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# Muliple Roles as Predictors of Subjective Well-Being in African American Women

Sha-Rhonda Michea Green-Davis

*Walden University*

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# Walden University

College of Social and Behavioral Sciences

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Sha-Rhonda M. Davis

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2016

Abstract

Multiple Roles as Predictors of Subjective Well-Being in African American Women

by

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MSW, The University of Georgia, 2001

MA, Georgia Southern University, 1997

BA, Brewton-Parker College, 1995

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Human Services

Walden University

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## Abstract

The role strain caused by the multiple roles of some women can impact their stress levels and health outcomes, which negatively affects reported subjective well-being (SWB). The culture and race of African American women has a complex effect on how they experience stress and manage their health. Some research shows the harmful rippling effect of stress for African American women is distinct from other racial groups and men. The purpose of this quantitative archival study was to understand how the SWB of African American women can be predicted by their age, years of education, household income, number of children, and marital, parental, and employment statuses. The theoretical foundation was role strain theory. The archival data set of The National Survey of American Life: Coping with Stress in the 21<sup>st</sup> Century provided data from African American female respondents ages 18 to 44, ( $n = 1,877$ ). Multiple linear regression analyses showed that when combined in 2 models; marital, parental, and employment statuses (Model 1) and the remaining four variables (Model 2) were statistically significant predictors of SWB. Separately, parental status, age, years of education, and number of children were not statistically significant predictors of SWB. This study showed that married parents who were employed had higher SWB which suggests increased access to resources. Research shows higher socioeconomic status is correlated to higher SWB. Increased resources may help to reduce the additive impact of juggling multiple roles. This study will contribute to social change by educating women on the connections between balancing roles and happiness and encourage them to negotiate roles and duties to reduce stress and improve their health outcomes.

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## Dedication

Dear woman, you are priceless and valuable beyond measure. This dissertation is dedicated to you. Your contributions sometimes go unnoticed, but know that the love, nurturing, support, and encouragement that you give behind the scenes has a rippling impact on the future of those that you touch. Your influence will be seen for generations to come. Know that your worth is not defined by the roles that you occupy. You alone are enough. Remember, it is not selfish to take care of you first. In fact, it is a necessary act of self-love.

## Acknowledgments

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## Chapter 1: Introduction to the Study

### **Introduction**

Women's roles as mothers, wives, and paid employees have changed over the past three decades (Barnett, 2004; Institute for Women's Policy Research, 2009; United States Bureau of Labor Statistics, 2011). Even though women have experienced more paid work experience outside of the home, they still bear the brunt of household and parenting responsibilities (Bianchi, Milkie, Sayer, & Robinson, 2000; Tang & Tang, 2001; Thurston, Sherwood, Matthews & Blumenthal, 2011; Wong & Almeida 2013). As women's role responsibilities have increased, the potential for role strain has also increased (Pearson, 2008; Sumra & Schiillaci, 2015). Role strain is experienced when the demands of multiple roles increases and the resulting stress negatively influences women's ability to maintain their emotional, mental, and physical health (Pearson, 2008; Woods-Giscombé, 2010; Wong & Almeida, 2013). The chronic, prolonged strain and stress associated with multiple roles can be detrimental to women's subjective well-being (SWB) (Deiner & Chan, 2011; Janssen et al., 2012; Kok et al., 2013; Low, Thurston & Matthews, 2010; Sumra & Schillaci, 2015; Woods-Giscombé, 2010). African American women have historically been considered pivotal forces in their communities and homes for creating cohesion and togetherness (Johnson & Loscocco, 2014; Mullings, 2014). This expectation of fostering cohesiveness further increases the roles outside of the home, such as church member, activist, or leader (Beauboeuf-LaFontant, 2007, 2008, 2009; Johnson & Loscocco, 2014).

Thus, the analysis of SWB is of value in understanding the multiple roles of African American women. This study examined the potential predictive relationship of multiple roles and SWB. Human services professionals could use the results from this study to educate women on the interplay of SWB on their physical health outcomes and self-care options. This chapter contains information on the following: background of the study, problem statement, and purpose of the study, research questions and hypotheses, theoretical foundation, nature of study, definition of terms, assumptions, scope/delimitations, limitations, significance, and summary.

## **Background**

### **Multiple Roles and Women**

The multiple roles associated with working inside and outside of the home have complicated women's ability to balance and manage the expectations and demands of the multiple duties associated with those roles (Barnett, 2004; Kasimatis & Guastello, 2012; Low et al., 2010; Woods-Giscombé, 2010). Dako-Gyeke and Ibrahim (2012) examined the multiple roles of Ghanaian nonacademic employed university women's responsibilities of childcare, household chores, and romantic activities. The researchers found that the respondents who managed multiple roles often experienced role conflict. Role conflict further influenced societal- and gender-related role expectations and therefore women's self-concept and SWB.

Rosenburg (2013) explored the narratives of tenured women counselor educators and their attempts to integrate and manage multiple roles. The participant educators in the study spoke of role strain, quality of support, and access to resources to mediate the

impact of coping with multiple roles. When women's multiple roles conflicted with their available resources, stress and role strain occurred (Rosenburg, 2013). This role strain contributed to declines in mental, emotional, and physical health. Overall findings from the study revealed the following: (a) stress and role strain can affect health outcomes; and (b) an individual's happiness or SWB can influence health outcomes (Rosenburg, 2013).

### **Multiple Roles and African American Women**

The life experiences of African American women are different from the life experiences of White men, White women, and African American men (Howard-Hamilton, 2004; Woods-Giscombé, 2010). Given the unique, historical, gender, and race experiences of African American women, these factors have created an elevated context of health- and stress-related risks (Geronimus, Hicken, Keene, & Bound, 2006; Johnson & Loscocco, 2014; Mullins, 2014). The enslavement history of African American women was met with role expectation assignments of the master (Smith, 1994). If these expectations were violated, slaves faced harsh punishment, death, and/or familial separation (Smith, 1994). Various role expectations emerged from this time period to include worker, laborer, mother, cook, housekeeper, nurse maid, property, procreator, healer, and midwife (Smith, 1994). In present day, the disproportionate rate of homicide, incarceration, and interracial marriage among affluent African American men has further confounded the role and role strain of African American women (Ashley, 2014). These factors lead to overcompensating to be strong and to internalize stereotypes such as that of the Angry Black Woman (Ashley, 2014).

Furthermore, researchers indicated that African American women are raised to believe they are strong Black women and asking for help is a sign of weakness (Neal-Barnett, 2010). According to Neal-Barnett (2010), “a strong black woman refuses to admit she is stressed and keeps her feelings bottled up inside while she helps everyone else. This strategy makes the black woman an excellent candidate for the development of anxiety”(p.33). Coping strategies to suppress feelings and combat emotional pain are manifested in maladaptive patterns of sex, overspending, overeating, and binge drinking (Neal-Barnett, 2010).

Beauboeuf-LaFontant (2007, 2008, 2009) stated that strength is a factor that has emerged and exacerbated the health outcomes of African American women. The strength factor states that African American women can handle the stress and are potentially seen as not strong when asking for help to shoulder multiple responsibilities (Beauboeuf-LaFontant, 2007, 2008, 2009). Black and Giscombé (2009) and Woods-Giscombé (2010) explored the construct of strength as a positive but also as a double jeopardy detriment to overall health in terms of self-care postponement, emotional suppression, and exceptional (overcompensated) caregiving.

### **Multiple Roles and Negative Health Outcomes**

African American women are disproportionately represented among chronic mental and physical health ailments and disorders (Dingfelder, 2013; Gildersleeve, Croom, & Vasquez, 2011; National Center for Health Statistics, 2008, 2013).

Cardiovascular disease is the leading cause of death among women in the United States, and the death rate is 60% higher in Black women compared to White women (American

Heart Association, 2009; Janssen et al., 2012; Roger et al. 2011). Cardiovascular disease is triggered and exacerbated by the successive and prolonged exposure to psychosocial and physiological stress factors (Terrill, Garofalo, Soliday, & Craft, 2012). These factors include the impact of workload, multiple roles, chronic stress, role perception, gender differences in stressor effects, caregiving, and women's biological susceptibility to stress (American Heart Association, 2009; Janssen et al., 2012; Terrill et al., 2012).

### **SWB**

SWB refers to how an individual subjectively experiences satisfaction with their quality of life (Deiner, 2002). Individuals assess their overall quality of life in terms of low negative affect, high positive affect, and general life satisfaction (Deiner & Chan, 2011). Past research has revealed a high positive association between health and SWB (Caunt, Franklin, Brodaty, & Brodaty, 2013; Diener, 2002; Diener, Scollon, & Lucas, 2003; Friedman, Kern, & Reynolds, 2010; Frey & Stutzer, 2002; Hoorn 2007; Kok et al., 2013). Diener and Chan (2011) provided a detailed framework of the applicability of SWB to different areas of life, such as lifetime health, diseases, illness, mortality, morbidity, and happiness in the context of positive emotions, life satisfaction, and feelings of euphoria. Deiner and Chan examined the relationship between mood, emotional fluctuations, health, and longevity. Findings from other studies have shown that that positive feelings and happiness were related to the following outcomes: reduced inflammation; lower incidents of stroke and heart attacks; healthier diets; improved cardiovascular functioning; and speedier recovery from medical procedures (De Neve, Diener, Tay, & Xuereb, 2013; Pavot & Diener, 2013).

Moreover, studies have shown the interaction of age, income, education, and gender as plausible predictors of SWB (Blanchflower & Oswald, 2004; Carr, 2013; Cramm et al., 2010; Diener & Biswas-Diener, 2002; Diener, Ng, Harter, & Arora, 2010; Hoorn, 2007). SWB was associated with higher levels of income and education (Diener, Ng, et al., 2010). Individual factors such as marital status, employment status, and parental status also showed both low and high impact SWB (Bradshaw, 2014; Ochs & Beck, 2013; Stam, Sieben, Verbakel, & de Graaf, 2015).

### **Problem Statement**

Juggling multiple roles has been linked to stress-related outcomes (Sumra & Schillaci, 2015). Stress is a heightened sense of aroused anxiety when an individual is unable to adapt to and perform the demands of the environment, such as juggling multiple roles (Sumra & Schillaci, 2015). Prolonged exposure to stress leads to adverse physiological outcomes such as high blood pressure, inflammation, diabetes, obesity, and immunity system suppression (Janssen et al., 2012). These adverse outcomes are all detrimental risk factors for heart disease, cancer, anxiety disorders, and depression (Janssen et al., 2012). Multiple roles are linked to stress, and stress is linked to adverse health outcomes (Kasimatis & Guastello, 2012).

Women's emotional and physical health outcomes are further complicated when they place the needs of others before their needs when responding to the demands of being a parent as well as other roles that women may possess (Kasimatis & Guastello, 2012). There is a high positive association between health and SWB (Caunt et al., 2013; Diener 2002; Diener, Scollon, & Lucas, 2003; Dolan et al., 2008; Friedman et al., 2010;

Frey & Stutzer, 2002; Hoorn 2007; Kok et al., 2013). When placing the needs of other before themselves, women have reported low SWB (Kok et al., 2013).

Low SWB can be particularly exacerbated given the unique historical racial and gender context of African American women (Woods-Giscombé, 2010). As a result, African American women, compared to White American women, experience disproportionately higher levels of chronic illness and disease as well as higher mortality rates associated with coronary heart disease, diabetes, stroke, and cancer (Janssen et al., 2012; National Center for Health Statistics, 2008, 2013; Pearson, 2008; Terrill et al., 2012; Woods-Giscombé, 2010). Research has also shown there are mental health disparities for African American women who fulfill multiple roles (Dingfelder, 2013; Gildersleeve et al., 2011; National Center for Health Statistics, 2008, 2013; Pearson, 2008). Some studies have shown that African American women experience higher rates of depression and are less likely to pursue mental health treatment (Dingfelder, 2013; Martin, Boadi, Fernandes, Watt, & Robinson-Wood, 2013; National Center for Health Statistics, 2008, 2013).

This was an exploratory quantitative archival research design study. There has been a gap in the recent research that examined the level of happiness in the multiple roles of African American women. Therefore, the problem that I addressed in this study was to determine the possible predictive impact of demographic variables and multiple roles on the SWB of African American women.

### **Purpose of Study**

The purpose of this study was to assess the predictive relationship between the multiple roles of marital status, employment status, parental status and age, household income, years of education, and number of children on the SWB of African American women. Multiple studies have looked at stress and the multiple roles of women. However, there appeared to be limited recent research on within-group examination of the SWB, specific to African American women.

### **Research Questions and Hypotheses**

This study examined two separate research questions for clarity of presenting the information. However, all variables were sequentially loaded into the multiple regression analysis equation using SPPSS. Research Question 1 (RQ1) examined the multiple role independent variables. Research Question 2 (RQ2) examined the four other independent variables. SWB was measured as a three-item index scale, using three questions from the National Survey of American Life: Coping with Stress in the 21<sup>st</sup> Century (NSAL): Positive Attitude, Happiness, and Life Satisfaction. Operationalization of the independent and dependent variables are described in further detail in Chapter 3.

RQ1-Quantitative: To what degree do the multiple roles of marital status, employment status, and parental status predict the SWB of African American women?

Null Hypothesis 1: The multiple roles of marital status, employment status and parental status are not statistically significant predictors of the SWB of African American women.

Alternative Hypothesis 1: The multiple roles of marital status, employment status and parental status are statistically significant predictors of the SWB of African American women.

RQ2-Quantitative: To what degree does age, household income, years of education, and number of children predict the SWB of African American women?

Null Hypothesis 2: Age, household income, years of education and number of children are not statistically significant predictors of the SWB of African American women.

Alternative Hypothesis 2: Age, household income, years of education and number of children are statistically significant predictors of the SWB of African American women.

### **Theoretical Foundation**

The theoretical framework for this study was role strain theory (Goode, 1960). According to role strain theory, individuals experience role strain when attempting to negotiate and balance multiple role obligations (Goode, 1960). Role strain refers to the tension and stress that occur within the context of how a single role's demands impact the demands of other roles (Goffman, 1990). Researchers noted that the demands of employee, partner, and mother lead to role strain and negative health risk outcomes (National Center for Health Statistics, 2008; Terrill et al., 2012). Roles that compete for time and resources cause pressure and strain. This theory can be applied to multiple populations and was appropriate to the purpose of this study on African American women. Strain is a negative emotional response to stress and can lead to negative health

outcomes. Strain is further impacted by the conflict that happens when the demands of one role have an impact on performance in another role. Furthermore, individuals can also experience stress in response to the multiple demands of multiple roles. This theory provided a foundation to understand the strain and stress of multiple responsibilities in multiple roles as well as the internal stress of the stressors of one role.

### **Nature of Study**

In this quantitative study, I conducted a secondary data analysis using logistic regression to examine multiple roles and SWB of African American women. I used archival data gathered by the NSAL (Jackson et al., 2007). The NSAL ( $N = 6,082$ ) was a comprehensive survey conducted from 2001 to 2003. The purpose of the NSAL was to explore the religious, health, neighborhood, and emotional, economic, physical, and mental conditions of Black Americans residing in urban and rural areas of the United States (Jackson et al., 2007).

Using archival data is a cost efficient, timely, and effective method for investigating the relationships among the variables presented in this study (Chidlow, Ghauri, Yenyurt, & Cavusgil, 2015). Typically, student researchers do not have the financial and time resources to conduct a large-scale longitudinal independent study. The NSAL provided an extensive multistage, multiyear, and national sample of data that was readily available for addressing the research questions for this study. The independent variables in this study were marital status, parental status, employment status, age, years of education, household income, and number of children. These independent variables provided insight on demographic makeup of the respondents. These independent

variables were quantifiers for inclusion of respondents in the sample selection. The dependent variable was SWB. Details regarding the operationalization of the independent and dependent variables are presented in greater detail in Chapter 3.

### **Definitions of Terms**

*African American men:* Men who self-identified as having origins in any of the Black racial groups of African and being 18 years of age or older (Jackson et al., 2007; U.S. Census Bureau, 2011).

*African American women:* Women who self-identified as having origins in any of the Black racial groups of Africa and being 18 years of age or older (Jackson et al., 2007; U.S. Census Bureau, 2011).

*Black men:* See above definition for African American men.

*Black women:* See above definition for African American women.

*Childbearing age:* Women who self-report their age of 18 to 44 and therefore it is physically possible for them to have babies (U.S. Census Bureau, 2010).

*Ethnicity:* An individual's self-identification of their origin or descent, roots, heritage, or place where the individual or his/her parents or ancestors were born (U.S. Census Bureau, 2010).

*Gender:* Social and cultural constructs that are assigned to certain behaviors as either masculine or feminine or as being male or female in a historical and cultural context that may not necessarily correspond to an individual's sex (Miller, 2014).

*Health outcome:* The positive or negative effects on an individual's health in terms of physical, mental, and/or social well-being (Huber et al., 2011)

*Race:* Self-identification of an individual as belonging to a group with which the individual most closely identifies (U.S. Census Bureau, 2013).

*Roles:* The behavioral expectations and responsibilities of more than one social status or position (Linton, 1936).

*Role strain:* The stress created by the conflicting demands of a role (Goffman, 1990).

*Sex:* An individual's biological attributes (hormones, chromosomes, anatomy) as being male or female (Miller, 2014).

*Status:* A position to which a person is referred to in a social system (Linton, 1936).

*Subjective well-being (SWB):* An individual's self-evaluation of their lives in terms of self-reported happiness and overall life satisfaction (Deiner, 2011).

*Stress:* "A physical, chemical, or emotional factor that causes bodily or mental tension and may be a factor in disease causation" ("Stress," 2015).

*White American women:* Women who have self-identified as having origins in any of the original peoples of Europe, the Middle East, or North America and being 18 years of age or older (Jackson et al., 2007; U.S. Census Bureau, 2011b).

### **Assumptions**

There were several assumptions that were associated with this study. The first assumption was that secondary data could provide valid and reliable data regarding the variables of interest for this study. When using secondary data analysis, I used an original established or older data set to answer new research questions (Chidlow et al., 2015).

Secondary data analysis is based on the collected survey research results of the initial researcher (Chidlow et al., 2015; Frankfort-Nachmias & Nachmias, 2008). It is particularly useful for researchers who have limited time and resources to engage in extensive data collection (Dolata, Kilic, & Schwabe, 2015; Frankfort-Nachmias & Nachmias, 2008). With secondary data analysis of the NSAL, I assumed that the respondents answered all the questions truthfully and accurately. I also assumed that the respondents did not introduce bias into their responses and that the original researchers accurately coded all the data.

According Frankfort-Nachmias and Nachmias (2008), there are some additional assumptions of the advantages of secondary data analysis:

- Low-key and discreet; not bringing attention to research participants
- Allows the researcher access to a broader and expansive sample size
- Allows for a large-scale study on a small budget
- Primary research is very costly and a survey of a “national representative sample... can cost as much as \$300,000” (p. 278).

### **Scope/Delimitations**

This study was a sample of convenience using the archived data of the NSAL. The NSAL was conducted over a 2-year period and consisted of 6,082 face-to-face interviews with persons aged 18 or older (Jackson et al., 2007). The results were published in 2007 and of the 6,082 respondents, 3,570 were African Americans, 891 were non-Hispanic Whites, and 1,621 were Black respondents of Caribbean descent (Jackson et al., 2007). Given that the focus of the NSAL was on individuals of African descent, the

ability to generalize to the larger population of the United States of America and beyond its borders is limited. This study focused only on African American women aged 18 to 44. I included only the following variables in my data analysis: age, years of education, household income, number of children, marital status, parental status, and employment status.

### **Limitations**

There are several limitations that are associated with secondary data analysis (Frankfort-Nachmias & Nachmias, 2008). The NSAL was conducted from 2001 to 2003 and the results were published in 2007 (Jackson et al., 2007). The NSAL's published research time difference of 2007 with respect to the current study's results is an assumption of appropriateness (Denscombe, 2010). In using archival data, I was unable to revisit questions or information provided by the original respondents. The results of this study may not generalize to other ethnic or racial groups. Another limitation of archival data is that they may show missing data values (Chidlow et al., 2015). The appropriateness of the NSAL data for current application is another limitation. The NSAL was collected from 2001 to 2003 (Jackson et al., 2007). Archival data are collected during a different time frame for different questions and objectives (Denscombe, 2010). This study looked at the NSAL data in 2016, approximately 13 years after the data were collected.

### **Significance**

Results from this study may inform women of how multiple roles impact their overall well-being. This study could be used to encourage women to develop effective

coping skills and effective stress management strategies for balancing multiple roles. Human services professionals may use this information to guide treatment planning when gathering psychosocial and demographic information during intake and follow-up sessions. Information from this study may be used to promote and advocate community wellness in terms of

- learning events for coping skills and stress management;
- sharing strategies to monitor stress-related symptoms; and
- developing techniques and strategies for improving their SWB.

### **Summary**

In this quantitative secondary data analysis study, I explored the potential predictive relationship of employment status, parental status, marital status, age, years of education, household income, and number of children on the SWB of African American women. SWB is the dependent variable. In Chapter 1, I included the background, research questions and hypotheses, purpose of the study, significance, and nature of the study, definition of terms, scope/delimitations, limitations, and assumptions. In Chapter 2, I explored the literature as related to SWB, multiple roles, and the independent variables of the study.

## Chapter 2: Literature Review

### **Introduction**

The purpose of this chapter was to explore the literature as related to the independent and dependent variables of this study. The sections that were explored in this chapter are the literature search strategy and theoretical foundation, role strain theory (Goode, 1960). There was a literature review on the independent variables of the multiple roles of marital status, parental status, and employment status and associated health outcomes. There was a separate literature review on the independent variables of age, gender, years of education, and household income. There was a review of the literature on women, African American women, and health outcomes and stress. In addition, there was a review of the literature in terms of gender, race, and ethnicity health outcomes and SWB of African American women. Another section of literature was specific to the correlation of the dependent variable SWB to multiple role health outcomes and the independent demographic variables of this study.

### **Literature Search Strategy**

The literature in this review was collected from the Walden University Library using the EBSCO Host database. The literature review includes scholarly peer-reviewed articles published within the past 5 years and several decades. Articles dated beyond 5 years were obtained to provide historical context for the variables. Articles were obtained from Human Services, Counseling, Google Scholar, Psychology, and Social Work Databases: SocINDEX, PsycINFO, PsycARTICLES. The search included an extensive search of multiple combinations of the following terms: *subjective well-being and*

*happiness, subjective well-being and women, subjective well-being and age, subjective well-being and employment, subjective well-being and race/gender, happiness and employment, unemployment, employment status, household income, demographics, socio-demographic, years of education, high school degree, college degree, adults, number of children, gender, race, ethnicity, health status, health outcomes, parent, parenting, marriage, marital status, women, couples, couples with children, couples without children, single parent, single parent with children, single parent without children, women's health status, women's health outcomes, African American women and gender, African American woman and multiple roles, African American women and stress, African American women, Black women and health status, Black women and children, Black woman and parenting, Black women and gender differences, Black women and emotions, Black women and marriage, and Black women and well-being.*

The selection of these keywords was based on the independent and dependent variables in this study. The independent variables were marital status, employment status, parental status age, household income, years of education, and number of children. The dependent variable, SWB, was also searched in the databases. A literature search on role strain theory was also completed.

## **Theoretical Foundation**

### **Role Strain Theory**

Goode (1960) presented the term *role strain* to explain the strain associated with meeting the challenges of multiple role expectations. Role strain is the stress experienced with the inability to fulfill and manage the associated demands of a role and can be the

strain and pressure experienced when the demands of one role come into conflict with the demands of another role. According to Goode (1960), there are four sources of role strain:

- Role demands require a specific location and time to occur and even when the demands are not displeasing, compliance with role demand is most times not automatic.
- Persons occupy different role relationships that have different role demands and these demands challenge how the individual allocates resources to fulfill these demands.
- Each role relationship can require multiple responses and resources that may appear inconsistent but not contradictory to the norms associated with the role.
- With many role relationships and expectations attached to each relationship, an individual is unable to fully engage in one role relationship at the expense of not meeting the expected satisfaction demands of their role network.

Seiber (1974) further elaborated on role strain being one part of role conflict. Role conflict is the demands placed on an individual by their role network wherein some expectations will not be met at the expense of fulfilling expectations of competing demands (Merton, 1957; Seiber, 1974). Role strain is the pressure of the conflict with competing demands within one role and between roles (Seiber, 1974).

In some instances, the role expectations may be incompatible with the person's belief system and society's standards (Feldman, 2008). Role strain occurs when the role expectations are incompatible or incongruent with the individual's values, time

constraints, and/or resources (Feldman, 2008; Seiber, 1974). Role expectations can be self-imposed as influenced by societal norms of roles and responsibilities as associated with such factors as gender, race, and ethnicity (Feldman, 2008).

For example, the ambiguity about the role expectations of being a good parent, provider, and employee can create strain (Feldman, 2008, Merton, 1957). A parent that wants to provide for his or her child(ren) as well as spend one-on-one time but has a demanding work schedule may experience role strain. Similarly, when women attempt to navigate employer expectations outside of the home and parenting/discipline expectations within the home, role strain can occur.

According to Goode (1960), the individual ultimately makes attempts to allocate his or her energies, resources, and skills to satisfy the role expectations of his or her network in order to reduce the amount of stress. Goode (1960) stated that these are strategies used in managing role strain:

- *Role compartmentalization*: Meeting the location and context of a specific role crisis and laying aside any precrisis role obligations attached to different roles.
- *Role delegation*: To achieve compartmentalization, the individual may delegate conflicting role obligations to other members of his or her role system. For example, a mother may delegate housekeeping and nursing to her husband.
- *Role elimination*: Eliminating a role may prove challenging especially when an individual may be sole earner, parent, employee, or caretaker. However,

substituting a role via change in employment or obligations may reduce role strain.

- *Role extension/obstacles to expansion*: Multiplying the number of current roles to the point of being excused from an unpleasant role. Even if there is temporary reduction in role strain due to the extension, role strain may increase exponentially as role obligations go unmet with an ever increasing limitation of time and resources.
- *Barriers against intrusion*: Erecting barriers to block, decrease, or dissolve the demands of role relationships.

I discovered one study that showed the examination of role strain theory and the multiple roles of women, and this was not an ethnically diverse respondent pool. Arber, Gilbert, and Dale (1985) researched a national household representation of 14,000 households from 1975 to 1976 of mostly married women. Using role strain theory, the researchers found that women under 40 with children had incidences of poorer health outcomes in terms of physical ailments and negative feelings with the multiple roles of wife, employee, and mother. There seemed to be a connection between stressful emotions and physical illness. Women who self-reported chronic illness were likely to be unemployed. Single women had the lowest level of self-reported illness. Women who had dependent children (children under 16 years of age) and were employed full time reported higher levels of physical illness outcomes. This article gave a 30-year historical context that women occupying multiple roles influenced their health outcomes and that gender role obligations warranted that women put family before work (Arber et al.,

1985). The researchers examined the application of role strain to the multiple roles of women as well as provided the potential for application to other populations of women.

Nonetheless, role strain theory helps to explain how the multiple demands of a role can also interact with the interdemands of multiple roles in a person's social system (Goode, 1960). These demands can impact attempts to manage resources, time, and human energy (Goode, 1960). It is further suggested that, at any given time, a person will be unable to meet the expectations of even a single role (Goode, 1960). Additionally, there are two parts to role strain: role performance and emotional strain. Role performance is how a person is concerned about how capable he or she is in performing the role. Emotional strain is how he or she feels (care/concern/level of happiness) about meeting the role expectations: "felt difficulty in fulfilling role obligations" (Goode, 1960, p. 483).

Research on role strain theory and role conflict has minimally documented the demands of the multiple roles of women. Most of the research on role conflict has focused primarily on the work-life balance in terms of parent and full-time employee (Arber et al., 1985; Barnett & Baruch, 1985; Conway, Jones, & Speakes-Lewis, 2011; Davis, Sloan, & Tang, 2011; Spencer-Dawe, 2005; Stanfield, 1985). Other dated and limited studies showed how to reduce role strain by aligning one's values with the role expectations (Saint Jacques, 1995), having adequate social supports (Steiner, Silvia, Bigatti, & Hernandez, 2010), obtaining suitable training (Henning & Weidner, 2008), and being middle to upper class (Jackson, 1994). However, specific and recent research on the SWB of African American women as related to multiple roles in recent years seemed

limited. It seemed that recent and historical research specific to African American women and role strain theory as a framework of explanation was not abundant.

An additional reason to use role strain theory was that it provided a framework for a microlevel (i.e., parent, spouse, etc.) view of how women negotiate their roles, but it also provided a context for a macrolevel view with regards to social status. Status can be achieved or ascribed (Berger, Norman, Balkwell, & Smith, 1992). There is less flexibility in an ascribed social status versus an achieved social status. Examples of ascribed status are sex and gender (Ayman & Korabik, 2010). Achieved status is based on what is earned or achieved, such as being a manager versus just an employee (Ayman & Korabik, 2010). In terms of understanding roles and statuses, both ascribed and achieved status comes with additional role obligations that further compound role strain (stress).

The multiple roles of African American women affect their SWB (Dilworth-Anderson, Williams & Gibson, 2002; 2004; Wallace Williams, Dilworth-Anderson, & Goodwin, 2002; Rosario & DeReinzis, 2008). How African American women can be stereotypically viewed on a continuum of being strong and being a superwoman to being an angry black woman affects SWB and worth (Ashley, 2014). This intersection of societal views and perceptions about self have created a context of elevated stress factors, increased and disproportionate health risks, and limited access to physical and mental health resources for African American women (Beauboeuf-LaFontant, 2007, 2008, 2009; Geronimus et al., 2006).

Although research showed feelings of self-worth and belongingness were associated with multiple roles, these positive feelings are inundated with pressure to

uphold cultural and social norms to be strong, resilient, and not need help, which contributes to emotional strain (Rosario & DeReinzis, 2008 ) Therefore, role strain theory, for this study, appeared to be a plausible fit to explore the relationship of the multiple roles of employment status, marital status, and parental status on African American women's self-report of happiness (SWB).

### **Variables Related to Multiple Roles**

When women occupy multiple roles, the navigation of both individual and multiple roles can impact their SWB and physical health (Frech & Damaske, 2012). There are a number of roles to include marital, employment, and parental status. These represent roles that can separately and collectively impact women's stress levels, which can influence strain and resulting health outcomes of women (Mendias, Clark, Guevara & Svrcek, 2011). Other demographic variables such as age, household income, years of education, and number of children appear to influence the health outcomes and SWB of women (Roger et al., 2011). As well, the interplay of race, ethnicity, and gender influenced the health outcomes of women (Roger et al., 2011; Wanic & Kulik, 2011; Woods-Giscombé, 2010).

**Marital status.** Research has shown the protective self-reported health outcomes of the married are better than the never married, divorced, or widowed (Goldman, Korenman, & Weinstein, 1995; Hughes & Waite, 2009; Lillard & Waite, 1995; Rohrer, Bernard, Zhang, Rasmussen, & Woroncow, 2008; Thomas, 2013). The nonmarried seemed to be associated with higher mortality and chronic illness over time in comparison to the married (Goldman et al., 1995; Gordon & Rosenthal, 1995; Hughes &

Waite, 2009; Lillard & Waite 1995; Williams, 2003). The married seemed to show enhanced health outcomes with both chronic and acute health conditions such as cancer, cardiovascular disease, and the common cold (Cohen et al. 1998; Gordon & Rosenthal 1995, Hughes & Waite, 2009; Zheng & Thomas, 2013). Married women diagnosed with ovarian cancer, the leading cause of gynecological-related deaths, had increased health and longevity in comparison to disadvantaged survival rates of unmarried women when controlling for demographic factors and medical histories (Mahdi et al., 2013).

Whereas married men seemed to benefit more in terms of longevity than married women, the unmarried were more likely to die earlier than married when looking at the long-term effects of the marriage (Hughes & Waite, 2009; Lillard & Waite 1995; Ross, Mirowsky, & Goldstein, 1990; Zheng & Thomas, 2013). The unmarried also seem to have poorer mental health outcomes than both married men and women (Caputo & Simon, 2013; Hughes & Waite, 2009; Marks & Lambert, 1998; Mirowsky & Ross, 2003; Umberson et al., 1996; Waite & Hughes, 1999; Williams 2003; Zhen & Thomas, 2013).

Single, divorced, widowed and caretaking women who were of low socioeconomic disadvantage were more likely to be unemployed and have poorer mental health (Butterworth, Leach, Pirkis, & Kelaher, 2012; Montez, Martikainen, Remes, & Avendano, 2014; Pit & Byles, 2012). Some researchers note the protective emotional factors and psychosocial resources of marriage impact emotional resiliency and well-being (Caputo & Simon, 2013; Spence et al., 2011; Williams, 2003).

Zheng and Thomas (2013) concluded that married persons may be overestimating their self-reported health status, report poorer health outcomes when severe conditions

are present and that marriage may not necessarily be a protective factor at varying levels of health. Other researchers noted the length and history of a marriage may slow the acceleration of chronic diseases and death (Brockmann & Klein, 2004; Dupre and Meadows, 2007; Hughes & Waite, 2009; Mahdi et al., 2013; Zheng & Thomas, 2013). As the health benefits of marriage accumulate over time the strain and stress related symptoms can also increase (Zheng & Thomas, 2013).

**Employment status.** Multicultural studies have examined at the relationship between employment status and the health of women (Au, Hauck, & Hollingsworth, 2013; Coley & Lombardi, 2014; Mendias et al., 2011; Pit & Byles, 2012). Au et al. (2013) conducted a quantitative, longitudinal study on employed middle aged women. They found that women worked more than 40 hours per week (experienced more weight gain over time than women who were employed part-time. Employment outside the home and the increasing number of hours working outside of the home, add to role strain and stress in negotiating home life roles (Mendias et al., 2011).

Unemployed mothers reported stress and strain related negative mental health outcomes as associated with household and caregiving responsibilities (Frech & Damaske, 2012). Levels of stress with caregiving were associated with emotional and financial strain (Arnsberger, Lynch, & Li, 2012). As physical and emotional health ailments such as depression, anxiety, high blood pressure and back pain increased, employment decreased (Pit & Byles, 2012).

Women who work longer hours were more likely to have less time to prepare and cook meals at home and were more likely to choose more convenient, nutrient-low and

processed foods due to being overwhelmed by singular and multiple roles (Au, Hauck & Hollingsworth, 2013). As a consequence, high calorie and nutrient poor diets contribute to health related risks such as obesity and high blood pressure which are gateways to other inflammatory diseases (Au et al., 2013). Reduced sleep and lack of exercise were also contributing factors to obesity for employed women (Magee & Hale, 2012; Patel, Malhotra, White, Gottlieb, & Hu, 2006). Women self-reported that employment was related to increased weight gain and less weight loss as associated with time and scheduling constraints (Pelletier & Laska, 2012). Contrastingly, women who reported higher wages were correlated to increased psychological well-being and financial stability (Coley & Lombardi, 2014). However, results also revealed that increased work hours, family responsibilities and time impacted self-care practices indicated that women put their children and family needs above their needs (Coley & Lombardi, 2014).

**Parental status.** Parenting stress is made up of a broad spectrum of variables to include: the parent's self-reported distress (i.e. depression, anxiety), daily caregiving tasks, managing daily family routines and activities, access to parenting resources to raise the child, perceptions about the child's behavior and the parent-child relationship dynamics (Estes, et al., 2013; Deater-Deckard, 2004; Dunninga & Giallo, 2012; Walker, 2014). The greater the perception of parental role demands, the greater the level of parental stress and negative affect (Butcher, Wind & Bouma, 2008; Deater-Deckard, 2004; Dunninga & Giallo, 2012; Walker, 2014). Parental stress has been shown to impact parents' overall health, mental and emotional well-being (Estes, et al., 2013; Hayes & Watson, 2013; Leahy-Warren, McCarthy & Corcoran, 2012; Lee & Hsu, 2012). Cooklin,

Giallo, and Rose (2011) found that high levels of fatigue were associated with high levels of parental stress of children aged birth to 5. Single-parent mothers self-reported more depression and stressors than two-parent families (Barrett & Turner, 2006; Zeiders, Roosa, & Tein, 2011). A quantitative secondary analysis study revealed that stay-at-home moms reported negative mental and physical health outcomes as associated with the dual roles of household and caregiving duties (Frech & Damaske, 2012).

Mendias et al. (2011) conducted a qualitative study using a convenience sample to survey of 10 low income aged 25 to 45 who utilized services at a Texas community health clinic in the United States. Results revealed multiple themes related to women's physical health and self-care practices and self-reported well-being: physical activity was associated with improved mood and physical appearance (self-image), when mothers are not practicing self-care and are not health, then their families are not healthy ("nobody can survive without mom"), being healthy was associated with feeling good and energized, being unhealthy was associated with "feeling emotionally and physically down" and poorer health outcomes were associated to multiple stressors for women (Mendias, et al., 2011).

### **Literature Review on the Independent Variables**

**Age.** The age of the parent at first birth or becoming a parent impacted overall health leading up to and beyond age 40 (Frech & Damaske, 2012). Socioeconomic status (SES) is a social hierarchy status measure that combines an individual's education, income, resources and occupation (Glymour, Avendano, & Kawachi, 2014). Higher SES is associated with post-secondary and graduate-level educational achievements. There are

strong correlations between SES and health outcomes (Hatzenbuehler, Phelan, & Link, 2013; Lucas & Phelan, 2012; Read & Gorman, 2010).

**Household income and strain.** Finances present an added stressor, as women appear more likely to be in low-wage and inflexible jobs (Zabkiewicz, 2010). These resulting demands create role strain and increase symptoms of tiredness, sadness, fatigue, reduced sleep, weight gain, risk for cardiovascular disease, depression, sick absence from work and deterioration in overall health (Berkman et al. 2010; Ertel, Koenen & Berkman 2008; Frone, 2000; Frone, Russel, & Cooper 1997; Jansen et al. 2006; Väänänen et al. 2008; Väänänen et al. 2004). However, Higher SES individuals report advantageous health outcomes and greater optimism about their health versus lower SES individuals (Avale, 2014; Dowd & Zajacova, 2007; Melzer, Lan, Tom, Deeg, & Guralnik, 2004; Phelan & Link, 2015; Shea, 2014). Even when the demands of multiple roles create strain, it appears that individuals with higher SES have access to more resources and are able to ameliorate the potential negative health outcomes (Shea, 2014). Lastly, single-parent versus two-parent families reported greater financial strain, greater economic hardship and lower income (Avison, Ali & Walters, 2007; Zeiders, Roosa, & Tein, 2011). Married persons with more household resources and finances may be more optimistic about their health outcomes than those individuals with lesser resources (Zheng & Thomas, 2013).

**Years of education.** Education for the past 40 years appears to be the strongest predictor of women's work and family responsibilities (Cohen & Bianchi, 1999; Montez et al., 2014). Women whose highest education was high school or less were less likely to

be married and employed and to merge employment with childrearing than their more educated cohorts (England, Gornick, & Shafer 2012; Kalmijn 2013). The complexities of juggling childrearing and employment transcended years of education making women with lower education more vulnerable to limited job flexibility and lower wage-earning jobs in comparison to women with higher education (Baron, 2013; Williams & Boushey, 2010).

**Number of children.** In a study of 1,197 mothers who were between the ages of 18 and 50, who had children between the ages of 0 and 6, and who had between 1 and 10 total children, Dunninga and Giallo (2012) found that mothers with increased parenting responsibilities as associated with the age of the child and compounded by two or more children, reported more exhaustion, feelings of low parental efficacy and increased stress. Giallo, Rose and Vittorino (2011) concluded that mothers of children aged 0 to 5 with sleep difficulties were fatigued and reported depression, anxiety and stress. Women overall with larger families (3 or more children versus zero to 2 children) were significantly more likely to report problems with depression (Zabkiewicz, 2010).

**Race and multiple roles.** Geronimus ( et al., 2006) suggested the “weathering hypothesis” to describe the race-related health differences African American and White women. The hypothesis stated that due to social disparities and discriminations and the additional roles of African American women experience decreasing health earlier in life (Spence et al., 2011). Stroke, the most commonly associated health outcome linked to stress, is an accumulation of risk factors, such as lack of adequate sleep, obesity, being low-income, race, gender, obesity, high-blood pressure and physical inactivity (Ennen &

Beamon, 2012; Roger et al., 2011). African American women experience strokes earlier in life and are twice more likely to die from strokes than White women (Roger et al., 2011). Disadvantages associated with race can influence lower educational achievement and scarce resources to cope with stress (Keith & Brown, 2010).

**Gender and multiple roles.** The traditional views of gender stated that women are more interpersonally oriented and interdependent on relationships as a key component of their self-identification (Chodorow, 1978; Eagly, 1987; Giles-Sims & Chodorow, 1979; Gilligan, 1982). Women tend to absorb and take the responsibility of maintaining relationships, even at the expense of emotional distress and suppression (Anderson, Keltner, & John, 2003). Also, gender role obligations stated that women, both married and single, should put family before work and be the primary caregiver for children. These gender role obligations further exacerbated managing multiple roles (Arber et al., 1985; Frech & Damaske, 2012; Montez, Martikainen, Remes, & Avendano, 2014).

Women, according to traditional gender roles, should be relationally interdependent and rely on the behaviors and relationships with others to define self-concept (Chodorow, 1978; Eagly, 1987; Giles-Sims & Chodorow, 1979; Gilligan, 1982). This is not to suggest that men do not have stress or respond emotionally, but to note that women feel more responsible for the emotional tone of the relationship as well as responsible for operating within a constricted range of emotional expression to preserve the positive interpersonal relational dynamics (Anderson, Keltner & John, 2003; Nolen-Hoeksema & Jackson, 2001; Wanic & Kulik, 2011).

The cultural ideal for United States women tends to be to provide care to others (Charles, 2012; Treiber, Cancian, & Oliner 2000). This ideal showed that women and men may respond to stress differently. According to a study on women with breast cancer, the caregiver role identity threatened women's initiative to place their needs before others (Sulik, 2007). Women's stress tended to be associated with family and things that harmfully affect others while men's stress tended to be associated with employment and things that harmfully affect them personally (Caputo & Simon, 2013; Simon & Lively, 2010; Simon & Nath, 2004). Epidemiological studies showed that when women experience life stressors they internalized their problems with resulting symptoms of depression (Charles, 2012; Wanic & Kulik, 2011; Williams 2003).

Researchers suggested that women's inter-relational interdependence has increased risk for physiological responses to conflict, distress and stress and results in susceptibility to negative health consequences such as stroke, cardiovascular disease, immune-suppression, slowed wound healing and increased secretion of cortisol-the stress hormone (Ennen & Beamon, 2012; Reeves et al., 2008; Roger et al., 2011; Wanic & Kulik, 2011; Williams, 2003). Increased cortisol release and emotion suppression amplify stress and stress is a common factor associated with stroke prevalence among women (Guiraud, Touzé, Rouillon, Godefroy, & Mas, 2012; Reeves et al., 2008; Roger et al., 2011; Wanic & Kulik, 2011; Williams, 2003).

Other studies indicated that multiple roles, strain and conflict are apparent in the role a caregiver. Chronic stress and caregiver strain increased the risk of stroke (Aliot et al., 2010; Guirard et al., 2012; Roger et al., 2011; World Health Organization, 2009).

Internationally, stroke deaths accounted for 11% in men versus 8.4 % in women (World Heart Federation, 2015; World Health Organization, 2009). The 9.1 billion global deaths among women are attributed to heart disease and stroke which is more than the cumulative total of deaths from HIV/AIDs, malaria, all cancers and tuberculosis (World Heart Federation, 2015). Sixty percent of the 160,000 stroke deaths in the United States were among women (Roger et al., 2011).

**Dependent Variable: SWB**

SWB is the over-arching concept or umbrella that includes these components: positive affect, negative affect and overall life satisfaction. (SWB) defines contentment in life satisfaction via an affective and cognitive assessment of emotions, feelings and perceptions of one's life (Deiner, 2000; Deiner & Lucas, 2000). SWB is considered as part of the "good life" or happiness (Diener, Oishi & Lucas, 2003). Deiner (2000) found that when individuals are happy, individuals have increased overall well-being. In a meta-analysis of longitudinal studies, Lyubomirsky, King, and Diener (2005) discovered an effect size of .18 that indicated variations in the health outcomes for low versus high SWB of study respondents. Also, in an examination of 49 studies testing the predictive relationship of long-term well-being on low versus high SWB of individuals, found an effect size of .14 (Howell, Kern, & Lyubomirsky, 2007).

Additionally, individuals who reported low levels of SWB have higher mortality than individuals who reported higher levels of SWB (Caunt et al., 2013). Good health is likely a foundation and consequence of high SWB (Diener & Biswas-Diener, 2002; Diener & Chan, 2010).

**Marital status and SWB.** Researchers showed that married couples and couples who live in a romantic partnership, on average, reported higher levels of SWB (i.e. are happier) than persons who are unmarried, widowed, separated or divorced (Campos, 2013; Diener, Scollon, & Lucas, 2003; Frey & Stutzer, 2002; Hoorn, 2007; Lee & Waite, 2010; Lucas et al., 2003; Mastekaasa, 1992, 1994). In a survey of life satisfaction and happiness, single mothers seemed to be less happy than any other group of women (Ifcher, 2011; Ifcher & Zarghamee, 2011; Herbst, 2012). Marital satisfaction and appreciation of housework duties of married women may also impact higher levels of SWB (Campos et al., 2013; Dew & Wilcox, 2010; Lee & Waite, 2010).

**Employment status and SWB.** Multiple studies have shown a relationship between employment status and SWB (Bradshaw, 2014; Kobau, Snizek, Zack, Lucas, & Burns, 2010; Luhmann, Hofmann, Eid & Lucas, 2012; Pavlova & Silbereisen, 2012; Stam et al., 2015). Paid employment seemed important in having access to resources that impact life satisfaction and influence life purpose for some individuals (Feldman, 2006; Veenhoven, 2011). SWB extends beyond gaining income (Bradshaw, 2014; Kahneman & Deaton, 2010; Myers & Diener, 1995).

McKee-Ryan, Song, Wanberg and Kinicki (2005) conducted a meta-analysis of over 100 studies on employment status and well-being and concluded that well-being difference between the employed and unemployed was 0.57 standard deviations and dropped at least 0.38 deviations when an individual became unemployed. Other mediating factors such as unemployment benefits (Nordenmark, Strandh & Layte, 2006), duration of unemployment (Clark et al., 2001; Creed, Lehmann, & Hood, 2009) and the

employment rate (Clark, 2003; Powdthavee, 2007) explained the low SWB of the unemployed (Powdthavee & Stutzer, 2014). Unemployment negatively impacted SWB and this seems to be consistent over time (Lucas, Clark, Georgellis & Diener, 2004, 2003; Straume & Vittersø, 2012; Winkelmann, 2008).

**Parental status and SWB.** Researchers found no significant difference in SWB of parents with children or those parents without children (Evenson & Simon, 2005; McLanahan & Adams, 1987; Nomaguchi & Milkie, 2003). Hansen's (2012) comprehensive longitudinal review of family related literature concluded that childless parents had more positive reports of SWB. Also scholars noted both the negative and positive impact of parenting on the SWB of parents (Bird, 1997; Evenson & Simon, 2005; Nomaguchi & Milkie, 2003, 2014; McLanahan & Adams, 1987; Twenge, Campbell, & Foster, 2003; Vanassche, Swicegood, & Matthijs, 2013). Married parents seem to have higher SWB than single parents (Myrskyl & Margolis, 2012) and this difference may be correlated to higher stress levels, limited access to financial resources and time constraints (Nomaguchi & Milkie, 2014; Vanassche et al., 2013).

**Age and SWB.** Age showed an inconsistent small variance in SWB (Diener & Biswas-Diener, 2002) and a "u-shaped" association which seemed to indicate that both youth and seniors have higher SWB (Blanchflower & Oswald, 2008; Hoorn, 2007; Vera-Villaruel et al., 2012). These middle-aged adults tended to have mortgages, children in college and emerging health problems (Chmiel, Brunner, Martin, & Schalke, 2012).

**Household income and SWB.** Researchers have shown that SWB was positively correlated with income (Cramm et al. 2010; Fahey et al., 2005; Keck & Krause, 2007,

Vera-Villarroel et al., 2012). In a secondary data analysis, individuals' perceptions and expectations associated with high income were correlated to high SWB (Diener, Kahneman, & Helliwell, 2010; Guven & Sørensen, 2012). Kanhem and Deaton (2010) found that income up to \$75,000, SWB was positively associated whereas after \$75,000 there was no correlation with more happiness. Multiple regression studies reported a positive but fairly limited relationship between total income and SWB (Cramm et al., 2010; Diener & Biswas-Diener, 2002; Stutzer & Frey, 2010).

**Years of education and SWB.** Researchers concluded that the relationship between years of education and SWB are mixed. Some studies have revealed positive correlations between the two variables (Diener, Scollon, & Lucas, 2003; Frey & Stutzer, 2003; Galinha & Pais-Ribeiro, 2011), and others have shown negative correlations (Stutzer & Frey, 2010; Vera-Villarroel et al., 2012). These causal effects associated with more years of education correlated to individual self-reports of happiness (Chen, 2012). Controlling for other socio-demographic variables (employment status, neighborhood, age, gender, marital status), years of education is associated with higher levels of happiness (Chen, 2012).

**Number of children and SWB.** Past researchers have shown different results on the relationship between parental well-being as related to the number of children (Alesina, Di Tella & MacCulloch, 2004; Frey, 2006, Nauck, 2007; Nomaguchi, Milkie & Bianchi, 2005). Nauck (2007) concluded that the number of children does not significantly influence the well-being of parents, in that one or even two children provide

as much emotional rewards. Nomaguchi et al. (2005) found no relationship between parenthood and well-being.

It was suggested that as parents convert from no children to one child it yields more emotional advantages versus a conversion from one child to two or more children (Nomaguchi & Brown, 2011). There was a negative effect for the first child, but no other overall well-being for each additional child (Stanci, 2012). However, as the number of children increased, the disbursement of the financial and psychological resources of parents was influenced (Nauck, 2007). Using longitudinal data to examine fertility behavior, Myrskylä and Margolis (2014) found that increased happiness was positively associated with parents of two children and there was no significant increase or change in happiness with the third child.

**Race and SWB.** Earlier researchers on race and SWB indicated that Blacks and Whites reported comparable levels of happiness and that culture, discrimination and perceptions of inequality were correlated to both high and low levels of SWB versus the sole variable of race/ethnicity (Diener, Sandvik, Seidlitz, & Diener, 1993; Myers & Diener, 1995; Robins & Regier, 1991; Tov & Diener, 2009). With regard to global SWB (i.e., overall life satisfaction), there were no racial differences (Saunders, Gregory-Bass, & Krause, 2013). In terms of ethnic identity, self-esteem and sense of belongingness, race was positively correlated to well-being among predominantly African American and Black immigrant participants (Cross Jr., Grant & Ventuneac, 2012).

### **Summary and Conclusions**

This chapter presented a comprehensive overview of the literature as related to socio-demographic variables, multiple roles and SWB to include marital, parental and employment statuses and age, gender, number of children, race/ethnicity, years of education and household income. Role strain theory was explained as the theoretical foundation and context for the intersection of the independent and dependent variables. Role strain theory provided the framework to explore the stress of multiple roles specific to African American women. There seemed to be limited research looking at African American women and how multiple roles potentially influence their happiness or SWB. Chapter 3 will include an explanation of the research methodology.

## Chapter 3: Research Method

### **Introduction**

The purpose of this quantitative secondary analysis of archival data study was to investigate the predictive relationship between the independent and dependent variables. The independent variables were marital status, parental status, employment status, age, years of education, household income, and number of children. The dependent variable was SWB. This chapter outlines the research design, methodology, recruitment and participation of respondents, data collection procedure, access to data, operationalization of variables, data analysis plan, threats to validity, and ethical considerations. The chapter ends with a summary.

### **Research Design and Rationale**

This study was a quantitative, non-experimental study using archival data. The data set was the NSAL (Jackson et al., 2007). I conducted a secondary data analysis study using multiple regression analysis to assess whether the independent variables had any impact on the occurrence of the dependent variable. Variables cannot be manipulated using archival data, so the non-experimental design was most appropriate for this study (Campbell & Stanley, 1963; Vartanian, 2010).

By using secondary data, I accessed the results of the NSAL that was conducted over the course of 2 years (Jackson et al., 2007). The NSAL is a national representative sample of over 6,000 African American respondents. According to Vartanian (2011), a large nationally representative sample size of the target population also increases external validity. Secondary data analysis occurs when the data collected from an initial

researcher are collected and analyzed by another researcher for a different purpose (Dolata et al., 2015; Field, 2013; Vartanian, 2010). The cost, time, manpower, budget, and incidental occurrences of conducting a national sample level representative study can be expensive and well beyond the financial resources of a student researcher (de Leeuw & de Heer, 2002; Frankfort-Nachmias & Nachmias, 2008; Groves & Couper, 1998; Rudestam & Newton, 2015; Vartanian, 2010). For example, the 2010 U.S. Census cost \$13 billion (U. S. Government Accountability Office, 2011). Therefore, secondary data analysis was most appropriate for this study.

Additionally, the survey design is the most frequently used type of quantitative research design because there are multiple ways to administer a survey (Fowler, 2013; Vartanian, 2010). With a survey, the researcher chooses a sample of the population and that sample is administered the survey via online, mail, face-to-face, or a hybrid of the three methods of delivery (Chidlow et al., 2015). The survey can measure multiple variables and is used for a wide variety of populations (Fowler, 2013; Vartanian, 2010). Although there are some weaknesses to the survey design, such as biased responder rates or cultural and conceptual confusion about meanings associated with scale questions, the NSAL was feasible for my inquiry. The NSAL data were collected from a national multistage probability sampling method (Jackson et al., 2007). The NSAL addressed cultural bias, responder bias, coder bias, threats to validity, and ethical considerations by matching the race/ethnicity of the interviewers and respondents (Jackson et al., 2007).

## **Methodology**

### **Population**

The NSAL conducted 6,082 face-to-face interviews with male and female respondents aged 18 and older who lived in the United States (Jackson et al., 2007). The survey represented respondents from 48 different states that were both urban and rural. Of the total 6,082 respondents, 3,570 were African Americans, 891 were non-Hispanic Whites, and 1,621 were Black respondents of Caribbean descent (Jackson et al., 2007). For this study, I examined African American women aged 18 to 44. According to the U.S. Census Bureau (2010), the childbearing age of women is 18 to 44.

### **Sampling and Sampling Procedure**

Jackson et al. (2007) used a four-stage national multiple stage probability sampling method. The NSAL, when interviewing respondents, ensured that the ethnicity matched that of the interviewees (Jackson, et al., 2007). The national multistage probability sampling ( $N = 6,082$ ) was comprised of African-American ( $N = 3,570$ ) and Afro-Caribbean ( $N = 1,623$ ) immigrant and second and older generation populations and non-Hispanic Whites ( $N = 1,006$ ) (Jackson et al., 2007). Multiple stage probability sampling or stratified sampling provides an adequate representation of the population to include different groups (Frankfort-Nachmias & Nachmias, 2008). Including different groups through stratified sampling can increase the representativeness of the sample (Frankfort-Nachmias & Nachmias, 2008).

For this study, I used multiple regression analysis. To determine the sample size, Field (2013) stated that each predictor variable should have 10 or 15 cases each. Agresti

(2007) asserted 10 cases per predictor variable. The NSAL data set had 6,082 respondents. There were seven predictor (independent) variables, which meant that roughly 70 to 105 cases were needed to achieve a minimum sample size for the data analysis. This computation is oversimplified, but sample size is also dependent upon how strong the measurable relationship is (Field, 2013). According to G\*Power 3.1, the sample size would be ( $n = 103$ ) with seven predictors, 80% power, effect size of (.15), and alpha of .05 (Buchner, Erdfelder, Faul, & Lang, 2009; Faul, Erdfelder, Lang, & Buchner, 2013). I only sampled African American female respondents aged 18 to 44 and only the independent and dependent variables identified in this study. This was the resulting sample for this archival study.

### **Instrumentation**

The NSAL was conducted from February 2001 to March 2003 by the Program for Research on Black Americans (PRBA), which was a part of the Research Center for Group Dynamics, Institute for Social Research, at the University of Michigan (Jackson et al., 2007). The NSAL was one of three nationally representative surveys sponsored by the National Institute of Mental Health's initiative, Collaborative Psychiatric Epidemiological Surveys (CPES). A goal of the NSAL was to provide comprehensive information on the lives of Black Americans and Americans of African descent (Jackson et al., 2007). Another goal of the NSAL was to enhance and improve community and nationwide initiatives to address the quality of life of persons of African descent (Jackson et al., 2007). To date, the NSAL was the most exhaustive and inclusive study that has

examined the economic, cultural, psychological, political, mental health, and mental health disorders of African Americans (Jackson et al., 2007).

The researchers predominantly used a computer assisted face-to-face survey interview instrument and about 14% of the interviews were completed over the phone (Jackson et al., 2007). The NSAL explored a wide range of social, economic, emotional, and health issues of African Americans residing in the rural and urban areas of the United States (Jackson et al., 2007).

For this study, no specific instrument was used. All data were archival and held by the Interuniversity Consortium for Political and Social Research (ICPSR). There was no personally identifying information associated with the data. Only data on African American females aged 18 to 44 and the independent and dependent variables of this study was accessed. All data was imported into SPSS for analysis.

### **Recruitment and Participation**

The NSAL included U.S. adults age 18 and older residing in 11,634 eligible households in the United States. Respondents were identified from 26,495 randomly sampled addresses. The NSAL interviews captured only respondents who could complete the interview in English. The African American sample of the NSAL was the core sample within the study and consisted of 64 primary sampling units, which was a nationally representative sample of households in the 48 states having the same boundaries (Jackson et al., 2007). These African American respondents did not identify ties with Caribbean ancestry.

Based on the eligible households, potential respondents were screened and called by telephone. It took an interviewer approximately 7.4 attempts to complete an interview. These 7.4 attempted interviews may have consisted of both face-to-face and telephone interviewing (Pennell et al., 2004). Verbal consent was required before interviewing began and any recorded interview required a written consent from respondents (Pennell et al., 2004). To increase response rates, CPES used a variety of strategies: detailed and distinctive mailings, respondent monetary incentives, offering modified shortened interview protocol, and personalized, hand-written letters, to name a few (Pennell et al., 2004). I only pulled respondent information from the ICPSR NSAL database specific to my study variables.

#### **Data Collection for the NSAL**

Over 900 interviewers were hired and trained to administer the core CPES questionnaire. The CPES questionnaire was primarily based on the World Health Organization's extended version of the Composite International Diagnostic Interview (CIDI) developed for the World Mental Health (WMH) Survey Initiative-the WMH-CIDI (Kessler & Üstün, 2004). The WHI-CIDI was done through a computer assisted interview process (Pennell et al., 2004). Potential interviewers called a toll-free number to express interest in becoming a part of the interviewer staff. Potential interviewers went through face-to-face interviews with the CPES staff. Criminal background checks were conducted on all interviewers (Pennell et al., 2004). Once hired, interviewers were monetarily compensated by the hour and received travel and lodging costs, incentives, and

reimbursements. The data collection consisted of racially and ethnically matched face-to-face interviews that lasted approximately 2 hours and 20 minutes.

The NSAL assessed for the presence of mental illness as well as any related impairments by a series of questions specific to the parameters for mental illness (Jackson et al., 2007). Parameters for mental illness were defined by the *Diagnostic and Statistical Manual of Mental Disorders* (4<sup>th</sup> ed.; *DSM-IV*; American Psychiatric Association, 1994). There were 1,535 item questions on the NSAL questionnaire, which gathered information in these sections: household listing, religion, neighborhood, cognitive functioning, psychological resources and physical health; employment and workplace; family and friends; screening for *DSM-IV* psychiatric disorders; substance and tobacco use; pharmacological epidemiology, family history, *DSM-IV* psychiatric disorders and mental health (19 sections varying in length), mental health services, use of help resources; group and personal identity discrimination; personal data, politics and detention; and technology and roots (Jackson et al., 2007). For this archival study, I looked at these items from the database: parental status, marital status, employment status, age, years of education, number of children, household income, positive attitude, happiness, and life satisfaction.

### **Access to NSAL Data**

I went to the website of the National Institute of Mental Health CPES at <http://www.icpsr.umich.edu/icpsrweb/CPES>. The NSAL data set was in the public domain. A data agreement was not required. The ICPSR help desk set up my student access account to download the NSAL data set. I downloaded the data set after I received

IRB approval through Walden University. The IRB approval number is 03-02-16-0183353.

### **Operationalization of Variables**

This study had seven independent variable that were matched to the same variables from the NSAL (Jackson et al., 2007). The coding and level of measurement for each variable is noted below:

Marital status was a nominal variable coded in three categories: (1) married/cohabitating, (2) divorced/separated/widowed, and (3) never married (NSAL, 2007). Marital status was dummy coded into two variables: married and unmarried. If (1) married/cohabitating, then the dummy variables are (1) married and (0) unmarried. If (2) divorced/separated/widowed and (3) never married, then the dummy variables are (0) married (1) unmarried.

Employment status was a nominal variable coded in three categories: (1) employed, (2) unemployed, and (3) not in labor force. Employment was dummy coded into two variables: employed and unemployed. If (1) employed, then the dummy variable is (1) employed (0) unemployed. If (2) unemployed and (3) not in labor force, then the dummy variables are (0) employed (1) unemployed.

Parental status was a nominal variable. The NSAL question was as follows: “Are you a parent”? It is coded as (1) Yes- I am a parent or (5) No- I am not a parent. Parental status was dummy coded into two variables: yes and no. If (1) Yes-I am a parent, then the dummy variables are (1) yes and (0) no.

Age was a ratio variable. The NSAL asked respondents, “How old are you?” Respondents were from 18 to 94 years of age. For this study, women of childbearing age 18 to 44 were a part of the sample (U.S. Census Bureau, 2010; Ventura, Curtin, Abma & Henshaw, 2012). For comparison of frequencies, Age was re-coded into four age groups (1) 18 to 24, (2) 25 to 31, (3) 32 to 38, (4) 39 to 44.

**Household Income** was a ratio variable measured in dollars from \$0 to \$200,000.

**Years of Education** was a ratio variable. It was measured as the total number of years of completed education. The data was coded in one of the following four categories: (1) 0 to 11 years, (2) 12 years, (3) 13 to 15 years, and (4) greater than or equal to 16 years.

**Number of Children in Household** was a ratio variable. It was coded by the total number of children in the respondent’s household as: (0) 0, (1) 1, (2) 2, (3) 3, (4) 4 or more.

**SWB** was ordinal variable measured by three different NSAL variables (Jackson et al., 2007). The three NSAL variables were combined to create a three-item index of SWB. The three NSAL variables were re-coded as Positive Attitude, Happiness and Life Satisfaction. The NSAL variables were reverse coded to so that High SWB was associated with higher Likert scale numbers and Low SWB was associated with lower Likert scale numbers.

(Positive Attitude) NSAL Question C1F: I take a positive (good) attitude toward myself. Do you (1) strongly agree, (2) somewhat agree, (3) somewhat disagree or (4)

strongly disagree? I re-coded the variables for High SWB for (4) strongly agree and (3) somewhat agree and Low SWB for (2) somewhat disagree or (1) strongly disagree.

(Happiness) NSAL Question E25: Taking all things together, how would you say things are these days -- would you say you are (1) very happy, (2) pretty happy, (3) not too happy these days (4) (if vol) not happy at all? I re-coded the variables as High SWB (4) very happy and (3) pretty happy and Low SWB as (2) not too happy these days and (1) (if vol) not happy at all.

(Life Satisfaction) NSAL Question A1: In general how satisfied are you with your life as a whole these days? Would you say that you are (1) very satisfied, (2) somewhat satisfied, (3) somewhat dissatisfied, or (4) very dissatisfied? I re-coded the variables as High SWB (4) very satisfied and (3) somewhat satisfied and Low SWB for (2) somewhat dissatisfied and (1) very dissatisfied.

### **Data Analysis Plan**

The IRB approval number was 03-02-16-0183353. The NSAL data were transferred into a password-protected file. The independent and dependent variables were imported into SPSS. All data were analyzed using the IBM Statistical Package for Social Sciences (SPSS) Standard Grad Pack Version 23. Descriptive statistics was done on the sample of respondents that met this study's variables. Multiple regression analysis was done to address the following research questions and associated hypotheses:

Research Question 1: To what degree do the multiple roles of marital status, employment status and parental status predict the SWB of African American women?

Null Hypothesis 1: The multiple roles of marital status, employment status and parental status are not statistically significant predictors of the SWB of African American women.

Alternative Hypothesis 1: The multiple roles of marital status, employment status and parental status are statistically significant predictors of the SWB of African American women.

Research Question 2: To what degree does age, household income, years of education and number of children predict the SWB of African American women?

Null Hypothesis 2: Age, household income, years of education and number of children are statistically significant predictors of the SWB of African American women.

Alternative Hypothesis 2: Age, household income, years of education and number of children are not statistically significant predictors of the SWB of African American women.

Research Question 1 and Research Question 2 included the seven independent variables and one dependent variable coded as: marital status ( $X_1$ ), employment status ( $X_2$ ), parental status ( $X_3$ ), age ( $X_4$ ), household income ( $X_5$ ), years of education ( $X_6$ ), and number of children ( $X_7$ ) and the dependent variable is SWB ( $Y$ ). When entering the variables into SPSS, there were two steps. The first step was to enter the independent variables from Research Question 1 into the regression equation as marital status ( $X_1$ ), employment status ( $X_2$ ), parental status ( $X_3$ ). Then the R-Square was calculated. Then, the remaining independent variables were entered from Research Question 2: age ( $X_4$ ), household income ( $X_5$ ), years of education ( $X_6$ ), and number of children ( $X_7$ ). R-Square

was calculated again to examine any increases. The second step examined all regression coefficients. Regression coefficients measured the effect of the independent variables on the dependent variable across all other levels of the independent variables (Agresti, 2007). Each individual regression coefficient was examined for increases (Alexopoulos, 2010; Field, 2013). Any increases were examined for significance.

For the multiple linear regression analysis, the F-test was used to assess whether the regression model predicts the dependent variable (Alexopoulos, 2010; Cohen, Cohen, West & Aiken, 2013). R-squared was the multiple correlation coefficient of determination (Nimon & Oswald, 2013). R-squared determined how much variance in the dependent variable was explained by the independent variables (Nimon & Oswald, 2013). The t-test assessed the significance of each predictor variable in predicting the dependent variables (Field, 2013). Beta coefficients determined if there was any one unit change in each independent variable (Cohen et al., 2013). For every significant predictor and for every one unit increase in the predictor, the dependent variable would have decreased or increased by the number of unstandardized beta coefficients (Alexopoulos, 2010; Field, 2013; Nimon & Oswald, 2013; Tabachnick & Fidell, 2007).

Before subjecting the data to the regression analysis, I examined the three assumptions of multiple linear regression analysis: linearity, homoscedasticity, and the absence of multicollinearity (Field, 2013). A linear relationship must exist between the dependent variable and each of the independent variables individually and collectively (Field, 2013). The variables had homoscedasticity which means no significant outliers and the variances across all the independent variables are the same. The variables must

have little or no multicollinearity where the independent variables are not independent from each other (Field, 2013; Konasani & Kadre, 2015; Lawal, 2014). I used a scatter plot to examine the assumptions related to linearity and homoscedasticity (Field, 2013). The absence of multicollinearity was assessed by using Variance Inflation Factors (VIF). VIF's over 10 would have implied multicollinearity (Field, 2013; Konasani & Kadre, 2015; Lawal, 2014).

Another consideration for the data analysis plan was Cronbach's alpha (Field, 2013). Cronbach's alpha determined the internal consistency of scale items to examine the scale's reliability (Alexopoulos, 2010; Field, 2013). Cronbach's alpha is a coefficient of reliability and ranges between 0 and 1 (Alexopoulos, 2010). It is stated that the closer the coefficient is to 1.0, the greater is the internal consistency of the items in the scale. Nunnally (1978) suggested an acceptable alpha of (.70). When you increase the number of scale items, Cronbach's alpha is increased (Alexopoulos, 2010). However, a high correlation does not necessarily mean high internal consistency (Field, 2010). So, if the correlation is low, then alpha will be low (Field, 2010). Moreover, for this study, SWB contained only three scale items (q1, q2, q3). The reliability command in SPSS was used as follows to determine the Cronbach's alpha: RELIABILITY/VARIABLES = q1 q2 q3. To interpret the SPSS output, George and Mallery (2003) provided the following rules of thumb: “\_ > .9 (*Excellent*), \_ > .8 (*Good*), \_ > .7 (*Acceptable*), \_ > .6 (*Questionable*), \_ > .5 (*Poor*), and \_ < .5 (*Unacceptable*)” (p. 231). Even though (0.8) alpha was used for this study, it did not mean that the SWB scale is unidimensional.

### **Threats to Validity**

In using archival data, there was the potential threat of experimenter bias because there was a plethora of information beyond what was needed for the current research study (Field, 2013). Researcher bias has the potential to infer the selection of only variables to support the researcher's hypotheses. However, since this was an archival data research, I only selected the variables of interest to this study (Field, 2013). External validity, internal validity, construct validity and conclusion validity were other threats to the validity of this study.

#### **External Validity**

A primary premise of external validity is whether the results of the study can be applied to other groups (Campbell & Stanley, 1963; Vartanian, 2010; Frankfort-Nachmias & Nachmias, 2008). The NSAL collected data specific African American population of respondents who were aged 18 and older and who lived in both urban and rural areas of the United States. Application of the secondary data analysis results to other ethnic or racial groups is cautioned since there may be different characteristics from the participants in the original study (Campbell & Stanley, 1963; Vartanian, 2010; Frankfort-Nachmias & Nachmias, 2008, Jackson et al., 2007). Power analysis was included in the data analysis plan to determine the effect size of the independent variables and predictability of the independent variables on the dependent variable (Field, 2013) to address external validity. Threats to external validity for this archival study were specificity of variables and multiple treatment interference (Campbell & Stanley, 1963). Specificity of variables is when the specific variables of a study are tested under specific

conditions and this may limit generalizability (Chidlow et al., 2015). Therefore, pulling the variables for this study from the original study may impact generalizability as the original study variables were tested under different conditions.

### **Internal Validity**

Internal validity is an attempt to understand if there is a cause and effect between the independent and dependent variable (Chidlow et al., 2015). This is an archival data study and is therefore a non-experimental design. Respondents were not randomly assigned to pre- or post-test groups so there is little risk of selection interaction effect and participant bias (Jackson et al., 2007). However, there were instrumentation threats with this study. I relied on archival data that has been collected for a purpose different than what the plan is this study. I assumed that the NSAL records were accurate, reliable and contained the information of interest for this study (Jackson et al., 2007). Because these were archival data, I had no way of statistically assessing the accuracy or validity of the information and relied on the original research (Campbell & Stanley, 1963; Frankfort-Nachmias & Nachmias, 2008)

### **Construct Validity**

Construct validity is how well variables in a study measures what the study states what the variables measures (Campbell & Stanley, 1963). Based on the operationalization of those variables is this generalizable (Campbell & Stanley, 1963). Furthermore it is concerned with how well the constructs measure what they say the measure (Campbell & Stanley, 1963). SWB in this study was an index of three different NSAL variables. Higher values were associated with High SWB and lower values were associated with

Low SWB. The 3 different variables were reversed coded. I made attempts to enhance the construct validity by clearly spelling out how this was done in the operationalization of SWB on Positive Attitude, General Happiness and Life Satisfaction.

### **Statistical Conclusion Validity**

Statistical conclusion validity is whether the conclusion about the relationship among the variables are reasonable and accurate (Campbell & Stanley, 1963; Frankfort-Nachmias & Nachmias, 2008). In regression analysis, the degrees to which the assumptions are met affect the statistical conclusion validity of the results (Campbell & Stanley, 1963). Threats to conclusion validity are making errors about a relationship among the variables observed (Campbell & Stanley, 1963). Strategies to improve conclusion validity are to potentially increase the sample size, raise the statistical power to a value greater than 0.8 or increase the probability of making a Type I error (Campbell & Stanley, 1963; Frankfort-Nachmias & Nachmias, 2008).

### **Ethical Considerations**

There are several interdependent ethical areas that needed be considered when conducting research. They were the potential for harm, confidentiality and anonymity, informed consent, voluntary participation and communicating the results. The NSAL had to ensure full disclosure of potential outcomes so that no harm or negative consequences would occur to the participants (Jackson et al., 2007). The NSAL also had to obtain multiple IRB approvals in multiple states during the data collection. Also, to protect respondent anonymity, particular variables were re-coded and categorized (Pennell et al., 2004). NSAL respondents were adults 18 years of age and older who were informed that

they could decline and/or stop the interview at any given time (Jackson et al., 2007).

While the respondents will not know the future research use of the archival data, the NSAL has not released any personal identifiable data to the public. Therefore, there is minimal respondent risk involved. This study relied on the accuracy and reliability of the original study's reporting measures, procedures and protocols.

With IRB Approval number 03-02-16-0183353, I downloaded the public access NSAL data set to a password-protected home computer. The computer had restricted access only by me. With the collection, analysis and interpretation of the data, all information will be kept for a minimum of 5 years in password protected files in the researchers' home. After 5 years, the data and any additional information associated with the study will be deleted from the researcher's computer using a Window's Desk Cleanup Utility that permanently removes associated system and temporary files from the Desktop and Recycle Bin.

With regard to dissemination of the research findings, there was minimal threat as I had no access to the personal identifying information of the respondents. The results of the secondary data analysis will be displayed in tables and in written form in Chapter 4. To the best of my knowledge and ability, all information is reported and no false information was given to support the study's hypotheses. Additionally, all findings are available in the ProQuest database for other scholars, researchers and practitioners.

### **Summary**

This chapter provided a description of the research methodology for using multiple regression analysis with the NSAL (Jackson et al., 2007) for this study. Chapter

3 included an introduction, research design and rationale, recruitment and respondent participation, interviewer recruitment, data collection procedure, how to access the data via the ICPSR, data analysis plan, threats to validity, and ethical considerations to respondents. This chapter included a restatement and listing of the research questions and null/alternative hypotheses, the assumptions of the statistics, and a sample size/power analysis justification. Chapter 4 will show the results of the descriptive and multiple regression analysis of the independent and dependent variables using SPSS.

## Chapter 4: Results

### Introduction

Chapter 4 presents a description of how the secondary data from the NSAL (Jackson et al., 2007) were cleaned and recoded. Using SPSS software package version 23, I conducted a descriptive statistical analysis including mean, standard deviation, frequency and percent. SPSS was used to test the three assumptions of linear multiple regression. Then, SPSS was used to conduct linear multiple regression analysis to examine the research questions and hypotheses. This chapter includes a write-up of the data output results using tables and figures. This study included seven independent variables and a three-item index for the dependent variable, SWB. The research questions and hypotheses are presented below:

Research Question 1: To what degree do the multiple roles of marital status, employment status and parental status predict the SWB of African American women?

Null Hypothesis 1: The multiple roles of marital status, employment status and parental status are not statistically significant predictors of the SWB of African American women.

Alternative Hypothesis 1: The multiple roles of marital status, employment status and parental status are statistically significant predictors of the SWB of African American women.

Research Question 2: To what degree does age, household income, years of education and number of children predict the SWB of African American women?

Null Hypothesis 2: Age, household income, years of education and number of children are not statistically significant predictors of the SWB of African American women.

Alternative Hypothesis 2: Age, household income, years of education and number of children are statistically significant predictors of the SWB of African American women.

## **Data Collection**

### **Sampling Procedure**

From the NSAL ( $n = 6,082$ ), in SPSS, I only selected cases that were female respondents aged 18 to 44 ( $n = 2,222$ ). Then, I selected only African American females aged 18 to 44. Of the 2,222 cases, I only selected individuals who were in the African American and Afro-Caribbean groups ( $n = 1,921$ ). From the sample of 1,921, I ran descriptive statistics on all independent variables and each of the three items of the dependent variable. These three variables had missing values: (C27D1) Parental Status ( $n = 42$ ), (C1F) Positive Attitude ( $n = 42$ ), and (E25) Happiness ( $n = 2$ ). As a result, African American respondents aged 18 to 44 who had responded to all the variables constituted the sample size. The valid sample size was  $n = 1,877$  with no missing values. Table 1 shows the descriptive statistics and Table 2 shows the frequency and percentages of the variables. The average age of respondents was 31.69 ( $SD = 7.543$ ). The average household income was \$31,447.31 ( $SD = \$27,777.989$ ) and only 1% ( $n = 18$ ) of respondents' household income was \$150,000 to \$200,000. The statistical average number of children was .95 ( $SD = 1.093$ ). The average SWB Index was 7.8940 ( $SD =$

1.06802). In terms of role status of the respondents, 67.2 % ( $n = 1,262$ ) were unmarried, 74.6 ( $n = 1,400$ ) were unemployed, and 77.1 % ( $n = 1,447$ ) were parents. A little over 36% of respondents had 12 years of education, and 16.2% had greater than or equal to 16 years of education.

Table 1

*Descriptive Statistics of Variables*

	Mean	Median	Mode	Standard Deviation
Marital Status	.33	.00	0	.469
Employment Status	.75	1.00	1	.435
Parental Status	.77	1.00	1	.420
Age	31.69	32	31	7.543
Household Income	31447.31	25000.00	30000	27777.989
Years of Education	2.42	2.00	2	.972
Number of Children	.95	1.00	0	1.093
SWB Index	7.8940	8.0000	8.00	1.06802

Table 2

*Frequency and Percentages of Variables*

		Frequency	Percent
Marital Status	Unmarried	1262	67.2
	Married	615	32.8
Employment Status	Unemployed	477	25.4
	Employed	1400	74.6
Parental Status	No	430	22.9
	Yes	1447	77.1
Age	18-24	414	22.1
	25-31	500	26.6
	32-38	514	27.4
	39-44	449	23.9
Household Income	\$0-\$14,999	510	27.2
	\$15,000-\$24,999	415	22.1
	\$25,000-\$49,999	595	31.7
	\$50,000-\$99,999	306	16.3
	\$100,000-\$149,999	33	1.8
	\$150,000-\$200,000	18	1.0
Years of Education	0-11 years	353	18.8
	12 years	682	36.3
	13-15 years	537	28.6
	(>)or (=) 16 years	305	16.2
Number of Children	0	861	45.9
	1	501	26.7
	2	325	17.3
	3	130	6.9
	4 or More	60	3.2
SWB Index	3.00	2	.1
	4.00	9	.5
	5.00	40	2.1
	6.00	129	6.9
	7.00	343	18.3
	8.00	844	45.0
	9.00	479	25.5
	10.00	9	.5
	11.00	17	.9
	12.00	5	.3

## Results

Linearity was assessed by partial regression plots and a plot of studentized residuals against the predictive values. There was independence of residuals, as assessed by a Durbin-Watson statistic of 2.002 ( $p < .001$ ). There was homoscedasticity, as assessed by visual inspection of a plot of studentized residuals against the predictive values. There was no evidence of multicollinearity, as evaluated by tolerance values greater than 0.1. I looked at standardized residuals for this study ( $n = 1,877$ ) and it was reasonable to expect 94 cases (5%) would have standardized residuals outside of  $\pm 2$ . This study had 86 (5%) that were outside  $\pm 2.5$ . Twenty-one of 86 cases (1%) had absolute values above 2.5, so the sample appeared to conform to a fairly accurate model. The Cook's distance values were well below 1 (Lin, Foster, & Ungar, 2011; Mertler & Vanetta, 2005; Osborne & Overbay, 2004). The SWB index consisted of three items: Positive Attitude, Happiness, and Life Satisfaction. The SWB index had a Cronbach's alpha of 0.589 (Cronbach, 1951). George and Mallery (2003) noted that Cronbach's alpha of  $< .5$  is *poor*.

### Testing Statistical Significance

A multiple regression analysis was run to predict SWB from marital status, parental status, employment status, age, household income, years of education, and number of children. Table 3 displays the regression coefficients and standard errors. Model 1 included marital status, parental status, and employment status. The multiple regression Model 1 statistically significantly predicted SWB,  $F(3, 1873) = 12.271, p < .0005$ .  $R^2$  for Model 1 was 1.9% with an adjusted  $R^2$  of 1.8%, a small size affect

according to Cohen (1988). The multiple regression Model 2 entered all seven independent variables. Model 2 statistically significantly predicted SWB,  $F(7, 1869) = 8.358, p < .0005$ .  $R^2$  for Model 2 was 3% with an adjusted  $R^2$  of 2.7%, a small size effect according to Cohen (1988). Collectively, the seven independent variables added statistically significant to the prediction,  $p < .05$ . Individually these four variables were not statistically significant predictors: parental status ( $p = .271$ ), age ( $p = .295$ ), years of education ( $p = .660$ ), and number of children ( $p = .817$ ).

Table 3

*Summary of Multiple Regression Analysis*

	B	SE B	$\beta$
Step 1			
Constant	7.75	0.07	
Marital Status	0.21	0.05	.09*
Employment Status	0.23	0.06	.10*
Parental Status	-0.12	0.06	.05*
Step 2			
Constant	7.78	0.12	
Marital Status	0.13	0.06	.06*
Employment Status	0.18	0.06	.07*
Parental Status	-0.08	0.07	-.03
Age	-0.004	0.004	-.03
Household Income	4.597E-6	0.00	.12*
Years of Education	-0.01	0.03	-.01
Number of Children	0.01	0.03	.01

Note.  $R^2 = .02$  for Step 1,  $\Delta R^2 = .03$  for Step 2 ( $p < .05$ )

### Conclusion

This chapter presented the results from the study. The demographic information indicated that the sample of aged 18 to 44 African American females were predominantly unmarried, employed, and parents with an average income over \$31,000. Most of the sample had 12 years of education and nearly half (45%) had no children. Because this study was specific to a within group comparison of African American female respondents

within an archival data analysis, caution should be used when generalizing these results to other populations.

A number of tests were performed on the data to ensure that they met the assumptions of multiple regression analysis. Frequencies and percentages were examined and indicated no missing records ( $n = 1,877$ ). A histogram, normal p-p plot, and scatter plot were examined for outliers. Casewise diagnostic and residual statistics were also observed and no more than 1% of the cases had absolute values above 2.5. The Pearson Correlation test revealed that no independent variables had correlations greater than 0.7. Results from the logistic regression led to me rejecting the null hypotheses:

(RQ1) Null Hypothesis 1: The multiple roles of marital status, employment status and parental status are not statistically significant predictors of the SWB of African American women.

(RQ2) Null Hypothesis 2: Age, household income, years of education and number of children are not statistically significant predictors of the SWB of African American women.

However,  $R^2$  for Model 1 and Model 2 explained 1.9% and 3 %, respectively, of the variability in SWB. Further analysis revealed that separately in Model 2, four of the independent variables (parental status, age, years of education, and number of children) were not statistically significant predictors of SWB.

Chapter 5 will present an explanation of the results from Chapter 4, the interpretation of the findings, limitations, and the implications for practice and the potential for positive social change. Chapter 5 will also include a brief overview of the

corresponding literature, the statement of the problem, the research methodology, and findings of Chapter 4.

## Chapter 5: Discussion, Conclusions, and Recommendations

### **Introduction**

The purpose of this quantitative, correlational study was to assess the predictive relationships between marital status, employment status, parental status, age, household income, years of education, and number of children on SWB. Results from the linear regression analysis indicated that marital status, employment status, and parental status were significant predictors of SWB (Model 1). Although collectively, when age, household income, and years of education were added, there was a significant increase in the prediction of SWB (Model 2), none of these four variables were individually significant. This chapter discusses the interpretations of the findings, the limitations of the study, recommendations, and implications of the study.

### **Interpretation of the Findings**

There were three main findings from this study. The first was that in Model 1, marital status, employment status, and parental status were statistically significant predictors of SWB. The regression coefficients for marital status, employment status, and parental status seemed to suggest that respondents who were parents experienced a decrease in SWB. These findings seem to support some of the existing literature that married couples on average reported higher SWB than the unmarried (Campos, 2013; Ifcher, 2011; Ifcher & Zarghamee, 2011). Researchers noted that individuals who were employed tended to have access to additional resources that contributed to overall life satisfaction and increased SWB (Bradshaw, 2014; Pavlova & Silbereisen; Stam et al., 2015). Other researchers stated that over time, unemployment negatively influenced

SWB (Straume & Vittersø, 2012). Single parents reported lower SWB than married parents, which may be associated with demands of time and financial resources (Myrskyl & Margolis, 2012; Nomguchi & Milkie, 2014). Findings of this study suggested that African American women who were married, employed parents had increases in SWB. This finding adds to the literature on the multiple roles of women.

The second significant finding from this study was entering all variables into Model 2. Marital status, employment status, parental status, age, household income, years of education, and number of children statistically significantly predicted SWB. This finding fits within existing literature that suggested the collective impact of roles and demographic variables on levels of SWB (Carr, 2013; Cramm et al., 2010; Diener, Ng, et al., 2010; Mendias et al., 2011). Middle-aged individuals tended to have additional responsibilities associated with housing, college tuition of children, and the beginnings of health challenges (Chmiel et al., 2012). More household income impacted individuals' perceptions of access to resources and was associated with high SWB (Deiner, Kahneman, & Helliwell, 2010; Guven & Sørensen, 2012).

However, Kahneman and Deaton (2010) found that when households earned beyond \$75,000, there was no correlation to SWB. Being unemployed was negatively correlated with SWB (Stutzer & Frey, 2010). Chen (2012) reported that the causal effects of life choices and additional years of education were correlated to individual reports of SWB. Couples who had no children compared to couples who had children seemed to have lower SWB (Nomaguchi & Brown, 2011; Stanci, 2012). In terms of balancing obligations outside of the home, researchers suggested that childless women had higher

SWB and women with children had lower SWB (Kroll, 2011). Adding more children seemed to impact both financial and psychological resources of the parents, which may be associated with varying levels of SWB (Nauck, 2007; Stanci, 2012). Therefore, the results of this study further suggested that the SWB of African American women was higher when they were married, parents, and employed with average household incomes of slightly over \$30,000. This further adds to the literature on the linkage between multiple roles and demographic variables on SWB.

The third significant finding from this study was that individually, parental status, age, years of education, and number of children were not statistically significant predictors of SWB. This may suggest that collectively demographic variables influence SWB versus each demographic variable having a separate influence on SWB. SES may help to explain the collective influence of demographic variables. SES is a social status measure that takes into account age, education, income, resources, and occupation (Glymour et al., 2014). Higher SES seemed to be correlated to higher educational achievements and these achievements were associated with more opportunities for access to higher income and resources (Read & Gorman, 2010). Also, there were associated correlations between SES and health outcomes and well-being (Hatzenbuehler et al., 2013; Lucas & Phelan, 2012).

Some researchers stated that being a parent was associated with parental stress and it was linked to the responsibilities and demands associated with this role (Hansen, 2012; Walker, 2014). Parental stress was likely correlated to lower SWB (Hansen, 2012). Overall, it appeared that parents without children had associated positive accounts of

SWB (Hansen, 2012). Stanci (2012) reported that there was no impact on the SWB of parents when adding an additional child after the first child. Dunninga and Giallo (2012) stated that as the number of children increased from two or more, mothers reported increased parental stress and exhaustion. This stress was compounded by the additional parental demands associated with children getting older (Zabkiewicz, 2010). Women who had families with three or more children versus women with zero to two children were more likely to report depressive symptoms (Zabkiewicz, 2010). Four of this study's variables were not individually statistically significant. This outcome seemed to further add to the literature that demographic variables have an overall collective impact.

Role strain theory was the theoretical foundation for this study. Role strain is the stress that individuals experience with the challenges of meeting the responsibilities of roles in their lives (Goode, 1960). Additionally, role strain theory explained that multiple requirements of a role can have interactional impact on multiple roles in a person's social structure (Goode, 1960). These interactional and multiple demands of roles could influence efforts to negotiate human energy, time, and resources (Goode, 1960). Model 1 of marital status, employment status, and parental status may help to explain the potential interactional effects of roles on resources as stated by Goode (1960).

Moreover, Goode (1960) noted that emotional strain was an individual's subjective feelings of happiness as associated with meeting role obligations. The negative coefficient of parental status may be explained by the strain created due to the uncertainty of the expectations associated with being a parent and employee (Feldman, 2008; Merton, 1957). Accordingly, parents desired to spend time with their child(ren) as well as perform

well under the standards of being an employee all the while balancing the time and resources needed to do both (Feldman, 2008; Merton, 1957).

Furthermore, Model 2 suggested that collectively the study's seven independent variables were statistically significant predictors of SWB. Goode (1960) noted that multiple roles are impacted by the multiple responsibilities associated with the roles. As a result, an individual's attempts to allocate resources and time to one role may be at the expense of the associated obligations of another role (Goode, 1960; Sieber, 1974). Role strain and conflict research has examined the balance of parent and employee and how this negotiation influences an individual's well-being (Arber et al., 1985; Barnett & Baruch, 1985; Conway et al., 2011; Davis et al., 2011; Spencer-Dawe, 2005).

Other studies suggested that role strain could be reduced by lining up personal values with the associated role expectations (Saint Jacques, 1995), enhancing individual support systems (Steiner et al., 2010), acquiring additional training associated with roles (Henning & Weidner, 2008) and increasing household income (Chan, 2012).

Nonetheless, role strain can be exacerbated by societal demands associated with both ascribed and achieved statuses (Ayman & Korabik, 2010). Ascribed status is gender and sex and achieved status is earned achievement (Ayman & Korabik, 2010). With these statuses come additional expected societal demands on the associated role obligations, which may further compound stress (role strain). Adding the associated societal gender and race expectations and at times stereotypical expectations further compounds levels of strain for African American women (Ashley, 2014).

### **Limitations of the Study**

The NSAL's data collection specifically recruited respondents who were African American and of African descent (Jackson et al., 2007). This study was a secondary archival data analysis and there were several associated limitations and threats to validity. In this study, I only examined African American women who were ages 18 to 44. This resulted in a valid sample size of 1,877. The generalizability of this study to other racial and ethnic groups is limited (external validity).

The NSAL gathered data from 2001 to 2003 and published the results in 2007 (Jackson et al., 2007). In this study, I was looking at results that were collected approximately 13 years ago. This assumed appropriateness of the results (Denscombe, 2010). I was unable to get additional information provided by the 2001 to 2003 respondents. I had to rely on the data as presented (internal validity). The resulting sample size ( $n = 1,877$ ) addressed the limitation of statistical conclusion validity by greatly increasing the sample size from the proposed sample size of 10 to 15 cases per variable (Campbell & Stanley, 1963).

The last limitation was the three-item SWB scale, which had a low alpha and low correlation. Construct validity is concerned with how well the construct measures what it says it measures (Campbell & Stanley, 1963). The three items were selected based on the three components of SWB found in the literature on positive affect, low negative affect, and overall general happiness (Deiner & Chan, 2011). The potential to increase the number of items in the scale may or may not have yielded a higher internal consistency.

### **Recommendations**

This study provided some evidence that the multiple roles of African American women were statistically significant predictors of SWB. Results from the data analysis revealed that multiple roles predicted a unit increase in SWB. Results from the data analysis revealed that all seven independent variables predicted a unit increase in SWB. The SWB Index in this study included three items. A future study may increase the number of index items to support a higher level of internal consistency. Additional independent variables associated with mental and physical health reports could be included in future research. Other research methodologies may be used to examine this population.

A qualitative study focusing on narratives and themes may foster a deeper understanding of the nuances and co-occurring factors that influence women's SWB in terms of attitudes, perceptions, beliefs, and family dynamics. Additional studies may look at the longitudinal impact of SWB on this population to observe trends. This study was based on data collected in 2003. Perhaps more current survey data may reveal additional information or trends that were not seen nearly 13 years ago. Lastly, these results may prompt helping professionals to gather additional demographic information on the women they serve. Helping professionals could use this information to guide treatment. Helping professionals could educate women on the potential interplay of emotional wellness on their health outcomes.

### **Implications**

African American women unequally account for more chronic physical and mental health ailments and disorders than other races and men (American Heart Association, 2009; Janssen et al., 2012; National Center for Health Statistics, 2008; Neal-Barnett, 2010; Roger et al., 2011). Given the intersection of race, gender, and class of African American women, their experiences are distinctive from White men, White women, and African American men (Howard-Hamilton, 2004; Neal-Barnett, 2010). Results from this study may support health initiatives geared toward educating African American women about their risk factors as well as informing helping professionals on the cultural intricacies of this population. These results may be disseminated to communities and conferences geared toward helping professionals and community members.

Policy makers and practitioners may be more informed in their practice and decision-making when creating interventions to address the disproportionate representation of chronic illnesses among African American women. Results may inform helping professions on the academic training and education of scholars and practitioners. Other implications for social change may be to foster dialogue about roles, gender, race, and SWB and encouraging women to think about how balancing multiple roles influences their level of SWB.

### **Conclusions**

The purpose of this quantitative, correlational archival study was to assess the predictive relationship of seven independent variables on the SWB of African American

women ages 18 to 44. The seven independent variables were marital status, employment status, parental status, age, household income, years of education and number of children. Using multiple linear regression analysis, marital status, employment status and parental status were entered into Model 1. Model 1 revealed that these three statuses were statistically significant predictors of SWB. Model 2 revealed that the seven independent variables were statistically significant predictors of SWB. However, individually, parental status, age, years of education and number of children were not statistically significant predictors of SWB. Role strain theory was used as the theoretical foundation.

The work-life balance has continued to be a challenge for women as society has become more advanced (Institute for Women's Policy Research, 2009; United States Bureau of Labor Statistics, 2011). Women continue to shoulder the volume of parenting and household responsibilities (Thurston et al., 2011; Wong & Almeida 2013). Gender-role expectations may further compound this responsibility dynamic (Dako-Gyeke & Ibrahim, 2012). Bearing the bulk of responsibilities, women have been viewed as the keepers of relationships (Frech & Damaske, 2012). Women are typically more interdependent and inter-relational (Chodorow, 1978; Eagly, 1987; Giles-Sims & Chodorow, 1979; Gilligan, 1982). This relational style is a component of self-identification and may influence women to take responsibility for maintaining and sustaining relationships (Frech & Damaske, 2012; Montez, Martikainen, Remes & Avendano, 2014).

Still, women are expected to foster cohesion within and among their social systems (Beauboeuf-LaFontant, 2007; 2008; 2009; Johnson & Loscocco, 2014). At times,

the likelihood of saying no to certain role expectations are suppressed (Charles, 2012). Suppression leads to stress and stress leads to the inability to live up to the expectations of others (Charles, 2012; Treiber, Cancian & Oliner 2000; Wanic & Kulik, 2011). The inability to meet and assert these limitations is hinged on the fear of losing the relationship (Wanick & Kulik, 2011). Navigating roles, suppressing feelings and managing stress culminate into role strain (Goode, 1960; Johnson & Loscocco, 2014).

While juggling multiple roles, women are negotiating the expectations of these roles within their social system (Woods-Giscombé, 2010; Pearson, 2008; Wong & Almeida, 2013). Role strain theory helped to explain multiple roles and the multiple negotiations of these system dynamics and the resulting stress and strain (Goode, 1960). Coping with multiple roles has been correlated with stress induced health outcomes (Kasimatis & Guastell, 2012; Sumra & Schillaci, 2015). Repeated exposure to stress can lead to immunity system suppression, high blood pressure and other inflammation related-diseases (Janssen et al., 2012; Low et al., 2010). Therefore, women's repeated suppression of their needs at the expense of meeting role demands had impact on their level of SWB (Deiner & Chan, 2011; Janssen et al., 2012; Kok et al., 2013; Sulik, 2007; Low et al., 2010). Internalizing stress was associated with depressive symptoms, increased risk of stroke, reduced sleep, negative cardiovascular outcomes, elevated cortisol levels, poorer eating habits and obesity (Aliot, et al., 2010; Au, Hauck & Hollingsworth, 2013; Charles, 2012; Ennen & Beamon, 2012; Guirard, et al., 2012; Roger et al., 2011; Wanic & Kulik, 2011; Williams 2003). These associated health

outcomes for African American women are heightened (Ennen & Beamon, 2012; Roger et al., 2011).

As well, researchers stated that African American women's level of happiness is impacted by multiple role expectations, societal perceptions, stereotypes and the context of racism (Dilworth-Anderson et al., 2002, 2004; Wallace Williams et al., 2004; Rosario & DeReinzis, 2008). It has been researched that African American women are viewed as being indestructible and resilient (Ashley, 2014). These divergent perceptions subsequently influenced SWB and self-worth (Ashley, 2014). African American women's self-worth and self-perceptions created a heightened stress context and was manifested in negative health outcomes that were highly more elevated than other ethnic and racial groups (Aliot, Breithardt, Brugada, et al., 2010; American Heart Association, 2009; Au, Hauck & Hollingsworth, 2013; Beauboeuf-LaFontant, 2007, 2008, 2009; Geronimus et al., 2006). This compound effect is referred to as the "weathering hypothesis" (Geronimus, et al., 2006; Spence et al., 2011). The "weathering hypothesis" stated that race-related discrepancies in health outcomes are associated with social and racial disparities for African American women (Geronimus, et al., 2006; Spence et al., 2011).

Overall, the results from this study revealed that parental status, marital status, employment status, age, household income, years of education and number of children were statistically significant predictors of SWB in African American women. Helping professionals and leaders may consider these results in developing and/or enhancing policies and procedures around work-life balance, total wellness, well-being and self-

care. Enhancing wellness initiatives may contribute to reduced negative health outcomes.

Finally, helping professionals may support dialogue around negotiating gender role expectations and demands.

## References

- Agresti, A. (2007). *An introduction to categorical data analysis* (2<sup>nd</sup> ed.). Hoboken, NJ: John Wiley & Sons. doi:10.1002/0470114754
- Arber, S., Gilbert, G. N., & Dale, A. (1985). Paid employment and women's health: a benefit or a source of role strain? *Sociology of Health and Illness*, 7(3), 375–400. doi:10.1111/1467-9566.ep10834014
- Adams, P. F, Kirzinger, W. K. & Martinez, M. (2013). Summary health statistics for the U.S. population: National Health Interview Survey, 2012. *Vital Health Statistics*, 10(259), 1-95.
- Ainsworth, B. E., Wilcox, S, Thompson, W.W., Richter, D. L., Henderson, K. A. (2003). Personal, social, and physical correlates of physical activity in African American women. *American Journal of Preventive Medicine*. 25, 23–29. doi:10.1016/s0749-3797(03)00161-2
- Aggarwal, A., Monsivais, P., & Drewnowski, A. (2012). Nutrient intakes linked to better health outcomes are associated with higher diet costs in the US. *PloS one*, 7(5), e37533. doi:10.1371/journal.pone.0037533
- Alexopoulos, E. C. (2010). Introduction to multivariate regression analysis. *Hippokratia*, 14(Suppl 1), 23–28.
- Aliot, E., Breithardt, G., Brugada, J., Camm, J., Lip, G. Y. H., Vardas, P. E., & Wagner, M. (2010). An international survey of physician and patient understanding, perception, and attitudes to atrial fibrillation and its contribution to cardiovascular disease morbidity and mortality. *Europace*, 12(5), 626–633.

doi:10.1093/europace/euq109. doi:10.1093/europace/euq109

Allison, P. (1999) *Multiple regression: A primer*. Thousand Oaks, CA: Pine Forge Press.

American Heart Association. (2009). *Heart disease and stroke statistics—2009 update*.

Dallas, TX: Author.

American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4<sup>th</sup> ed.). Washington, DC: Author.

Anderson, C., Keltner, D., & John, O. P. (2003). Emotional convergence between people over time. *Journal of Personality and Social Psychology*, 84(5), 1054–1068.

doi:10.1037/0022-3514.84.5.1054

Ashley, W. (2014). The angry black woman: The impact of pejorative stereotypes on psychotherapy with black women. *Social work in public health*, 29(1), 27-34.

doi:10.1080/19371918.2011.619449

Au, N., Hauck, K., & Hollingsworth, B. (2013). Employment, work hours and weight gain among middle-aged women. *International Journal of Obesity*, 37(5), 718–724. doi:10.1038/ijo.2012.92

doi:10.1038/ijo.2012.92

Avale, J. (2014). *SES and health: Income the weapon against cardiovascular heart disease* (Senior thesis). Retrieved from

<http://economics.uakron.edu/SeniorProjects/2014/AvaleSeniorProjectJQ.pdf>

Avison, W.R., Ali, J., & Walters, D. (2007). Family structure, stress, and psychological distress: A demonstration of the impact of differential exposure. *Journal of Health and Social Behavior*, 48, 301–317. doi:10.1177/002214650704800307

doi:10.1177/002214650704800307

Ayman, R., & Korabik, K. (2010). Leadership: Why gender and culture matter. *American*

*Psychologist*, 65, 157–170. doi:10.1037/a0018806

Barnett, R. C. (2004). Women and multiple roles: Myths and reality. *Harvard Review*

*Psychiatry*, 12(3), 158-164. doi:10.1080/10673220490472418

Baron, J. N. (2013). Arne L. Kalleberg: Good Jobs, Bad Jobs: The Rise of Polarized and Precarious Employment Systems in the United States, 1970s to 2000s.

*Administrative Science Quarterly*, 58(1), 149–151.

doi:10.1177/0001839212472660

Barrett, A. E. (2000). Marital trajectories and mental health. *Journal of Health and Social*

*Behavior*, 41(4), 451. doi:10.2307/2676297

Barrett, A.E., & Turner, R.J. (2006). Family structure and substance use problems in adolescence and early adulthood: Examining explanations for relationship.

*Addiction*, 101, 109–120. doi:10.1111/j.1360-0443.2005.01296.x

Barnett, R. & Baruch, G. (1985). Women's Involvement in Multiple Roles and

Psychological Distress." *Journal of Personality and Social Psychology*, 49,135-145. doi:10.1037/0022-3514.49.1.135

Berger, J., Norman, R. Z., Balkwell, J. W., & Smith, R. F. (1992). Status inconsistency in task situations: A test of four status processing principles. *American Sociological*

*Review*, 57, 843–855. doi:10.2307/2096127

Beauboeuf-Lafontant, T. (2007). You have to show strength: An exploration of gender, race, and depression. *Gender & Society*, 21, 28–51.

doi:10.1177/0891243206294108

Beauboeuf-LaFontant, T. (2008). Listening past the lies that make us sick: A voice-

centered analysis of strength and depression among Black women. *Qualitative Sociology*, 31(3), 91–406. doi:10.1007/s11133-008-9113-1

Beauboeuf-Lafontant, T. (2009). *Behind the mask of the strong Black woman: Voice and the embodiment of a costly performance*. Philadelphia, PA: Temple University Press.

Berkman, L. F. , Buxton, O. , Ertel, K. A., & Okechukwu, C. (2010). Managers' practices related to work-family balance predict employee cardiovascular risk and sleep duration in extended-care settings. *Journal of Occupational Health Psychology*, 15, 316–329. doi:10.1037/a0019721

Bianchi, S., Milkie, M., Sayer, L., & Robinson, J. (2000). Is anyone doing the housework? Trends in the gender division of household labor. *Social Forces*, 79, 191–228. doi:10.2307/2675569

Bird, C. E. (1997). Gender differences in the social and economic burden of parenting and psychological distress. *Journal of Marriage and the Family*, 59, 809–823. doi:10.2307/353784

Black, A. R., & Giscombé, C. W. (2009). *Strong Black woman script (SBW-S): The influence of strength embodiment on African American maternal health*. Paper presented at the 137th Annual Meeting and Expo of the American Public Health Association, Philadelphia, PA.

Blanchflower, D. G., & Oswald, A. J. (2008). Is well-being U-shaped over the life cycle? *Social Science and Medicine*, 66(8), 1733–1749. doi:10.1016/j.socscimed.2008.01.030

- Bradshaw, J. (2014). Subjective well-being and social policy: Can nations make their children happier? *Child Indicator Research*, 8(1), 227–241. doi:10.1007/s12187-014-9283-1
- Brockmann, H., & Klein, T. (2004). Love and death in Germany: The marital biography and its effect on mortality. *Journal of Marriage and Family*, 66(3), 567–581. doi:10.1111/j.0022-2445.2004.00038.x
- Buchner, A., Erdfelder, E., Faul, F., & Lang, A. (2009). G\*Power (Version 3.1.2) [Computer program]. Retrieved May 30, 2015 from <http://www.softpedia.com/get/Science-CAD/G-Power.shtml>
- Burns, R., & Machin, M. (2010). Identifying gender differences in the independent effects of personality and psychological well-being on two broad affect components of subjective well-being. *Personality and Individual Differences*, 48(22), 4822–4827. doi:10.1016/j.paid.2009.08.007
- Butcher, P. R., Wind, T., & Bouma, A. (2008). Parenting stress in mothers and fathers of a child with a hemiparesis: sources of stress, intervening factors and long-term expressions of stress. *Child Care Health Development*, 34(4), 530–541. doi:10.1111/j.1365-2214.2008.00842.x
- Butterworth, P., Leach, L. S., Pirkis, J., & Kelaher, M. (2012). Poor mental health influences risk and duration of unemployment: A prospective study. *Social Psychiatry and Psychiatric Epidemiology*, 47(6), 1013–1021. doi:10.1007/s00127-011-0409-1
- Campbell, D. T., & Stanley, J. C. (1963). *Experimental and quasi-experimental designs*

*for research*. Boston, MA: Houghton Mifflin.

- Campos, B., Wang, S., Plaksina, T., Repetti, R. L., Schoebi, D., Ochs, E., & Beck, M. E. (2013). Positive and negative emotion in the daily life of dual-earner couples with children. *Journal of Family Psychology, 27*(1), 76–85.  
<http://doi.org/10.1037/a0031413>
- Caprara, G. V. & Steca, P. (2005). Affective and social self-regulatory efficacy beliefs as determinants of positive thinking and happiness. *European Psychologist, 10*, 275–286. doi:10.1027/1016-9040.10.4.275
- Caputo, J., & Simon, R. W. (2013). Physical limitation and emotional well-being: Gender and marital status variations. *Journal of Health and Social Behavior, 54*(2), 241–257. doi:10.1177/0022146513484766
- Carr, M. D. (2013). Local area inequality and worker well-being. *Review of Social Economy, 71*(1), 44–64. doi.org/10.1080/00346764.2012.707399
- Caunt, B. S., Franklin, J., Brodaty, N. E., & Brodaty, H. (2013). Exploring the causes of subjective well-being: A content analysis of peoples' recipes for long-term happiness. *Journal of Happiness Studies, 14*(2), 475–499.  
[doi.org/10.1007/s10902-012-9339-1](http://doi.org/10.1007/s10902-012-9339-1)
- Charles, M. (2012). Cecilia L. Ridgeway: Framed by gender: How gender inequality persists in the modern world. *European Sociological Review, 29*(2), 408–410.  
 doi:10.1093/esr/jcs074
- Chandiramani, K. (2014). Locus of control and subjective wellbeing: Examining gender differences. *Indian Journal of Health and Wellbeing, 5*(3), 325.

- Chang, W.-C. (2011). Identity, gender, and subjective well-being. *Review of Social Economy*, 69(1), 97–121. doi:10.1080/00346760902756495
- Chen, W. (2012). How education enhances happiness: Comparison of mediating factors in four East Asian countries. *Social Indicators Research*, 106(1), 117-131. doi:10.1007/s11205-011-9798-5
- Chidlow, A., Ghauri, P. N., Yenyurt, S., & Cavusgil, S. T. (2015). Establishing rigor in mail-survey procedures in international business research. *Journal of world business*, 50(1), 26-35. doi:10.1016/j.jwb.2014.01.004
- Chmiel, M., Brunner, M., Martin, R., & Schalke, D. (2012). Revisiting the structure of subjective well-being in middle-aged adults. *Social Indicators Research*, 106(1), 109-116. doi:10.1007/s11205-011-9796-7
- Chodorow, N. (1978). *The reproduction of mothering: Psychoanalysis and the sociology of gender*. Berkeley, CA: University of California Press.
- Cohen, P. N. & Bianchi, S. M. (1999). Marriage, children, and women's employment: What do we know? *Monthly Labor Review*, 122(12), 22-31.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2013). *Applied multiple regression/correlation analysis for the behavioral sciences*. London, England: Routledge.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Earlbaum Associates.
- Cohen, S., Frank, E., Doyle, W. J., Skoner, D. P., Rabin, B. S., & Gwaltney, J. M. (1998). Types of stressors that increase susceptibility to the common cold in healthy

- adults. *Health Psychology*, 17(3), 214–223. doi:10.1037/0278-6133.17.3.214
- Coley, R. L., & Lombardi, C. M. (2014). Low-income women's employment experiences and their financial, personal, and family well-being. *Journal of Family Psychology*, 28(1), 88–97. doi:10.1037/a0034998
- Conway, F., Jones, S., & Speakes-Lewis, A. (2011). Emotional strain in caregiving among African American grandmothers raising their grandchildren. *Journal Of Women & Aging*, 23(2), 113-128. doi:10.1080/08952841.2011.561142
- Cooke, R. A., & Rousseau, D. M. (1984). Stress and strain from family roles and work-role expectations. *Journal Of Applied Psychology*, 69(2), 252-260. doi:10.1037/0021-9010.69.2.252
- Cooklin, A.R., Giallo, R., & Rose, N. (2011). Parental fatigue and parenting practices during early childhood: An Australian community survey. *Child: Care, Health, and Development*, 38(5), 654-64. doi:10.1111/j.1365-2214.2011.01333.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297–334. doi:10.1007/bf02310555
- Cross Jr., W. E., Grant, B. O., & Ventuneac, A. (2012). Chapter five black identity and well-being: Untangling race and ethnicity. *African American Identity: Racial and Cultural Dimensions of the Black Experience*, 125. doi:10.5860/choice.50-1527
- Dako-Gyeke, M., & Ibrahim, U. (2012). Multiple roles and women's psychosocial well-being. *Current Research Journal of Social Sciences*, 4(6), 400-406.
- Davis, C., Sloan, M., & Tang, C. (2011). Role occupancy, quality, and psychological distress among Caucasian and African American women. *Affilia*, 26(1), 72–82.

doi:10.1177/0886109910392535

Deater-Deckard, K. (2004). *Parenting stress*. New Haven, CT: Yale University Press.

de Leeuw, E., & de Heer, W. (2002). Trends in household survey nonresponse: A longitudinal and international comparison. In R. M. Groves, D. A. Dillman, J. L. Eltinge, & R. J. A. Little (Eds.). *Survey nonresponse* (pp. 41–54). New York, NY: Wiley.

De Neve, J. E., Diener, E., Tay, L., & Xuereb, C. (2013). The objective benefits of subjective well-being. *World happiness report*. In Helliwell, J., Layard, R., & Sachs, J., eds. *World Happiness Report 2013*. New York: UN Sustainable Development Solutions Network. Available at SSRN: <http://ssrn.com/abstract=2306651>

Denscombe, M. (2014). *The good research guide: for small-scale social research projects*. 5th ed. Maidenhead, London: Open University Press.

Dew, J., & Wilcox, W. B. (2011). If Momma Ain't Happy: Explaining Declines in Marital Satisfaction Among New Mothers. *Journal of Marriage and Family*, 73(1), 1–12. <http://doi.org/10.1111/j.1741-3737.2010.00782.x>

Diener, E. (2000). Subjective well-being: The science of happiness and a proposal for a national index. *American Psychologist*, 55(1), 34–43. doi:10.1037/0003-066x.55.1.34

Diener, E., & Chan, M.Y. (2011). Happy people live longer: Subjective well-being contributes to health and longevity. *Applied Psychology: Health and Well-Being*, 3(1), 1–43. doi:10.1111/j.1758-0854.2010.01045.x

- Diener, E., Kahneman, D., & Helliwell, J. (2010). International differences in well-being. doi:10.1093/acprof:oso/9780199732739.001.0001
- Diener, E., & Lucas, R. E. (2000). *Subjective emotional well-being*. In M. Lewis & J. M. Haviland (Eds.). *Handbook of emotions* (2nd ed., pp. 325–337). New York, NY: Guilford.
- Diener, E., Ng, W., Harter, J., & Arora, R. (2010). Wealth and happiness across the world: Material prosperity predicts life evaluation, whereas psychosocial prosperity predicts positive feeling. *Journal of Personality & Social Psychology*, 99(1), 52–61. doi.org/10.1037/a0018066
- Diener, E., Oishi, S., & Lucas, R. E. (2003). Personality, culture, and subjective well-being: Emotional and cognitive evaluations of life. *Annual Review of Psychology*, 2003(54), 403-425. doi:10.1146/annurev.psych.54.101601.145056
- Diener, E., Sandvik, E., Seidlitz, L., & Diener, M. (1993). The relationship between income and subjective well-being: Relative or absolute? *Social Indicators Research*, 28(3), 195–223. doi:10.1007/bf01079018
- Diener, E. D., Scollon, C., & Lucas, R. E. (2003). The evolving concept of subjective well-being: The multifaceted nature of happiness. *Advances in Cell Aging and Gerontology*, 15, 187-219. doi:10.1016/S1566-3124(03)15007-9
- Dingfelder, S. (2013). African American women at risk. *Monitor on Psychology*, 44(1), 56. doi:10.1037/e681372012-015
- Dilworth-Anderson, P., Goodwin, P. Y., & Williams, S. W. (2004). Can culture help explain the physical health effects of caregiving over time among African

- American caregivers? *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 59(3), S138–S145. doi:10.1093/geronb/59.3.s138
- Dilworth-Anderson, P., Williams, I. C., & Gibson, B. E. (2002). Issues of race, ethnicity, and culture in caregiving research: A 20-Year review (1980-2000). *The Gerontologist*, 42(2), 237–272. doi:10.1093/geront/42.2.237
- Dolata, M., Kilic, M., & Schwabe, G. (2015). Unpacking the artifact knowledge: secondary data analysis in design science research. In *New horizons in design science: Broadening the research agenda* (pp. 327-342). Cham, Switzerland: Springer International Publishing. doi:10.1007/978-3-319-18714-3\_21
- Dowd, J. B., & Zajacova, A. (2007). Does the predictive power of self-rated health for subsequent mortality risk vary by socioeconomic status in the US? *International Journal of Epidemiology*, 36(6), 1214–1221. doi:10.1093/ije/dym214
- Dlugonski, D., & Motl, R. W. (2013). Marital status and motherhood: Implications for physical activity. *Women and Health*, 53(2), 203–215. doi:10.1080/03630242.2013.767304
- Dunninga, M. J., & Giallo, R. (2012). Fatigue, parenting stress, self-efficacy and satisfaction in mothers of infants and young children. *Journal of Reproductive and Infant Psychology*, 30(2), 145–159. doi:10.1080/02646838.2012.693910
- Dupre, M. E., & Meadows, S. O. (2007). Disaggregating the effects of marital trajectories on health. *Journal of Family Issues*, 28(5), 623–652. doi:10.1177/0192513x06296296
- Eagly, A. H. (1987). *Sex differences in social behavior: A social-role interpretation*.

Hillsdale, NJ: Lawrence Erlbaum Associates. doi:10.4324/9780203781906

Edwards, K. L. (2014). Role strain theory and understanding the role of head clergy of racially diverse churches. *Sociology Of Religion*, 75(1), 57-79.

doi:10.1093/socrel/srt047

England, P., Janet C. Gornick, J.C. & Shafer, E. (2012). Women's employment, education, and the gender gap in 17 countries. *Monthly Labor Review* (April): 20-29.

Ennen, K. A., & Beamon, E. R. (2012). Women and stroke knowledge: Influence of age, race, residence location, and marital status. *Health Care for Women International*, 33(10), 922–942. doi:10.1080/07399332.2012.673662

Ertel, K. A., Koenen, K. C., & Berkman, L. F. (2008). Incorporating home demands into models of job strain: Findings from the work, family and health network. *Journal of Occupational and Environmental Medicine*, 50, 1244–52.

doi:10.1097/jom.0b013e31818c308d

Eryilmaz, A., & Ercan, L. (2011). Investigating of the subjective well-being based on gender, age and personality traits. *Turkish Psychological Counseling and Guidance Journal*, 4(36), 150-151.

Estes, A., Olson, E., Sullivan, K., Greenson, J., Winter, J., Dawson, G., & Munson, J. (2013). Parenting-related stress and psychological distress in mothers of toddlers with autism spectrum disorders. *Brain and Development*, 35(2), 133-138.

doi:10.1016/j.braindev.2012.10.004

Evenson, R. J., & Simon, R. W. (2005). Clarifying the relationship between parenthood

and depression. *Journal of Health and Social Behavior*, 46(4), 341–358.

doi:10.1177/002214650504600403

Faison, N. (2003). National Income Imputation Memo. [PDF] Michigan: Collaborative Psychiatric Epidemiology Surveys, pp.1-7. Retrieved October 5, 2014, from <http://www.icpsr.umich.edu/files/CPES/NSAL%20Income%20Imputation%20Definition.pdf>

Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2013). G\* Power 3.1.7: A flexible statistical power analysis program for the social, behavioral and biomedical sciences. *Behavioral Research Methods*, 39, 175-191.

Fawcett, J. T. (1988). The value of children and the transition to parenthood. *Marriage and Family Review*, 12, 11–34. doi:10.1300/J002v12n03\_03

Feldman, F. (2006). Well-Being: The foundations of hedonic psychology (New York: The Russell Sage Foundation, 1999), pp. xii + 593, Daniel Kahneman, Ed Diener, and Norbert Schwarz (eds.). *Utilitas*, 18(02), 192.

doi:10.1017/s0953820806231972

Feldman, B. (2008). Role strain. In V. Parrillo (Ed.), *Encyclopedia of social problems*. (p. 794). Thousand Oaks, CA: Sage.

doi:http://dx.doi.org/10.4135/9781412963930.n479

Field, A. (2013). *Discovering Statistics Using IBM SPSS Statistics* (4th ed.). London, England: Sage.

Fowler Jr, F. J. (2013). *Survey research methods*. London, England: Sage.

Frankfort-Nachmias, C., & Nachmias, D. (2008). *Research methods in the social sciences*

(7th ed.). New York, NY: Worth.

- Frech, A., & Damaske, S. (2012). The Relationships between mothers' work pathways and physical and mental Health. *Journal of Health and Social Behavior*, 53(4), 396–412. doi:10.1177/0022146512453929
- Friedman, H. S., Kern, M. L., & Reynolds, C. A. (2010). Personality and health, subjective well-being, and longevity. *Journal Of Personality*, 78(1), 179-216. doi:10.1111/j.1467-6494.2009.00613.x
- Frone, M. R. (2000). Work-family conflict and employee psychiatric disorders: The National Comorbidity Survey. *Journal of Applied Psychology*, 85, 888–95. doi:10.1037/0021-9010.85.6.888
- Frone, M. R., Russell, M., & Cooper, M. L. (1997). Relation of work-family conflict to health outcomes: A four-year longitudinal study of employed parents. *Journal of Occupational and Organizational Psychology*, 70(4), 325–335. doi:10.1111/j.2044-8325.1997.tb00652.x
- Galinha, I., & Pais-Ribeiro, J. L. (2011). Cognitive, affective and contextual predictors of subjective well being. *International Journal of Wellbeing*, 2(1), 34–53. doi:10.5502/ijw.v2i1.3
- George, D., & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference. 11.0 update* (4th ed.). Boston, MA: Allyn & Bacon.
- Geronimus, A. T., Hicken, M., Keene, D., & Bound, J. (2006). “Weathering” and age patterns of allostatic load scores among Blacks and Whites in the United States. *American Journal of Public Health*, 96, 826–833. doi:10.2105/ajph.2004.060749

- Giallo, R., Rose, N., & Vittorino, R. (2011). Fatigue, well-being and parenting in mothers of infants and toddlers with sleep problems. *Journal of Reproductive and Infant Psychology*, 29(3), 236-249. doi:10.1080/02646838.2011.593030
- Gildersleeve, R. E., Croom, N. N., & Vasquez, P. L. (2011). "Am I going crazy?!": A critical race analysis of doctoral education. *Equity & Excellence in Education*, 44(1), 93–114. doi:10.1080/10665684.2011.539472
- Giles-Sims, J., & Chodorow, N. (1979). The Reproduction of Mothering: Psychoanalysis and the Sociology of Gender. *Journal of Marriage and the Family*, 41(2), 437. doi:10.2307/351719
- Gilligan, C. (1982). *In a different voice: Psychological theory and women's development*. Cambridge, MA: Harvard University Press.
- Glymour, M. M., Avendano, M., & Kawachi, I. (2014). Socioeconomic status and health. *Social Epidemiology*, 17. doi:10.1093/med/9780195377903.003.0002
- Glynn, K., Maclean, H., Forte, T., & Cohen, M. (2009). The Association between role overload and women's mental health. *Journal of Women's Health*, 18(2), 217–223. doi:10.1089/jwh.2007.0783
- Goode, W. J. (1960). A theory of role strain. *American Sociological Review*, 25(4), 483–96. doi:10.2307/2092933
- Goffman, E. (1990). *The presentation of self in everyday life*. London, England: Penguin.
- Goldman, N., Korenman, S., & Weinstein, R. (1995). Marital status and health among the elderly. *Social Science & Medicine*, 40(12), 1717–1730. doi:10.1016/0277-9536(94)00281-w

- Gordon, H. S. (1995). Impact of marital status on outcomes in hospitalized patients. Evidence from an academic medical center. *Archives of Internal Medicine*, 155(22), 2465–2471. doi:10.1001/archinte.155.22.2465
- George, D., & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference*. 11.0 update (4thed.). Boston, MA: Allyn & Bacon.
- Greenhaus, G. & Powell. G. 2006. When work and family are allies: A theory of work-family enrichment. *Academy of Management Review*, 31, 72-92. doi:10.5465/amr.2006.19379625
- Groves, R. M., & Couper, M. P. (1998). *Nonresponse in household interview surveys*. New York, NY: Wiley. doi:10.1002/9781118490082
- Guiraud, V., Touzé, E., Rouillon, F., Godefroy, O., & Mas, J.-L. (2012). Stressful life events as triggers of ischemic stroke: a case-crossover study. *International Journal of Stroke*, 8(5), 300–307. doi:10.1111/j.1747-4949.2012.00810.x
- Guvan, C., & Sørensen, B. (2012). Subjective well-being: Keeping up with the perception of the joneses. *Social Indicators Research*, 109(3), 439-469. doi:10.1007/s11205-011-9910-x
- Harrison, P. M. & Beck, A. J. (2003). Prisoners in 2002. In the Bureau of Justice Statistics Bulletin. Washington, DC: Bureau of Justice Statistics, U.S. Department of Justice. doi:10.1037/e387822004-001
- Hatzenbuehler, M. L., Phelan, J. C., & Link, B. G. (2013). Stigma as a fundamental cause of population health inequalities. *American Journal of Public Health*, 103(5), 813–821. doi:10.2105/ajph.2012.301069

- Hayes, S. A., & Watson, S. L. (2013). The impact of parenting stress: A meta-analysis of studies comparing the experience of parenting stress in parents of children with and without autism spectrum disorder. *Journal of Autism and Developmental Disorders, 43*(3), 629-642. doi:10.1007/s10803-012-1604-y
- Heeringa, S., Wagner, J., Torres, M., Duan, N. H., Adams, T. & Berglund, P. (2004) Sample designs and sampling methods for the Collaborative Psychiatric Epidemiology Surveys (CPES). *International Journal of Methods in Psychiatric Research, 13*, 221-240. doi:10.1002/mpr.179
- Henning, J. M. & Weidner, T. G. (2008). Role strain in collegiate athletic training approved clinical instructors. *Journal of Athletic Training, 43*, 275–83. doi:10.4085/1062-6050-43.3.275
- Herbst, C. M. (2012). Footloose and fancy free? Two decades of single mothers' subjective well-being. *Social Service Review, 86*(2), 189–222. doi:10.1086/666390
- Hogg, M.A., Abrams, D., & Martin, G.N. (2010). Social cognition and attitudes. In Martin, G.N., Carlson, N.R., Buskist, W., (Ed.), *Psychology*, 646-677. Harlow, United Kingdom: Pearson Education Limited.
- Howard-Hamilton, M. F. (2004). Theoretical frameworks for African American women. *New Directions for Student Services, 2003*(104), 19-27. doi:10.1002/ss.104
- Howell, R. T., Kern, M. L., & Lyubomirsky, S. (2007). Health benefits: Meta-analytically determining the impact of well-being on objective health outcomes. *Health Psychology Review, 1*, 83-136. doi:10.1080/17437190701492486

- Huber, M., Knottnerus, J. A., Green, L., Horst, H. v. d., Jadad, A. R., Kromhout, D., ...  
 Smid, H. (2011). How should we define health? *BMJ*, *343*(jul26 2), d4163–  
 d4163. doi:10.1136/bmj.d4163
- Hughes, M. E., & Waite, L. J. (2009). Marital biography and health at mid-life. *Journal  
 of Health and Social Behavior*, *50*(3), 344–358.  
 doi:10.1177/002214650905000307
- Ifcher, J. (2011). The happiness of single mothers after welfare reform. *B. E. Journal of  
 Economic Analysis and Policy: Topics*, *11*(1): article 60. doi:10.2202/1935-  
 1682.2727
- Ifcher, J. & Zarghamee, H. (2011). Trends in the happiness of single mothers:  
 Evidence from the General Social Survey. *SRRN Journal*.  
 doi:10.2139/ssrn.1740029
- Institute for Women's Policy Research. (2009). The gender wage gap by occupation.  
 IWPR #C350a. Washington, DC: Author. doi:10.1037/e571852011-001
- Jackson, A. P. (1994). The effects of role strain on single, working, black mothers'  
 perceptions of their young children. *Social Work Research*, *18*(1), 36-40.
- Jackson, J. S., Caldwell, C. H., Chatters, L. M., Neighbors, H. W., Nesse, R., Taylor, R.  
 J., . . . & Williams, D. R. (2007). National Survey of American Life (NSAL). In  
 M. Alegria, J. S. Jackson, R. C. Kessler, & D. Takeuchi (Eds.), *Collaborative  
 Psychiatric Epidemiology Surveys (CPES), 2001-2003 [UNITED STATES]*  
 [Computer file]. ICPSR20240-v5. Ann Arbor, MI: Institute for Social Research,  
 Survey Research Center [producer]. Ann Arbor, MI: Inter-university Consortium

for Political and Social Research [distributor], 2008-06-19.

doi:10.3886/ICPSR20240.

Jansen, N. W. H., Kant, I. J., Van Amelsvoort, L. G. P. M., Kristensen, T. S., Swaen, G.

M. H., & Nijhuis, F. J. N. (2006). Work-family conflict as a risk factor for sickness absence. *Occupational and Environmental Medicine*, *63*, 488–94.

doi:10.1136/oem.2005.024943

Janssen, I., Powell, L. H., Jasielec, M. S., Matthews, K. A., Hollenberg, S. M., Sutton-

Tyrrell, K., & Everson-Rose, S. (2012). Progression of coronary artery calcification in Black and White women: Do the stresses and rewards of multiple roles matter? *Annals of Behavioral Medicine*, *43*(1), 39-49.

doi:http://dx.doi.org/10.1007/s12160-011-9307-8

Jansen, N. W. H., I. J. Kant, L. G. P. M. van Amelsvoort, T. S. Kristensen, G. M. H.

Swaen, and F. J. N. Nijhuis. 2006. “Work-Family Conflict as a Risk Factor for Sickness Absence.” *Occupational and Environmental Medicine*, *63*,488–94.

doi:10.1136/oem.2005.024943

Johnson, K. R., & Loscocco, K. (2014). Black marriage through the prism of gender,

race, and class. *Journal of Black Studies*, *46*(2), 142–171.

doi:10.1177/0021934714562644

Kalmijn, M. (2013). The educational gradient in marriage: A comparison of 25 European

Countries. *Demography*, *50*(4), 1499–1520. doi:10.1007/s13524-013-0229-x

Kahneman, D., & Deaton, A. (2010). High income improves evaluation of life but not

emotional well-being. *Proceedings of the National Academy of Sciences*, *107*(38),

16489–16493. <http://doi.org/10.1073/pnas.1011492107>

- Kasimatis, M. D., & Guastello, D. D. (2012). Parenting style trumps work role in life satisfaction of midlife women. *Journal of Articles in Support of the Null Hypothesis*, 9(1), 52. <http://dx.doi.org/10.1037/e566962012-496>
- Keith, V. M. & Brown, D. R. (2010). African American women and mental well-being: The triangulation of race, gender, and socioeconomic status. In *A handbook for the study of mental health: Social contexts, theories, and systems*, 291-305. New York, NY: Cambridge University Press. doi:10.1017/cbo9780511984945.019
- Kessler, R. C., & Üstün, T. B. (2004). The World Mental Health (WMH) Survey Initiative version of the World Health Organization (WHO) Composite International Diagnostic Interview (CIDI). *International Journal of Methods in Psychiatric Research*, 13(2), 93–121. doi:10.1002/mpr.168
- Kessler, R. C., Wittchen, H.-U., Abelson, J. M., McGonagle, K., Schwarz, N., Kendler, K. S., & Zhao, S. (1998). Methodological studies of the Composite International Diagnostic Interview (CIDI) in the US national comorbidity survey (NCS). *International Journal of Methods in Psychiatric Research*, 7(1), 33–55. doi:10.1002/mpr.33
- Kleindorfer, D., Lindsell, C., Alwell, K. A., Moomaw, C. J., Woo, D., Flaherty, M. L., ... Kissela, B. M. (2012). Patients living in impoverished areas have more severe ischemic strokes. *Stroke*, 43(8), 2055–2059. doi:10.1161/strokeaha.111.649608
- Kobau, R., Sniezek, J., Zack, M. M., Lucas, R. E., & Burns, A. (2010). Well-Being assessment: An evaluation of well-being scales for public health and population

- estimates of well-being among US adults. *Applied Psychology: Health and Well-Being*, 2(3), 272–297. doi:10.1111/j.1758-0854.2010.01035.x
- Kok, B. E., Coffey, K. A., Cohn, M. A., Catalino, L. I., Vacharkulksemsuk, T., Algoe, S. B., & ... Fredrickson, B. L. (2013). How positive emotions build physical health: Perceived positive social connections account for the upward spiral between positive emotions and vagal tone. *Psychological Science*, 24(7), 1123-1132. doi:10.1177/0956797612470827
- Konasani, V. R., & Kadre, S. (2015). Multiple regression analysis. *Practical Business Analytics Using SAS*, 351–399. doi:10.1007/978-1-4842-0043-8\_10
- Kroll, C. (2011). Different things make different people happy: Examining social capital and subjective well-being by gender and parental status. *Social Indicators Research*, 104(1), 157–177. <http://doi.org/10.1007/s11205-010-9733-1>
- Lawal, B. (2014). Regression Analysis. *Applied Statistical Methods in Agriculture, Health and Life Sciences*, 217–306. doi:10.1007/978-3-319-05555-8\_7
- Leahy-Warren, P., McCarthy, G., & Corcoran, P. (2012). First-time mothers: social support, maternal parental self-efficacy and postnatal depression. *Journal of Clinical Nursing*, 21(3-4), 388-397. doi:10.1111/j.1365-2702.2011.03701.x
- Lee, Y.-S., & Waite, L. J. (2010). How appreciated do wives feel for the housework they do? *Social Science Quarterly*, 91(2), 476–492. <http://doi.org/10.1111/j.1540-6237.2010.00703.x>
- Lee, S. Y., & Hsu, H. C. (2012). Stress and health-related well-being among mothers with a low birth weight infant: The role of sleep. *Social science & medicine*,

74(7), 958-965. doi:10.1016/j.socscimed.2011.12.030

Lent, R. W., Singley, D., Sheu, H.-B., Gainor, K. A., Brenner, B. R., Treistman, D. &

Ades, L. (2005). Social cognitive predictors of domain and life satisfaction:

Exploring the theoretical precursors of subjective wellbeing. *Journal of*

*Counseling Psychology*, 52, 429–442. doi:10.1037/0022-0167.52.3.429

Lillard, L. A. & Waite, L. J. (1995). Til death do us part: marital disruption and mortality.

*American Journal of Sociology*, 100, 1131–1156. doi:10.1086/230634

Linton, R. (1936). *The study of man: An introduction*. New York, NY: Appleton Century

Crofts. Retrieved May 1, 2015 from

<http://www.archive.org/details/studyofman031904mbp>

Lyubomirsky, S., King, L., & Diener, E. (2005). The benefits of frequent positive affect:

Does happiness lead to success? *Psychological Bulletin*, 131, 803-855.

doi:10.1037/0033-2909.131.6.803

Lucas, J. W., & Phelan, J. C. (2012). Stigma and Status: The Interrelation of Two

Theoretical Perspectives. *Social Psychology Quarterly*, 75(4), 310–333.

doi:10.1177/0190272512459968

Lucas, R. E., Clark, A. E., Georgellis, Y., & Diener, E. (2004). Unemployment alters the

set point for life satisfaction. *Psychological Science*, 15(1), 8–13.

doi:10.1111/j.0963-7214.2004.01501002.x

Lucas, R. E., Clark, A. E., Georgellis, Y., & Diener, E. (2003). Reexamining adaptation

and the set point model of happiness: Reactions to changes in marital status.

*Journal of Personality and Social Psychology*, 84(3), 527–539. doi:10.1037/0022-

3514.84.3.527

- Luhmann, M., Hofmann, W., Eid, M., & Lucas, R. E. (2012). Subjective well-being and adaptation to life events: A meta-analysis. *Journal of Personality and Social Psychology, 102*(3), 592–615. <http://doi.org/10.1037/a0025948>
- Luszczynska, A., Scholz, U. & Schwarzer, R. (2005). The general self-efficacy scale: Multicultural validation studies. *The Journal of Psychology, 139*, 439–457. doi:10.3200/jrlp.139.5.439-457
- Lyonette, C., Kaufman, G., & Crompton, R. (2012). We both need to work: Maternal employment, childcare, and health care in Britain and the USA. *Work, Employment, and Society, 25*,34–50. doi:10.1177/0950017010389243
- Lyubomirsky, S., King, L., & Diener, E. (2005). The benefits of frequent positive affect: Does happiness lead to success? *Psychological Bulletin, 131*(6), 803–855. <http://doi.org/10.1037/0033-2909.131.6.803>
- Magee, L., & Hale, L. (2012). Longitudinal associations between sleep duration and subsequent weight gain: A systematic review. *Sleep Medicine Reviews, 16*(3), 231–241. doi:10.1016/j.smrv.2011.05.005
- Mahdi, H., Kumar, S., Munkarah, A. R., Abdalamir, M., Doherty, M., & Swensen, R. (2013). Prognostic impact of marital status on survival of women with epithelial ovarian cancer. *Psycho-Oncology, 22*(1), 83–88. doi:10.1002/pon.2058
- Marks, S. R. (1977). Multiple roles and role strain: Some notes on human energy, time and commitment. *American Sociological Review, 42*(6), 921. doi:10.2307/2094577

- Marks, N. F., & Lambert, J. D. (1998). Marital status continuity and change among young and midlife adults: Longitudinal effects on psychological well-being. *Journal of Family Issues, 19*(6), 652–686. doi:10.1177/019251398019006001
- Martin, A., Boadi, N., Fernandes, C., Watt, S., & Robinson-Wood, T. (2013). Applying resistance theory to depression in Black women. *Journal of Systemic Therapies, 32*(1), 1-13. doi:10.1521/jsyt.2013.32.1.1
- Mastekaasa, A. (1992). Marriage and psychological well-Being: Some evidence on selection into marriage. *Journal of Marriage and the Family, 54*(4), 901. doi:10.2307/353171
- Mastekaasa, A. (1994). Psychological well-Being and marital dissolution: Selection effects? *Journal of Family Issues, 15*(2), 208–228. doi:10.1177/0192513x94015002004
- McKee-Ryan, F., Song, Z., Wanberg, C. R., & Kinicki, A. J. (2005). Psychological and physical well-being during Unemployment: A meta-analytic study. *Journal of Applied Psychology, 90*(1), 53–76. doi:10.1037/0021-9010.90.1.53
- McLanahan, S., & Adams, J. (1987). Parenthood and psychological well-being. *Annual Review of Sociology, 13*(1), 237–257. doi:10.1146/annurev.so.13.080187.001321
- Mendias, E. P., Clark, M. C., Guevara, E. B., & Svrcek, C. Y. (2011). Low-income Euro-American mothers' perceptions of health and self-care practices. *Public Health Nursing, 28*(3), 233–242. doi:10.1111/j.1525-1446.2010.00913.x
- Melzer, D., Lan, T.-Y., Tom, B. D. M., Deeg, D. J. H., & Guralnik, J. M. (2004). Variation in thresholds for reporting mobility disability between national

- population subgroups and studies. *The Journals of Gerontology Series A: Biological Sciences and Medical Sciences*, 59(12), 1295–1303.  
doi:10.1093/gerona/59.12.1295
- Merton, R. K. (1957). *Social theory and social structure*. Glencoe, IL: The Free Press.  
doi:10.2307/2573874
- Miller, V. M. (2014). Why are sex and gender important to basic physiology and translational and individualized medicine? *American Journal of Physiology - Heart and Circulatory Physiology*, 306(6), H781-H788.  
doi:10.1152/ajpheart.00994.2013
- Montez, J. K., Martikainen, P., Remes, H., & Avendano, M. (2014). Work-family context and the longevity disadvantage of US Women. *Social Forces*, sou117.  
doi:10.1093/sf/sou117
- Mirowsky, J. & Ross, C. E. (2003). *Social causes of psychological distress*. Hawthorne, NY: Aldine de Gruyter.
- Mullings, L. (2014). *On our own terms: Race, class, and gender in the lives of African-American Women*. New York, NY: Routledge.
- Myers, D. G., & Diener, E. (1995). Who is happy? *Psychological Science*, 6(1), 10-19.  
doi:10.1111/j.1467-9280.1995.tb00298.x
- Myrskylä, M., & Margolis, R. (2014). Happiness: Before and after the kids. *Demography*, 51(5), 1843-1866. doi:10.1007/s13524-014-0321-x
- National Center for Health Statistics (NCHS). (2008). Depression in the United States household population. Atlanta, GA: Centers for Disease Control. (NCHS Data

Brief Number 7).

- National Center for Health Statistics. (2013). Health, United States with special feature on prescription drugs. Hyattsville, MD: Center for Disease Control and Prevention. May 2014. (Black or African American Population, Health Status and Risk Factors: Tables 42-44, 46).
- National Heart, Lung, and Blood Institute (NHLBI). (2006). Incidence and prevalence: 2006 chart book on cardiovascular and lung diseases. Bethesda, MD: Author.
- Neal-Barnett, A. (2010). Soothe your nerves: The Black woman's guide to understanding and overcoming anxiety, panic, and fearz. New York, NY: Simon and Schuster.
- Nikolaev, B., & Burns, A. (2014). Intergenerational mobility and subjective well-being—Evidence from the General Social Survey. *Journal of Behavioral And Experimental Economics*, 5382-96. doi:10.1016/j.socec.2014.08.005
- Nimon, K. F., & Oswald, F. L. (2013). Understanding the results of multiple linear regression: Beyond standardized regression coefficients. *Organizational Research Methods*, 16(4), 650–674. doi:10.1177/1094428113493929
- Nolen-Hoeksema, S., & Jackson, B. (2001). Mediators of the gender difference in rumination. *Psychology of Women Quarterly*, 25(1), 37–47. doi:10.1111/1471-6402.00005
- Nomaguchi, K., & Milkie, M. A. (2014). Gender, accuracy about partners' work–family conflict, and relationship quality. *Gender and the Work-Family Experience*, 159–176. doi:10.1007/978-3-319-08891-4\_9
- Nomaguchi, K., & Milkie, M. A. (2003). Costs and rewards of children: The effects of

- becoming a parent on adults' lives. *Journal of Marriage and Family*, 65(2), 356-374. doi:10.1111/j.1741-3737.2003.00356.x
- Nordenmark, M., Strandh, M., & Layte, R. (2006). The impact of unemployment benefit system on the mental well-being of the unemployed in Sweden, Ireland and Great Britain. *European Societies*, 8(1), 83–110. doi:10.1080/14616690500491415
- Nunnally, J. (1978). *Psychometric theory*. New York, NY: McGraw-Hill.
- Pavlova, M. K., & Silbereisen, R. K. (2012). Age, cumulative (dis)advantage, and subjective well-being in employed and unemployed Germans: A moderated mediation model. *Journal of Occupational Health Psychology*, 17(1), 93–104. doi:10.1037/a0026426
- Pavot, W., & Diener, E. (2013). Happiness experienced: The science of subjective well-being. Oxford Handbooks Online. doi:10.1093/oxfordhb/9780199557257.013.0010
- Pearson, K. & Lee, A. (1908). On the generalized probable error in multiple normal correlation. *Biometrika*, 6(1), 59–68. doi:10.1093/biomet/6.1.59
- Pelletier, J. E., & Laska, M. N. (2012). Balancing healthy meals and busy lives: Associations between work, school, and family responsibilities and perceived time constraints among young adults. *Journal of Nutrition Education and Behavior*, 44(6), 481–489. doi:10.1016/j.jneb.2012.04.001
- Patel, S. R., Malhotra, A., White, D. P., Gottlieb, D. J., & Hu, F. B. (2006). Association between reduced sleep and weight gain in women. *American Journal of Epidemiology*, 164, 947-54. doi:10.1093/aje/kwj280

- Pearson, Q. M. (2008). Role overload, job satisfaction, leisure satisfaction, and psychological health among employed women. *Journal of Counseling and Development, 86*, 57–63.
- Pearson, K., & Lee, A. (1908). On the generalised probable error in multiple normal correlation. *Biometrika, 6*(1), 59-68.
- Pennell, B., Bowers, A., Carr, D., Chardoul, S., Cheun, G., Dinkelmann, K., . . . & Torres, M. (2004). The Development and implementation of the National Comorbidity Survey Replication, the National Survey of American Life, and the National Latino and Asian American Survey. *International Journal of Methods in Psychiatric Research, 13*, 241-269
- Phelan, J. C., & Link, B. G. (2015). Is race a fundamental cause of inequalities in health? *Annual Review of Sociology, 41*(1), 311-30. doi:10.1146/annurev-soc-073014-112305
- Pit, S. W., & Byles, J. (2012). The association of health and employment in mature women: A longitudinal study. *Journal of Women's Health, 21*(3), 273–280. doi:10.1089/jwh.2011.2872
- Powdthavee, N. (2007). Happiness and the standard of living: The case of South Africa. *Handbook on the Economics of Happiness*. doi:10.4337/9781847204158.00030
- Powdthavee, N., & Stutzer, A. (2014). Economic approaches to understanding change in happiness. *Stability of Happiness, 219–244*. doi:10.1016/b978-0-12-411478-4.00011-4
- Read, J. G., & Gorman, B. K. (2010). Gender and health inequality. *Annual Review of*

*Sociology*, 36(1), 371–386. doi:10.1146/annurev.soc.012809.102535

- Reeves, M. J., Bushnell, C. D., Howard, G., Gargano, J. W., Duncan, P. W., Lynch, G.,...Lisabeth, L. (2008). Sex differences in stroke: Epidemiology clinical presentation, medical care, and outcomes. *Lancet Neurology*, 7, 915–926. doi:10.1016/S1474-4422(08)70193a
- Robins, L., & Regier, D. (Eds.). (1991). *Psychiatric disorders in America*. New York, NY: Free Press.
- Rohrer, J. E., Bernard, M. E., Zhang, Y., Rasmussen, N. H., & Woroncow, H. (2008). Marital status, feeling depressed and self-rated health in rural female primary care patients. *Journal of Evaluation in Clinical Practice*, 14(2), 214–217. doi:10.1111/j.1365-2753.2007.00835.x
- Roger, V. L., Go, A. S., Lloyd-Jones, D. M., Adams, R.J., Berry, J.D., Brown, T.M.,...Willie-Rosett, J. (2011). Heart disease and stroke statistics—2011 update: A report from the American Heart Association, 123, 18–209.
- Rosenberg, M. A. (2013). *Tenured women counselor educators at research universities: Navigating multiple roles and personal well-being*. (Doctoral Dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3575453)
- Ross, C. E., Mirowsky, J., & Goldsteen, K. (1990). The impact of the family on health: The decade in review. *Journal of Marriage and the Family*, 52(4), 1059. doi:10.2307/353319
- Rozario, P. A. & DeRienzi, D. (2008). Familism beliefs and psychological distress among African American women caregivers. *Gerontologist*, 48(6), 772-80.

doi:10.1093/geront/48.6.772

- Rudestam, K. E., & Newton, R. R. (2015). *Surviving your dissertation: A comprehensive guide to content and process* (4th ed.). London, England: Sage.
- Saint Jacques, M. C. (1995). Role strain prediction in stepfamilies. *Journal of Divorce and Remarriage*, 21, 33–53. doi:10.1300/j087v24n01\_05
- Sayer, L. C., England, P., Allison P. D., & Kangas, N. (2011). She left, he left: How employment and satisfaction affect women's and men's decisions to leave marriages. *American Journal of Sociology*, 116, 1982–2018. doi:10.1086/658173
- Saunders, L. L., Gregory-Bass, R., & Krause, J. S. (2013). Gender, race, pain, and subjective well-being of adults with spinal cord injury. *Journal of Health Care For The Poor and Underserved*, 24(3), 1257-1265. doi:10.1353/hpu.2013.0119
- Seligman, M.E.P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55, 5-14.
- Shea, B. M. (2014). Socioeconomic Status and Stress. *The Wiley Blackwell Encyclopedia of Health, Illness, Behavior, and Society*, 2245–2248.  
doi:10.1002/9781118410868.wbehibs381
- Sheu, H.-B. (2014). Affective well-being viewed through a lens of race and ethnicity. *Cross-Cultural Advancements in Positive Psychology*, 61–74. doi:10.1007/978-94-017-8654-6\_5
- Sieber, S. D. (1974). Toward a theory of role accumulation. *American Sociological Review*, 39(4), 567-5. doi:10.2307/2094422
- Simon, Robin. W. & Lively, K. (2010). Sex, anger and depression. *Social Forces*, 88,

543–68. doi:10.1353/sof.2010.0031

Simon, R. W. & Nath, L. (2004). Gender and emotion in the U.S.: Do women and men differ in self-reports of feelings? *American Journal of Sociology*, *109*, 1137–76. doi:10.1086/382111

Smith, L. (1994). *Killers of the dream*. New York, NY: Norton.

Spencer-Dawe, E. (2005). Lone mothers in employment: Seeking rational solutions to role strain. *Journal Of Social Welfare & Family Law*, *27*(3/4), 251-264. doi:10.1080/09649060500386711

Stam, K., Sieben, I., Verbakel, E., & de Graaf, P. M. (2015). Employment status and subjective well-being: The role of the social norm to work. *Work, Employment & Society*, *30*(2), 309-33. doi:10.1177/0950017014564602

Stanfield, J. B. (1985). Research on wife/mother role strain in dual career families: Its present state has laid an adequate basis for representative empirical studies. *American Journal Of Economics & Sociology*, *44*(3), 355-363. doi:10.1111/j.1536-7150.1985.tb02356.x

Steiner, J. L., Silvia Bigatti, S. & Hernandez, A. M. (2010). Social support mediates the relations between role strains and marital satisfaction in husbands of patients with fibromyalgia syndrome. *Families Systems and Health*, *28*, 209–223. doi:10.1037/a0020340

Straume, L. V., & Vittersø, J. (2012). Happiness, inspiration and the fully functioning person: Separating hedonic and eudaimonic well-being in the workplace. *The Journal of Positive Psychology*, *7*(5), 387–398.

doi:10.1080/17439760.2012.711348

- Stutzer, A., & Frey, B. S. (2010). Recent advances in the economics of individual subjective well-being. *Social Research*, 77(2), 679-714.
- Sulik, G. A. (2007). On the receiving end: Women. *Qualitative Sociology*, 30, 297-314.
- Sumra, M. K., & Schillaci, M. A. (2015). Stress and the multiple-role woman: Taking a closer look at the “Superwoman.” *PLoS ONE*, 10(3), e0120952.  
doi.org/10.1371/journal.pone.0120952
- Surtees, P. G., Wainwright, N. W. J., Luben, R. N., Wareham, N. J., Bingham, S. A., & Khaw, K.-T. (2008). Psychological distress, major depressive disorder, and risk of stroke. *Neurology*, 70(10), 788-794. doi:10.1212/01.wnl.0000304109.18563.81
- Tabachnick, B. G., & Fidell, L. S. (2011). Multivariate Analysis of Variance (MANOVA). *International Encyclopedia of Statistical Science*, 902-904.  
doi:10.1007/978-3-642-04898-2\_394
- Tang, T. N. & Tang, C. S. (2001). Gender role internalization, multiple roles and Chinese women’s mental health. *Psychology of Women Quarterly*, 25, 181-196.  
doi:10.1111/1471-6402.00020
- Terrill, A., Garofalo, J. P., Soliday, E., & Craft, R. (2012). Multiple roles and stress burden in women: A conceptual model of heart disease risk. *Journal of Applied Biobehavioral Research*, 17(1), 4-22. doi:10.1111/j.1751-9861.2011.00071.x
- Thurston, R. C., Sherwood, A., Matthews, K. A., & Blumenthal, J. A. (2011). Household responsibilities, income, and ambulatory blood pressure among working men and women. *Psychosomatic Medicine*, 73, 200-205.

doi:10.1097/psy.0b013e3182080e1a

- Tov, W., & Diener, E. (2009). Culture and subjective well-being. *Culture and Well-Being*, 9–41. doi:10.1007/978-90-481-2352-0\_2
- Treiber, L. A., Cancian, F. M., & Oliner, S. J. (2000). Caring and gender. *Contemporary Sociology*, 29(4), 634. doi:10.2307/2654570
- Twenge, J. M., Campbell, W. K., & Foster, C. A. (2003). Parenthood and marital satisfaction: A meta-analytic review. *Journal of Marriage and Family*, 65(3), 574–583. doi:10.1111/j.1741-3737.2003.00574.x
- U.S. Census Bureau. (2010). Question and answers: Real people, real questions, real answers. “Ethnic Origin or Race”. Retrieved September 30, 2014 from [http://factfinder2.census.gov/help/en/glossary/e/ethnic\\_origin\\_or\\_race.htm](http://factfinder2.census.gov/help/en/glossary/e/ethnic_origin_or_race.htm)
- U.S. Census Bureau. (2011a). The Black population: 2010. 2010 Census Brief. Retrieved September 29, 2014 from <http://www.census.gov/prod/cen2010/briefs/c2010br-06.pdf>
- U.S. Census Bureau. (2011b). The White population: 2010. 2010 Census Brief. Retrieved September 29, 2014 from <http://www.census.gov/prod/cen2010/briefs/c2010br-05.pdf>
- U.S. Census Bureau. (2013, July 11). “Race”. About. U.S. Department of Commerce. Retrieved September 30, 2014 from <http://www.census.gov/topics/population/race/about.html>
- United States Bureau of Labor Statistics. (2011) Women at work. Retrieved June 24, 2014 from <http://www.bls.gov/spotlight/2011/women/>

- U. S. Government Accountability Office. (2011). 2010 Census: Preliminary lessons learned highlight the need for fundamental reform. (GAO Publication No. GAO 11-496T). Retrieved from the U. S. Government Accountability Office: <http://www.gao.gov/assets/130/125947.pdf>
- Väänänen, A., Kumpulainen, R., Kevin, M. V., Ala-Mursula, L., Kouvonen, A., Kivimaki, M., Minna Toivanen, M., Linna, A. & Vahtera, J. (2008). Work-family characteristics as determinants of sickness absence: A large-scale cohort study of three occupational grades. *Journal of Occupational Health Psychology, 13*, 181–196. doi:10.1037/1076-8998.13.2.181
- Vanassche, S., Swicegood, G., & Matthijs, K. (2013). Marriage and children as a key to happiness? Cross-national differences in the effects of marital status and children on well-being. *Journal of Happiness Studies, 14*(2), 501–524. <http://doi.org/10.1007/s10902-012-9340-8>
- Vartanian, T. P. (2010). *Secondary data analysis*. Oxford University Press.
- Veenhoven, R. (2011). Can we get happier than we are? *The Human Pursuit of Well-Being, 3–14*. doi:10.1007/978-94-007-1375-8\_1
- Ventura, S. J., Curtin, S.C, Abma, J. C., & Henshaw, S. K. (2012). Estimated pregnancy rates and rates of pregnancy outcomes for the United States, 1990–2008. National vital statistics reports; Volume 60 Number 7. Hyattsville, MD: National Center for Health Statistics.
- Vera-Villaruel, P., Cells-Atenas, K., Pavez, P., Lillo, S., Bello, F., Díaz, N., & López, W. (2012). Money, age and happiness: Association of subjective wellbeing with

- socio-demographic variables. *Revista Latinoamericana De Psicología*, 44(2), 155-163.
- Walker, A. (2014). *Comparing parental stress and parental efficacy based on the age of the child as determined by the Parenting Stress Index and the Parent-Child Relationship Inventory among immigrant Hispanic and Latino families*. Retrieved from ProQuest Dissertations and Theses. (Accession Order No. [AAI1557715])
- Wallace Williams, S., Dilworth-Anderson, P., & Goodwin, P. Y. (2002). Caregiver role strain: The contribution of multiple roles and available resources in African-American women. *Aging & Mental Health*, 7(2), 103–112.  
doi:10.1080/1360786031000072312
- Wanic, R., & Kulik, J. (2011). Toward an understanding of gender differences in the impact of marital conflict on health. *Sex Roles*, 65(5/6), 297–312.  
doi:10.1007/s11199-011-9968-6
- Winkelmann, R. (2008). Unemployment, social capital, and subjective well-being. *Journal of Happiness Studies*, 10(4), 421–430. doi:10.1007/s10902-008-9097-2
- Williams, K. (2003). Has the future of marriage arrived? A contemporary examination of gender, marriage, and psychological well-being. *Journal of Health and Social Behavior*, 44(4), 470. doi:10.2307/1519794
- Wong, J. D., & Almeida, D. M. (2013). The effects of employment status and daily stressors on time spent on daily household chores in middle-aged and older adults. *The Gerontologist*, 53, 81-91. doi:10.1093/geront/gns047
- Woods-Giscombé, C.L. (2010). Superwoman schema: African American women's views

on stress, strength, and health. *Qualitative Health Research*, 20, 668–683. doi:  
10.1177/1049732310361892

World Heart Federation. (2015). *Stroke*. Geneva, Switzerland, Author.

World Health Organization. (1948). Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference, New York, 19-22 June, 1946; signed on 22 July 1946 by the representatives of 61 States (Official Records of the World Health Organization, no. 2, p. 100) and entered into force on 7 April 1948.

World Health Organization. (2009). *Women and health: Today's evidence tomorrow's agenda*. Geneva, Switzerland: Author.

Xu, X., Liang, J., Bennett, J. Quinones, A. R., & Ye, W. (2010). Ethnic differences in the dynamics of depressive symptoms in middle aged and older Americans. *Journal of Aging and Health*, 22(5), 631–52. doi:10.1177/0898264310370851

Zabkiewicz, D. (2010). The mental health benefits of work: Do they apply to poor single mothers? *Social Psychiatry and Psychiatric Epidemiology*, 45(1), 77–87. doi:10.1007/s00127-009-0044-2

Zheng, H., & Thomas, P. A. (2013). Marital status, self-rated health, and mortality: Overestimation of health or diminishing protection of marriage? *Journal of Health and Social Behavior*, 54(1), 128–143. doi:10.1177/0022146512470564

Zhang, Z., & Hayward, M. D. (2006). Gender, the marital life course, and cardiovascular disease in late midlife. *Journal of Marriage and Family*, 68(3), 639–657. doi:10.1111/j.1741-3737.2006.00280.x

- Zhao, Y., Sun, X., Lian, R. R., Chen, S. L., Liu, L. L. (2013). A study on the relationship between positive and negative affect based on LST Model. *Advanced Materials Research*, 718-720, 2508-2512. doi:10.4028/www.scientific.net/AMR.718-720.2508
- Zweig, J. S. (2014). Are women happier than men? Evidence from the Gallup World Poll. *Journal of Happiness Studies*, 16(2), 515-541. doi:10.1007/s10902-014-9521-8