White workers (Chou & Choi, 2011), and workplace discrimination has been linked to poor workplace and health outcomes for Black/AA workers (Meyer, 2014). One experimental study found that when equally qualified matched Black/AA and White job applicants applied for entry-level positions, Black/AA applicants were half as likely to be called back or offered a job as White applicants (Pager et al., 2009). The issue is even more pronounced among working Black/AA women, who report more discrimination effects in the workplace, including prejudiced coworkers, having fewer opportunities, and being fired more often than White women (O’Brien et al., 2014). This is important to consider since women are also more likely than men to be caregivers (Wolff et al., 2018).

In addition to workplace discrimination based on sex and race, working caregivers may face additional discrimination due to their family responsibilities. This kind of discrimination, termed family responsibility discrimination (FRD), is a unique kind of discrimination that occurs when a person providing care for a family member experiences differential treatment in the workplace, presumably because of their status as a care provider (WorkLife Law, 2021). Examples of workplace discrimination that have been reported by working caregivers include being passed over for jobs and promotions, receiving lower salaries, and perceiving differential treatment on the job as compared to non-caregivers (Henle, 2020; Schulz, 2020). There is no federal law that explicitly protects caregivers from FRD, but caregivers may report claims of FRD using a variety of laws, including the Civil Rights Act of 1964, Family and Medical Leave Act of 1993, the Employee Retirement Income Security Act of 1974, and the Americans with Disabilities Act of 1990 (Calvert, 2016). Nevertheless, persistent FRD lawsuits suggest that despite these protections, FRD still occurs (Calvert, 2016). While overall, only 7% of caregivers report feeling that they are discriminated against in the workplace, certain sub-groups report more workplace discrimination, including caregivers who provide more hours of care and higher intensity care, and those who are caring for people who have mental health or cognitive problems (National Alliance for Caregiving and AARP Public Policy Institute, 2020).

Study Aims and Hypotheses

There is limited literature to date that examines differences in perceptions of general and workplace discrimination among working Black/AA and White caregivers. To address this gap, the current study examined differences between working Black/AA and White caregivers and non-caregivers in the domains of perceived general discrimination (lifetime and everyday) and perceived workplace discrimination (chronic job discrimination and work inequality). The study had three aims.

The primary aim was to determine whether caregiving status was associated with differing levels of perceived general and workplace discrimination among working adults. Regarding this aim, I hypothesized that working caregivers and non-caregivers would report similar levels of perceived general discrimination, but that working caregivers would report greater levels of perceived workplace discrimination than working non-caregivers. This is based on the notion that in their everyday lives, caregivers are not considered a minority group, so they are not subjected to general discrimination more than non-caregivers. However, due to potential conflict between work and family roles, in addition to having a workplace minority status as a caregiver, working caregivers would report more workplace discrimination than working non-caregivers.

The second aim was to determine whether race was associated with differing levels of perceived general and workplace discrimination among working adults (regardless of caregiver status). Regarding this aim, I hypothesized that working Black/AA adults would perceive greater levels of general and workplace discrimination than White participants. This is based on Minority Stress Theory, which states that discrimination is a stressor that minority group members specifically are subjected to, in addition to prior research findings that Black/AA individuals tend to report greater perceived general discrimination and workplace discrimination.

The final aim was to determine whether race and caregiving had interacting effects on perceived general and workplace discrimination among working adults. While there is insufficient literature to offer a definitive hypothesis, I expected that there would be an interaction between race and caregiving status for workplace discrimination, but not general discrimination. This is because in the workplace, Black/AA caregivers hold dual minority status as racial minority group members in addition to being caregivers, which may increase the likelihood of role conflict, and thus workplace discrimination.

Method

Participants

Data for this study was obtained from MIDUS 2 and the MIDUS Refresher, in addition to an oversample of Black/AA individuals from the Milwaukee data corresponding to each wave (*N* = 9640; Ryff, Almeida, Ayanian, Carr et al., 2017; Ryff et al., Mar. 2018; Ryff et al., Oct. 2018; Ryff et al., Sept. 2018). Participants who did not complete both the SAQ and CAPI portions of the study were excluded (*n* = 2290) because key variables were obtained from both instruments. Further, because the study aims including comparing working Black/AA and White adults, participants who reported a different primary racial identity were excluded from the study (*n* = 468). Participants who did not report working at the time of the study or for at least 50 weeks over the past year (chosen to ensure working and caregiving co-occurred) were also excluded from the study (*n* = 2,850). Finally, caregivers whose caregiving did not coincide with working (either currently or in the past year) were excluded from this study (*n* = 41). The overall sample consisted of 3,991 working adult participants, 347 of whom were working caregivers and 3,644 of whom were working non-caregivers. The process of selecting the sample is displayed in Figure 2.1 for visual reference.

Measures

The following measures were included in the analyses.

Outcomes

General Discrimination. General discrimination was measured using two scales – lifetime discrimination and everyday discrimination.

Lifetime Discrimination. Lifetime discrimination was measured using an 11-item scale that asked participants: *How many times in your life have you been discriminated against in each of the following ways because of such things as your race, ethnicity, gender, age, religion, physical appearance, sexual orientation, or other characteristics?* (Williams et al., 2008). Participants were presented with 11 different scenarios, including being discouraged by a teacher or advisor from seeking higher education; being denied a scholarship; not being hired for a job; not being given a promotion; being fired; being prevented from renting or buying a home in the neighborhood you wanted; being prevented from remaining in a neighborhood because neighbors made life so uncomfortable; being hassled by the police; being denied a bank loan; being denied or provided inferior medical care; and being denied or provided inferior service by a plumber, care mechanic, or other service provider. Participants stated how many times they had been discriminated against in each of the 11 scenarios (any number was acceptable). Scores on the scale were calculated by summing the number of scenarios with a number of one or more, ranging from zero to 11. MIDUS calculated scores only for participants with valid values on at least one of the items. Those who did not have valid values on at least one item were coded as "not calculated (due to missing data)." Internal reliability for the 11 item measure was .90.

Everyday Discrimination. Everyday discrimination was measured using a nine-item scale that asked participants: *How often on a day-to-day basis do you experience each of the following types of discrimination?* (Williams et al., 1997). Participants were presented with nine different types of everyday discrimination, including being treated with less courtesy than other people, being treated with less respect than other people, receiving poorer service than other people at restaurants or stores, people acting as if they think you are not smart, people acting as if they are afraid of you, people acting as if they think you are dishonest, people acting as if they think you are not as good as they are, being called names or insulted, and being threatened or harassed. Participants answered using a four-point Likert scale, wherein one represented 'often', two represented 'sometimes', three represented 'rarely', and four represented 'never'. Items were reverse coded so that high scores reflected more everyday discrimination. Scores on the scale were calculated by summing the nine ratings, ranging from zero to 36. MIDUS calculated scores only for participants with valid values on at least five of the items. Missing data in these cases was imputed using the mean value of completed items. Participants who did not have valid values on at least five items were coded as "not calculated (due to missing data)." Internal reliability for the nine item measure was .92.

Workplace Discrimination. Workplace discrimination was measured using two scales – chronic job discrimination and work inequality.

Chronic Job Discrimination. Chronic job discrimination was measured using a six-item scale that asked participants: *How often do you think you are unfairly given the jobs that no one else wanted to do? How often are you watched more closely than other workers? How often does* *your supervisor or boss use ethnic, racial, or sexual slurs or jokes? How often do your coworkers use ethnic, racial, or sexual slurs or jokes? How often do you feel that you are ignored or not taken seriously by your boss? How often has a co-worker with less experience and qualifications gotten promoted before you?* (Williams at al., 1997). Participants answered using a five-point Likert scale, wherein one represented ‘once a week or more’, two represented ‘a few times a month’, three represented ‘a few times a year’, four represented ‘less than once a year’, and five represented ‘never’. Items were reverse coded so that higher scores represented more workplace discrimination. Scores on the scale were calculated by summing the six ratings, ranging from zero to 30. MIDUS calculated scores only for participants with valid values on at least three of the items. Missing data in these cases was imputed using the mean value of completed items. Participants who did not have valid values on at least three items were coded as “not calculated (due to missing data).” Internal reliability for the six item measure was .86.

Work Inequality. Work inequality was measured using a six-item scale that asked participants to describe the extent to which the statements described their current job: *I feel cheated about the chances I have had to work at good jobs. When I think about the work I do on my job, I feel a good deal of pride. I felt that others respect the work I do on my job. Most people have more rewarding jobs than I do. When it comes to my work life, I’ve had opportunities that are as good as most people’s. It makes me discouraged that other people have much better jobs than I do.* Participants answered using a four-point Likert scale, wherein one represented ‘a lot’, two represented ‘some’, three represented ‘a little’, and four represented ‘not at all’. Appropriate items were reverse coded so that higher scores represented more inequality in work. Scores on the scale were calculated using the mean of the six items, ranging from zero to four. MIDUS calculated scores only for participants with valid values on at least one of the items. Missing data in these cases was imputed using the mean value of completed items. Participants who did not have valid values on at least one item were coded as “not calculated (due to missing data).” Internal reliability for the six item measure was .78.

Covariates

Participant Demographics. Participant demographic information, including age, sex, Hispanic ethnicity, and education were used as covariates in the adjusted analyses. For sex, males were coded as one and females were coded as two. For Hispanic ethnicity, non-Hispanic was coded as zero and Hispanic was coded as one. For education, not having a college degree was coded as one and have a college degree was coded as two.

Work Characteristics. All participants in the study reported either working currently or working for at least 50 weeks in the past year. The number of hours worked per week was used as a covariate in the adjusted analyses. Participants who reported working zero hours per week were coded as missing.

Caregiver Descriptive Variables

Characteristics of Care Provision. Participants were classified as caregivers if they reported providing personal care now or for a period of at least one month over the last year to an adult family member or friend (excluding those providing care to their children) due to a physical or mental condition, illness, or disability. Characteristics of care provision, including the relationship of the caregiver to the care recipient, whether the caregiver lived with the care recipient, the duration of caregiving (number of weeks in the last year), hours of care provided in a week, and assistance with activities of daily living (ADL) and instrumental activities of daily living (IADL) were reported to describe caregivers. For co-residence with the care recipient, not co-residing was coded as zero and co-residing was coded as one. Assistance with ADL was measured using two questions: *Because of his/her limitations do/did you provide him/her with personal help with bathing, dressing, eating, or going to the bathroom? Because of his/her limitations do/did you provide him/her getting around inside the house or going outside?* Assistance with IADL was measured using two questions: *Because of his/her limitations do/did you provide him/her shopping, cooking, housework, or laundry? Because of his/her limitations do/did you provide him/her managing money, making phone calls, or taking medications?* These two items were combined into a composite variable representing total assistance with ADL and IADL and ranged from 0-4, representing the number of activities for which the caregiver provided assistance.

Statistical Analyses

Statistical analyses were performed using the Statistical Package for Social Sciences (SPSS), Version 27.0 (IBM Corp., 2020). Frequencies of study variables were examined for missing data and Little's test of missing completely at random (MCAR; 1988) was performed to determine how to treat missing data. Frequencies and means were calculated for the final analytic sample on all study variables, and analyses of variance (ANOVA), T-tests, and chi-square tests were conducted to compare the subgroups (working White caregivers, working Black/AA caregivers, working White non-caregivers, working Black/AA non-caregivers). To evaluate collinearity, point-biserial correlation analyses were performed. To examine differences in discrimination between the four subgroups and to better understand possible mechanisms of caregiving and racial effects, a series of two-way (caregiver status: caregiver/non-caregiver; race: White/Black/AA) ANOVA and analyses of covariance (ANCOVA) were performed.

Results

Description of the Sample

Examination of frequencies of study variables revealed missing data for Hispanic ethnicity, education, hours worked, lifetime discrimination, daily discrimination, workplace discrimination, and work inequality. Analyses of missing values using Little's test of MCAR were significant, $\chi^2(33, N = 3991) = 99.78$, $p < .001$, indicating that the data was not missing completely at random. However, percentages of missing data were inspected, and all were below 6%, indicating that deleting the data would most likely not introduce bias (Bennett, 2001). As a result, participants with missing data for any variables were deleted listwise ($n = 384$). The study sample containing no missing data on key variables was significantly different than those who were excluded due to missing data ($n = 384$) in age, race, and education. The study sample was younger, had more White participants, and was more educated than those who were excluded. Descriptive statistics for the final analytic sample ($n = 3607$) are displayed in Table 2.1. The average age of participants was 49 years, about half were male and half were female, 88% were White, 98% were non-Hispanic, about half had a college degree, 9% were caregivers, and participants worked an average of 40 hours per week.

One-way ANOVA revealed significant differences among the four subgroups for age, $F(1, 3603) = 12.08$, $p < .001$, partial $\eta^2 = .010$ and hours worked per week, $F(1, 3603) = 3.28$, $p = .020$, partial $\eta^2 = .003$. Results of Fisher's LSD tests revealed that working White non-caregivers were younger than working White caregivers and older than working Black/AA non-caregivers, and that working White caregivers were older than working Black/AA caregivers and working Black/AA non-caregivers. Also, working White non-caregivers worked more hours per week than working Black non-caregivers and working Black caregivers. T-tests revealed significant differences between working Black/AA and White caregivers for hours of care provided per week, $t(54) = -2.21$, $p = .032$. Working Black/AA caregivers provided significantly more hours of care per week than working White caregivers. Chi-square tests for association revealed significant differences between working Black/AA caregivers and working White caregivers for sex, $\chi^2(1) = 4.17$, $p = .041$ and education, $\chi^2(1) = 24.67$, $p < .001$; and between working Black/AA non-caregivers and working White non-caregivers for sex, $\chi^2(1) = 32.48$, $p < .001$ and education, $\chi^2(1) = 44.26$, $p < .001$. Working Black/AA caregivers were significantly more likely to be female and have less education than working White caregivers, and working Black/AA non-caregivers were significantly more likely to be female and have less education than working White non-caregivers. Finally, correlation analyses were conducted to evaluate multicollinearity among the study variables. All coefficients were under 0.80, suggesting no issues with severe multicollinearity. Results of correlation analyses are displayed in Table 2.2.

Group Comparisons

A series of two-way ANOVA were conducted to determine whether there were significant main effects for race, caregiving status, and an interaction between race and caregiving status for general and workplace discrimination. A series of two-way ANCOVAs were then conducted to determine whether main and interaction effects remained significant after covariate adjustment and to determine covariate effects for the two kinds of discrimination. Results of adjusted group comparisons are displayed in Table 2.3.

General Discrimination

Lifetime Discrimination. Mean lifetime discrimination scores by subgroup are illustrated in Figure 2.3. There was a statistically significant main effect for race for lifetime discrimination, which remained significant after adjustment for covariates, $F(1, 3598) =$

117.00, $p < .001$, partial $\eta^2 = .031$. Being Black/AA was associated with a significantly higher mean lifetime discrimination score. There was also a statistically significant main effect for caregiving status, which remained significant after adjustment for covariates, $F(1, 3598) = 5.81$, $p = .016$, partial $\eta^2 = .002$. Being a caregiver was associated with a significantly higher mean lifetime discrimination score. The interaction between race and caregiving status was not statistically significant before or after covariate adjustment, $F(1, 3598) = 0.62$, $p = .804$, partial $\eta^2 = .000$. There was a statistically significant covariate effect for hours worked, $F(1, 3598) = 4.63$, $p = .031$, partial $\eta^2 = .001$. More hours worked was associated with more lifetime discrimination.

Everyday Discrimination. There was a statistically significant main effect for race for everyday discrimination, which remained significant after adjustment for covariates, $F(1, 3598) = 18.37$, $p < .001$, partial $\eta^2 = .005$. Being Black/AA was associated with significantly higher everyday discrimination scores. There was no statistically significant main effect for caregiving status before or after adjusting for covariates, $F(1, 3598) = 0.04$, $p = .852$, partial $\eta^2 = .000$. There was also no statistically significant interaction between race and caregiving status for everyday discrimination, but a marginally significant interaction appeared after covariate adjustment, $F(1, 3598) = 3.86$, $p = .050$, partial $\eta^2 = .001$. There were statistically significant covariate effects for age, $F(1, 3598) = 16.98$, $p < .001$, partial $\eta^2 = .005$; sex, $F(1, 3598) = 5.17$, $p = .023$, partial $\eta^2 = .001$; and education, $F(1, 3598) = 28.41$, $p < .001$, partial $\eta^2 = .005$. Being younger, female, and having less education were associated with more reports of everyday discrimination.

Workplace Discrimination

Chronic Job Discrimination. There was a statistically significant main effect for race for chronic job discrimination, $F(1, 3598) = 5.11$, $p = .024$, partial $\eta^2 = .001$, but this difference was no longer significant after adjusting for covariates, $F(1, 3598) = 1.28$, $p = .257$, partial $\eta^2 = .000$. There was no statistically significant main effect for caregiving status, and this remained after adjusting for covariates, $F(1, 3598) = 0.51$, $p = .478$, partial $\eta^2 = .000$. There was also no statistically significant interaction between race and caregiving status for chronic job discrimination, and the interaction was still not significant after covariate adjustment, $F(1, 3598) = 0.15$, $p = .700$, partial $\eta^2 = .000$. There were statistically significant covariate effects for age, $F(1, 3598) = 166.00$, $p = < .001$, partial $\eta^2 = .044$; sex $F(1, 3598) = 29.17$, $p < .001$, partial $\eta^2 = .008$; education $F(1, 3598) = 74.27$, $p < .001$, partial $\eta^2 = .020$; and hours worked, $F(1, 3598) = 18.99$, $p < .001$, partial $\eta^2 = .005$. Being younger, male, less educated, and working more hours were associated with more reported chronic job discrimination.

Work Inequality. There was a statistically significant main effect for race for work inequality, which remained significant after adjustment for covariates, $F(1, 3598) = 34.14$, $p < .001$, partial $\eta^2 = .009$. Being Black/AA was associated with significantly higher work inequality scores. There was no statistically significant main effect for caregiving status, and this remained after adjusting for covariates, $F(1, 3598) = 1.49$, $p = .222$, partial $\eta^2 = .000$. There was also no statistically significant interaction between race and caregiving status for work inequality, and the interaction was still not significant after covariate adjustment, $F(1, 3598) = 2.00$, $p = .157$, partial $\eta^2 = .001$. There were statistically significant covariate effects for age, $F(1, 3598) = 148.27$, $p = < .001$, partial $\eta^2 = .040$; sex $F(1, 3598) = 4.87$, $p < .001$, partial $\eta^2 = .040$; education $F(1, 3598) = 61.76$, $p < .001$, partial $\eta^2 = .017$; and hours worked, $F(1, 3598) = 20.32$, $p < .001$, partial $\eta^2 = .006$. Being younger, male, less educated, and working fewer hours were associated with more reported work inequality.

Supplemental Group Analyses

An additional series of one-way ANOVA and ANCOVA using the four subgroups as the independent variable rather than as two factors were conducted to determine whether results were consistent with the previous analyses. Subgroup differences are displayed in Table 2.3. For lifetime discrimination, there was a statistically significant main effect for group status, which remained significant after covariate adjustment, $F(1, 3598) = 109.34$, $p < .001$, partial $\eta^2 = .084$. Results of Fisher's LSD tests revealed that working White non-caregivers had significantly lower lifetime discrimination scores than all other groups, and that working White caregivers had significantly lower lifetime discrimination scores than working Black/AA caregivers and non-caregivers. For everyday discrimination, there was a statistically significant main effect for group status, which remained significant after covariate adjustment, $F(1, 3598) = 32.21$, $p < .001$, partial $\eta^2 = .026$. Results of Fisher's LSD tests revealed that working White non-caregivers had significantly lower everyday discrimination scores than all other groups, and that working White caregivers had significantly lower everyday discrimination scores than working Black/AA non-caregivers. For chronic job discrimination, there was a statistically significant main effect for group status, $F(1, 3603) = 4.44$, $p = .004$, partial $\eta^2 = .004$, but this was no longer significant after covariate adjustment, $F(1, 3598) = 2.48$, $p = .059$, partial $\eta^2 = .002$. For work inequality, there was a statistically significant main effect for group status, which remained significant after covariate adjustment, $F(1, 3598) = 19.97$, $p < .001$, partial $\eta^2 = .016$. Results of Fisher's LSD tests revealed that both working White caregivers and non-caregivers had significantly lower work inequality scores than working Black/AA caregivers and non-caregivers.

To further understand the significant effects for mean discrimination scores, individual items on the lifetime discrimination, everyday discrimination, and work inequality scales were examined. For each scale, the five most frequently endorsed items for the entire sample were identified. Mean scores for each of the groups with significant differences are displayed in Figures 2.3, 2.4, and 2.5.

Discussion

This study is unique because it examines multiple kinds of discrimination among working Black/AA and White caregivers and non-caregivers in a nationally representative sample. The findings have important implications for the role of discrimination in the stress process for diverse working adults in the U.S. Regarding lifetime discrimination, working Black/AA adults reported more lifetime discrimination than working White adults, and working caregivers reported more lifetime discrimination than working non-caregivers, even after adjusting for demographics including age, sex, Hispanic ethnicity, and education. While there was no interaction between race and caregiving status, there were significant differences in lifetime discrimination among the four subgroups. Most notably, working White non-caregivers reported the least lifetime discrimination and working Black/AA caregivers and non-caregivers reported the most. Finally, working Black/AA adults reported more of all five of the most common kinds of lifetime discrimination. These findings confirm prior research that Black/AA adults in the U.S. report more discrimination than any other racial/ethnic group (Lee et al., 2019). They also support the utility of Minority Stress Theory, which postulates that a person's minority status makes them vulnerable to unique stressors, including discrimination.

The finding for caregiver differences for lifetime discrimination is novel and surprising, although the effect size for this finding was much smaller than that for the finding of racial differences. The item analyses show differences between the kinds of lifetime discrimination reported by working Black caregivers and non-caregivers. Working Black caregivers report being hassled by the police, being discouraged from seeking higher education, and not being hired for a job more than working Black non-caregivers; and working Black/AA non-caregivers report not being given a job promotion and being denied/provided inferior service by a service provider more than working Black/AA caregivers. Of note is also that Black/AA caregivers also had far lower educational attainment than any of the four subgroups. Only 12% of Black/AA caregivers reported having a college degree, while 32% of Black/AA non-caregivers report having college degrees. It is possible that some of the differences in lifetime discrimination for caregivers is due to selection factors regarding who becomes a caregiver, and some may be a result of caregiving exposing people to certain types of experiences present in the measure of lifetime discrimination. For example, 42% of Black/AA caregivers of people with Alzheimer's or another dementia report that health care professionals do not listen to concerns regarding their care recipient due to their race or color (i.e., they are provided inferior service; Alzheimer's Association, 2021). This may be a form a discrimination that people report after being exposed to caregiving, whereas being discouraged from seeking higher education could be a selection factor for family caregiving. Determining how different kinds of discriminatory experiences interact with caregiving is an important direction for future research.

Regarding everyday discrimination, working Black/AA adults reported more everyday discrimination than working White adults, even after adjusting for demographics including age, sex, Hispanic ethnicity, and education. This is aligned with previous literature on racial differences in everyday discrimination (Ayalon & Gum, 2010). There was no direct effect of caregiving status on everyday discrimination, nor was there an interaction between race and caregiving status, but there were significant differences in everyday discrimination among the four subgroups. Working White non-caregivers had lower everyday discrimination scores than any other group. Item analysis of the most common kinds of everyday discrimination for the two racial groups showed a consistent pattern across the five items – Black/AA workers reported higher everyday discrimination on each item as compared to White workers. These findings are echoed in a recent report by the Alzheimer's Association, which found that 28% of Black/AA caregivers of people with Alzheimer's or another dementia report feeling like health care providers believe they are not smart (as compared to 11% of White caregivers), 26% felt like they were treated with less courtesy by health care providers (as compared to 11% of White caregivers), and 24% felt they were treated with less respect (as compared to 8% of White caregivers), and 21% felt they received poorer service (as compared to 7% of White caregivers; 2021).

Regarding workplace discrimination, working Black/AA adults reported more chronic job discrimination than working White adults, although this difference was no longer significant in adjusted analyses. Working Black/AA adults also reported more work inequality than working White adults both with and without adjusting for covariates. Item analysis of the five most common kinds of work inequality showed that the most common form of work inequality for both Black/AA and White workers was, "most people have more rewarding jobs than I do". Results across all five of these items were consistent – Black/AA workers reported more work inequality for all items as compared to White workers. The race effect for chronic job discrimination disappearing after adjusting for covariates may have occurred because certain covariates, including education and hours worked, might be confounds for race. In this sample, Black/AA workers were significantly less likely to have a college degree and worked fewer hours than White workers, both of which are most likely related to racial disparities. It may be difficult to disentangle these factors from one another.

Caregivers and non-caregivers did not differ in either chronic job discrimination or work inequality, contrary to the hypothesis that working caregivers would report more workplace discrimination than working non-caregivers. Prior research has also found that relatively low percentages of caregivers report workplace discrimination due to caregiving, and that those who do report it are more likely to be highly strained (National Alliance for Caregiving and AARP Public Policy Institute, 2020). The caregivers in the current study provided an average of 20 hours per week of care and helped their care recipients with almost three (out of four) ADL/IADL, suggesting that caregiving played a significant role in their lives. However, the data did not provide information about the caregivers' appraisals of their role, and the workplace discrimination measures were not directly related to discrimination due to caregiving, so we are unable to examine whether caregivers in this sample who perceive their role as more burdensome also report more workplace discrimination due to their caregiving role.

However, there were differences for work inequality among the four subgroups, with working Black/AA caregivers and non-caregivers reporting more work inequality than working White caregivers and non-caregivers. These differences suggest that work inequality may be a salient aspect of the stress process especially for working Black/AA caregivers. Interestingly, two of the most common kinds of lifetime discrimination – not being hired for a job and not being given a job promotion – are related to the workplace. This suggests that workplace discrimination is a real issue for these groups that deserves attention. This demonstrates the utility of the lifetime discrimination scale as a multidimensional measure of discrimination for examining diverse aspects of discrimination.

In addition to differences for race and caregiving status, key demographic factors were associated with differences in perceived discrimination. First, being younger was associated with more reports of everyday discrimination, chronic job discrimination, and work inequality. This is surprising due to much of the age discrimination literature focusing on older adults. However, a recent study found that younger adults are more likely to experience age discrimination in the workplace than middle aged or older adults (Chasteen et al., 2020). Further, because only workers aged 40 and older are protected against workplace discrimination by law, workplace discrimination towards younger workers appears to be more socially sanctioned. Another surprising finding is that while being female was associated with more reports of everyday discrimination, it was associated with fewer reports of chronic job discrimination and work inequality. These findings are also surprising given that one of the most frequent bases for workplace discrimination complaints in the U.S. is sex (U.S. Equal Employment Opportunity Commission, 2020). However, it is possible that male workers experience more explicit forms of workplace discrimination than their female counterparts due to gender discrimination protections, which tend to focus on females.

Not surprisingly, lower levels of education were associated with more reports of everyday discrimination, chronic job discrimination, and work inequality. In addition, working more hours was associated with more reports of lifetime and chronic job discrimination, but less work inequality. This finding for workplace discrimination is not entirely surprising, as it could mean that because people who work more hours are exposed to the workplace more, they are also more likely to experience discrimination than those who spend less time at work. Due to the nature of the work inequality items, it could be that those aspects of work are not as important to people who work less, making them report less of them. It would be useful to include information about income and job type into a study such as the current one to disentangle whether education level and hours worked are also related to these additional socioeconomic factors.

Overall, this study suggests that discrimination plays a major role in the stress process for working Black/AA caregivers and non-caregivers, and highlights the importance of remaining vigilant about the role of discrimination in the lives of caregivers, as the percentage of racially and ethnically diverse caregivers in the U.S. is expected to increase in the coming decades. The discrepancy between the findings for lifetime discrimination, where there were significant effects for both caregiving and race, and for the other three discrimination variables, where there were only race effects, are mystifying. Not only should examinations of the stress process for diverse working caregivers include measures of lifetime discrimination, they should work to understand how caregiving relates to other discriminatory experiences, either as an antecedent or consequence. Finally, this study supports the appropriateness of the workplace as an excellent venue for programs and interventions combating discrimination and discriminatory practices.

Limitations

The current study has limitations that should be considered both for the interpretation of the findings and for the design of future studies. A main limitation is the amount of missing data in the dataset, which greatly reduced the number of eligible participants. Specifically, over 2,000 participants in the initial sample did not complete the SAQ portion of the study, which is where the hours worked per week, caregiving variables, and discrimination variables were assessed. Many participants were also missing income data, so income, an important aspect of the stress process for Black/AA and White individuals (Williams et al., 1997), was not included in the study. Additionally, due to the lack of diversity in the dataset, only Black/AA and White participants were included in this study. With the rise in recent years of discriminatory experiences among other racial and ethnic groups in the U.S., it is important to examine the role of discrimination in a broadly diverse sample that more closely represents the makeup of the U.S. Finally, there was a low number of working Black/AA caregivers compared to the number of working White caregivers, which may have made interaction effects for race and caregiving undetectable.

In addition to missing data, the discrimination measures used in the survey relied on self-reports, which are subject to perception biases, including minimization and vigilance bias (Lewis et al., 2015). These biases may have resulted in underreporting of certain kinds of discrimination due to denial or desensitization (minimization bias) or overreporting of discrimination due to overattributing ambiguous experiences to discrimination as a result of chronic exposure to discriminatory experiences (vigilance bias). Nevertheless, a person's appraisal of discriminatory experiences is important and should be considered along with more objective measures like implicit association tests (Krieger et al., 2011). In addition, the lifetime discrimination measure asks participants to state how many times in their lives participants have experienced discrimination based on a number of factors, including race, ethnicity, gender, age, religion, physical appearance, sexual orientation, and other characteristics. This lack of specificity about the cause of reports of perceived lifetime discrimination prohibits researchers from drawing definitive conclusions about why particular research participants report more or less lifetime discrimination, thus limiting the scope of research findings for policy implications. While it is unclear whether this approach is more valid than a two-step approach allowing participants to attribute the discriminatory experience to a specific personal characteristic (Lewis et al., 2015), future research should consider the use of both methods concurrently, which would allow for comparison and a more robust view of discrimination.

A final limitation in this study is that it is impossible to know at what point in time in relation to caregiving the discriminatory experiences occurred, making it impossible to examine whether discrimination changes over time after onset of caregiving. Discrimination differences by caregiving status could be due to a complex combination of selection factors regarding who becomes a caregiver, and consequences of becoming a caregiver. Despite these limitations, this study illuminates important differences among working adults for perceived discrimination, especially between working Black/AA and White adults.

Figure 2.1

Flowchart of Study One Participants

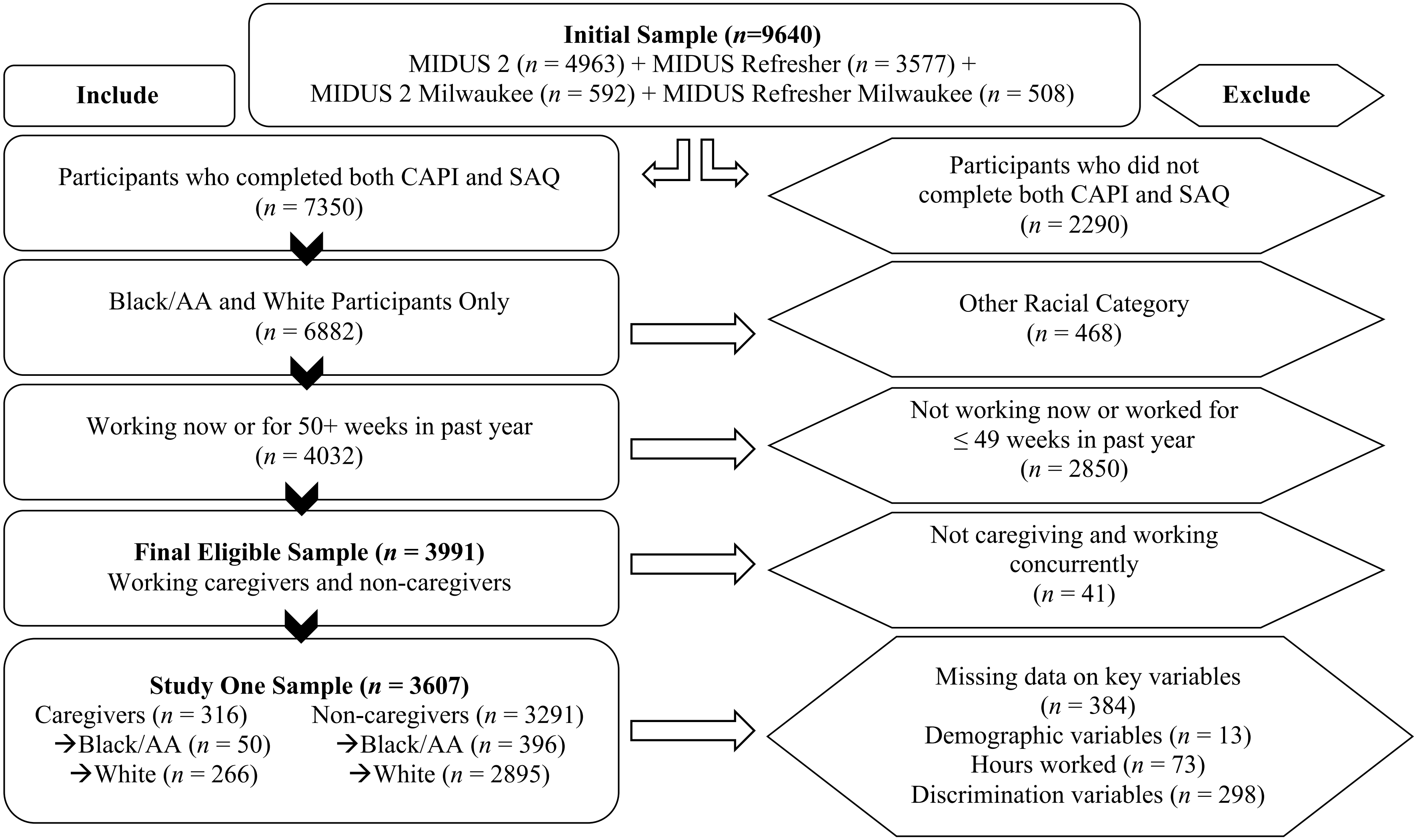


Table 2.1.

Participant Demographic, Work, and Caregiving Characteristics by Group

	White non-Caregiver *n* = 2895		White Caregiver *n* = 266		Black/AA non-Caregiver *n* = 396		Black/AA Caregiver *n* = 50		Total Sample *n* = 3607	
Demographics										
Age (years)	49.43^{bc}	10.83	51.82^{ad}	9.12	46.88^{a}	10.43	48.26^{b}	9.65	49.31	10.71
Sex (*n*/% female)	1393^{c}	48	156^{d}	59	251^{a}	63	37^{b}	74	1837	51
Hispanic ethnicity (*n*/% yes)	54	2	7	3	4	1	3	6	68	2
Education (*n*/% no college degree)	1466^{c}	51	133^{d}	50	271^{a}	68	44^{b}	88	1914	53
Work Characteristics										
Hours worked/week	39.97^{cd}	13.42	39.71	15.04	38.30^{a}	11.83	35.78^{a}	11.56	39.71	13.37
Caregiving Characteristics (CGs only)										
Weeks cared in past year	-	-	25.68	19.96	-	-	25.10	21.76	-	-
Hours of care/week	-	-	18.19^{d}	19.62	-	-	28.46^{b}	31.10	-	-
To whom provided care (*n*/%):										
Spouse	-	-	34	13	-	-	6	12	-	-
Parent/Parent-in-law	-	-	158	59	-	-	25	50	-	-
Other	-	-	74	28	-	-	19	38	-	-
CG lives with CR (*n*/% yes)	-	-	111	42	-	-	18	36	-	-
ADL/IADL assistance (out of 4)	-	-	2.74	1.13	-	-	2.94	1.11	-	-

Note. Results are means and standard deviations unless otherwise noted; AA = African American; CG = caregiver; CR = care recipient; ADL = activity of daily living; IADL = instrumental activity of daily living. Superscript letters represent significant differences across subgroups, $p < .05$. ^{a} = White non-caregiver, ^{b} = White caregiver, ^{c} = Black/AA non-caregiver, ^{d} = Black/AA caregiver.

Table 2.2

Correlations Between Demographics, Hours Worked, and Perceived Discrimination

Measure	1	2	3	4	5	6	7	8	9	10	11
1. Age	–										
2. Sex	-.01	–									
3. Race	**-.08****	**.10****	–								
4. Hispanic ethnicity	-.02	-.00	-.01	–							
5. Education	**-.05****	**-.08****	**-.08****	.00	–						
6. Caregiving status	**-.06****	**-.06****	**-.03***	-.03	.02	–					
7. Hours worked/week	**-.17****	**-.28****	**-.05****	.02	**.09****	.01	–				
8. Lifetime discrimination	**-.04***	**.04***	**.29****	.02	-.02	**-.07****	.02	–			
9. Everyday discrimination	**-.08****	**.06****	**.18****	-.01	**-.11****	**-.04***	-.00	**.46****	–		
10. Workplace discrimination	**-.22****	**-.10****	**.06****	.00	**-.12****	-.01	**.12****	**.24****	**.36****	–	
11. Work inequality	**-.19****	.01	**.15****	-.01	**-.14****	.00	**-.05****	**.22****	**.29****	**.47****	–

Note. For sex, male = 1, female = 2; for race, White = 1, Black/AA = 2; for Hispanic ethnicity, non-Hispanic = 0, Hispanic = 1; for education, no college degree = 1, college degree = 2; for caregiving status, caregiver = 0, non-caregiver = 1; for discrimination/inequality measures, higher = more; **p* < .05, ***p* < .001.

Table 2.3.

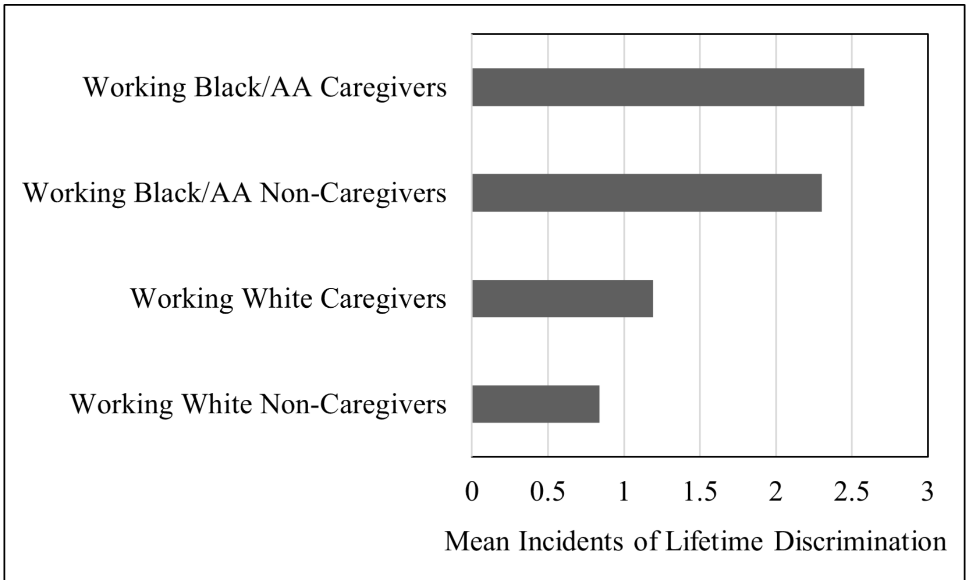
Covariate Adjusted Perceived Discrimination Scores by Group

	White non-Caregiver *n* = 2897		White Caregiver *n* = 266		Black/AA non-Caregiver *n* = 396		Black/AA Caregiver *n* = 50		*p*
Lifetime discrimination	0.83^{bcd}	1.45	1.19^{acd}	1.71	2.30^{ab}	2.39	2.58^{ab}	2.25	**< .001**
Everyday discrimination	12.67^{bcd}	4.29	13.43^{ac}	4.49	15.28^{ab}	6.05	14.75^{a}	6.46	**< .001**
Chronic job discrimination	10.91	4.44	10.98	4.43	11.74	5.23	11.83	6.00	.059
Work inequality	1.61^{cd}	0.55	1.57^{cd}	0.52	1.85^{ab}	0.60	1.99^{ab}	0.55	**< .001**

Note. Results are means and standard deviations; AA = African American; lifetime discrimination measured on a scale of zero to 11; everyday discrimination measured on a scale of zero to 36; chronic job discrimination measured on a scale of zero to 30; work inequality measured on a scale of zero to four. Superscript letters represent significant differences across subgroups, $p < .05$. ^{a} = White non-caregiver, ^{b} = White caregiver, ^{c} = Black/AA non-caregiver, ^{d} = Black/AA caregiver.

Figure 2.2.

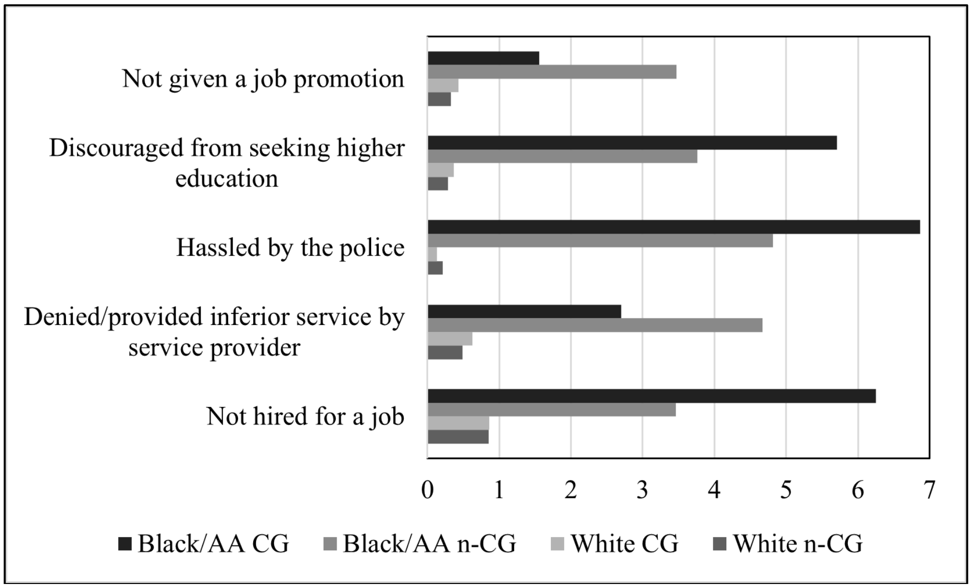
Mean Lifetime Discrimination Scores by Group



Note. AA = African American

Figure 2.3.

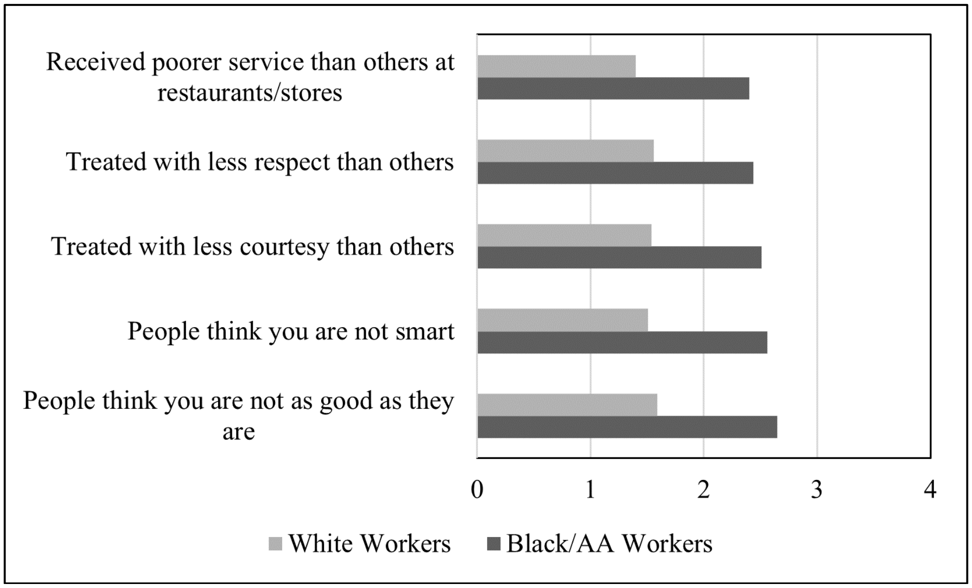
Five Most Common Kinds of Lifetime Discrimination by Group



Note. AA = African American, CG = caregiver, n-CG = non-caregiver.

Figure 2.4.

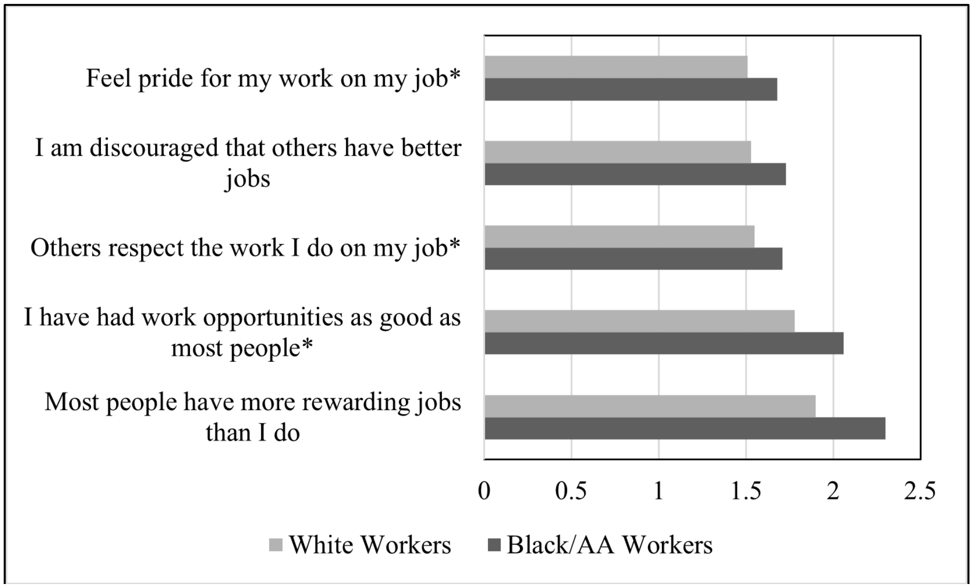
Five Most Common Kinds of Everyday Discrimination by Race



Note. AA = African American

Figure 2.5.

Five Most Common Kinds of Work Inequality by Race



Note. AA = African American. *Items are reverse coded so higher scores reflect more work inequality.

CHAPTER THREE. STUDY TWO:

FACTORS CONTRIBUTING TO MULTI-DIMENSIONAL WORK-FAMILY SPILLOVER AMONG WORKING BLACK/AA AND WHITE CAREGIVERS

Introduction

A large proportion of caregivers (75%) work 30 or more hours a week and the majority of them provide care for over 20 hours a week – the equivalent of an additional part-time job (National Alliance for Caregiving and AARP Public Policy Institute, 2020). Caregivers provide a variety of types of care, some of which can be difficult to balance with full-time employment. Tasks that caregivers report performing on a daily or nearly daily basis include helping their care recipient with chores (44%), providing transportation for their care recipient (23%), helping their care recipient around their home (21%), and helping with self-care tasks (18%; National Academies of Sciences, Engineering, and Medicine, 2016). In addition to these daily tasks, caregivers are also often responsible for coordinating services for their care recipients, including making medical appointments, monitoring medications, and handling insurance issues, all of which can be both stressful and time-consuming (National Academies of Sciences, Engineering, and Medicine, 2016). Further, caregivers often provide emotional support for their care recipients, who might be suffering from depression, anxiety, and other psychological issues (National Academies of Sciences, Engineering, and Medicine, 2016). This kind of support is often perceived as the most time-consuming and stressful task for caregivers (Bakas et al., 2004; Haley et al., 2009). These primary caregiving stressors, which are directly related to care provision, can produce stress proliferation, thereby spilling over into non-caregiving areas of a person's life and influencing secondary stressors (Pearlin et al., 2005). Further, secondary stressors not directly related to caregiving, like working, are an additional important aspect of the stress process for caregivers.

Negative Work-Family Spillover

Although caregivers who provide more hours of care, higher intensity care, and co-reside with their care recipient are less likely to be working (National Alliance for Caregiving and AARP Public Policy Institute, 2020), caregivers who combine caregiving and work often report negative outcomes, and much of the literature related to caregiving and work emphasizes conflict between the two roles. Role conflict theory suggests that involvement in multiple roles depletes a limited number of resources that a person must devote to the roles, causing frustration and conflict, and resulting in worsened well-being (Greenhaus & Beutell, 1985). A great deal of the work-family conflict literature focuses on the parenting role, but balancing caregiving tasks in addition to work responsibilities has the potential to create both time-based and strain-based conflict for working caregivers of older adults as well. Indeed, among a sample of information technology workers, caregivers (of older adults) and "sandwiched" caregivers (caring for both a child and an older adult) reported more psychological distress because of primary and secondary stressors than did caregivers of children only (DePasquale et al., 2017). This conflict can occur in two directions – issues arising in the family domain negatively influencing the work domain, and issues arising in the work domain negatively influencing the family domain (Greenhaus & Beutell, 1985).

Issues arising in the family domain (i.e., caregiving) negatively influencing the work domain, termed family/caregiving to work conflict or negative family to work spillover, is defined as the perception that one cannot adequately attend to work-related responsibilities due to family responsibilities (Gaugler et al., 2018; Gordon et al., 2012). This conflict stems from family demands creating issues in the workplace, including an inability to maintain boundaries between the domains, keep up with work demands, and the need to ask coworkers to provide work-related assistance, and prior research has found that for caregivers, it is a significant predictor of poor well-being and burden (Gaugler et al., 2018; Gordon et al., 2012; Templeman et al., 2019). Family to work conflict is also detrimental to the work domain, and over 60% of working caregivers report making at least one workplace accommodation, such as going in late, leaving early, or taking time off; reducing work hours; and taking a leave of absence, especially among higher intensity and higher hour caregivers (National Alliance for Caregiving and AARP Public Policy Institute, 2020). Working caregivers also report issues with their work performance, such as making errors, which can be of grave consequence in many professions (Scott et al., 2006). Furthermore, caregivers who are involved in care recipient health care activities, including care coordination and medication management, are more likely to miss work because of caregiving and are three times as likely as those who are not involved in health care activities to report reductions in work productivity (Wolff et al., 2016).

Issues arising in the work domain negatively influencing the family domain (i.e., caregiving) are termed work to family/caregiving conflict, or negative work to family spillover. Workplace demands are equally, or perhaps even more important than family demands in determining stress, as they have been associated with increased strain in both the work and family domain (Bakker & Demerouti, 2007; Gordon et al., 2012). However, while there is abundant research on the influence of workplace factors on work-family conflict in general, research on how work demands influence the caregiving domain specifically is lacking (Clancy et al., 2020), and the literature that does exist shows mixed findings (Wagner & Neal, 1994). Nevertheless, one of the main workplace factors that is salient for work-family conflict in general is greater perceived work demands, including time-based (not having enough time to get things done) and strain-based (being very busy) demands (Barnett et al., 2012; Stoiko et al., 2017; Voydanoff, 2008). In a meta-analysis on antecedents of work-family conflict, the most salient workplace variable influencing work interference with family was job stress, operationalized as role stress, role ambiguity, role overload, and psychological demands (Byron, 2005). Another more recent meta-analysis expands on these findings, reporting that those same workplace factors, in addition to work time demands (i.e., time devoted to the work role) were positively related to work to family conflict (Michel et al., 2011). Expanding similar findings to working caregivers would help to illuminate how workplaces can support caregivers and what resources working caregivers can use to cope with negative spillover from work to family.

Positive Work-Family Spillover

While research on working caregivers has focused more on the conflict perspective than the enhancement perspective, combining caregiving and work can also result in positive outcomes. The enhancement perspective suggests that involvement in multiple roles bolsters a person’s sense of purpose, meaning, and status through positive spillover or role enhancement, resulting in improved well-being (Greenhaus & Powell, 2006; Stephens et al., 1997). This enhancement, or positive spillover, is bi-directional, and can be achieved as a direct effect of combining the two roles, and through internal and external resources that protect against work-family conflict for working caregivers.

Benefits of combining work and caregiving on work-related outcomes is considered family to work enhancement, or positive family to work spillover, and tends to be most pronounced among working caregivers with lower perceived caregiving burden and those providing fewer than 20 hours of care per week (Trukeschitz et al., 2013). Nevertheless, caregivers who are satisfied with caregiving tasks tend to report less of an impact of caregiving on job performance (Zacher et al., 2012).

Benefits of combining work and caregiving on caregiving outcomes is considered work to family enhancement, or positive work to family spillover. In addition to providing the financial means to care for a loved one, work can serve as a source of satisfaction for caregivers, leading to improved relationships with care recipients (Scharlach, 1994). Involvement in work can also serve as a form of respite, resulting in reduced stress for caregivers who involved in high demand care scenarios like caring for a person with a mental disability (Bainbridge et al., 2006). In fact, in some cases, the more time a caregiver spends in the work role, the less caregiving stress impacts their well-being (Martire et al., 1997).

Racial Differences in Work-Family Spillover

While there is extensive research examining differences between Black/AA and White caregivers of older adults, much less is known about racial differences in combining caregiving and work roles. In one nationally representative study of employed women, Black/AA women were more likely to report work-family conflict than White women, and work-family conflict was associated with worse self-rated mental health (Mutambudzi, 2017). Among women of color providing care for their children, some of this conflict can stem from difficulty with financial aspects of balancing work and care, in addition to having to negotiate time off to provide care (Gates et al., 2020). A recent study examining multi-dimensional work-family spillover among working women found that negative spillover (both work-to-family and family-to-work) and positive work-to-family spillover were higher for White workers than Black/AA workers (Rung et al., 2021). This same study did not find differences between Black/AA and White workers on positive family-to-work spillover. In another sample of working adults, no differences were found in family-to-work or work-to-family conflict between Black/AA and White workers (Ammons et al., 2017). One study that examined job strain, a potential contributor to work-family spillover, found that Black/AA workers reported more job strain than White workers after adjusting for demographic and occupational characteristics (Hurtado et al., 2012). However, none of these studies examined working caregivers or specified aspects of participants' care-related roles, making the differences in work-family spillover between working Black/AA and White caregivers unclear.

There are several reasons to believe that Black/AA caregivers may view their caregiving role as more central to their lives, and more important, thus producing greater psychological benefits than do White caregivers. Black/AA caregivers in general tend to report less strain from caregiving, potentially due to cultural factors, including religious beliefs and cultural justifications for care (Dilworth-Anderson et al., 2002; Dilworth-Anderson et al., 2005; Henderson, 2016). Cultural justifications for care include beliefs that one should provide care for family members because of religious or familial expectations (Dilworth-Anderson et al., 2005). These cultural resources might shield working Black/AA caregivers to some extent from the negative effects of work-family conflict, but empirical research on this topic is inconclusive. For example, some studies find that Black/AA culture is not related to level of familism (i.e., prioritization of family over self) and that higher levels of familism in both Black/AA and White culture are associated with worse mental health (Kim et al., 2007; Rozario & DeRienzis, 2012), suggesting that there may not be differences in these cultural orientations for Black/AA and White caregivers. However, studies related to informal support have found that Black/AA caregivers report having wider and more diverse social support systems than White caregivers (Dilworth-Anderson et al., 2002), which might be a result of differences in the cultural values of collectivism and individualism. This would suggest that caregiving could serve a protective function for people belonging to more collectivist cultures.

In contrast, it is reasonable to think that White caregivers may view their work role as more central to their lives, and more important, thus producing greater psychological benefits than do Black/AA caregivers. Studies have found that American and Western European cultures tend to espouse more individualistic values, including independence, competition, and preference of self over group goals, than other cultures, including those from which some Black/AA families originate (Kim et al., 2007; Triandis et al., 1988). Further, states in the United States with lower percentages of minorities score lower on collectivism, the inverse of individualism (Vandello & Cohen, 1999). However, in one meta-analysis, European Americans were not found to be more individualistic or less collectivistic than Blacks/AAs (Oyserman et al., 2002). The relationship between individualism and work-family conflict is understudied, but one study examining differences between White and Hispanic American workers found that individualism is related to work-family conflict, and that individualistic attitudes contribute to conflict from the work to the family domain specifically (Olson et al., 2013). More research is needed to determine whether cultural factors influence differences in work-family spillover among working Black/AA and White caregivers.

Study Aims and Hypotheses

Due to the mixed nature of studies examining work-family conflict and facilitation for caregivers, and specifically differences between Black/AA and White caregivers, it is important to further examine the nuanced relationship between race, caregiving, and work-family conflict and facilitation, including individual caregiver and care-recipient characteristics and workplace characteristics. The current study examined differences in the direction and domains of work-family spillover among working Black/AA and White caregivers. In contrast to Study One, this study focused on racial differences between caregivers only and did not include non-caregivers. The aim of the study was to determine whether caregiver race (Black/AA or White) was associated with more positive or negative work-to-family spillover (work obligations enhance or interfere with familial obligations) and family-to-work spillover (family obligations enhance or interfere with work obligations) among working caregivers. This study was predicated on the notion that the value a person places on different life roles impacts their perceptions, decisions, and outcomes related to balancing multiple roles like work and caregiving (Carlson et al., 2020). I tested two hypotheses: First, I hypothesized that working Black/AA caregivers would report greater negative work-to-family spillover and greater positive family-to-work spillover because of the factors reviewed above supporting the idea that caregiving is a particularly salient and culturally valued role. This role salience and prioritization of the caregiving role creates a condition wherein Black/AA workers who provide care to a loved one are more vulnerable to strain at work that impinges upon the caregiving role, but also have protection from caregiving strain influencing work because of the gains resulting from caregiving. Second, I hypothesized that working White caregivers would report greater negative family-to-work spillover and more positive work-to-family spillover because of the factors reviewed above supporting the idea that White caregivers may be more likely to espouse a Western European worldview that values individualism and personal gains. This worldview creates a condition wherein issues arising in the caregiving role that impinge upon the work role are viewed as more of a strain, but also serves as a protective mechanism from work strain influencing caregiving because of the gains that stem from the work role.

Method

Participants

Data for this study was obtained from MIDUS 2 and the MIDUS Refresher, in addition to an oversample of Black/AA individuals from the Milwaukee data corresponding to each wave (*N* = 9640; Ryff, Almeida, Ayanian, Carr et al., 2017; Ryff et al., Mar. 2018; Ryff et al., Oct. 2018; Ryff et al., Sept. 2018). Participants who did not complete both the SAQ and CAPI portions of the study were excluded (*n* = 2290) because key variables were obtained from both instruments. Because the study compares Black/AA and White working caregivers, participants who reported another primary racial identity were excluded from the study (*n* = 468). Participants who did not report working at the time of the study or for at least 50 weeks over the last year were also excluded (*n* = 2850). People who did not report caregiving, measured as providing personal care now or for a period of at least one month over the last year to an adult family member or friend (excluding those providing care to their children) due to a physical or mental condition, illness, or disability, were also excluded (*n* = 3,645). Finally, to ensure that employment coincided with caregiving, participants who did not report working and caregiving concurrently (either at the time of the study or during the past year) were excluded (*n* = 40). The overall sample consisted of 347 working caregivers. The process of selecting the sample is displayed in Figure 3.1 for visual reference.

Measures

The following measures were included in the analyses.

Outcomes

Work-Family Spillover. Work-family spillover was the main outcome of the study. Work-family spillover was measured by asking participants how often they experienced 16 different circumstances in the past year. The 16 circumstances represented four aspects of work-family spillover (four items each): positive work to family spillover, negative work to family spillover, positive family to work spillover, negative family to work spillover (Grzywacz & Marks, 2000).

The negative work to family spillover items were: *Your job reduces the effort you can give to activities at home. Stress at work makes you irritable at home. Your job makes you feel too tired to do the things that need attention at home. Job worries or problems distract you when you are at home.* Internal reliability for the four item measure was .82.

The negative family to work spillover items were: *Responsibilities at home reduce the effort you can devote to your job. Personal or family worries and problems distract you when you are at work. Activities and chores at home prevent you from getting the amount of sleep you need to do your job well. Stress at home makes you irritable at work.* Internal reliability for the four item measure was .80.

The positive work to family spillover items were: *The things you do at work help you deal with personal and practical issues at home. The things you do at work make you a more interesting person at home. Having a good day on your job makes you a better companion when you get home. The skills you use on your job are useful for things you have to do at home.* Internal reliability for the four item measure was .68.

The positive family to work spillover items were: *Talking with someone at home helps you deal with problems at work. Providing for what is needed at home makes you work harder at your job. The love and respect you get at home makes you feel confident about yourself at work. Your home life helps you relax and feel ready for the next day's work.* Internal reliability for the four item measure was .68.

Participants ranked the items on a five-point Likert scale, wherein one represented 'all of the time', two represented 'most of the time', three represented 'sometimes', four represented 'rarely', and five represented 'never'. Items were recoded so that higher scores on the scales represented more spillover. Scores on each scale were calculated by adding together the scores on the four items, ranging from one to 20. MIDUS calculated scores only for participants who had valid values for at least half of the items on a subscale. Missing data in these cases was imputed using the mean value of completed items. Participants who did not have valid values on at least half of the items were coded as "not calculated (due to missing data)."

Covariates

Participant Demographic Information. Participant demographic information, including age, sex, and level of education were included in adjusted analyses as covariates. For sex, male was coded as one and female was coded as two. For education, no college degree was coded as one having a college degree was coded as two.

Caregiving Characteristics. Characteristics of care provision that have been identified by previous research as caregiving stressors related to work-family spillover were included in adjusted analyses as covariates. These measures include hours of care provided in a week, co-residence with the care recipient, and assistance with ADLs and IADLs. For co-residence with the care recipient, not co-residing was coded as zero and co-residing was coded as one. Assistance with ADLs was measured using two questions: *Because of his/her limitations do/did you provide him/her with personal help with bathing, dressing, eating, or going to the bathroom? Because of his/her limitations do/did you provide him/her getting around inside the house or going outside?* Assistance with IADLs was measured using two questions: *Because of his/her limitations do/did you provide him/her shopping, cooking, housework, or laundry? Because of his/her limitations do/did you provide him/her managing money, making phone calls, or taking medications?* The four ADL/IADL items were then summed to create a composite ADL/IADL assistance measure that ranged from zero to four.

Job Characteristics. Job characteristics that have been identified by previous research as being related to work-family spillover, including hours worked, job demands, decision authority, and skill discretion were included as covariates (Stoiko et al., 2017; Voydanoff, 2008).

<u>Job demands</u> were measured using a five-item scale that asked participants: *How often do you have to work very intensively – that is, you are very busy trying to get things done? How often do different people or groups at work demand things from you that you think are hard to combine? How often do you have too many demands made on you? How often do you have*

enough time to get everything done? How often do you have a lot of interruption? Internal reliability for the five item measure was .76.

Decision authority was measured using a six-item scale that asked participants: *On your job, how often do you have to initiate things – such as coming up with your own ideas, or figuring out on your own what needs to be done? How often do you have a choice in deciding how you do your tasks at work? How often do you have a choice in deciding what tasks you do at work? How often do you have a say in decisions about your work? How often do you have a say in planning your work environment – that is, how your workplace is arranged or how things are organized? How often do you control the amount of time you spend on tasks?* Internal reliability for the six item measure was .85.

Skill discretion was measured using a three-item scale that asked participants: *How often do you learn new things at work? How often does your work demand a high level of skill or expertise? How often does your job provide you with a variety of things that interest you?* Internal reliability for the three item measure was .70.

Participants ranked the items from each scale on a five-point Likert scale, wherein one represented ‘all of the time’, two represented ‘most of the time’, three represented ‘sometimes’, four represented ‘rarely’, and five represented ‘never’. Items were recoded so that higher scores on the scales represented more of the job characteristic being measured (e.g., more job demands). Scores on each scale were calculated by adding together the scores on items. The job demands scale ranged from one to 25, the decision authority scale ranged from one to 30, and the skill discretion scale ranged from one to 15. MIDUS calculated scores only for participants who had valid values for at least half of the items on a subscale. Missing data in these cases was imputed using the mean value of completed items. Participants who did not have valued values on at least half of the items were coded as “not calculated (due to missing data).”

Statistical Analyses

Statistical analyses were performed using the Statistical Package for Social Sciences (SPSS), Version 27.0 (IBM Corp., 2020). Frequencies of study variables were examined for missing data and Little’s test of missing completely at random (MCAR; 1988) was performed to determine how to treat missing data. Frequencies and means were calculated for the final analytic sample on all study variables, and t-tests and chi-square tests were conducted to compare Black/AA and White caregivers. To evaluate collinearity, point-biserial correlation analyses were performed. To examine differences in work-family spillover between the groups (White caregivers and Black/AA caregivers), a series of one-way ANOVA and ANCOVA were conducted.

Results

Description of the Sample

Examination of frequencies of study variables revealed missing data for hours of care provided per week (n = 19), hours worked per week (n = 7), skill discretion (n = 13), decision authority (n = 13), job demands (n = 11), and all four of the spillover variables (n = 13 each). An analysis of missing values using Little’s test of MCAR (1988) was not significant, $\chi^2(57, N = 347) = 57.24$, $p = .466$, indicating that the data was MCAR. As a result, missing cases for all variables were deleted listwise (n = 37). Descriptive statistics for the final analytic sample (n = 310) are displayed in Table 3.1. The study sample containing no missing data on key variables was not significantly different than those who were excluded due to missing data except in education (study sample had more education). T-tests were conducted for race and continuous study variables. There were statistically significant associations between race and age, $t(308) = 2.44$, and race and hours of care provided per week, $t(57) = -2.09$. Black/AA caregivers were younger and provided more hours of care per week than White caregivers. Chi-square tests for association were conducted for race and categorical study variables. All expected cell frequencies were greater than five. There were statistically significant associations between race and sex, $\chi^2(1) = 5.44$ and race and education, $\chi^2(1) = 24.59$. Black/AA caregivers were more likely to be female and have less education than White caregivers. Finally, correlation analyses were conducted to evaluate multicollinearity among the study variables and results are displayed in Table 3.2. All coefficients were under 0.80, suggesting no issues with severe multicollinearity.

Group Comparisons

A series of one-way ANOVA and ANCOVA were conducted to compare Black/AA and White caregiver scores of work-family spillover. Unadjusted means and standard deviations of spillover scores by race and for the whole sample are displayed in Table 3.3.

Negative Work-to-Family Spillover

There was homogeneity of variances, as assessed by Levene's test for equality of variances ($p = .957$). There was a trend towards a statistically significant main effect for race for negative work-to-family spillover, $F(1, 308) = 3.85$, $p = .051$, partial $\eta^2 = .012$, with lower scores for Black/AA caregivers than for White caregivers, but there was no longer a trend after adjusting for covariates. There were significant covariate effects for hours worked, $F(1, 298) = 5.77$, $p = .017$, partial $\eta^2 = .019$ and job demands, $F(1, 298) = 117.34$, $p < .001$, partial $\eta^2 = .283$. More hours worked and more job demands were associated with more negative work-to-family spillover for caregivers.

Negative Family-to-Work Spillover

There was homogeneity of variances, as assessed by Levene's test for equality of variances ($p = .158$). There was no statistically significant main effect for race for negative family-to-work spillover, $F(1, 308) = 0.21$, $p = .645$, partial $\eta^2 = .001$. There was still no difference after adjusting for covariates, but there were significant covariate effects for age, $F(1, 298) = 8.30$, $p = .004$, partial $\eta^2 = .027$; co-residing with a care recipient, $F(1, 298) = 7.11$, $p = .008$, partial $\eta^2 = .023$; and job demands, $F(1, 298) = 35.57$, $p < .001$, partial $\eta^2 = .107$ for negative family-to-work spillover. Being younger, co-residing with a care recipient, and having more job demands were associated with more negative family-to-work spillover for caregivers.

Positive Work-to-Family Spillover

There was homogeneity of variances, as assessed by Levene's test for equality of variances ($p = .301$). There was a statistically significant main effect for race for positive work-to-family spillover, $F(1, 308) = 4.33$, $p = .038$, partial $\eta^2 = .014$. Working White caregivers reported more positive work-to-family spillover than working Black/AA caregivers. After adjusting for covariates, this difference was no longer significant, but there were significant covariate effects for co-residing with the care recipient, $F(1, 298) = 4.14$, $p = .043$, partial $\eta^2 = .014$; hours worked, $F(1, 298) = 4.41$, $p = .037$, partial $\eta^2 = .015$; decision authority, $F(1, 298) = 7.70$, $p = .006$, partial $\eta^2 = .025$; and skill discretion, $F(1, 298) = 18.45$, $p < .001$, partial $\eta^2 = .058$. Co-residing with a care recipient, working fewer hours, greater decision authority, and greater skill discretion were associated with more positive work-to-family spillover for caregivers.

Positive Family-to-Work Spillover

There was homogeneity of variances, as assessed by Levene's test for equality of variances (p = .578). There was no statistically significant main effect for race for positive family-to-work spillover, $F(1, 308) = 0.86$, $p = .355$, partial $\eta^2 = .003$. There was still no significant difference after adjusting for covariates, but there were significant covariate effects for age, $F(1, 298) = 3.93$, $p = .048$, partial $\eta^2 = .013$; decision authority, $F(1, 298) = 7.66$, $p = .006$, partial $\eta^2 = .025$; and skill discretion, $F(1, 298) = 5.53$, $p = .019$, partial $\eta^2 = .018$ for positive family-to-work spillover. Being younger and having more decision authority and skill discretion were associated with more positive family-to-work spillover for caregivers.

Discussion

This study is novel in that it compared working Black/AA and White caregivers to examine whether the two groups report differing levels of the domains and directions of work-family spillover. Results revealed that Black/AA caregivers reported less positive work-to-family spillover than White caregivers, but this difference was no longer significant after covariate adjustment. There were no other differences in spillover between Black/AA and White caregivers, so the hypotheses described above were not supported. These results suggest that among working Black/AA and White caregivers, race alone is not a sufficient indicator of the direction or domain of spillover caregivers report. This extends prior research that has found no differences between Black/AA and White workers for negative work-family spillover when examining race alone (Ammons et al., 2017), or positive family-to-work spillover among working women (Rung et al., 2021). However, the current study includes all four dimensions of spillover in a sample of working caregivers, making it a unique contribution to the work-family and caregiving literature. These findings also suggest that working Black/AA caregivers, who provided significantly more hours of care per week than working White caregivers (28 hours vs. 18 hours, respectively) may have more resources to cope with balancing multiple roles. A more fruitful avenue for future research might be examining individual factors that predict and protect from spillover within racial groups, including cultural factors like cultural justifications for care, familism beliefs that may influence appraisals of spillover, support systems, and subsequent well-being among working Black/AA and White caregivers (Dilworth-Anderson et al., 2005; Oyserman et al., 2002). Future research should also compare diverse working caregivers and non-caregivers on work-family spillover to determine whether non-caregivers experience high levels of positive family-to-work spillover. These comparisons would also illuminate factors that contribute to spillover in caregivers and non-caregivers, allowing us to better understand the utility of role conflict and role enhancement theories for examining spillover in these populations.

Another important finding of the study is that caregiver age, living with a care recipient, and work characteristics were all associated with spillover regardless of caregiver race, demonstrating that specific characteristics of caregivers’ circumstances have unique and important implications for specific domains and directions of work-family spillover for working caregivers. Table 3.4 displays a matrix of the characteristics associated with the multi-dimensional outcome of work-family spillover, and the implications of the associations are described below. Of these, workplace characteristics exhibited the most frequent associations with spillover, suggesting that the work domain is potentially the most important target for interventions.

Among the caregiver demographics included in the study, age was the only one that was related to work-family spillover. Caregivers in this sample had a mean age of 51, and ages ranged from 24 to 75 years of age, spanning multiple life stages. While caregiver age was not associated with either direction of work-to-family spillover, younger caregivers were more likely to report more family-to-work spillover in both the positive and negative direction. This may be a result of greater involvement in multiple roles, including working, parenting, being a spouse, and caregiving among younger adults. Although this study did not account for whether participants had spousal or parental roles in addition to working and caregiving, it is possible that younger caregivers reported more negative family-to-work spillover because they were involved in more of these roles than older caregivers, perceiving more family strain as a result. This is similar to the literature on "sandwiched caregivers," who tend to report more stress and strain and poorer outcomes than caregivers with fewer roles (DePasquale et al., 2017). In addition, because of their age, younger caregivers are most likely less experienced in all of their roles, making it more difficult to adjust to the demands of them than for someone older and more experienced. This suggests that younger caregivers may benefit more from respite services and from interventions that provide strategies for balancing multiple roles more effectively.

On the other hand, the fact that younger age was associated with more positive family-to-work spillover indicates that younger caregivers may derive more of a sense of purpose or satisfaction from the caregiving role, which then spills over into the work role. This is aligned with prior research that has found that adult child caregivers report more positive growth and uplifts from caregiving than do spousal caregivers (Ott, 2007; Pinquart & Sörensen, 2011). It is also aligned with research that has found that high levels of both positive and negative affect are more likely to meaningfully co-occur when a person is involved in a valued activity (Folkman, 1997). This is important because it suggests that negative family-to-work spillover may lead to positive psychological states and personal growth if it is accompanied by meaningful appraisals and coping, resulting in concurrent positive family-to-work spillover. This would be an interesting future direction for research and interventions for working caregivers.

The only caregiving characteristic that was linked to spillover was co-residing with a care recipient. Co-residing with a care recipient was associated with more negative family-to-work spillover, which is logical and aligned with prior research that has found that co-residence with a care recipient is associated with more caregiving emotional strain (National Alliance for Caregiving and AARP Public Policy Institute, 2020). The current findings suggest that this strain also contributes to greater perceptions of negative spillover into the work role for working caregivers, which may result in work impacts for working caregivers. Workplaces that have knowledge of employees who are also caregivers, and especially those co-residing with their care recipient, should make efforts to understand how the caregiving role might impact work performance and provide supports that help to minimize strain. On the other hand, co-residing with a care recipient was associated with more positive spillover from work to family, which is a novel finding. A possible explanation for this is that positive experiences in the work domain that spill over to the family domain are more perceptible when the care recipient is in the home as soon as the caregiver returns from work. This proximity of the care recipient may make the positive influence of work experiences on family experiences more salient. However, when the care recipient lives elsewhere, the caregiver may not recognize the positive spillover as readily. If this is the case, incorporating awareness of positive spillover into interventions that help caregivers cope with the strain of living with a care recipient could lead to more positive appraisals overall.

All four workplace characteristics were associated with spillover in varying ways. More hours worked and greater job demands were associated with greater negative work-to-family spillover, which is consistent with prior research on antecedents of negative work-to-family conflict (Barnett et al., 2012; Stoiko et al., 2017; Voydanoff, 2008). The current study extends these findings to a national sample of working caregivers. In addition, fewer hours worked was associated with positive work-to-family spillover, which is not surprising, but has not been examined in prior research on antecedents of positive work-to-family spillover. More job demands were also associated with greater negative family-to-work spillover, which is also aligned with prior research demonstrating that work demands influence both work and family domains (Bakker & Demerouti, 2007; Gordon et al., 2012), but this time in a sample of working caregivers. It also suggests that when negative family experiences spill over into a job with high demands, the spillover may be more salient than when the job has lower demands. These findings have important implications for interventions aimed at helping working caregivers balance caregiving and work. First, while it may not always be possible for working caregivers to reduce their working hours, it is important for them to be cognizant of the potential consequences of long work hours and to consider obtaining help with caregiving tasks if excessive work hours cannot be avoided. In addition, organizations should be made aware of the extent of the harmful effects of high job demands on the work and personal lives of their employees and make efforts to modify expectations to reasonable levels. The additional workplace characteristics of decision authority and skill discretion were both associated with spillover in expected ways. More decision authority and more skill discretion were related to more positive work-to-family spillover and more positive family-to-work spillover, which is aligned with prior research findings that workplace resources like decision authority and skill discretion promote positive work-to-family spillover (Stoiko et al., 2017). These findings indicate that there are particular aspects of the workplace that differentially influence directions and domains of work-family spillover for diverse working caregivers. To lessen work-to-family spillover for this population, employers should turn the focus away from requiring a certain number of hours to be worked and increase employees' decision authority and skill discretion. To lessen family-to-work spillover for this population, employers should focus on increasing decision authority and skill discretion and decreasing job demands.

Limitations

This study has limitations that should be considered for the interpretation of the findings and for future research on diverse working caregivers. A main limitation is the amount of missing data in the dataset, which greatly reduced the number of eligible participants. Specifically, over 2,000 participants in the initial sample did not complete the SAQ portion of the study, which is where hours worked per week, caregiving characteristics, and workplace characteristics were assessed. There was also a low number of working Black/AA caregivers compared to the number of working White caregivers, which may have made race effects undetectable. Further, due to the lack of racial/ethnic diversity in the dataset, only Black/AA and White participants were included in this study. However, because there may be even starker cultural differences in beliefs about and experiences with caregiving among other racial/ethnic groups in the U.S. (Pinquart & Sörensen, 2005), future research should examine similar differences in work-family spillover across a more diverse sample of working caregivers in the U.S..

Another limitation is that the spillover measure is not linked to caregiving specifically, but to home life in general. As a result, it is impossible to be sure that participants were considering their role as a caregiver, rather other family roles like spouse or parent, when responding to these questions. Using a more specific measure of spillover directly related to caregiving would allow researchers to make more confident conclusions about associations between caregiving characteristics and work-family spillover. In addition, we did not have subjective measures of caregiving, include those representing appraisals of burden or satisfaction with caregiving. Such measures would be useful in combination with the objective measures used in this study to gain a more complete picture of how caregiving is related to spillover. Finally, because the spillover measure relies on self-report, future research should accompany this with objective measures that examine outcomes of negative spillover, like taking time off of work to care and institutionalization of care recipients; and outcomes of positive spillover, like work performance appraisals and care recipient outcomes. Subjective appraisals of spillover are essential in understanding caregiver well-being, but objective measures would be helpful on a policy level when designing support services and programs for working caregivers.

Figure 3.1

Flowchart of Study Two Participants

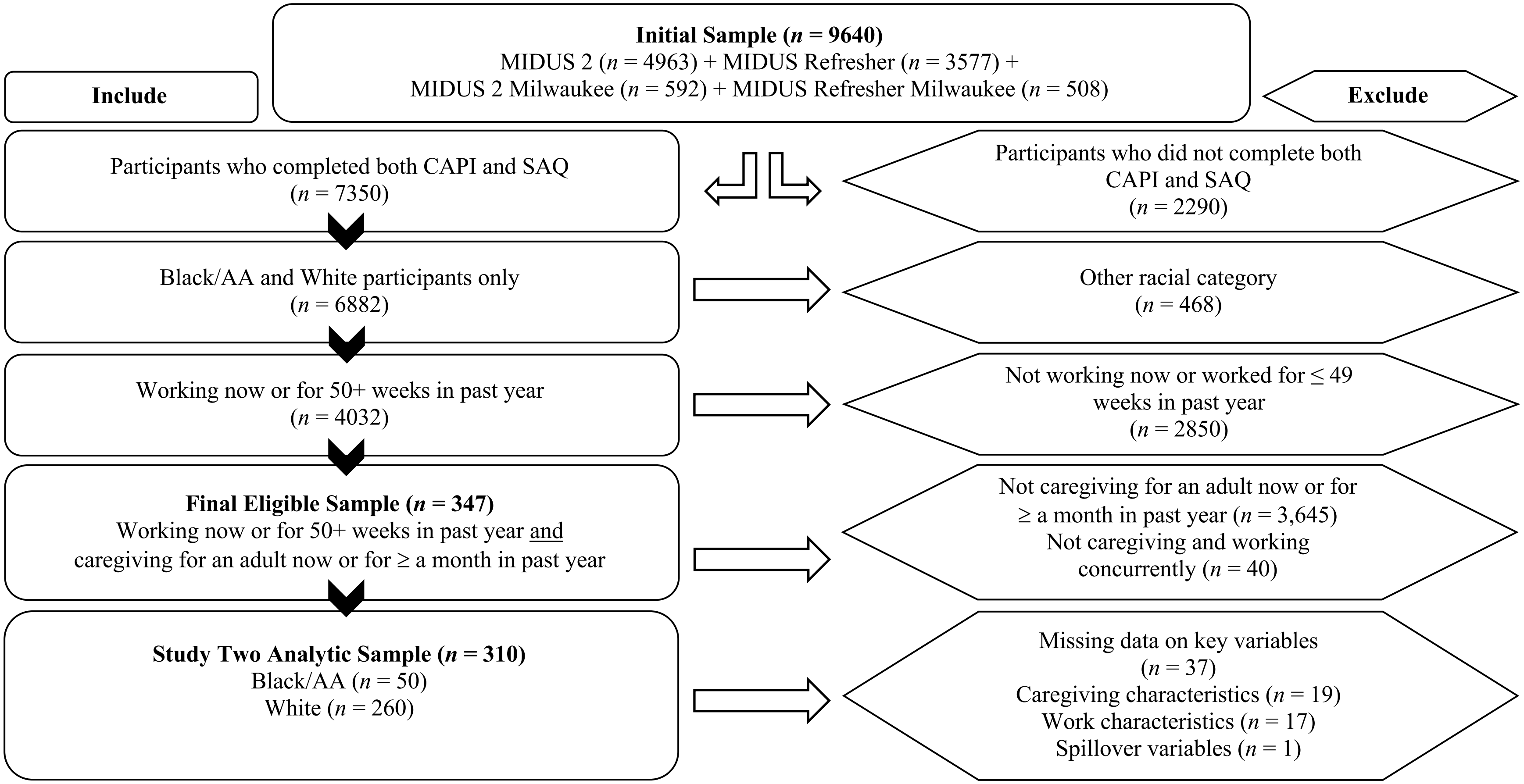


Table 3.1.

Caregiver Demographic, Work, and Care Provision Characteristics

	Black/AA		White		*p*	Total Sample	
	n = 50		*n* = 260			*N* = 310	
Demographics							
Age (years)	48.48	9.22	51.97	9.28	**.015**	51.41	9.35
Sex (*n*/% female)	38	76	152	58.5	**.020**	190	61
Education (*n*/% no college degree)	44	88	130	50	**< .001**	174	56
Caregiving Characteristics							
Hours cared/week	27.62	30.76	18.19	19.48	**.041**	19.71	21.91
CG lives with CR (*n*/% yes)	17	34	107	41	.344	124	40
ADL/IADL assistance	2.84	1.13	2.73	1.29	.517	2.75	1.13
Work Characteristics							
Hours worked/week	35.14	12.32	39.65	15.36	.051	38.93	14.99
Job demands	15.03	3.40	15.53	3.53	.356	15.45	3.50
Decision authority	21.36	4.79	22.51	4.68	.114	22.33	4.71
Skill discretion	10.45	2.50	10.80	2.35	.340	10.74	2.37

Note. Results are means and standard deviations unless otherwise noted; AA = African American; CG = caregiver; CR = care recipient; ADL = activity of daily living; IADL = instrumental activity of daily living; job demands are measured on a scale from one to 25 (higher = more); decision authority is measured on a scale from one to 30 (higher = more); skill discretion is measured on a scale from one to 15 (higher = more).

Table 3.2

Correlations Between Demographics, Caregiving Characteristics, Job Characteristics, and Spillover

Measure	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Age	–														
2. Sex	-.00	–													
3. Race	**-.14***	**.13***	–												
4. Education	**.11***	**-.11***	**-.28****	–											
5. Hours of care	.02	**.22****	.07	-.05	–										
6. Co-residence with CR	.02	-.11	-.05	.04	.11	–									
7. ADL/IADL assistance	**-.16****	**.15****	.04	-.06	**.31****	.01	–								
8. Hours worked	**-.18****	**-.23****	-.11	**.15***	.09	.07	.01	–							
9. Job demands	**-.13****	.04	-.05	**.13***	.01	-.02	.06	**.31****	–						
10. Decision authority	.01	-.08	-.09	**.16****	.02	-.05	-.06	**.13***	.10	–					
11. Skill discretion	.01	**-.13***	-.05	**.23****	-.01	.01	-.08	**.18****	**.28****	**.58****	–				
12. Neg. WTF spillover	**-.16****	-.00	-.11	**.12***	.04	.04	.11	**.29****	**.57****	-.07	.03	–			
13. Neg, FTW spillover	**-.19****	**.12***	-.03	.07	.10	**.13***	**.15****	.08	**.34****	.04	.03	**.56****	–		
14. Pos. WTF spillover	.09	.00	**-.12***	**.19****	.01	.09	-.01	-.03	.10	**.34****	**.39****	.04	**.12***	–	
15. Pos. FTW spillover	**-.14***	-.03	.05	-.06	-.01	.06	.06	.06	.03	**.26****	**.24****	-.05	-.06	**.41****	–

Note. For sex, male = 1, female = 2; for race, White = 1, Black/AA = 2; for education, no college degree = 1, college degree = 2; for co-residence, not co-residing = 0, co-residing = 1; CR = care recipient; ADL = activity of daily living; IADL = instrumental activity of daily living; for job characteristics and spillover, higher = more; Neg. = negative; Pos. = positive; WTF = work-to-family; FTW = family-to-work; *$p < .05$, **$p < .01$

Table 3.3.

Caregiver Work-Family Spillover

	Black/AA		White		Total Sample	
	n = 50		*n* = 260		*n* = 310	
Negative WTF spillover	10.02	3.07	10.93	3.00	10.79	3.03
Negative FTW spillover	8.94	3.07	9.14	2.79	9.11	2.83
Positive WTF spillover	10.86	3.36	11.79	2.82	11.64	2.93
Positive FTW spillover	13.80	3.52	13.34	3.13	13.42	3.20

Note. Results are unadjusted means and standard deviations; AA = African American; WTF = work to-family; FTW = family-to-work; all spillover items measured on a scale from one to 20 (higher = more).

Table 3.4.

Covariates Associated with Work-Family Spillover Domains and Directions

	Positive	Negative
Work-to-family	✓ Co-residing with CR	↑ Hours worked
	↓ Hours worked	↑ Job demands
	↑ Decision authority	
	↑ Skill discretion	
Family-to-work	↓ Age	↓ Age
	↑ Decision authority	✓ Co-residing with CR
	↑ Skill discretion	↑ Job demands

Note. CR = care recipient; ✓ = yes, ↑ = more/higher, ↓ = less/lower.

CHAPTER FOUR. STUDY THREE:

PREDICTORS OF WELL-BEING AMONG WORKING BLACK/AA AND WHITE CAREGIVERS

Introduction

Prioritizing caregiver well-being is imperative for cultivating a society that can effectively support the growing aging population. In addition to the importance of quality of life for caregivers themselves, factors like increased caregiver burden, distress, and negative appraisals of caregiving have been linked to detrimental outcomes for care recipients, including all-cause mortality, hospitalization, loneliness, and an increased risk of institutionalization (Iecovich, 2016; Kuzuya et al., 2011; Montgomery et al., 2011; Stall et al., 2018). An ever-rising percentage of caregivers is working while providing care, due in large part to women's increased participation in the workforce, while the population simultaneously ages at an unprecedented rate (Stone, 2015; Toossi, 2015). These trends are likely to continue into the foreseeable future (Stone, 2015; Toosi, 2015), making the examination of the factors that contribute to well-being among working caregivers a necessary endeavor. It is particularly important to examine the well-being of diverse working caregivers in the United States, given the projected growth of older adults in diverse racial and ethnic groups, who are more likely to have functional impairments and need care (National Academies of Sciences, Engineering, and Medicine, 2016).

Caregiver Well-Being

Decades of longitudinal research have established that caregivers generally exhibit worse well-being than non-caregivers. Caregivers often report worse mental health than non-caregivers in the forms of more perceived stress, increased caregiver burden, greater incidence of depression, worse subjective well-being, and lower mental health quality of life (Bom et al., 2019; Dunkle et al., 2014; Hirst, 2005; Pinquart & Sörensen, 2003; Riffin et al., 2017; Roth et al., 2009). These differences are even more pronounced in caregivers who report high levels of caregiving strain (Roth et al., 2009). Stress process models suggest that multiple factors influence caregiver well-being, including background characteristics like the caregiver's socioeconomic status and family structure, primary stressors that directly relate to the caregiving role, secondary stressors including role-based strains and intrapsychic strains, and both internal and external resources available to the caregiver (Haley et al., 1987; Pearlin et al., 1990).

Caregiver Background Characteristics

Background characteristics that have been linked to individual differences in well-being among caregivers include age, sex, education, and race. Younger caregivers (under age 64) report more emotional strain from caregiving than older caregivers (38% of those under 65 versus 30% of those over 65; National Alliance for Caregiving and AARP Public Policy Institute, 2020). Female caregivers tend to report more emotional strain and distress from caregiving, in addition to lower subjective well-being than male caregivers (Hirst, 2005; National Alliance for Caregiving and AARP Public Policy Institute, 2020; Pinquart & Sörensen, 2006). Caregivers with more education report fewer positive aspects of caregiving (National Academies of Sciences, Engineering, and Medicine, 2016), and these caregivers are also more likely to be working while providing care (National Alliance for Caregiving and AARP Public Policy Institute, 2020). When examining racial differences among caregivers, White caregivers tend to have higher levels of depression and anxiety than Black/AA caregivers (Nápoles et al., 2010;

Sörensen & Pinquart, 2005), in addition to reporting more negative caregiving-related emotional impacts than Black/AA caregivers, even when providing less intense care (Fabius, 2020). In a recent systematic review and meta-analysis, White dementia caregivers had worse psychological well-being than Black/AA dementia caregivers in both population-based and convenience sample studies (Liu et al., 2020). However, Black/AA adults in general report lower life satisfaction than Whites after accounting for socio-demographics (Barger et al., 2009), so it is important to understand whether differences between working Black/AA and White caregivers are different than those in the general caregiving population.

Primary Caregiving Stressors

Primary caregiving stressors contribute to emotional strain and poorer quality of life for caregivers (National Academies of Sciences, Engineering, and Medicine, 2016; Kang, 2006; Kang, 2016; Litzelman et al., 2015). Among the primary caregiving stressors that impact caregiver well-being are residing with the care recipient, providing long hours and duration of care, and providing intense care (Kang, 2006; National Alliance for Caregiving and AARP Public Policy Institute, 2020; Pinquart & Sörensen, 2003; Schulz et al., 2009). These stressors are especially important when studying Black/AA caregivers because comparisons of caregivers by race have shown that Black/AA caregivers tend to provide more hours of care per week, higher intensity care, care for a care recipient with dementia, and help with more care tasks, including medical and nursing tasks, than White caregivers (Fabius, 2020; National Alliance for Caregiving and AARP Public Policy Institute, 2020). Black/AA caregivers also more often report living with their care recipient than White caregivers (45% and 36%, respectively; National Alliance for Caregiving and AARP Public Policy Institute, 2020). While White caregivers tend to report worse well-being than Black/AA caregivers despite having fewer caregiving stressors, these differences have not been examined among working Black/AA and White caregivers.

Secondary Role Strains

Secondary role and intrapsychic strains are an additional important factor to consider when studying diverse working caregivers. One such secondary stressor is work-family conflict, which broad work-family literature indicates is associated with worse well-being, including low life satisfaction, reduced quality of life, increased psychological strain, low self-rated mental health, and more depression (Allen et al., 2000; Frone et al., 1996; Gareis et al., 2009). When caregivers experience caregiving-related work interruptions and greater levels of work-family conflict, they report more depressive symptoms and emotional strain (Ang & Malhotra, 2018; Templeman, 2019) making them less likely to continue providing care (National Academies of Sciences, Engineering, and Medicine, 2016). An additional secondary strain is perceived workplace discrimination. Perceived workplace discrimination has been linked to negative workplace outcomes like lack of job control, reduced job satisfaction, more work-family conflict, and more intentions to quit, in addition to negative health outcomes (Dickson, 2008; Meyer, 2014). However, much of the literature on workplace discrimination examines parenting, rather than caring for an older adult.

Internal Resources for Caregivers

Internal resources can have protective effects for caregivers. One potential protective internal resource for caregivers is personal mastery, which is a component of perceived control (Pearlin, 1999; Pioli, 2010). Personal mastery is the belief that people can control various aspects of their own lives, and it allows people to view stressors as less threatening, in addition to enabling them to behave as if they have more control over their environment (Pearlin, 1999). A number of studies have found personal mastery to be a predictor of positive well-being in general, in addition to a protective factor from psychological issues resulting from caregiving stress (Adams et al., 2005; Mausbach et al., 2007; Pearlin et al., 1990). Although an underdeveloped area in the work-family literature, a recent study found that personal mastery protects against psychological distress resulting from both work to family and family to work conflict (Badawy & Schieman, 2020). In addition, perceptions of control are associated with more positive perceptions of informal organizational support and job autonomy, which are related to greater life satisfaction (Thompson & Prottas, 2005). However, personal mastery may be limited among people from disadvantaged socioeconomic circumstances (Pearlin et al., 2007), making it an important focus for interventions targeted at diverse working caregivers.

An additional potential internal resource for caregivers is optimism, a life orientation that assumes that good things (rather than bad things) tend to happen (Scheier & Carver, 1985). Optimism has been linked to positive outcomes for caregivers, including greater quality of life, well-being, and more life satisfaction (Lamont et al., 2019). Further, caregivers with higher levels of optimism report reduced psychological distress resulting from high hours of care provision (Díaz et al., 2020).

A third internal resource that may have a protective function against stress is religious and spiritual coping. Caregivers often use religious and spiritual coping to manage caregiving stressors, and research demonstrates that religious coping has protective effects for mental health issues in caregiving populations (Pearce, 2005). Higher levels of religious coping are linked to reduced caregiver burden and, in turn, reduced depression, especially among Black/AA caregivers (Heo & Keoske, 2011). Black/AA caregivers routinely report more religious coping (Haley et al., 2004) and additional aspects of spiritual support than White caregivers, including perceived support from spiritual beliefs (e.g., reliance on a relationship with God to get through difficult situations) and spiritual well-being (relationship with God and purpose in life), and spiritual support has been linked to increased resilience and reduced caregiver burden (Ellison, 1983; Spurlock, 2005; Wilks et al., 2018). Related to religious coping is the concept of cultural justifications for caregiving (e.g., religious beliefs, giving back to family members, family expectations) that are particularly salient in Black/AA families and that make caregiving a valued role (Dilworth-Anderson et al., 2005), thus protecting against the negative effects of caregiving stress (Dilworth-Anderson et al., 2007). In the work-family literature, religiousness has been associated with reduced family to work conflict, in addition to protecting against the negative effects of work-family conflict on subjective well-being (Selvarajan et al., 2020a, 2020b), with one study suggesting that religious involvement (both organizational and personal) buffers the effects of work-family conflict on life satisfaction among working Black/AA adults (Henderson, 2016). However, this literature does not extend to diverse working caregivers.

External Resources for Caregivers

External resources also have the potential to protect working caregivers from primary and secondary stressors. Affective or emotional social support is an important resource for caregivers found to buffer the negative influence of objective caregiving stressors on subjective well-being, including life satisfaction and depression (Haley et al., 1996; Kaufman et al., 2010; Verbakel et al., 2018). The amount of social support does not tend to differ by race in the working adult population or among caregivers (Bailey et al., 1996; Haley et al., 1996). However, social support does help to buffer the effect of perceived general discrimination on stress levels, and this is slightly truer among White individuals than Black/AA individuals (American Psychological Association, 2016). Regarding the work-family interface, expressive support (i.e., having a trusted friend or family member to confide in) has a moderating effect on depressive symptoms, whereby the more expressive support a caregiver has, the less impact caregiving-related work interruptions contribute to depression (Ang & Malhotra, 2018). Despite these findings, research has yet to address differences in social support for diverse working caregivers.

Study Aims and Hypotheses

This study examined individual differences in predictors of well-being among working Black/AA and White caregivers. Specifically, the aim was to determine whether background characteristics (age, sex, race, and education), primary caregiving stressors (caregiver/care recipient co-residence, assistance with ADL/IADL), secondary role stressors (negative work to family spillover, negative family to work spillover, workplace discrimination), internal resources (perceived control, religiousness, optimism), and external resources (family support) contribute to individual differences in well-being for working Black/AA and White caregivers. First, I hypothesized that, consistent with stress process models, higher levels of primary caregiving stressors and secondary role stressors would be associated with poorer caregiver well-being, and that greater internal and external resources would be associated with better caregiver well-being. Next, I hypothesized that, consistent with previous literature, working Black/AA caregivers would report better well-being than working White caregivers after accounting for primary caregiving stressors. I also hypothesized that working Black/AA caregivers would report more caregiving stressors and explored whether they would also report more secondary role stressors.

Finally, I hypothesized that working Black/AA caregivers would report greater religious coping and family support than working White caregivers, and I explored racial differences in perceived control and optimism.

Method

Data for this study was obtained from the MIDUS 2 and MIDUS Refresher samples, in addition to an oversample of Black/AA individuals from the Milwaukee data corresponding to each main sample (Ryff, Almeida, Ayanian, Carr et al., 2017; Ryff et al., Mar. 2018; Ryff et al., Oct. 2018; Ryff et al., Sept. 2018). Participants who did not complete both the SAQ and CAPI portions of the study were excluded (*n* = 2290) because key variables were obtained from both instruments. Because a focus of the study was to determine differences in well-being between working Black/AA and White caregivers, participants who reported another primary racial identity were excluded from the study (*n* = 468). Further, participants who did not report working at the time of the study or for at least 50 weeks over the last year were also excluded (*n* = 2850). People who did not report caregiving, measured as providing personal care now or for a period of at least one month over the last year to an adult family member or friend (excluding those providing care to their children) due to a physical or mental condition, illness, or disability, were also excluded (*n* = 3,645). Finally, to ensure that employment coincided with caregiving, participants who did not report working and caregiving concurrently (either at the time of the study or during the past year) were excluded (*n* = 40). The overall sample consisted of 347 working caregivers. The process of selecting the sample is displayed in Figure 4.1 for visual reference.

Measures

The following measures were included in the analyses.

Background Characteristics

Participant Demographic Information. Participant demographic information, including age, sex, race, and level of education were considered background characteristics that have the potential to influence the other aspects of the stress process. For sex, males were coded as one and females were coded as two. For race, White was coded as one and Black/AA was coded as two. For education, not having a college degree was coded as one and have a college degree was coded as two.

Primary Stressors

Caregiving Stressors. Primary caregiving stressors, or those directly related to care provision, were assessed using three measures: the number of weekly hours of care provided, whether the care recipient lived with the caregiver, and assistance with ADL and IADL. The number of weekly hours of care provided was re-coded into a dichotomous variable with zero representing those who provided under 20 hours of care per week (low hours of care) and one representing those who provided 20 or more hours of care per week (high hours of care; National Alliance for Caregiving and AARP Public Policy Institute, 2020). This variable will be referred to as 'high or low hours of care'. For co-residence with the care recipient, not co-residing was coded as zero and co-residing was coded as one. Assistance with ADL was measured using two questions: *Because of his/her limitations do/did you provide him/her with personal help with bathing, dressing, eating, or going to the bathroom? Because of his/her limitations do/did you provide him/her getting around inside the house or going outside?* Assistance with IADL was measured using two questions: *Because of his/her limitations do/did you provide him/her shopping, cooking, housework, or laundry? Because of his/her limitations do/did you provide* *him/her managing money, making phone calls, or taking medications?* These items were summed so that scores ranged from zero to four and represented assistance with both ADL and IADL.

Secondary Stressors

Negative Work-Family Spillover. Negative work-family spillover, considered to be a secondary role-related stressor, was measured by asking participants how often they experienced eight different circumstances in the past year on a scale of one to five with one representing ‘all of the time’ and five representing ‘never’. The eight circumstances represented the two negative aspects of work-family spillover (four items each): negative work to family spillover and negative family to work spillover. Example items from the two subscales are: *Your job reduces the effort you can give to activities at home* (negative work to family spillover) and *Responsibilities at home reduce the effort you can devote to your job* (negative family to work spillover). Items were recoded so that higher scores on the scales represented more negative spillover. Scores on each sub-scale were calculated by adding together the scores on the four items, ranging from one to 20. MIDUS calculated scores only for participants with valid values on at least half of the items. Missing data in these cases was imputed using the mean value of completed items. Participants who did not have valid values on at least half of the items were coded as “not calculated (due to missing data).” Internal reliability for the four negative work-to-family spillover item measure was .83 and for the four negative family-to-work spillover item measure, it was .80.

Workplace Discrimination. Workplace discrimination represents an additional secondary stressor, and was measured using a six-item scale that asked participants: *How often* *do you think you are unfairly given the jobs that no one else wanted to do? How often are you watched more closely than other workers? How often does your supervisor or boss use ethnic, racial, or sexual slurs or jokes? How often do your coworkers use ethnic, racial, or sexual slurs or jokes? How often do you feel that you are ignored or not taken seriously by your boss? How often has a co-worker with less experience and qualifications gotten promoted before you?* (Williams at al., 1997). Participants answered using a five-point Likert scale, wherein one represented ‘once a week or more’, two represented ‘a few times a month’, three represented ‘a few times a year’, four represented ‘less than once a year’, and five represented ‘never’. Items were reverse coded so that higher scores represented more workplace discrimination. Scores on the scale were calculated by summing the six ratings, and scores ranged from zero to 30. MIDUS calculated scores only for participants with valid values on at least three of the items. Missing data in these cases was imputed using the mean value of completed items. Participants who did not have valid values on at least three items were coded as “not calculated (due to missing data).” Internal reliability for the six item measure was .96.

Internal Resources

Perceived Control. Perceived control is a potential internal resource for working caregivers and was measured using a 12-item scale that asked participants about personal mastery (four items) and perceived constraints (eight items; Lachman & Weaver, 1998). Participants rated the items using a seven-point scale, where one represented ‘strongly agree’, two represented ‘somewhat agree’, three represented ‘a little agree’, four represented ‘neither agree or disagree’, five represented ‘a little disagree’, six represented ‘somewhat disagree’, and seven represented ‘strongly disagree. Examples of items related to personal mastery were: *I can* *do just about anything I really set my mind to. When I really want to do something, I usually find a way to succeed at it.* Examples of items related to perceived constraints were: *Other people determine most of what I can and cannot do. There is really no way I can solve the problems I have.* Items were recoded so that higher scores represented more personal mastery and more perceived constraints. A composite variable – perceived control – was then created by calculating the mean of the responses to the 12 items, ranging from zero to seven. Higher scores represented higher levels of overall perceived control. MIDUS calculated scores only for participants with valid values on at least half of the items. Missing data in these cases was imputed using the mean value of completed items. Participants who did not have valid values on at least half of the items were coded as "not calculated (due to missing data)." Internal reliability for the 12 item measure was .87.

Religious/Spiritual Coping. Religious/spiritual coping, an additional potential internal resource for working caregivers, was measured using two items that asked participants: *When you have problems or difficulties in your family, work, or personal life, how often do you seek comfort through religious or spiritual means such as praying, meditating, attending a religious or spiritual service, or talking to a religious or spiritual advisor? When you have decisions to make in your daily life, how often do you ask yourself what your religious or spiritual beliefs suggest you should do?* Participants ranked the items on a four-point scale, with one representing 'often', two representing 'sometimes', three representing 'rarely', and four representing 'never'. Items were reverse coded so that high scores represented more religious/spiritual coping. Scores on the scale represented the sum of the two items, with scores ranging from zero to eight. MIDUS calculated scores only for participants with valid values on at least one of the items.

Missing data in these cases was imputed using the mean value of completed items. Participants who did not have valid values on at least one item were coded as "not calculated (due to missing data)." Internal reliability for the two item measure was .87.

Optimism. Optimism, a third potential internal resource for working caregivers, was measured using a scale that asked participants to respond to three items using a scale of one to five, where one represented 'a lot agree', two represented 'a little agree', three represented 'neither agree or disagree', four represented 'a little disagree', and five represented 'a lot disagree'. The three items were: *In uncertain times, I usually expect the best. I'm always optimistic about my future. I expect more good things to happen to me than bad.* Items were reverse coded so that higher scores represented higher levels of optimism. Scores represented the sum of all items in the scale, and scores ranged from zero to 15. MIDUS calculated scores only for participants with valid values on at least two of the items. Missing data in these cases was imputed using the mean value of completed items. Participants who did not have valid values on at least two items were coded as "not calculated (due to missing data)." Internal reliability for the three item measure was .74.

External Resources

Family Support. Family support, a potential external resource for working caregivers, was measured using a four-item scale that asked: *Not including your spouse or partner, how much do members of your family really care about you? How much do they understand how you feel about things? How much can you rely on them for help if you have a serious problem? How much can you open up to them if you need to talk about your worries?* Participants rated each item on a four-point scale, with one representing 'a lot', two representing 'some', three representing ‘a little’, and four representing ‘not at all’. Items were reverse coded so that higher values represented more support. The scale was constructed by calculating the mean of the responses on the four items, ranging from zero to four. MIDUS calculated scores only for participants with valid values on at least one of the items. Missing data in these cases was imputed using the mean value of completed items. Participants who did not have valid values on at least one of the items were coded as “not calculated (due to missing data).” Internal reliability for the four item measure was .83.

Well-being

Life satisfaction. Life satisfaction was measured by participants rating their lives in five domains on a scale from zero to 10, with zero representing ‘the worst possible’ and 10 representing ‘the best possible’. The five domains were: life overall, work, health, relationship with spouse/partner, and relationship with children. Scores reported are mean scores across all domains, ranging from zero to 10. MIDUS calculated scores only for participants with valid values on at least one item on the scale. Participants who did not have valid values for at least one item on the scale were coded as “not calculated (due to missing data).” Internal reliability for the five item measure was .62.

Affect. Positive affect was measured using a scale that asked participants to respond to six items that represented how often they felt a certain way during the past 30 days. The measure used a scale of one to five, with one representing ‘all of the time’, two representing ‘most of the time’, three representing ‘some of the time’, four representing ‘a little of the time’, and five representing ‘none of the time’. The six items were: *cheerful, in good spirits, extremely happy, calm and peaceful, satisfied, and full of life.* Negative affect was measured using a scale that asked participants to respond to six items that represented how often they felt a certain way during the past 30 days. The measure used a scale of one to five, with one representing ‘all of the time’, two representing ‘most of the time’, three representing ‘some of the time’, four representing ‘a little of the time’, and five representing ‘none of the time’. The six items were: *so sad nothing could cheer you up, nervous, restless or fidgety, hopeless, that everything was an effort, worthless.* Items were recoded so that higher scores on the scales represented higher levels of positive and negative affect. Scores reported were mean scores on each scale. MIDUS calculated scores only for participants with valid values on at least one item on each scale. Participants who did not have valid values on at least one item on each scale were coded as “not calculated (due to missing data).” Internal reliability for the six positive affect item measure was .91 and for the six negative affect item measure, it was .86.

Statistical Analyses

Statistical analyses were performed using the Statistical Package for Social Sciences (SPSS), Version 27.0 (IBM Corp., 2020). Frequencies of study variables were examined for missing data and Little’s test of missing completely at random (MCAR; 1988) was performed to determine how to treat missing data. Frequencies and means were calculated for the final analytic sample on all study variables, and t-tests and chi-square tests were conducted to compare Black/AA and White participants. To evaluate collinearity, point-biserial correlation analyses were performed. Finally, ordinary least squares hierarchical regression analyses were conducted for working White and Black/AA caregivers to determine relationships between background characteristics, primary stressors, secondary stressors, internal and external resources, and outcomes. Background characteristics were entered in the first step as covariates, primary caregiving stressors were entered in the second step, secondary role-related stressors were entered in the third step, and resources were entered in the fourth step. Normality of the distribution was verified by inspecting P-P plots and scatterplots. Further, the variance inflation factor (VIF) was inspected to detect multicollinearity, and the Durbin-Watson test was conducted to confirm independence of errors.

Results

Description of the Sample

Frequencies of study variables revealed missing data for high or low hours of care provided, workplace discrimination, negative work to family spillover, negative family to work spillover, sense of control, optimism, religious/spiritual coping, family support, and negative affect. Analyses of missing values using Little's test of MCAR were significant, $\chi^2(147, N = 347) = 178$, $p = .041$, indicating that the data was not missing completely at random. However, percentages of missing data were inspected, and all were below 6%, indicating that deleting the data would most likely not introduce bias (Bennett, 2001). As a result, participants with missing data for any variables were deleted listwise ($n = 48$). Descriptive statistics for the final analytic sample ($n = 299$) are displayed in Table 4.1. The average age of participants was 51 years, more than half were female, and just over 50% had a college degree. The study sample containing no missing data on key variables was not significantly different than those who were excluded due to missing data in age, sex, race, or education. T-tests were conducted for race and continuous study variables. There were significant differences by race for age, $t(297) = 2.50$; negative WTF spillover, $t(297) = 2.20$; perceived control, $t(50) = -3.51$; and religious/spiritual coping, $t(89) = -4.17$. Working Black/AA caregivers were younger, reported less negative work to family spillover (consistent with a trend towards significance in Study Two), more control, and more religious/spiritual coping than working White caregivers. Chi-square tests for association were conducted for race and categorical study variables. All expected cell frequencies were greater than five. There were significant differences by race for sex, $\chi^2(1) = 3.90$ and education, $\chi^2(1) = 2.19$, with Black/AA participants more likely to be female and less likely to have a college degree than White participants. For the well-being outcomes, working Black/AA caregivers reported significantly higher positive affect than working White caregivers, but the groups did not differ on life satisfaction or negative affect. Finally, correlation analyses were conducted to evaluate multicollinearity among the study variables and results are displayed in Table 4.2. All coefficients were under 0.80, and VIFs were less than two for all predictors, indicating no issues with multicollinearity among the study variables. Results of correlation analyses are displayed in Table 4.2.

Hierarchical Regression Analyses

Examination of the Durbin-Watson statistic for each of the regressions revealed no autocorrelation. For life satisfaction, it was 2.17; for positive affect, it was 2.04; and for positive affect, it was 1.97.

Life Satisfaction

Results from the first hierarchical regression analysis with the outcome of life satisfaction are displayed in Table 4.3. Results from the first step showed that as a group, caregiver demographics were not associated with life satisfaction, $F(4, 294) = 1.96$, $p = .101$, although the individual variable of older age was associated with higher life satisfaction. The second step showed that primary caregiving stressors were not associated with life satisfaction, independent of demographic factors, $F(3, 291) = 0.68$, $p = .562$. The third step showed that secondary workplace stressors were associated with life satisfaction, independent of demographics and primary caregiving stressors, $F(3, 288) = 39.34$, $p < .001$. This step accounted for 28% of explained variance. There were direct effects of negative work-to-family spillover, negative family-to-work spillover, and workplace discrimination on life satisfaction. More negative work-to-family and family-to-work spillover and more workplace discrimination were associated with lower life satisfaction. The fourth step showed that resources were associated with life satisfaction, independent of demographics and primary and secondary stressors, $F(4, 284) = 12.10$, $p < .001$. This step accounted for an additional 10% of explained variance. The direct effects of negative work-to-family spillover, negative family-to-work spillover, and workplace discrimination remained significant in this step, and there were also direct effects of perceived control, optimism, and family support. More of these resources was associated with greater life satisfaction. In addition, a direct effect of race also appeared in this step. Being Black/AA was associated with lower life satisfaction. Total variance explained by the final model was 41%.

Positive Affect

The second dependent variable was positive affect. Results from the hierarchical regression analysis are displayed in Table 4.4. Results from the first step showed that caregiver demographics were significantly associated with positive affect, $F(4, 294) = 3.06$, $p = .017$. This step accounted for 4% of explained variance. There were significant direct effects of age and race on positive affect. Being older and Black/AA were associated with more positive affect. The second step showed that primary caregiving stressors as a group were not associated with positive affect, independent of demographic factors, $F(3, 291) = 2.43$, $p = .066$, although the individual variable of hours of care provided was associated with positive affect. Providing lower hours of care (less than 20/week) was associated with higher positive affect. There also remained a significant direct effect of race on positive affect (Black/AA race = more positive affect). The third step showed that secondary workplace stressors were associated with positive affect, independent of demographics and primary caregiving stressors, $F(3, 288) = 23.93$, $p < .001$. This step accounted for an additional 19% of explained variance. There remained a significant direct effect of race on positive affect (Black/AA race = more positive affect), and there were also significant direct effects of high or low hours of care provided, negative work-to-family spillover and negative family-to-work spillover on positive affect. Low hours of care provided and less negative work-to-family and family-to-work spillover were associated with more positive affect. The fourth step showed that resources were significantly associated with positive affect, independent of demographics and primary and secondary stressors, $F(4, 284) = 21.22$, $p < .001$. This step accounted for an additional 17% of explained variance. The direct effects of race, high or low hours of care provided, and negative work-to-family spillover were no longer significant in this step, but the direct effect of negative family-to-work spillover remained significant, and there were direct effects of optimism and family support. More optimism and family support were associated with more positive affect. Total variance explained by the final model was 42%.

Negative Affect

The third dependent variable was negative affect. Results from the hierarchical regression analysis are displayed in Table 4.5. Results from the first step showed that caregiver demographics were associated with negative affect, $F(4, 294) = 3.09$, $p = .016$. This step accounted for 4% of explained variance. There was a significant direct effect of age on negative affect. Younger age was associated with more negative affect. The second step showed that primary caregiving stressors as a group were not associated with negative affect, independent of demographic factors, $F(3, 291) = 1.13$, $p = .338$. However, there remained a significant direct effect of age on negative affect. The third step showed that secondary workplace stressors were associated with negative affect, independent of demographics and primary caregiving stressors, $F(3, 288) = 24.98$, $p < .001$. This step accounted for an additional 20% of explained variance.

The direct effect of age was no longer significant in this step, but there were significant direct effects of race and negative work-to-family and family-to-work spillover on negative affect. Being Black/AA and reporting more negative work-to-family and family-to-work spillover were associated with more negative affect. The fourth step showed that resources were associated with negative affect, independent of demographics and primary and secondary stressors, $F(4, 284) = 7.66, p < .001$. This step accounted for an additional 7% of explained variance. The direct effects of race, negative work-to-family spillover, and negative family-to-work spillover remained significant in this step, and there were direct effects of optimism and family support on negative affect. Less optimism and family support were associated with more negative affect. Total variance explained by the final model was 32%.

Discussion

The aim of this study was to determine individual factors that predicted well-being, as measured by life satisfaction and positive and negative affect, among working Black/AA and White caregivers. First, I hypothesized that, consistent with the stress process model, higher levels of primary caregiving stressors and secondary role stressors would be associated with poorer caregiver well-being, and that greater internal and external resources would be associated with better caregiver well-being. This hypothesis was partially supported. The study findings revealed that secondary role stressors, rather than primary caregiving stressors, were most influential in predicting well-being. Specifically, more negative work-to-family conflict predicted worse well-being as measured by all three outcomes; more negative family-to-work conflict predicted worse well-being as measured by life satisfaction and negative affect; and workplace discrimination predicted worse well-being as measured by life satisfaction. Further, workplace factors accounted for the highest amount of explained variance of all the predictors in all three models (28% for life satisfaction, 19% for positive affect, and 19% for negative affect). This is an important finding because it suggests that for working caregivers, the workplace domain may be a more important avenue in need of modification than the caregiving domain. However, it should be noted that the caregiving measures in this study were all objective (high or low hours of care provided, co-residing with a care recipient, and provision of ADL/IADL assistance), while the workplace stressors that were associated with well-being were all subjective (negative work-family spillover and perceived workplace discrimination). Including both objective and subjective measures of both domains in future research would most likely provide a more balanced view of the impact of these stressors on the well-being of working caregivers.

I also hypothesized that more internal and external resources would be associated with greater well-being. This hypothesis was supported; resources were found to be an important aspect of the stress process for diverse working caregivers. Regarding internal resources, more optimism was associated with better well-being, as measured by all three outcomes, and perceived control was associated with better well-being, as measured by life satisfaction. This is aligned with prior research on caregiver well-being and suggests that interventions aimed at improving caregiver well-being should focus on increasing internal resources among working caregivers as well (Litzelman et al., 2017; Montgomery et al., 2011). Religious/spiritual coping was not associated with well-being, which is contrary to former research that has found religiosity to be an important resource, especially for Black/AA caregivers (Haley et al., 2004; Heo & Keoske, 2011) and Black/AA workers (Henderson, 2016; Selvarajan et al., 2020a, 2020b). However, the measure used in this study only consisted of two items that specifically measured religious coping, but religiosity is a multidimensional concept that has been operationalized in prior research in a number of ways (John E. Fetzer Institute, 1999). Future research should incorporate a multidimensional measure of religiosity to better determine whether religiosity is an important external resource for diverse working caregivers contending with workplace issues. Finally, regarding external resources, more family support was associated with better well-being as measured by all three outcomes, illuminating the importance of including not only the caregiver, but also their family members in interventions for working caregivers.

Regarding differences between working Black/AA and white caregivers, I hypothesized that working Black/AA caregivers would report more caregiving stressors and explored whether they would also report more secondary role stressors. Working Black/AA caregivers in this sample did not report more primary caregiving stressors, a surprising finding since prior research consistently finds that Black/AA caregivers provide more hours of care than White caregivers (National Alliance for Caregiving and AARP Public Policy Institute, 2020). However, because this sample consisted of working caregivers exclusively, differences in caregiving stressors may have been attenuated since overall, working caregivers provide fewer hours of care than non-working caregivers (National Alliance for Caregiving and AARP Public Policy Institute, 2020). The only racial difference in secondary stressors was that working Black/AA caregivers reported less negative work-to-family conflict than working White caregivers.

Regarding resources, I hypothesized that working Black/AA caregivers would report greater religious coping and family support than working White caregivers, and I explored racial differences in perceived control and optimism. Working Black/AA caregivers reported more of all three kinds of internal resources, although for optimism, the difference was not statistically significant. However, this is interesting because after adjusting for resources, there were major changes in the race effects for life satisfaction and negative affect. The finding that working Black/AA caregivers report more control than working White caregivers is contrary to prior research on the topic but may also suggest that caregiving increases mastery (an aspect of perceived control) in working Black/AA caregivers. The finding that working Black/AA caregivers report more religious/spiritual coping than working White caregivers, on the other hand, is not surprising and is most likely not related to being a caregiver. There were no differences between Black/AA and White caregivers for the external resource of family support, which suggests that interventions aimed at improving well-being for working Black/AA and White caregivers can focus on improving family support for both racial groups.

Finally, I hypothesized that, consistent with previous literature, working Black/AA caregivers would report better well-being than working White caregivers after accounting for primary caregiving stressors (Pinquart & Sörensen, 2005). This finding was partially supported. In group comparisons prior to regressions, working Black/AA caregivers reported more positive affect (but not more life satisfaction or less negative affect) than working White caregivers. In the regression analyses, being Black/AA was associated with higher positive affect at all steps, except when resources were included in the model. This suggests that some resources may mediate the relationship between race and positive well-being. For negative affect, race became associated with worse negative affect after including workplace stressors, and resources. Similarly, race became associated with lower life satisfaction after including resources. While this is difficult to interpret, it suggests that Black/AA caregivers generally have greater psychological resources to cope with caregiving, but that without these resources, working Black/AA caregivers would have poorer psychological well-being than working White caregivers.

Overall, the findings of this study support the utility of caregiving stress process models and role conflict theory in examining well-being among diverse working caregivers. First, they demonstrate that caregiving stressors alone are not sufficient in predicting well-being, and that other role stressors must also be considered when understanding well-being among working caregivers. The findings also extend prior work in the field regarding resilience in coping with caregiving stress to working Black/AA caregivers, who reported significantly higher positive affect, perceived control, religious/spiritual coping, and reported higher optimism (although this effect was not significant). All of the resources except religious/spiritual coping were associated with better psychological well-being. Finally, the findings reinforce the importance of identifying and building upon internal resources that working caregivers can employ to cope and thrive when faced with multiple role stressors. An excellent place to build those resources is the workplace. Prior research has found that engaging in positive activities in the workplace (e.g., recounting positive events at work) leads to positive outcomes, including more happiness and work productivity (Chancellor et al., 2015). Such an investment in employees is worthwhile, as this study suggests that if working caregivers are not equipped with appropriate resources, they may be more at risk for negative outcomes than non-working caregivers.

Limitations

This study has limitations that should be considered for the interpretation of the findings and for future research on diverse working caregivers. A main limitation is the amount of missing data in the dataset, which greatly reduced the number of eligible participants. Specifically, over 2,000 participants in the initial sample did not complete the SAQ portion of the study, which is where hours worked per week, caregiving characteristics, and workplace characteristics were assessed. Also, due to the lack of racial/ethnic diversity in the dataset, only

Black/AA and White participants were included in this study. However, because there may be even starker cultural differences in beliefs about and experiences with caregiving among other racial/ethnic groups in the U.S. (Pinquart & Sörensen, 2005), future research should examine the relationships between stressors, resources, and well-being across a more diverse sample of working caregivers in the U.S.

Another limitation mentioned earlier is the lack of available subjective measures of caregiving, include those representing appraisals of burden or satisfaction with caregiving, in the MIDUS dataset. Additional objective measures of the impact of caregiving on work would also be useful to broaden the scope of work-related stressors that can be examined. Using subjective measures in combination with objective measures would allow researchers to gain a more complete picture of how caregiving stressors are related to well-being and to determine what kinds of policies might be useful to support working caregivers.

Figure 4.1

Flowchart of Study Three Participants

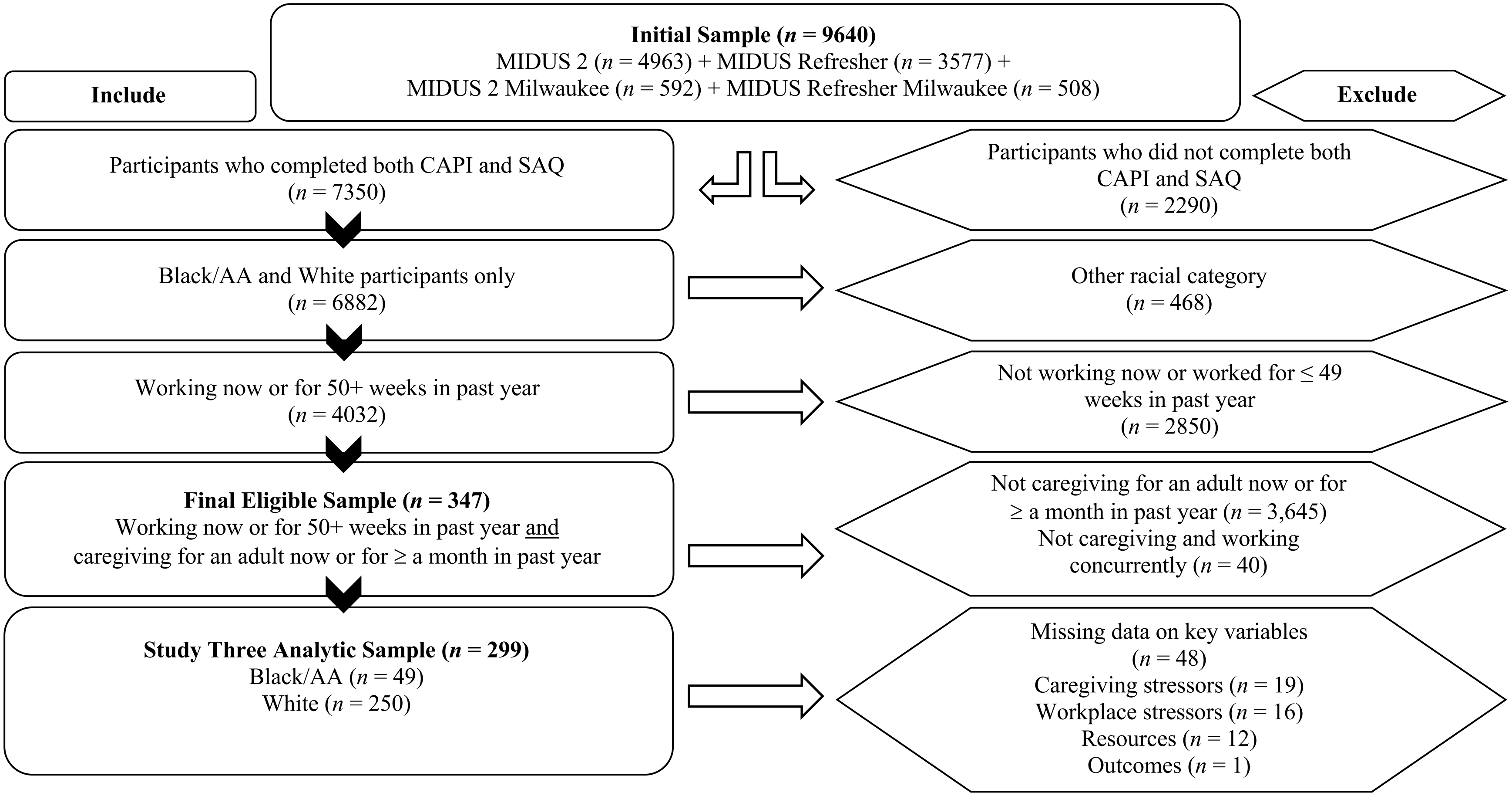


Table 4.1.

Caregiver Demographics, Caregiving Stressors, Secondary Stressors, and Resources

	Black/AA Caregivers *n* = 49		White Caregivers *n* = 250		*p*	Total Sample *n* = 299	
Demographics							
Age	48.41	9.77	52.03	9.18	**.013**	51.44	9.36
Sex (*n*/% female)	36	74	146	58	**.048**	182	61
Education (*n*/% w/o college degree)	43	88	124	50	**< .001**	167	56
Caregiving Stressors							
High/low hours of care (n/% 20+)	23	47	95	38	.242	118	39.5
Co-residence with CR (*n*/% yes)	16	33	103	41	.264	119	40
ADL/IADL assistance (out of 4)	2.80	1.12	2.72	1.13	.684	2.74	1.13
Secondary Workplace Stressors							
Negative WTF spillover	9.90	3.10	10.94	2.99	**.029**	10.77	3.03
Negative FTW spillover	8.86	3.08	9.07	2.78	.621	9.04	2.82
Workplace discrimination	12.36	6.28	10.92	4.51	.133	11.15	4.86
Hours worked/week	35.81	11.40	39.40	15.31	.125	38.81	14.78
Resources							
Internal resources							
Perceived control	7.23	3.33	5.54	1.15	**< .001**	5.81	1.81
Optimism	12.26	2.66	11.61	2.58	.111	11.71	2.60
Religious/spiritual coping	6.65	1.56	5.56	2.18	**< .001**	5.74	2.13
External resources							
Family support	3.45	0.67	3.52	0.57	.439	3.51	0.59
Outcomes							
Life Satisfaction	7.50	1.29	7.68	1.14	.317	7.65	1.16
Positive Affect	3.63	0.75	3.32	0.74	**.009**	3.37	0.75
Negative Affect	1.75	0.78	1.54	0.57	.074	1.58	0.61

Note. Results are means and standard deviations unless otherwise noted; AA = African American; w/o = without; CR = care recipient; ADL = activity of daily living; IADL = instrumental activity of daily living; WTF = work-to-family; FTW = family-to-work; spillover items scaled from one to 20; workplace discrimination scaled from zero to 30; perceived control scaled from zero to seven; optimism scaled from zero to 15; religious/spiritual coping scaled from zero to eight; family support scaled from zero to four; life satisfaction scaled from zero to 10; positive affect scaled from one to five; negative affect scaled from one to five; for all stressors, resources, and outcomes, higher = more.

Table 4.2.

Correlations Between Caregiver Background Characteristics, Stressors, Resources, and Well-being

Measure	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Age	–																
2. Sex	.02	–															
3. Race	**-.14***	**.11***	–														
4. Education	**.12***	**-.13***	**-.29***	–													
5. High/low hours of care	.02	**.23***	.07	-.07	–												
6. Co-residence with CR	.00	-.09	-.07	.05	.11	–											
7. ADL/IADL assistance	**-.15***	**.13***	.02	-.05	**.30***	.01	–										
8. Neg. WTF spillover	**-.14***	-.03	**-.13***	**.13***	.02	.06	.11	–									
9. Neg, FTW spillover	**-.21***	.08	-.03	.08	.06	**.14***	**.15***	**.56***	–								
10. Job Discrimination	**-.22***	-.03	.11	-.06	-.00	.11	.06	**.31***	**.22***	–							
11. Perceived Control	-.07	-.05	**.35***	-.05	-.04	-.04	-.08	**-.18***	**-.23***	-.08	–						
12. Optimism	.07	-.01	.09	-.02	-.11	.00	-.08	**-.29***	**-.28***	**-.14***	**.39***	–					
13. Religious Coping	-.02	**.26***	**.19***	-.07	.10	**-.14***	.02	.07	.02	.03	.03	.04	–				
14. Family Support	.03	.14*	-.05	-.06	-.01	-.00	.00	**-.14***	**-.18***	**-.24***	**.12***	**.24***	.10	–			
15. Life Satisfaction	**.15***	.04	-.06	.03	.02	-.08	-.04	**-.46***	**-.44***	**-.34***	**.28***	**.40***	.01	**.32***	–		
16. Positive Affect	.09	-.02	**.15***	-.09	**-.13***	.00	-.11	**-.38***	**-.43***	**-.15***	**.34***	**.51***	.03	**.33***	**.52***	–	
17. Negative Affect	**-.17***	.04	**.13***	-.04	.08	.06	.09	**.37***	**.43***	**.19***	**-.18***	**-.34***	.08	**-.28***	**-.47***	**-.58***	–

Note. For sex, male = 1, female = 2; for race, White = 1, Black/African American = 2; for education, no college degree = 1, college degree = 2; for high/low hours of care, low = 0, high = 1; CR = care recipient; for co-residence with CR, no = 0, yes = 1; ADL = activity of daily living; IADL = instrumental activity of daily living; Neg. = negative; Pos. = positive; WTF = work-to-family; FTW = family-to-work; for all stressors, resources, and outcomes, higher = more; *$p < .05$.

Table 4.3.

Regression Analyses Predicting Caregiver Life Satisfaction

Predictor	Model 1		Model 2		Model 3		Model 4	
	B	β	B	β	B	β	B	β
Demographics								
Age	.018	**.142***	.017	**.137***	.000	.001	.003	.021
Sex	.106	.045	.086	.036	.135	.057	.078	.033
Race	-.123	-.039	-.140	-.045	-.216	-.069	-.424	**-.135***
Education	.028	.012	.033	.014	.166	.071	.150	.064
Caregiving Stressors								
High/low hours of care			.063	.027	.060	.025	.130	.055
ADL/IADL assistance			-.029	-.028	.031	.030	.038	.037
CG lives with CR			-.189	-.080	-.019	-.008	-.071	-.030
Workplace Stressors								
Negative WTF spillover					-.107	**-.278****	-.095	**-.248****
Negative FTW spillover					-.106	**-.258****	-.070	**-.169***
Workplace discrimination					-.045	**-.189****	-.032	**-.132***
Resources								
Perceived control							.099	**.154***
Religious/spiritual coping							.009	.017
Optimism							.082	**.183****
Family support							.302	**.152***
R^2	.026		.033		.314		.414	
ΔR^2	.026		.007		**.281****		**.100****	

Note. n = 299; for sex, male = 1, female = 2; for race, White = 1, Black/African American = 2; for education, no college degree = 1, college degree = 2; for high/low hours of care, low = 0, high = 1; ADL = activity of daily living; IADL = instrumental activity of daily living; CG = caregiver; CR = care recipient; for co-residence with CR, no = 0, yes = 1; WTF = work-to-family; FTW = family-to-work; for all stressors, resources, and outcomes, higher = more; **p* < .05, ***p* < .001.

Table 4.4.

Regression Analyses Predicting Caregiver Positive Affect

	Model 1		Model 2		Model 3		Model 4	
Predictor	B	β	B	β	B	β	B	β
Demographics								
Age	.009	**.116***	.009	.110	.000	.005	.002	.021
Sex	-.080	-.052	-.021	-.014	.028	.019	-.026	-.017
Race	.314	**.156***	.324	**.161***	.273	**.136***	.169	.084
Education	-.092	-.061	-.101	-.067	-.020	-.013	-.026	-.017
Caregiving Stressors								
High/low hours of care			-.097	**-.129***	-.195	**-.128***	-.125	-.082
ADL/IADL assistance			-.040	-.061	-.007	-.010	-.005	-.007
CG lives with CR			.043	.028	.135	.089	.085	.056
Workplace Stressors								
Negative WTF spillover					-.039	**-.160***	-.026	-.106
Negative FTW spillover					-.088	**-.333****	-.060	**-.226****
Workplace discrimination					-.007	-.048	.003	.022
Resources								
Perceived control							.039	.094
Religious/spiritual coping							.002	.006
Optimism							.091	**.317****
Family support							.252	**.198****
R^2	.040		.063		.250		.423	
ΔR^2	**.040***		.023		**.187****		**.173****	

Note. n = 299; for sex, male = 1, female = 2; for race, White = 1, Black/African American = 2; for education, no college degree = 1, college degree = 2; for high/low hours of care, low = 0, high = 1; ADL = activity of daily living; IADL = instrumental activity of daily living; CG = caregiver; CR = care recipient; for co-residence with CR, no = 0, yes = 1; WTF = work-to-family; FTW = family-to-work; for all stressors, resources, and outcomes, higher = more; **p* < .05, ***p* < .001.

Table 4.5.

Regression Analyses Predicting Caregiver Negative Affect

	Model 1		Model 2		Model 3		Model 4	
Predictor	B	β	B	β	B	β	B	β
Demographics								
Age	-.010	**-.154***	-.010	**-.149***	-.003	-.045	-.004	-.058
Sex	.039	.031	.024	.019	-.013	-.011	.005	.004
Race	.176	.107	.180	.109	.233	**.141***	.265	**.160***
Education	.017	.013	.018	.015	-.054	-.043	-.053	-.043
Caregiving Stressors								
High/low hours of care			.066	.053	.064	.051	.024	.019
ADL/IADL assistance			.024	.045	-.004	-.008	-.004	-.007
CG lives with CR			.081	.065	.010	.008	.046	.037
Workplace Stressors								
Negative WTF spillover					.043	**.212****	.035	**.175***
Negative FTW spillover					.066	**.305****	.052	**.238****
Workplace discrimination					.004	.029	-.003	-.023
Resources								
Perceived control							-.022	-.063
Religious/spiritual coping							.016	.057
Optimism							-.042	**-.176***
Family support							-.172	**-.165***
R^2	.040		.051		.247		.320	
ΔR^2	**.040***		.011		**.196****		**.073****	

Note. n = 299; for sex, male = 1, female = 2; for race, White = 1, Black/African American = 2; for education, no college degree = 1, college degree = 2; for high/low hours of care, low = 0, high = 1; ADL = activity of daily living; IADL = instrumental activity of daily living; CG = caregiver; CR = care recipient; for co-residence with CR, no = 0, yes = 1; WTF = work-to-family; FTW = family-to-work; for all stressors, resources, and outcomes, higher = more; *$p < .05$, **$p < .001$.

CHAPTER FIVE. CONCLUSION

In the next 40 years in the U.S., the percentage of non-Hispanic Whites is projected to decrease by almost 10%, while the percentage of Blacks/AAs is projected to increase by 40%, along with increases in every other racial/ethnic group (Vespa et al., 2020). In such a diverse society, understanding unique factors that contribute to well-being for different racial groups is essential. In addition to this increase in diversity, the population of the U.S. is aging at an unprecedented rate (Mather et al., 2019), driving a need for informal caregivers to assist older adults with activities they are unable to perform independently. Over half of informal caregivers are working while providing care, and this combination has been linked to both losses and gains for caregivers. Because caregivers are a vital means to an effectively functioning aging society, their well-being should be a priority.

Guided by stress process models, minority stress theory, and role theory, this dissertation examined background characteristics, stressors, internal and external resources, and psychological well-being among working Black/AA and White adults and caregivers in the U.S. The overall aim of the dissertation was to create avenues for future research investigating the intersections of race, caregiving, and employment, and to gain a better understanding of the experiences of diverse working adults and caregivers to devise relevant support systems that address potential racial and caregiving-related disparities.

The first study, which investigated perceived general and workplace discrimination among working Black/AA and White caregivers and non-caregivers, demonstrated that not only did Black/AA workers report more general and workplace discrimination in the forms of lifetime discrimination, everyday discrimination, and work inequality than White workers, working caregivers also reported more lifetime discrimination than working non-caregivers. Additional factors, including background characteristics (age, sex, education) and hours worked were also related to perceived discrimination. While there was no interaction between race and caregiving status, working Black/AA caregivers and non-caregivers reported more lifetime discrimination, everyday discrimination, and work inequality than working White non-caregivers, in addition to more lifetime discrimination and work inequality than working White caregivers. These findings support the utility of minority stress theory for studies examining stress among working Black/AA adults by confirming the significant role of perceived discrimination in the stress process for this population. In addition, the findings suggest that there is a relationship between caregiving and discrimination, either as a selection factor for or a consequence of caregiving.

The second study, which investigated domains and directions of work-family spillover, demonstrated that while race alone is not associated with differences in spillover, multiple contextual factors, including age, living with a care recipient, and work characteristics are related to spillover in unique ways. The finding that younger caregivers reported more positive and negative family-to-work spillover is particularly interesting because it suggests that combining caregiving and work can lead to meaningful growth for some working caregivers. The same can be said for the finding that co-residing with a care recipient was associated with negative family-to-work spillover, but positive work-to-family spillover. Finally, the finding that multiple workplace factors, including job demands, hours worked, decision authority, and skill discretion consistently influenced work-family spillover demonstrates that work may be the aspect of a working caregiver's life that is most important to modify.

The third study, which investigated predictors of well-being for working Black/AA and White caregivers, found that the most important predictor of well-being was workplace factors, including negative work-family spillover and discrimination. This reinforces the importance of the workplace in the stress process for this population. In addition, resources including optimism, perceived control, and family support were all associated with enhanced well-being for working caregivers, pointing to potential sources of resilience for both Black/AA and White working caregivers. Finally, being Black/AA was associated with lower life satisfaction and more negative affect when resources were accounted for, suggesting that working Black/AA caregivers should be a priority in terms of targeted interventions for working caregivers.

Future Directions

The findings from this dissertation point to several potential avenues for future research and intervention. Regarding discrimination, determining whether the findings from Study One are related to well-being for working Black/AA and White adults and caregivers will help us to better understand how discrimination influences various aspects of health. It will also be important to investigate the relationship between discrimination and caregiving longitudinally to gain a clearer understanding of the interplay between these two factors. Specifically, determining whether caregiving is a cause of discrimination, or related to selection factors into the caregiving role will provide a better understanding of how discriminatory experiences shape the likelihood of providing care, ways that providing care leads to discriminatory experiences, and whether these differ among Black/AA and White families. In addition, understanding why different measures of discrimination are associated with different background characteristics, workplace factors, and caregiving would help to illuminate factors that may be inextricable from race.

Regarding work-family spillover, examining differences between caregivers and non-caregivers for multi-dimensional spillover would provide a clearer understanding of how caregiving influences the domains and directions of work-family spillover, what resources might protect against negative spillover, and how to achieve positive spillover for working caregivers and non-caregivers. Further, determining if sociocultural factors like collectivism and cultural justifications for caregiving, rather than race and socioeconomic factors, influence domains and directions of work-family spillover would help in the design of culturally appropriate interventions. In addition, younger caregivers and those co-residing with their care recipients may benefit from respite services and interventions that provide strategies for balancing multiple roles more effectively, in addition to those that highlight the positive aspects of work and caregiving that might spill over into the other domain. Finally, organizations aiming to make the workplace more hospitable for caregivers should consider changing the workplace culture to focus less on long hours and demanding expectations and more on increasing employee resources like decision authority and skill discretion.

Regarding the well-being of working caregivers, determining within-group factors that influence well-being for working Black/AA and White caregivers is an important next step that will require more inclusive data collection techniques. Future research should also include a balance of objective and subjective measures of stressors to gain a clearer picture of how they relate to well-being for diverse working caregivers. In addition, both working caregivers and their family members should be included in programs serving working caregivers, as their family members can serve as a tremendous resource. Finally, interventions focused on building internal resources that help working caregivers cope with role stressors is an advantageous strategy and attainable goal.

The 21st century workplace is a setting that is ripe for opportunities to intervene in issues related to discrimination, stress, and psychological well-being for working caregivers. However, it is imperative that solutions not only be designed for workplaces with mostly non-minority employees. Workplaces with high proportions of racial minority employees and caregivers should take precedence as sites for research and interventions so that we are well prepared to create an equitable environment for the ever-advancing older and more diverse society to come.

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