The Role of Strength: Navigating Perinatal Loss Among Black Women

Ashley N. Hill
Virginia Commonwealth University

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THE ROLE OF STRENGTH: NAVIGATING PERINATAL LOSS AMONG BLACK WOMEN

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy at Virginia Commonwealth University

By: Ashley Hill
Masters of Science, Virginia Commonwealth University, December 2016

Shawn Utsey, Ph.D.
Title: Professor
Department of Psychology
Department of African American Studies

Kristina Hood, Ph.D.
Title: Assistant Professor
Department of Psychology

Virginia Commonwealth University
Richmond, Virginia
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Contents

Abstract ........................................................................................................................................... 5
Chapter 1: Introduction ...................................................................................................................... 6
  Purpose of Study ............................................................................................................................. 7
Chapter 2: Literature Review ............................................................................................................ 8
  Defining Perinatal Loss .................................................................................................................. 8
    Black American Bereavement ...................................................................................................... 11
  Black Perinatal Bereavement ......................................................................................................... 14
    SBW and Black Perinatal Bereavement ...................................................................................... 15
    Contextualizing the Black Grief Experience .............................................................................. 19
  Pathological Grief Outcomes ....................................................................................................... 20
  Post-traumatic Growth and Perinatal Loss ................................................................................... 21
  Pushing on Theory ........................................................................................................................ 24
  Purpose of the Study and Hypotheses ............................................................................................ 28
Chapter 3: Methodology .................................................................................................................... 30
  Participants ..................................................................................................................................... 30
  Data Collection ............................................................................................................................. 30
  Recruitment Strategy .................................................................................................................... 31
  Measures ........................................................................................................................................ 32
Chapter 4: Data Analysis ................................................................................................................... 35
Chapter 5: Discussion ........................................................................................................................ 44
Appendix A. Tables and Figures ....................................................................................................... 73
Appendix B. Questionnaires and Measures ..................................................................................... 83
THE ROLE OF STRENGTH

Abstract

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By: ASHLEY NICOLE HILL

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy at Virginia Commonwealth University

Virginia Commonwealth University, 2018

Dissertation Co-Chairs: Dr. Shawn Utsey and Dr. Kristina Hood
Professors
Department of African American Studies, Department of Psychology

In the U.S., Black mothers experience fetal and infant mortality at alarming rates when compared to White and Latina mothers (Gregory, Drake, & Martin, 2018). The intent of this study was to examine perinatal loss among Black American women and to expand understanding of how the Strong Black Woman (SBW) ideology influences bereavement. Data were gathered from (N=109) Black American bereaved mothers. It was predicted that endorsement of differing aspects of the SBW would moderate the relationship between perinatal grief and psychosocial outcomes (i.e., depression and post-traumatic growth). Regression analyses, alongside a bootstrapping procedure via PROCESS (Hayes, 2017), were used to evaluate the moderation models. Results yielded a model of perinatal bereavement among Black American mothers. In particular, reliance on spirituality moderated the relationship between perinatal grief and depression, while the obligation to manifest strength moderated the relation between perinatal
grief and posttraumatic growth (PTG). Neither moderated moderation model was significant. The model provided significant implications for clinical practice and intervention.

The Role of Strength: Navigating Perinatal Loss Among Black Women

Chapter 1: Introduction

Black American women suffer perinatal mortality at disturbing rates. According to the CDC, Black American women are twice (10.66 per 100,000 live births) as likely to experience a perinatal death (e.g. miscarriage, stillborn, neonatal death), than their White (4.98) and Latina (5.35) counterparts (Gregory, Drake, & Martin, 2018). Black American women themselves have shown increased vulnerability to maternal morbidity and pregnancy-related deaths (43.7 per 100.00 live births), relative to their White counterparts (12.7), (Creanga, Syverson, Seed, & Callaghan, 2017). Contextual factors such as the intersection between race, gender, and class influence perinatal loss experiences (Callister, 2006; Wallace, Green, Richardson, Theall, & Crear-Perry, 2017). Research suggests that experiences of racism negatively shape pregnancy and birth outcomes for Black American women, especially those with depressive symptoms (Barnes, 2008; Slaughter-Acey, Talley, Stevenson, & Misra, 2018). As a result, Black American pregnant and postpartum women face unique challenges that affect their pregnancies and resulting births and losses.

Despite the known health risks surrounding Black American women and infants, there are significant gaps in the Black perinatal loss literature. Specifically, there are few studies that examine how Black women endure perinatal loss with respect to their psychological and physical outcomes. Additionally, previous research has not yet examined how culturally congruent coping
schemas, such as Strong Black Woman (SBW) schema, are used by Black women to persevere through perinatal loss. SBW ideology refers to relational scripts that guide Black womanhood in which Black women are socialized to be strong and endure a multitude of sociocultural stressors (Abrams, Maxwell, Pope, & Belgrave, 2014; Black & Peacock, 2011; Woods-Giscombé, 2010). In addition to manifesting strength, reliance on spirituality is a core trait of the SBW ideal (Abrams et al., 2014). Throughout the Black perinatal loss literature, Black women have recounted using spirituality and religiosity to cope (Fenstermacher, 2014; Kavanaugh & Hershberger, 2005; Van, 2001; Van & Meleis, 2003; Wallace et al., 2017). During bereavement, Black women enact strength to survive everyday life stressors (Wallace et al., 2017). However, byproducts of embodying strength include silencing one’s grief and the avoidance of emotional pain (Rosenblatt & Wallace, 2005). One explanation is that Black women endure their losses without showing weakness because they perceive having no other options except being strong for their families and communities (Woods-Giscombé, 2010). Thus, SBW acts as a protective coping strategy with psychological costs. This research sought to understand how SBW contributes to the resilience of Black women and influences their psychosocial outcomes after perinatal loss.

Purpose of Study
The intent of this study was to investigate the relationship between perinatal grief and psychological well-being among Black American mothers and to understand how components of the SBW schema affect that relationship. Building upon previous models of perinatal loss and Womanist theory (Bryant-Davis & Comas-Díaz, 2016) this study examined whether specific components of the SBW (e.g., Obligation to Manifest Strength and Reliance on Spirituality) uniquely buffer or facilitate the relationship between perinatal grief and psychosocial outcomes.
Chapter 2: Literature Review

Defining Perinatal Loss

Examining perinatal loss among Black American women begins with establishing a clear definition of the construct. Some scholars define perinatal loss as a loss that takes place during pregnancy or shortly after birth like miscarriages, stillbirths, or neonatal deaths (Bhat & Byatt, 2016), while others have expanded the construct to include infant loss (Callister, 2006). According to the CDC, “Fetal death refers to the intrauterine death of a fetus prior to delivery” (MacDorman & Gregory, 2015), while “infant mortality is the death of an infant before his or her first birthday” (CDC, 2019). Thus, the present study conceptualized perinatal losses as two subcategories; prenatal (before birth) and postnatal (after birth) losses.

Prenatal losses or fetal deaths encompass miscarriages (loss at or before 20 weeks of gestational age) and stillbirth (a loss after 20 weeks) (Campbell-Jackson & Horsch, 2014; Kersting & Wagner, 2012). Meanwhile, postnatal losses refer to neonatal deaths (infant deaths before the 28th day of life), late infant loss (infant deaths after 28 days through the first year), PICU deaths (infant death that occurs within a pediatric intensive care unit), and NICU death (infant death during admission to a neonatal intensive care unit) (MacDorman & Gregory, 2015; Youngblut, Brooten, Glaze, Promise, & Yoo, 2017). In addition to defining perinatal loss, it is important to clarify the terms used to denote the grief experience. Many parents ascribe personhood to their unborn child or deceased infant; and thus, view the perinatal loss as the loss of a child (Krosch & Shakespeare-Finch, 2017; Van, 2001). Therefore, perinatal loss, loss of a child, and loss of the baby was used interchangeably in the subsequent document. The present study investigated Black American perinatal losses which include prenatal losses (i.e., miscarriage, stillbirth, fetal death) and postnatal losses (i.e., neonatal death, PICU death, NICU death, infant death).
**Before the Loss.** There are several factors that come before the perinatal loss that contribute to the psychological distress of bereaved parents. The initial future orientation of the pregnancy experience from preparing one's home, arranging time off from work, and discussing how a future child will change family dynamics, contribute to parental attachment and identity formation (Lang et al., 2011). Likewise, pregnancy-related celebrations (i.e. gender reveal parties, pregnancy photoshoots, and baby showers) may also foster attachment between parents and their future child. Advances in technology, like ultrasound and 3-D imaging, have created opportunities for strengthening the early bond between a mother and her unborn child (Brier, 2008; Brownlee & Oikonen, 2004). Thus, the experience of loss involves not only the concrete loss but also the metaphysical loss of a future with their child (Campbell-Jackson & Horsch, 2014). In essence, the loss goes beyond the physical to include the cognitive and emotional loss of dreams, fantasies, and expectations that can form early in the pregnancy (Callister, 2006) or prior to conception. All of these pre-loss factors, including parental bonding and maternal identity development, contribute to the intensity of perinatal grief.

**After the Loss.** Following the death, mothers must grapple with the reality that their baby is gone. Some scholars argue that perinatal loss signifies a significant traumatic event in the lives of would-be parents (Christiansen, 2017). For parents who have miscarried, they described feeling robbed due to the lack of memories and time with their unborn child (Brier, 2008). While for those whose infant has died, it can be traumatic for parents to go from rejoicing the birth of their child to mourning their child’s death (Christiansen, Elklit, & Olff, 2013). Additionally, the ambiguous nature of perinatal loss, such as being unable to pinpoint the cause of death or even when loss occurred, makes it hard for families to cope (Lang et al., 2011). Immediately following any type of loss, parents face numerous decisions that include deciding on which
mourning rituals to perform and whom to tell about loss in cases of prenatal losses (Lang et al., 2011). In case of a postnatal loss, parents may struggle with deciding on whether to have a funeral or memorial and whether they would like to request an autopsy report (Lang et al., 2011; Youngblut et al., 2017). The emotional and cognitive components immediately surrounding the loss provide context for maternal grief.

Bereaved mothers experience a complex array of emotions that include anxiety, guilt, sadness, frustration, regret, and self-blame (Bhat & Byatt, 2016; Cacciatore, 2010; Callister, 2006; Campbell-Jackson & Horsch, 2014). This mix of emotions may change, fluctuate over time, and even last long after loss (Cacciatore, 2010). In particular, parents may regret decisions made in the aftermath of the loss (e.g., choices in mourning rituals) and consequently feel that they have failed their child (Bhat & Byatt, 2016; Cacciatore, 2010). Physiologically, depending on the gestational age of the loss, mothers may also grapple with the physical remnants of their pregnancy. For example, mothers after a postnatal loss may continue to experience lactation and hormonal changes, which can be distressing (Cacciatore, 2010). Perinatal loss is a multifaceted process in which all of these factors influence how bereaved mothers view their loss and process their grief.

Lastly, perinatal loss potentially alters the development of maternal identity. Many studies suggest that maternal development may begin during pregnancy or soon after birth based on maternal bonding and attachment (Campbell-Jackson & Horsch, 2014). Additionally, due to historical patriarchy, the ability to conceive and have a normally developing pregnancy can be largely tied to a mother’s self-worth (Layne, 2006). In fact, scholars have found that bereaved mothers experience low body esteem and feel that their bodies have failed them due to their inability to birth a healthy infant (Burden et al., 2016). Scholars have also found that perinatal
loss disrupts how women evaluate their role within their families, especially as a mother (Patterson, 2000). Specifically, how women conceptualized and perceived their various roles within their day to day lives affected the intensity of their perinatal grief (Patterson, 2000). In essence, experiencing a perinatal loss undermines self-efficacy in one’s maternal role. In summary, perinatal grief is multidimensional in which bereaved mothers endure a variety of emotional, cognitive and physiological factors that shape their maternal identity and influence their mental health.

**Black American Bereavement**

Understanding Black American bereavement begins with examining cultural worldviews surrounding death and dying. Rooted in African epistemologies, the Black American community views death as a spiritual transition instead of finality (Barrett & Heller, 2002). Specifically, death is seen as a journey in which the lost loved one is traveling from a physical realm to a nonphysical one—the afterlife (Barrett & Heller, 2002). Scholars have emphasized the unique cultural needs of Black Americans during bereavement as Black American mourning and grief is distinctly different from grief among other ethnic groups. Firstly, it is shaped by the past and continued lived experiences of oppression within American society. Black American death rituals are uniquely influenced by racism (Rosenblatt & Wallace, 2005). In particular, institutional racism has rippling consequences that alter Black American life expectancy, health care, socioeconomic status (SES), education, among other social determinants of health (Rosenblatt & Wallace, 2005). Beyond racism, discrimination based on the intersection of social identity, such as class, race, gender, and sexual orientation, all shape Black American mourning rituals and bereavement. Consequently, Black people have adopted death rituals that are congruent to their cultural and social identities and experiences.
Black American mourning rituals are marked by an influx of practical (i.e., food, funeral expenses) and emotional support (e.g. offering sympathy or advice) in the aftermath of the loss (Hardy-Bougere, 2008; Rosenblatt & Wallace, 2005). Many Black American funerals are noted to have an outpouring of family, fictive kin, friends, and community members that surround the bereaved in their time of need (Barrett & Heller, 2002; Rosenblatt & Wallace, 2005). Bereaved Black Americans also may draw on resiliency factors, such as strength and hardiness to withstand intense grief (Hardy-Bougere, 2008). Informed by their world view, Black Americans have adopted grief rituals and developed culturally congruent grief responses to help them navigate their bereavement process.

Researchers have used quantitative approaches to examine Black American bereavement. Studies have found that continuing bonds, emotional, and spiritual ties that transcend death, are particularly salient among bereaved Black Americans (Laurie & Neimeyer, 2008). Specifically, Black American bereavement is marked by strong and intense displays of emotions that include fainting and intense lamenting (Rosenblatt & Wallace, 2005), while others may appear detached and reserved following their loss (Hardy-Bourgere, 2008). Although having strong continuing bonds can be at times adaptive, it has been linked to pathological grief outcomes (Boulware & Bui, 2016). Moreover, it may be hard to "move on" from grief, because it provides a connection to their late loved one (Rosenblatt & Wallace, 2005). Drawing from Afrocentric spiritual worldviews, grief provides a bridge between this life and the next; and thus, discarding grief is viewed as severing that connection. In short, understanding the role of connection to a loved one is critical when examining the psychological outcomes of Black bereavement.

There is evidence that culturally congruent coping strategies may help to lessen the grief experience for Black Americans (Sharpe, Osteen, Frey, & Michalopoulos, 2014). Scholars have
examined how social support and religious coping aid and inhibit Black American grief. Specifically, negative religious coping, such as belief in an unkind and punishing God, predicted prolonged grief symptoms (Boulware & Bui, 2016). In contrast, perceived social support was noted as a protective factor against disordered grief symptoms (Boulware & Bui, 2016).

However, Black Americans who did not discuss their loss with others and silenced themselves were more likely to increased distress while grieving (Laurie & Neimeyer, 2008). In addition to social support and spirituality, gender also shapes Black grief. Researchers have found that Black American women grieve more intensely than Black men, as measured by endorsement of grief symptoms (Sharpe et al., 2014). Despite cultural differences in grief, there are some universal elements to grief shared by most cultures – meaning-making, seeking social support, engagement in activism and religious coping (Boulware & Bui, 2016; Boyden, Kavanaugh, Issel, Eldeirawi, & Meert, 2014; Hardy-Bougere, 2008; Van, 2001). As evident by previous research, there are cultural nuances that make Black American grief distinct as well as features of the grief experience that are culturally universal.

In recent reviews of Black grief literature, Granek and Peleg-Sagy (2015, 2017) heavily critiqued researchers for pathologizing bereaved Black Americans and noted significant gaps in the literature. First, when examining the facets of grief and mourning, the authors emphasized the necessity of understanding how grief is shaped by intersections of identity that include gender, race, ethnicity, age, and SES (Granek & Peleg-Sagy, 2015). Without considerations of context, culturally appropriate grief experiences appear pathological, especially if it deviates from the Eurocentric norm (Granek & Peleg-Sagy, 2015, 2017). For example, intense expression of emotion and extended duration of grief are considered by the DSM-V to be pathological response to grief, which may lead researchers to over-pathologize bereaved Black Americans.
Secondly, the authors found that relatively few studies focused on perinatal loss (Granek, & Peleg-Sagy, 2015). Due to the differences between perinatal grief and other forms of grief (i.e., lack of shared memories and invalidation of grief from others), further research is needed to fully understand Black bereavement in the context of perinatal loss. Thirdly, scholars sharply critiqued the implied assumption that Eurocentric grief experiences were normative and the overreliance on comparative studies to understand grief. Granek and Peleg-Sagy (2015, 2017) explained that many of the cultural nuances of the Black experience are misinterpreted when juxtaposed to the White “norm.” Therefore, a culturally inclusive lens is needed when examining the cultural components of Black bereavement. Due to these gaps and cultural validity issues, it is necessary to examine how Black American grief and mourning changes when faced with perinatal loss.

**Black Perinatal Bereavement**

Perinatal bereavement is a distinct form of bereavement even within the Black experience in the United States. However, Black perinatal grief literature is early in its development, with few studies published. In a literature review of Black perinatal bereavement, Boyden and colleagues (2014) examined the psychological effects of bereavement and coping strategies among 10 studies (5 dissertations and 5 journal articles). Across several studies, Black parents were described to have experienced an intense mix of emotions that sustained after several years after loss (Boyden et al., 2014). Reactions to perinatal loss included shock, irritability, guilt, shame, envy, anger, depressed mood, and even suicidal ideation (Boyden et al., 2014; Kavanaugh & Hershberger, 2005). Additionally, Black American values that govern familial obligation and emotional expression were found to alter the grieving process and the solicitation of social support (Boyden et al., 2014). To accommodate those values, Black mothers use a variety of coping strategies that include discussing their loss with others, engaging in memory-
making and self-soothing activities, developing a new routine, and increasing self-care (Boyden et al., 2014; Van, 2001). Bereaved mothers may also find solace in spending time with their living children (Kavanaugh and Hershberger, 2004; Van & Meleis 2003). Without these protective factors, Black bereaved parents have increased risk for depression, higher use of maladaptive coping strategies, poor self-care, poorer overall health (Boyden et al., 2014), and post-traumatic stress (Youngblut et al., 2013). Nevertheless, some parents noted feeling empowered after grieving, which enabled them to make positive life changes, such as leaving unhealthy relationships, increasing self-care; and having the desire to help others after loss (Fernstermacher, 2014; Paisley-Cleveland, 2013). As such, it is important to assess for both pathological outcomes (i.e., depression) and resiliency (i.e., posttraumatic growth) among Black bereaved mothers.

**SBW and Black Perinatal Bereavement**

Black American perinatal bereavement is influenced by the Strong Black Woman schema, a racialized gendered role that shapes Black womanhood. Racialized gendered roles were birthed as a consequence of the intersectional oppression of Black women (West, 2008, 2017). A predecessor of the SBW schema, the Mammy stereotype embodies nurturance, self-sacrificial caregiving, and self-neglect (West, 2008; West, 2017). In essence, Black women are overburdened with providing practical and emotional care toward others in a variety of contexts (e.g., home, work, community), which eventually results in significant physical and emotional strain (West, 2017). The SBW is the metaphorical daughter of the Mammy. Although the SBW inherits the obligation to take care of others, she departs from the Mammy and other negative stereotypes by presenting a positive and empowering image of Black women (Nelson, Cardemil, & Adeoye, 2016; Woods-Giscombé, 2010). Moreover, SBW can be conceptualized as a coping
strategy that enables Black women to combat sources of oppression (Woods-Giscombe, 2010). Despite its adaptive features, previous studies have linked internalization of the SBW to anxiety, depression, emotional dysregulation and disordered eating (Black & Peacock, 2011; Harrington, Crowther, & Shipherd, 2010). Acknowledging both the adaptive functions and the psychological costs of the SBW, it is critical to understand how components of the SBW are used to cope with perinatal grief.

Obligation to Manifest Strength. In SBW ideology, Black women are pressured to be strong unwavering vessels to engender the survival of their communities and families (Woods-Giscombé, 2010). Scholars note that the decision to embody strengths is sometimes a conscious choice, but often is an external pressure (Lewis & Neville, 2015; Woods-Giscombé, 2010). Black women are pressed upon by their family, community, and even the greater society to exude strength by striving to be independent, taking on leadership roles, and remaining resilient (Abrams, Maxwell, Pope, & Belgrave, 2014). In particular, Black women are raised to be self-sufficient and independent; in which, they only rely on themselves to meet their needs (Abram et al., 2014). Consequently, Black women find themselves adopting a multitude of roles and responsibilities, which can lead to feeling overburdened and strained (Abrams et al., 2014). To preserve a mask of strength, Black women have been socialized to eschew emotional vulnerability (Abrams et al., 2014; Woods-Giscombe, 2010). Therefore, she silences her feelings, fears, and concerns and hides them from others (Abrams et al., 2014; Wood-Giscombe, 2010), which can hold deleterious outcomes, such as depression (Abrams, Hill, & Maxwell, 2018). Additionally, Black women are socialized to be resilient so that they can surmount adversity and navigate oppression (Abrams et al., 2014; Woods-Giscombé, 2010). Thus, manifesting strength enables Black women to ensure stability for their families and drives their
investment in their community (Woods-Giscombé, 2010). Beyond daily life stressors, the expectation to be strong also arises in response to acute stressors like perinatal grief.

Previous bereavement research reveals that Black mothers use strength schemas to manage grief (Hardy-Bougere, 2008; Kavanaugh & Hershberger, 2005; Rosenblatt & Wallace, 2005), but the Strong Black Woman schema has yet to be examined quantitatively in relation to perinatal grief. There are several parallels between Black American grief coping strategies and facets of the SBW schema. Black Americans have also been socialized to be "strong" and “push through” when managing their grief (Rosenblatt & Wallace, 2005). Embodying strength involves emotionally avoiding distressing memories of the loss and hiding grief from others (Rosenblatt & Wallace, 2005). Strength becomes an “armor” that defends oneself against emotional vulnerability and being overcome with grief (Rosenblatt & Wallace, 2005). For some, to forsake the strength schema is seen as relinquishing their control over the grieving process (Rosenblatt & Wallace, 2005). Role flexibility is another trait of the SBW, in which Black women are expected to assume multiple roles in different realms of their professional, personal and social lives (Abrams et al., 2014). Black women are known to fulfill any necessary role within their social network with ease, especially in times of crisis (Laurie & Neimeyer, 2008). Black women also face additional burdens (e.g. managing other losses and familial stressors) that alter their mourning process (Van & Meleis, 2002). As a result, some Black women adopted a survival mentality to overcome various adversities (Wallace et al., 2017).

However, Black people have mixed views on the use of strength schemas while grieving. While some noted the value of hardiness and endurance during emotional turmoil, others note the taxing nature of being strong at all times (Rosenblatt & Wallace, 2005). Most importantly, many noted that the façade of strength prevented one from actually grieving and receiving
emotional support (Rosenblatt & Wallace, 2005). Due to the external pressures to summon strength, Black bereaved women may then focus on spirituality to withstand their grief.

**Reliance on Spirituality.** Despite hiding their true feelings from others, Black women report sharing their vulnerability with God (Woods-Giscombé, 2010). Embedded within the SBW schema is an unwavering sense of spirituality and religiosity (Abrams et al., 2014). In particular, Black women find solace in their belief in a higher power and purpose greater than themselves (Abrams et al., 2014). Black women turn to God as a source of encouragement, hope, and renewal to face adversity (Abrams et al., 2014; Woods-Giscombé, 2010). Specifically, through faith, a SBW is able to summon strength and navigate through stressful experiences (Abrams et al., 2014), such as loss and grief. Use of spirituality is not unique to the Black experience when coping with perinatal grief; however, Black bereaved mothers are more likely to engage in spiritual coping than White bereaved mothers (Eichenbaum, 2012). In every study examining perinatal grief, Black mothers described using spirituality to cope (Kavanaugh & Hershberger, 2005; Van, 2001; Van & Meleis, 2003). Even if the bereaved did not attend religious services regularly, many found spiritual coping helpful in providing them with hope and peace (Kavanaugh & Hershberger, 2005; Van, 2001). Previous studies found that Black women prayed to God asking for forgiveness, strength, peace, and improved health moving forward (Van & Meleis, 2003). In particular, belief in an afterlife, where their child was not suffering, helped parents make meaning of their loss (Van & Meleis, 2003). Moreover, engagement in religious activities, such as attending a place of worship was found to lessen the intensity of grief (Mann, McKeown, Bacon, Vesselinov, & Bush, 2008). Overall, scholars argue that religiosity and spirituality is a prominent component of Black perinatal bereavement.
Contextualizing the Black Grief Experience

The experience of Black American perinatal loss and subsequent grief occurs in the context of numerous social and community factors that are important considerations in its severity and duration. In a recent study of infant mortality, Wallace and colleagues (2017) examined community factors that contributed to disproportionate infant mortality rates among Black American women. Community factors included neighborhood characteristics such as crime and pollution, which are indirectly affected by SES. The study analyzed both interview data from 18 Black women and rates of income inequity, scarcity of healthy foods, crime, pollution, employment, and segregation throughout the United States. Notably, disparities in income and isolation from other racial communities significantly contributed to inequitable Black infant mortality rates. Research also suggested that SES influences patient-provider communication. Several studies described how low income Black bereaved parents experience stereotyping and differential treatment due to race and insurance coverage (Kavanaugh & Hershberger, 2005; Wallace et al., 2017). Specifically, parents noted the lack of cultural sensitivity (e.g. the minimization of pregnancy complication symptoms) and racial and gender bias among providers (Kavanaugh & Robertson, 1999). Due to the influence of SES on bereavement, it is important to account for its role in the relationship between perinatal grief and psychosocial outcomes.

Beyond SES, Black women face a multitude of everyday and institutional stressors that impact their grieving process. Generally, Black parents must also manage stress related to work, familial, finances, and housing (Kavanaugh & Hershberger, 2005). Many parents also noted processing multiple losses in addition to the loss of their child augmenting their grief (Boyden et al., 2014; Kavanaugh & Hershberger, 2005). Black women also reported experiencing stress uniquely related to their race, gender, and gendered racism (Wallace et al., 2017). Unfortunately,
bias due to various intersections of identities, impact how Black women experience perinatal loss. As demonstrated within the literature, the influence of intersecting identities must be attended to when researching Black American bereavement.

**Pathological Grief Outcomes**

Perinatal loss has significant impacts on the psychological well-being of parents as it can lead to traumatic stress, depressive and anxiety symptoms as well as disruptive sleep (Kersting & Wagner, 2012). Specifically, it can lead to complicated grief, which is marked by prolonged grief symptoms and dysfunction in day-to-day living (Bhat & Byatt, 2016). Complicated grief has been defined as grief responses that impair psychological and physiological well-being (Kersting & Wagner, 2012). Among perinatal bereaved mothers, the effects of complicated grief can include persistent depression, anxiety, and post-traumatic stress symptomatology (Bhat & Byatt, 2016; Campbell-Jackson & Horsch, 2014; Krosch & Shakespeare-Finch, 2017; Randolph, Hruby, & Sharif, 2015; Youngblut, Brooten, Cantwell, del Moral, & Totapally, 2013). Additionally, infant loss has been linked to increased hospitalizations and chronic illness in parents (Youngblut et al., 2013). For some mothers, these symptoms last for several years after loss (Campbell-Jackson & Horsch, 2014; Kersting & Wagner, 2012). Of these pathological grief outcomes, clinical depression is a particular concern among bereaved mothers because of its significant impact on functioning and physical health.

Researchers have clarified that although grief and depression have similar symptoms, grief is a normal and expected process (American Psychiatric Association, 2013; Burden et al., 2016). For most mothers, intense feelings of grief remain during the first few months of their loss and decreased over time (Youngblut et al., 2017). However, clinical depression may develop if mood changes last for several years and disrupt normal functioning (Burden et al., 2016). The
major distinction between grief and clinical depression is that clinically depressed individuals have anhedonia (loss of pleasure or enjoyment) and generalized changes in mood (American Psychiatric Association, 2013). According to the DSM-5, symptoms of major depressive disorder also include fatigue, excessive guilt, worthlessness, impairment in social or occupational functioning, and suicidal ideation (American Psychiatric Association, 2013). When comparing perinatal grief and depression, there are several overlapping similarities. Across several studies, bereaved mothers expressed having depressive symptoms that included self-blame, regret, excessive guilt, decreased self-esteem and feeling a failure (Burden et al., 2016; Kersting & Wagner, 2012). In particular, many parents blamed themselves for their child's death and noted feeling like they failed their child (Kersting & Wagner, 2012). In rare cases, parents voiced having suicidal thoughts (Cacciatore, 2010; Kavanaugh & Hershberger, 2005). Bereaved mother may also experience increased jealousy toward other mothers and family members, limiting their access to social support (Kersting & Wagner, 2012). Beyond emotional responses, grief impacted other areas of functioning such as work productivity (Burden et al., 2016), which is also a symptom of clinical depression. Due to the established risk for developing clinical depression following a perinatal loss, the study investigated depressive symptoms among Black American mothers.

**Post-traumatic Growth and Perinatal Loss**

Post-traumatic growth (PTG) is a growing area of research within trauma and bereavement. Instead of solely focusing on the adverse consequence of trauma, researchers have sought to better comprehend the resilience that develops out of trauma (Tedeschi & Calhoun, 2004). PTG is defined as a cognitive and behavioral change in response to intense adversity (Black & Wright, 2012). Specifically, it is a fundamental shift in how survivors of trauma view
the world, themselves, and their relationships with others; giving way to behavioral change and growth (Krosch & Shakespeare-Finch, 2017). PTG is closely related to resilience, in that it is marked by increased strength, competency, and maturity (Black & Wright, 2012). However, in contrast, PTG involves a disruption of current cognitive beliefs and assumptions, forcing individuals to form a new cognitive schema (Tedeschi & Calhoun, 2004). The dimensions of change that makeup PTG include a deeper appreciation for life, increased empathy within relationships, increased faith or spirituality, a renewed sense of purpose and optimism for life possibilities (Martinleková & Klatt, 2017; Tedeschi & Calhoun, 2004). PTG develops after continued reflection on the trauma resulting in increased inclusivity, openness, reflectivity, and flexibility (Black & Wright, 2012).

PTG has been documented in several studies as a feature of the perinatal bereavement process (Büchi et al., 2007; Burden et al., 2016; Thomadaki, 2017). PTG does not displace the intensity of perinatal grief but instead, it develops simultaneously as the bereaved work through their grief (Black & Wright, 2012). In a recent study, Krosch and Shakespeare-Finch (2017) investigated how changes in core beliefs influenced grief and post-traumatic growth. Researchers hypothesized that after a perinatal loss, parents would struggle to make meaning of the loss because it damaged their worldview and belief in a “just world.” Consequently, if they were not able to integrate the loss into their current worldview, they would then have to adopt a new worldview leading to changes in their behavior (Krosch & Shakespeare-Finch, 2017). Results indicated that changes in core belief and perinatal grief predicted posttraumatic growth (Krosch & Shakespeare-Finch, 2017). In particular, increased self-worth and positive self-image were predictive of PTG (Engelkemeyer & Marwit, 2008). Receiving social support also bolsters post-traumatic growth, in that being practically and emotionally supported after the loss of a
child predicted post-traumatic growth (Ogińska-bulik, 2018). Researchers have also examined how forgiveness following a perinatal loss contributed to their posttraumatic growth. After a perinatal loss, parents are angry at themselves, at others, and at God (Martinleková & Klatt, 2017). Specifically, grieving mothers expressed feeling guilty and regretful, were angered by lack of social support, and felt betrayed by God (Martinleková & Klatt, 2017). Martincekova & Klatt (2017) predicted that increased forgiveness toward others, themselves, and God would significantly contribute to posttraumatic growth among bereaved mothers. Researchers found that forgiveness enabled bereaved mothers to stop blaming themselves for the loss, have increased empathy for others, feel empowered to help others and strengthened their faith (Martinleková & Klatt, 2017).

The bulk of research on PTG among bereaved parents has been based on European White samples (Büchi et al., 2007; Engelkemeyer & Marwit, 2008; Krosch & Shakespeare-Finch, 2017; Martinleková & Klatt, 2017; Thomadaki, 2017). Only one study to date has examined PTG among Black American women who have experienced perinatal loss. In a longitudinal study, Youngblut et al., (2017) examined grief and post-traumatic growth, following child loss on a neonatal intensive care or pediatric intensive care unit. The study had a diverse sample that included mostly Black American and Latinx parents. Results revealed that for mothers in general, PTG increased over time and that Black mothers had greater amounts of PTG than their Latinx counterparts (Youngblut et al., 2017). Additionally, within the Black perinatal literature, there is evidence of positive change following loss. Some Black women reported finding agency within loss and developed a desire to help other bereaved women (Fenstermacher, 2014; Van, 2001). Others reported having increased self-care and healthier relationships following their loss.
THE ROLE OF STRENGTH

(Paisley-Cleveland, 2013). Due to gaps in the literature, it is imperative to provide a theoretical foundation to substantiate the relationship between PTG and Black perinatal grief.

Pushing on Theory

Pushing on Theory provides a theoretical lens to examine Black American perinatal bereavement. Following a qualitative study, Wright (2010) proposed the Pushing on Theory to describe the grieving process women undergo following a perinatal loss. In essence, “pushing on” denoted the process in which bereaved mothers’ “push” resiliently through the emotional strain of grief (Wright, 2010). Pushing on Theory, encompassed the task or stages that bereaved women must traverse. As depicted in Figure 1, the outlined stages included *Experiencing the Pregnancy*, *Losing the Baby*, *Bearing the Burden*, *Working it Through*, *Coming to Terms*, and *Living a Changed Life*. Stage 1, *Experiencing the Pregnancy* involved the initial development of maternal identity during the pregnancy period. After discovering their pregnancy, women begin to engage in maternal bonding and prenatal self-care (i.e., taking vitamins, meeting with providers). In the second stage, *Losing the Baby* signified an action-oriented process in which women become aware of the perinatal loss (Wright, 2016). During this stage, women meet with their health providers to confirm their loss as well as experience the physical symptoms of the pre- or post-natal loss. In Stage 3, women experience *Bearing the Burden*, which entailed the initial decisions following loss, emotional responses to grief, and physiological by-products of...
loss (Wright, 2016). The burden also consisted of notifying their social support system of the loss which may ironically, involve them comforting and caring for others (Wright, 2016). After bearing the burden, women are then engaged in Working It Through in Stage 4. The fourth stage signified the actual coping process such as navigating their emotional reactions and psychological distress. During this stage, women desire answers about the reason for the loss, which may result in self-blame. After searching, mothers then reflect on the loss, using tangible mementos (Wright, 2016) as well as seek social support (Wright, 2010). In stage 5, Coming to Terms referred to the actual acceptance of the loss, self-forgiveness and forgiving others, and meaning-making. As mothers come to terms, they are able to incorporate their loss into their lives and reconcile feelings of anger or resentment. The last stage of Pushing on theory is Living a Changed Life, which referred to posttraumatic growth. During this stage, mothers view life differently (i.e. a deeper appreciation for life), and experience changes in their relationships (i.e. feeling closer to those who supportive and estranged from those who were unsupportive). As demonstrated in its stages, Pushing on Theory embodied a strength-based approach in which mothers start with intense feelings of loss progress toward personal growth.

Other qualitative researchers have found that similar processes that Black American women undergo when grieving perinatal losses (Foyt, 2007). In contrast to Pushing on Theory, Foyt (2007) emphasized a process model, instead of a stage theory, to highlight that grief is nonlinear. Based on the interviews of 15 low-income Black American mothers and family members, Foyt (2007) found that Black women first experience a process termed a "burden like no other" when grieving an infant death. In particular, the burden consisted of their emotional responses, changes in their maternal identity and family system, the initial shock of the loss, and their experiences with health providers and morticians following loss. It also includes financial
stressors related to the loss, as well as depressive symptoms and engagement in maladaptive coping skills (i.e. excessively eating, substance misuse) (Foyt, 2007). Additionally, social support was a key facilitator that enabled women to manage grief. Despite the differences in terminology, there were several overlapping stages in Foyt’s (2007) Model of the Experience of Infant Death for Lower-Income African American Mothers and Wright’s (2016) Pushing on Theory. Specifically, Foyt’s (2007) secondary process, “Living Through It" seems to overlap with Pushing on Theory’s Stage 3, Bearing the Burden, in which women both found ways to survive grief by allowing themselves to intensely grief and avoiding traumatic stimuli. In Foyt’s (2007) model, after experiencing intense grief, Black women "came around" by engaging in self-care, using spiritual coping strategies, and narrating their perinatal loss experience, which also embodies Stage 4: Working It Through of Pushing on Theory. The final processes of Foyt’s (2007) model, involved Meaning Making and Reclaiming Control amid the grief. Both processes overlapped with Pushing on Theory’s Stage 5: Coming to Terms and Stage 6: Living a Changed Life. Specifically, Black women noted reflecting on their loss and finding meaning in their suffering. Most importantly, mothers reported experiences of post-traumatic growth, such as integration of their loss of their changed life and goal setting (Foyt, 2007). As evidenced by comparisons between Foyt’s (2007) model and Wright’s (2010) theory, there is significant overlap between these qualitative driven theories. Nevertheless, there is no quantitative study to date to examine these phases among Black bereaved women.

Despite its innovation, there are several reasons the Pushing on Theory should be expanded. First, Pushing on Theory was generated from the interviews of 19 women who had experienced perinatal loss (Wright, 2010). The original study did not provide information on the demographics of the sample (e.g., race, SES, etc.). However, it appeared by the setting
information provided that the sample was mostly from a White middle-class background (Wright, 2010). Moreover, this theory does not consider how culture or context may influence the stages of the theory. In particular, it does not capture how cultural congruent coping strategies, such as the Strong Black Woman Schema or racialized gendered roles (Abrams et al., 2014; Thomas, Witherspoon, & Speight, 2008), may influence the grief of Black American women. Secondly, although it is important to take a strength-based approach, it is equally important to evaluate possible negative psychological outcomes for women experiencing distress while managing their loss. Previous researchers have demonstrated that perinatal grief can lead to depression, anxiety, and PTSD (Bhat & Byatt, 2016; Campbell-Jackson & Horsch, 2014; Krosch & Shakespeare-Finch, 2017; Randolph et al., 2015; Youngblut et al., 2013). The theory briefly noted the potential for developing pathological grief outcomes (i.e. depression and post-traumatic stress) within the Bearing the Burden stage (Wright, 2016), but did not specify how coping strategies buffered or facilitated these grief outcomes or how they enabled women to move past them. Due to these critiques, it is important to expand the theory to capture the lived experience of bereaved Black American mothers.

Expanding the theory with adding a multicultural framework, such as Womanism, that contextualizes the experience of Black perinatal bereavement. A multicultural framework is needed because perinatal bereavement of Black women is inextricably tied to their position within American society. Specifically, scholars note that bereavement among Black American women is shaped by racism (Rosenblatt & Wallace, 2005) and gendered racism (Barnes, 2008; Slaughter-Acey et al., 2018; Wallace et al., 2017). In particular, a womanist approach added an intersectional perspective in which the various dimensions of identity, such as race, gender, class, and religion, are acknowledged (Sanchez-Hucles, 2016). Womanist theory also focuses on
the strengths that Black women already obtain and seeks to foster cultural harmony within an emphasis on spirituality (Lindsay-Dennis, 2015). Drawing from Womanism, it was essential to frame Black perinatal bereavement within the context of dimensions of power, privilege, and oppression, that shape the lives of Black women (Hardy-Bougere, 2008). Most importantly, womanism establishes the study’s findings and implications for bereavement care in an intersectional framework.

**Purpose of the Study and Hypotheses**

Review of perinatal grief literature suggests that continued research is needed to fill gaps within the Black American perinatal grief literature. In particular, past studies noted that Black mothers manifest strength to manage psychosocial stressors (Black & Peacock, 2011; Harrington et al., 2010; Woods-Giscombé, 2010), such as bereavement (Paisley-Cleveland, 2013; Rosenblatt & Wallace, 2005). However, no study has yet to examine how the use of the Strong Black Woman schema influences psychological well-being among bereaved Black mothers. While, past perinatal research indicated the potential for psychological distress as well as post-traumatic growth among bereaved parents (Cacciatore, 2010; Fenstermacher, 2014; Kavanaugh & Hershberger, 2005; Van, 2001), theories of perinatal grief were not able to capture the psychological outcomes of perinatal grief among Black American women. They also did not indicate what factors inhibit or facilitate that relationship (Wright, 2010). Additionally, previous theories did not control for the effect of SES on bereavement. Therefore, the current study sought to expand the Pushing on Theory to include psychological well-being outcomes. Specifically, it examined how components of SBW strengthened or weakened the relationship between perinatal grief and the psychological consequences of grief.
H1: It was hypothesized that perinatal grief would predict increased depressive symptomatology, after controlling for SES.

a) Obligation to manifest strength was predicted to moderate the relationship between perinatal grief and depression, in which obligation to manifest strength would exacerbate the relationship.

b) Reliance on spiritual coping was hypothesized to moderate the relationship between perinatal grief and depression, in which reliance on spirituality would buffer the relationship.

c) It was hypothesized that reliance on spirituality and obligation to manifest strength will conjointly moderate the relationship between perinatal grief and depression, such that decreased reliance on spirituality and increased obligation to manifest strength, would strengthen the relationship between perinatal grief and depression scores.

H2: It was hypothesized that perinatal grief would predict increased PTG scores after controlling for SES.

a) Obligation to manifest strength was predicted to moderate the relationship between perinatal grief and PTG, in which obligation to manifest strength would strengthen the relationship.

b) Reliance on spirituality was predicted to moderate the relationship between perinatal grief and PTG, in which reliance on spirituality would strengthen the association.

c) In the presence of increased reliance on spirituality, obligation to manifest strength would strengthen the relationship between perinatal grief and PTG.
Chapter 3: Methodology

Participants

The analytic sample included 109 Black American women who had experienced a perinatal loss. Eligibility requirements included self-identifying as a US Black or African American woman, being 18 years or older, and having experienced a prior perinatal loss (with the elapsed time since loss being at least three months (see Wright, 2010). During the cleaning and screening process, cases were removed based on the following criteria: ineligibility, duplication (i.e. a participant submitting more than one response), and insufficient time (i.e. completing the 30-minute survey in less than 10 minutes), resulting in an analytic sample of 109. On average participants were 30.53 years old, $SD= 5.31$, with ages ranging between 19 and 46. The most common types of perinatal loss were miscarriage (58.7%) and having a stillborn child (21.1%) within the sample. Other types of perinatal losses include ectopic pregnancy (6.4%), neonatal death (11%) and infant loss (2.8%). Seven women in the sample indicated having more than one perinatal loss. Time since the perinatal loss averaged 10.1 months with a range of 3 months to 3 years. Half of the sample reported being married at the time of their loss (57.8%) and being married currently (56.0 %). Most of the sample (88.1%) had a collegiate background that ranged from some college to terminal degrees and most (64.3%) were in the middle to upper class based on the annual income. 20% indicated belonging to a faith community and 40% reported receiving church-based or pastoral counseling after their loss.

Data Collection

The Virginia Commonwealth University’s Institutional Review Board approved all study procedures and methods. The study was conducted online so that participants were able to take the survey in the comfort and privacy of a place of their choosing. A prescreen survey was
administered first to ensure that participants identify as a Black woman, are 18 or older and have experienced a perinatal loss. Upon completing the consent form, they were then given a comprehensive questionnaire (e.g., Demographic Questionnaire, Perinatal Grief Scale, Post Traumatic Growth Inventory, Superwoman Subscale, Spiritual-Centered Coping Subscale, and Center for Epidemiologic Studies Depression Scale-Revised) through the confidential Qualtrics system. All participants were given the measures in the same order. After finishing the survey, participants were provided with a list of national psychological or medical resources and the contact information of the student researcher and primary researcher. Lastly, participants, who met eligibility requirements, were given a $10 electronic gift card for completion of the survey. To receive payment, participants were asked to provide their email in the payment survey, after which an electronic gift card was emailed to them.

**Recruitment Strategy**

Participants were recruited using a multistep recruitment strategy that included advertising via word of mouth, print flyers, email, and digital flyers posted on social media. First, a variety of digital flyers were created to attract a heterogeneous sample of Black American women. Next, flyers were distributed on a variety of platforms, chiefly, social media accounts catering to perinatal loss such as online support groups, information pages, and topical groups. A special focus of recruitment centered on networking within Black perinatal loss organizations and initiatives. To gain access to these spaces, relationships were developed with stakeholders (i.e. perinatal doulas, online group facilitators, and mental health professionals) through providing study information and answering relevant questions. Announcements were then posted on blogs and social media accounts periodically until data collection ceased. Digital flyers were also sent through email networks of organizations catering to maternal mental health. Although
the bulk of participants were solicited from online recruiting, paper flyers were also distributed. For instance, the head researcher attended an event for Black perinatal loss, to network with stakeholders, meet potential participants and distribute flyers. During the recruitment process, potential participants were given the full details of the study, including its purpose, aims, and the tangible benefits of participating. Participants were also given the contact information of the research team in case they want to ask questions or voice concerns.

**Measures**

**Demographic Questionnaire.** It was a 14-item questionnaire that assessed age, ethnicity, sexual identity, time since loss, gestational age/chronological age of deceased child, dating status at time of loss, dating status currently, income, education, religious affiliation, number of past losses, type of loss, number of losses, relationship status change and whether they have living children.

**Perinatal Grief.** The Perinatal Grief Scale was used to measure intensity of grief following a perinatal loss (Toedter, Lasker, & Alhadeff, 1988). The 33-item measure was rated on a 5-point scale, in which responses range from 1 (*Strongly Agree*) to 5 (*Strongly Disagree*). The scale consisted of three subscales: Active Grief, Difficulty Coping and Despair. Example items include “I am grieving for the baby” and “The best part of me died with the baby.” Higher scores indicated increased grief intensity. The scale was internally consistent, in which Cronbach’s alpha was $\alpha = .97$ in the original study. Among Black American women, the scale remained stable, $\alpha = .95$ (Patterson, 2000). In the current sample of Black bereaved women, the scale remained consistent, $\alpha = .91$.

**Religious Coping.** The Brief Religious Coping Scale (Pargament, Smith, Koenig, & Perez, 1998) was used to measure the extent to which individuals rely on spirituality to cope with
stressful experiences. The subscale has 14 items divided amongst two subscales: positive religious coping (e.g., “I look to God for strength, support, and guidance in crises.”) and negative religious coping (e.g., “I feel that stressful situations are God’s way of punishing me for my sins or lack of spirituality”). The positive religious coping subscale was used to assess reliance on spirituality while the negative religious coping was used in the exploratory analyses. Pargament and colleagues (2000) found that both subscales were internally consistent with Cronbach’s alphas ranging between $\alpha = .78$-$ .87$. In the present study, the positive and negative religious coping scales remained consistent, $\alpha = .57$ and $\alpha = .57$, respectively. Higher scores on the positive religious coping scale represented a greater reliance on spirituality, while higher scores on the negative religious coping scale represented increased questioning with one’s spirituality and general religious dissatisfaction.

**Obligation to Manifest Strength.** Obligation to manifest strength was measured using the Superwoman subscale of the Stereotypical Roles for Black Woman Scale (Thomas, Witherspoon, & Speight, 2004). It assessed the extent to which Black women feel pressured to embody strength. The 11-item subscale was rated on a 5-point scale that ranges from 1 (strongly disagree) to 5 (strongly agree). Items consisted of “Black women have to be strong to survive”. Higher mean scores indicated increased internalization of the obligation to exude strength. In the original scale, Cronbach's alpha was $\alpha = .67$. In more recent samples of Black women, the scale demonstrated good internal consistency, $\alpha = .79$ (Abrams, Hill, & Maxwell, 2018) and remained consistent in the current study, $\alpha = .72$.

**Post Traumatic Growth.** Tedeschi and Calhoun (1996) created the 21-item Posttraumatic Growth Inventory to assess cognitive and behavioral change following a traumatic life event. It contained five subscales, Relating to Others, New Possibilities, Personal Strength,
Spiritual Change, and Appreciation to life, that refer to the five dimensions of PTG. Items were rated on a 6-point scale where 0 (I did not experience this change as a result of my crisis), 1 (I experienced this change to a very small degree as a result of my crisis), 2 (I experienced this change to a small degree as a result of my crisis), 3 (I experienced this change to a moderate degree as a result of my crisis), 4 (I experienced this change to a great degree as a result of my crisis), and 5 (I experienced this change to a very great degree as a result of my crisis). Items included “I changed my priorities about what is important in life”, “I have more compassion for others” and “I am more likely to try to change things which need changing”. In the original validation study, internal consistency was $\alpha = .90$ and ranged between $\alpha = .67-.85$ for each subscale. In perinatal grief studies, internal consistency remained stable across several studies, $\alpha = .92$ (Krosch & Shakespeare-Finch, 2017), $\alpha = .93$ (Ogińska-bulik, 2018), and $\alpha = .95$ (Martinleková & Klatt, 2017). Within the current sample, the scale remained consistent, $\alpha = .86$. Higher scores indicated increased growth.

**Depression.** Center for Epidemiologic Studies Depression Scale-10 (CES-D) assessed depressive symptomatology (Andresen, Malmgren, Carter., & Patrick, 1994)). It consisted of 10 items that were rated on a 4-point scale that ranged from 0 (Rarely or none of the time) to 3 (All of time). Example of items include “I was bothered by things that usually don't bother me” and “I felt depressed”. The scale was found to be internally consistent in which Cronbach’s alpha was .80 in college populations (Schrick, Sharp, Zvonkovic, & Reifman, 2012) and .80 black college women (Settles, 2006). Cronbach’s alpha was $\alpha = .57$, in the present study. Higher scores signified more depressive symptoms.
Chapter 4: Data Analysis

SPSS 24 alongside PROCESS macro v 3.1 were used for all analyses. Before conducting the primary analyzes, the data were cleaned and screened to ensure that all of the assumptions of normality, outliers, linearity, multicollinearity, and homoscedasticity were met. To check the assumption of normality, the residuals scatterplots of predicted scores and the normal probability plot of the regression standardized residual were reviewed and the assumption was upheld. The data was also screened for univariate and multivariate outliers. Two cases were identified as univariate outliers on one study variable. To reduce their influence on the analyses, several transformations (i.e. logarithm of 10, inverse, square root) were attempted, but they did not reduce the influence of the outliers. Ultimately it was decided that altering the scores of those cases was the best solution (Tabachnick & Fidell, 2001). The Mahalanobis distances for each set
of analyses were examined for multivariate outliers and none were found. To confirm the
assumption of linearity, the scatterplots for each set of variables were examined and the
assumption was not violated. To verify the absence of the multicollinearity correlations of study
variables were reviewed to ensure that the strength of the relationship was less than .7 and the
assumption was met. The assumption of homoscedasticity was not violated as evidenced by
having evenly dispersed residuals. After which, descriptive statistics, such as the mean and
standard deviations, were calculated, as depicted in Table 1. Preliminary analyses, bivariate
correlations, and hierarchal regression were conducted to assess the strength of the relationships
between study variables and investigate primary hypotheses. Lastly, all moderators and the
predictor variables were mean-centered for the moderation analyses.

**Preliminary Analyses**

Correlations were conducted to measure the strength of the relationships between study
variables. Perinatal grief was positively correlated to all study variables: obligation to manifest
strength, \( r(107) = .68, p < .001 \), depression \( r(107) = .20, p < .05 \), PTG \( r(107) = .32, p < .001 \),
except for reliance on spirituality, \( r(107) = -.13, p = .19 \). Among the moderators, obligation to
manifest strength was positively correlated with PTG, \( r(107) = .22, p < .05 \). Type of loss was
positively associated with depression \( r(107) = .25, p < .001 \), in which higher scores indicated
different types of loss. Change in relationship status, in which higher scores indicated a change
in the relationship, was positively correlated with depression \( r(107) = .22, p < .05 \) and negatively
correlated with PTG, \( r(107) = -.20, p < .05 \). As a result, relationship status and type of loss were
added as controls in the moderation models. All other correlations are reflected in Table 2.

**H1: Perinatal Grief and Depression**
A regression analysis was used to investigate the relationship between the intensity of perinatal grief and depression, after controlling for SES, relationship status change, and type of loss. Perinatal grief was found to be significantly associated with depression, after accounting for controls, $R^2 = .18$, $F (4,108) = 5.86$, $p < .001$ and explained 43% of the variance in the model. In the model, as perinatal grief scores increased so did depression scores.

**H$_{1a}$: Perinatal Grief, Obligation to Manifest Strength and Depression**

A moderation analysis was used to test the hypothesis that obligation to manifest strength would moderate the relationship between perinatal grief and depression, after controlling for SES, relationship status change, and type of loss. Results revealed that depression was significantly related to perinatal grief, $[b=.104, SE=.03, p = .001]$, loss type, $[b= 2.56, SE = .90, p = .005]$, and relationship status change, $[b= 3.00, SE=.93, p =.002]$. However, obligation to manifest strength was not significantly associated with depression $[b=-1.46, SE = .87, p = .095]$.

To test the moderated effect of obligation to manifest strength in the model, bootstrapping was used at a 95% confidence interval with 5,000 samples. Results demonstrated that obligation to manifest strength was not a significant moderator in the model, $[b= -.01, SE=.03, p =.823, (95\% CI: -3.18, .257)]$. Thus, hypothesis 1a was not supported.

**H$_{1b}$: Perinatal Grief, Reliance on Spirituality, and Depression**

A moderation analysis with bootstrapping was used to test the hypothesis that reliance on spiritual coping would moderate the relationship between perinatal grief and depression, after controlling for SES, relationship status change, and type of loss. Results revealed that perinatal grief, $[b = .06, SE=.02, p = .008]$, loss type, $[b = 2.28, SE = .86, p = .009]$ and relationship status change, $[b = 2.73, SE =.89, p = .003]$, were significantly associated with depression. However, reliance on spirituality, $[b = -.18, SE=.11, p = .091]$ and SES, $[b =.04, SE = .20, p = .859]$ were
not significantly associated with depression. To test the moderated effect of reliance on spirituality in the model, bootstrapping was used at a 95% confidence interval with 5,000 samples. Supporting hypothesis 1b, results demonstrated that reliance on spirituality significantly moderated the relation between perinatal grief and depression, after accounting for SES, relationship status change, and type of loss, \(b = .01, SE = .004, (95\% CI: .01, 02)\). As depicted in Figure 1, depression scores for individuals with low reliance on spirituality did not change as perinatal grief scores increased. In contrast, for individuals with high reliance on spirituality, depression scores significantly increased as perinatal grief score increased.

**H1c: Perinatal Grief, Reliance on Spirituality, Obligation to Manifest Strength and Depression**

To examine the hypothesis that obligation to manifest strength and reliance on spirituality would conjointly moderate the relationship between perinatal grief and depression, a moderated moderation analysis was conducted. SES, type of loss, and relationship status change were added as controls into moderated moderation model. In the current model, perinatal grief, \(b = .05, SE = .03, p = .144\), obligation to manifest strength, \(b = -.76, SE = .84, p = .364\), reliance on spirituality, \(b = -.10, SE = .15, p = .515\), and SES \(b = -.002, SE = .20, p = .992\) were not significantly associated with depression. However, loss type, \(b = 1.85, SE = .88, p = .039\) and relationship status change \(b = 2.71, SE = .91, p = .004\) were significantly related to depression. Bootstrapping was used at a 95% confidence interval with 5,000 samples to conduct the simple moderations and moderated moderation. In the model, obligation to manifest strength in isolation did not significantly moderated the relationship between perinatal grief and depression, \(b = .04, SE = .03, p = .195 (95\% CI: -.02, .10)\). In contrast, reliance to spirituality significantly moderated the aforementioned relationship, \(b = .02, SE = .01, p = .002 (95\% CI:.01, .04)\).
Examining the interaction plot, Figure 2, revealed that those with high reliance on spirituality, depression scores significantly increased as perinatal grief scores increased. Meanwhile, at low reliance there was no significant change in depression scores as perinatal grief increased. Contrary to hypothesis $H_{1c}$, results indicated that reliance on spirituality and obligation to manifest strength did not conjointly moderate the relationship between perinatal grief and depression [$b = -.002, SE = .01, p = .707, (95\% \ CI: -.01, .01)]

$H_2$: Perinatal Grief and Post Traumatic Growth

A regression analysis was used to investigate the hypothesis that perinatal grief would predict PTG. The model tested whether the intensity of perinatal grief was related to PTG, after controlling for SES and relationship status change. Perinatal grief was significantly associated with PTG, $R^2 = .18, F (3,108) = 4.844, p < .01,$ after controlling for relationship status change and socioeconomic status; it accounted for 35% of the variance. In the model, as perinatal grief scores increased so did PTG scores.

$H_{2a}$: Perinatal Grief, Obligation to Manifest Strength and PTG

A moderation analysis was used to test the hypothesis that obligation to manifest strength would moderate the relationship between perinatal grief and PTG, after controlling for SES and relationship status change. Perinatal grief, [$b = .06, SE = .11, \ p = .564$], obligation to manifest strength, [$b = 2.51, SE = 2.99, \ p = .404$], relationship status change [$b = -4.15, SE = 3.22, \ p = .200$], and SES [$b = -.17, SE = .71, \ p = .811$], were not significantly associated with PTG. To test the moderation model with obligation to manifest strength, bootstrapping was used at a 95% confidence interval with 5,000 samples. Supporting hypothesis 2a, results demonstrated that obligation to manifest strength was a significant moderator [$b = .34, SE = .10, \ p = .001, (95\% \ CI: .15, .53)$]. As seen in Figure 3, for those lower in internalization of the obligation to manifest
strength, there was no significant change in PTG scores. Inversely, for those higher in internalization, PTG scores significantly increased as their perinatal grief scores increased.

H2b: Perinatal Grief, Reliance on Spirituality, and PTG

A moderation analysis with bootstrapping was used to test the hypothesis that reliance on spiritual coping would moderate the relationship between perinatal grief and PTG, after controlling for SES and relationship status change. Results revealed that perinatal grief \([b = .26, SE = .08, p = .001]\) and reliance on spirituality \([b = .93, SE = .40, p = .021]\) were significantly related to PTG, but relationship status change \([b = -5.49, SE = 3.34, p = .104]\) and SES \([b = .12, SE = .74, p = .871]\) were not. To test the moderated effect of reliance on spirituality in the model, bootstrapping was used at a 95% confidence interval with 5,000 samples. Results demonstrated that reliance on spirituality did not significantly moderated the relation between perinatal grief and PTG, after accounting for SES and relationship status change, \([b = -.01, SE = .01, p = .374, (95\% CI: -.04, .02)]\).

H2c: Perinatal Grief, Reliance on Spirituality, Obligation to Manifest Strength and PTG

To evaluate the hypothesis that obligation to manifest strength and reliance on spirituality would conjointly moderate the relationship between perinatal grief and PTG, a moderated moderation analysis using a bootstrapping procedure was conducted. In the current model, perinatal grief, \([b = .78, SE = .12, p = .523]\), obligation to manifest strength, \([b = 3.24, SE = 2.95 p = .275]\), relationship status change \([b = -4.29, SE = 3.21, p = .184]\), SES \([b = .25, SE = .69, p = .715]\), and reliance on spirituality \([b = .18, SE = .52, p = .72]\) were not significantly related to PTG. Bootstrapping was used at a 95% confidence interval with 5,000 samples to conduct the moderated moderation. In isolation, obligation to manifest strength significantly moderated the
relation, \[b = .39, SE = .11, p = .001, (95\%\ CI: .17, .61)\]. Investigation of the interaction plot, Figure 4, shows that for those who are higher obligation to manifest strength, PTG scores significantly increased as perinatal grief scores increased. In contrast, for those with lower obligation to manifest strength, PTG scores significantly decreased as perinatal grief scores increased. Reliance on spirituality was also a marginally significant moderator, \[b = -.05, SE = .03, p = .051 (95 \%\ CI: -.10, .0003)\]. Figure 5 depicts that for those with low reliance on spirituality, PTG significantly increased as perinatal grief scores increased. However, for those with high reliance on spirituality, PTG significantly decreased as perinatal grief increased. Additionally, the interaction between reliance on spirituality and obligation to manifest strength was significant, \[b = 2.40, SE = .87, p = .007, (95\%\ CI: .67, 4.13)\] (see Figure 6). As depicted in Figure 6, for those with higher obligation to manifest strength, PTG increased as reliance on spirituality increased. In contrast, for those with lower obligation to manifest strength, reliance on spirituality decreased as PTG decreased. Inconsistent with hypothesis H2c, results indicated that reliance on spirituality and obligation to manifest strength did not conjointly moderate the relationship between perinatal grief and PTG, \[b = .01, SE = .02, p = .710, (95\%\ CI: -.03, .04)\].

**Additional Analyses**

Due to the unexpected results of the reliance on spirituality analyses, it was decided to further investigate a different facet of spirituality--negative religious coping. The Brief Religious Coping Scale was used to measure positive and negative religious coping. While the positive religious coping subscale was used to assess the reliance on spirituality in the main analyses, the negative religious coping scale was used to explore negative religious coping within the subsequent analyses. In the exploratory analyses, the combined influence of negative religious
coping and obligation to manifest strength on the relationship between perinatal grief and depression was examined. Lastly, the influence of negative religious coping and obligation to manifest strength on the relationship between perinatal grief and PTG was explored.

**Perinatal Grief, Negative Religious Coping, Obligation to Manifest Strength and Depression**

To evaluate if the influence of obligation to manifest strength on the relationship between perinatal grief and depression was conditionally based on levels of reliance of spirituality, a moderated moderation analysis using a bootstrapping procedure was conducted. In the current model, perinatal grief, \( b = .01, SE = .03, p = .779 \), obligation to manifest strength, \( b = -.25, SE = .89, p = .776 \), negative religious coping \( b = .13, SE = .14, p = .370 \), loss type \( b = 1.01, SE = .83, p = .226 \) and SES \( b = -.02, SE = .19, p = .907 \) were not significantly associated with depression. In contrast, relationship status change \( b = 2.52, SE = .83, p = .003 \) was significantly associated with depression. Bootstrapping was used at a 95% confidence interval with 5,000 samples to conduct the moderated moderation. In isolation, obligation to manifest strength did not significantly moderated the relation, \( b = .02, SE = .03, p = .370 \), (95% CI: -.05, .09)]. However, negative religious coping was a significant moderator in insolation, \( b = -.03, SE = .01, p = .0001 \) (95% CI: -.04, -.01)]. Figure 7 depicts that at low levels of negative religious coping, depression significantly increased as perinatal grief scores increased. At high levels of negative religious coping, depression significantly decreased as perinatal grief increased. Additionally, the interaction between negative religious coping and obligation to manifest strength was significant, \( b = .72, SE = .24, p = .004 \), (95% CI: .24, 1.20)]. Depicted in Figure 8, for those with lower obligation to manifest strength, depression scores decreased as negative religious coping increased. In contrast, for those with higher obligation to manifest, depression increased as
negative religious coping increased. Results indicated that negative religious coping and obligation to manifest strength did conjointly moderate the relationship between perinatal grief and depression, \([b = .02, \text{SE} = .01 (95\% \text{ CI: } .01, .03), \Delta R^2 = .05, F(1,98) = 8.22, \ p = .005]\). As demonstrated in Figure 9, at lower levels of negative religious coping, for those with higher and lower levels of obligation to manifest strength, depression significantly increased as perinatal grief increased \([b = .09, \ t = 3.39, \ p = .001), (b = .15, \ t = 3.34, \ p = .001)\] respectively. However, at higher levels of negative religious coping, for those with lower obligation to manifest strength, depression significantly decreased as perinatal grief increased \([b = -.16, \ t = -2.19, \ p = .031]\). For those with higher obligation to manifest strength, the relationship between perinatal grief and depression was not significant \([b = -.04, \ t = -.85, \ p = .400]\).

**Perinatal Grief, Negative Religious Coping, Obligation to Manifest Strength and PTG**

To evaluate the moderated moderation of PTG, with negative religious coping and obligation to manifest strength as moderators, a regression analysis using a bootstrapping procedure was conducted. In the current model perinatal grief, \([b = .19, \text{SE} = .12, \ p = .123]\), obligation to manifest strength, \([b = 2.62, \text{SE} = 3.21, \ p = .417]\), relationship status change \([b = -2.60, \text{SE} = 3.03, \ p = .391]\), SES \([b = .14, \text{SE} = .67, \ p = .832]\) and negative religious coping, \([b = -.06, \text{SE}= .52, \ p = .902]\) were not significantly associated to PTG. Bootstrapping was used at a 95% confidence interval with 5,000 samples to conduct the moderated moderation. In isolation, obligation manifest strength significantly moderated the relation between perinatal grief and PTG \([b = .28, \text{SE}= .13, \ p = .025]\). As demonstrated in Figure 10, for those with higher obligation to manifest strength, PTG increased as perinatal grief significantly increased, but there was not a significant change between perinatal grief and PTG for those with lower obligation to manifest strength. However, negative religious coping was not a significant moderator in isolation \([b =
THE ROLE OF STRENGTH

.04, SE=.03, p = .148]. Results indicated that negative religious coping and obligation to manifest strength did conjointly moderate the relationship between perinatal grief and PTG, [b=-.05, SE =.02, (95% CI: -.09, -.01), ΔR² = .04, F(1,99) = 6.05, p = .016]. As demonstrated in Figure 11, at lower levels of negative religious coping, for those with higher obligation to manifest strength, PTG significantly increased as perinatal grief increased, [ b= .37, t = 3.71, p = .0003], while for those with lower obligation to manifest strength, there was not a significant change between perinatal grief and PTG [b =-.29, t = -1.75, p = .08]. However at higher levels of negative religious coping, for those with higher obligation to manifest strength, PTG significantly increased as perinatal grief increased [ b = .39, t = 2.12, p = .037 ], while for those with lower obligation to manifest strength there was not a significant change between perinatal grief and PTG [b = .27, t = 1.05, p = .298].

Chapter 5: Discussion

Black perinatal mortality is an overlooked and understudied phenomenon in the US. The present study sought to examine Black perinatal grief and its relation to psychological well-being. The study’s main goal was to understand how facets of the Strong Black woman schema conditionally affect the relationship between grief and well-being. Embracing a womanist approach, the study highlighted the intersection between gender, race, SES and maternal identity as well as recognized the strength that Black American women innately possess. It also expanded the understanding of the Black perinatal grieving experience and gave voice to the silent struggle of many Black American women. Within that struggle, both aspects of resilience (i.e. PTG) and pathology (i.e. depression) were investigated. Previous research has established a strong relationship between perinatal grief and depressive symptomatology (Bhat & Byatt, 2016).
Similarly, there is a strong association between an endorsement of the SBW schema and depression among Black women across multiple studies (Abrams, Hill, & Maxwell, 2018; Woods-Giscombé, 2010). Building upon previous literature, the influence of SBW traits on the connection between perinatal grief and depression was analyzed.

**Black Perinatal Grief and Depression**

Results revealed that more intense perinatal grief was associated with increased endorsement of depressive symptoms (Hypothesis 1). Specifically, perinatal grief remained consistently associated with depression. These results confirm earlier studies’ documentation of the various psychological outcomes following Black perinatal bereavement such as emotional pain, depressed mood increased irritability, guilt, loneliness, and thoughts of suicide (Fenstermacher, 2014; Foyt, 2007; Kavanaugh & Hershberger, 2005; Paisley-Cleveland, 2013; Van, 2001) — all of which coincide with depressive symptoms. Additionally, results supported aspects of Pushing on Theory. In particular, the current study showcased that Black American women undergo “Bearing the Burden” stage of grief of the model. The Bearing the Burden stage involved sorting through the negative affectivity of perinatal grief (i.e. sadness, despair, and other depressive symptoms) (Wright, 2016). Overall, the current study underscored the intense emotional experience that Black American women withstand after perinatal grief and the potential risk of depression.

To understand what the factors shape the relationship between perinatal grief and depression, characteristics of the Strong Black Woman schema were examined as moderators. A fundamental aspect of Strong Black Woman Ideology, obligation to manifest strength was predicted to strengthen the relationship between perinatal grief and depression (Hypothesis 1a). However, hypothesis H1a was not supported; Obligation to manifest strength did not
significantly moderate the relationship nor was it significantly associated with depression in the moderation model or any other analyses. These results depart from previous research that found a significant association between the obligation to manifest strength and depressive symptomatology (Abrams et al., 2018; Woods-Giscombé, 2010). This discrepancy may be attributed to the fact that obligation to manifest strength scores varied little across the sample. Within Black perinatal grief literature, studies have documented that Black women embody strength to navigate their perinatal grief (Fenstermacher, 2014; Foyt, 2007; Van & Meleis, 2003). For Black grieving mothers, summoning strength may enable them to withstand the onslaught of emotions after a perinatal loss and prevent being overcome with despair.

To fully understand the use of the SBW schema amid perinatal bereavement, another core trait of SBW, reliance on spirituality, was explored in the present study. Prior research identified spirituality as the cornerstone of SBW ideology, where strong Black women engage in spiritual coping to mitigate external stressors (Etowa, Beagan, Eghan, & Thomas, 2017; L. M. West, Donovan, & Daniel, 2016; Woods-Giscombé, 2010). Hence, it was predicted that reliance on faith would lower the intensity of the relationship between perinatal grief and depression (Hypotheses 1b). In contrast, reliance on spirituality was found to exacerbate the relationship between perinatal grief and depression. Specifically, Black American women who reported higher reliance on God also endorsed more depressive symptoms and intense grief. Departing from the majority of Black perinatal grief literature that upholds the healing nature of spirituality (Kavanaugh & Hershberger, 2005; Van, 2001; Van & Meleis, 2003), these findings may be ascribed to how spirituality was measured in the present study.

In the current study, reliance on spirituality was measured using the positive religious coping subscale of the Brief Religious Coping Scale. The scale assessed both positive religious
and negative religious coping. In general, positive religious coping encompasses actions that demonstrate one's closeness with God (e.g. prayer, trust in God, reliance on God to manage stress), while negative religious coping denotes one's distance from God (e.g. questioning God, anger toward God, feeling punished by God) (Pargament et al., 1998). In the context of perinatal grief, closeness with God may be difficult as mothers question their loss. Specifically, those with strong religious beliefs prior to their loss may struggle with drawing closer to a higher power if they believe allowed their loss to occur. Moreover, receiving empty platitudes that masquerade as Christian tenets (e.g. "Everything happens for a reason") may trigger distress. Therefore, the results of the current study signal the need for additional exploration of the multifaceted nature of faith and spirituality in the context of grief.

Further explanation of these results can be drawn from the previous literature on spiritual and religious coping. Scholars argued that religion and spirituality are distinct constructs in Black populations, where one may identify as spiritual but not as an active member of a faith community (Graham, 2016; Van, 2001). Although similar, religion is more oriented toward structured expressions of faith (i.e. attendance within a place of worship, faith-based rituals), while spirituality encapsulates an internal experience of faith (i.e. Self-reflection, focus on social connectedness, personal relationship with a higher power) (Graham, 2016). Previous researchers have tried to disentangle spirituality and religiosity by examining the effect of spiritual and religious behaviors separately. In a study investigating spirituality after death of the child in an intensive care unit, researchers found that engagement in spiritual activities were significantly associated with decreased symptoms of depression, grief and posttraumatic stress among bereaved parents (Hawthorne, Youngblut, & Brooten, 2016). However, engagement religious activities were not associated with poor psychological well-being, after controlling for race
(Hawthorne et al., 2016). An earlier qualitative investigation focusing exclusively on Black bereaved mothers found that even among those who did not attend church regularly, participants indicated that prayer and belief in an afterlife aided their coping (Van & Meleis, 2003). Within the present study, neither engagement in spirituality activities, belief in an afterlife nor spiritual coping were captured in the measures administered. Therefore, it can be argued that analysis of spiritual coping instead of religious coping may affect psychology well-being differently among Black bereaved mothers.

In addition to examining each facet of Strong Black womanhood in isolation, the combined effect of obligation to manifest strength and reliance on spirituality, on the relation between perinatal grief and depression was investigated. It was hypothesized that obligation to manifest strength’s ability to influence the relationship between perinatal grief would be conditionally based on levels of reliance on spirituality. However, the results did not reveal a significant moderated moderation. In contrast to our findings, the bulk of SBW literature outlines the bidirectional relationship between internalization of SBW and reliance on faith (Etowa et al., 2017; West et al., 2016; Woods-Giscombe, 2010). Scholars described strength as a representation of a Black woman’s faith (Woods-Giscombe, Robinson, Carthon, Devane-Johnson, & Cobie-Smith, 2016), that allows her to manage stressors. However, one previous study seemed to corroborate our results. Examination of media messages surrounding SBW ideology revealed a weaker association between strength and spirituality (Black & Peacock, 2011). After analyzing media from pop culture (i.e. magazines, blogs) Black and Peacock (2011) found that the majority of public descriptions of SBW ideology did not reference spirituality as a foundation part of Strong Black womanhood. Due to the contradictions found within the literature, spirituality and strength may work differently and may be explained by the uniqueness
of perinatal grief. Unlike other stressors that Black American women face there is often not an identifiable cause of perinatal grief. As a result, parents may blame themselves or God for their perinatal loss. Further inquiry is needed to explicate the nuanced relationship between embodying strength and spirituality.

**Black Perinatal Grief and Post Traumatic Growth**

To provide a holistic view of Black perinatal grief, it was important to capture a strength-focused outcomes such as posttraumatic growth. Results showcased that perinatal grief was associated with increased posttraumatic growth. As outlined in previous research, PTG following perinatal loss occurs due to a paradigm shift among parents in which a new world outlook is adopted (Krosch & Shakespeare-Finch, 2017). Within in our sample, intense grief may have triggered Black women to question their current worldview, thus, increasing their potential for growth. These results support evidence of PTG among Black bereaved parents found within qualitative literature. Previous studies found that Black parents endorsed aspects of personal growth that included, a desire to help others, improving interpersonal relationships and self-care, a new worldview, and most importantly a renewed sense of purpose (Fenstermacher, 2014; Paisley-Cleveland, 2013; Van, 2001). It is important to note that endorsement of PTG does not invalidate their loss but instead showcases the resiliency of Black American women in finding purpose amidst their pain.

To further comprehend the underlying factors that contribute to the relationship between perinatal grief and PTG, both obligation to manifest strength and reliance on spirituality were examined as moderators. Obligation to manifest strength was predicted to accelerate the association between perinatal grief and PTG (Hypothesis 2a). Obligation to manifest strength, acted as predicted in hypothesis 2a, and strengthened the relationship between perinatal grief and
PTG. Precisely, Black American women who strongly internalized strength, their perinatal grief intensified as their PTG increased. Our results mirrored previous studies that described how bereaved parents found strength to move forward after perinatal loss (Black & Sandelowski, 2010; Martinčeková & Klatt, 2017). Moreover, embedded within PTG, is the concept of personal strength following tragedy (Tedeschi & Calhoun, 2004). Therefore, embodying strength can adaptively facilitate personal growth after perinatal loss.

The expectation of strength, found within the present study, upheld aspects of Pushing on Theory. The obligation to manifest strength, amplified the relationship between grief and PTG, supporting the theory's prediction that intense grief would ultimately result in personal growth. As aforementioned, the SBW schema pressures Black women to exude strength to overcome struggle and hardship (Beauboeuf-Lafontant, 2007). Similar to SBW ideology, Pushing on Theory emphasizes the strength that women must embody to navigate their grief (Wright, 2016). Within the present study, Black American women may have felt compelled to press through their grief and to summon strength to achieve positive personal growth. Hence, strength maintenance has some adaptive qualities in the context of perinatal loss.

In addition to an obligation to manifest strength, reliance on spirituality was also predicted to strengthen the relation between perinatal grief and PTG (Hypothesis 2b). The hypothesis was not supported as reliance on spirituality was not a significant moderator. These findings are intriguing because a dimension of PTG is a strong sense of spirituality. These results conflict with past research that established a strong relationship between spirituality and PTG. A review of the literature revealed that spiritual and religious beliefs aid personal growth development (Shaw, Joseph, & Linley, 2005). Additionally, a prior study observed a significant relationship between religious coping and PTG among European mothers (Lafarge, Mitchell, &
Researchers examining methods of coping following terminated pregnancy found that religious-based coping was significantly related to PTG (Lafarge et al., 2017). Alternatively, for Black grieving mothers, questioning their faith may inspire growth, because they were challenged to craft a different worldview.

Evaluation of obligation to manifest strength and reliance on spirituality on the relationship between perinatal grief and PTG yielded mixed results. There was an interesting interaction between both moderators on PTG. Namely, Black American women who strongly internalized the obligation to manifest strength, their PTG increased as reliance on spirituality increased. These results substantiate previous SBW literature that summarized the intertwining nature of manifesting strength and spirituality. Spirituality was found to enable resilience, in which Black women discovered strength within their faith to face adversity (Woods-Giscombe et al., 2016). Spirituality was also identified as a vessel of strength in times of hardship (Abrams, Maxwell, Pope, & Belgrave, 2014; Woods-Giscombe et al., 2016). Additionally, Black mothers reported praying to God for strength while grieving (Fenstermacher, 2014; Foyt, 2007; Van & Meleis, 2003). In the present study, these aspects of SBW ideology work in tandem in the context of PTG.

However, the moderated moderation on the relationship between perinatal grief and PTG was not supported. In essence, the influence of obligation to manifest strength on the relationship between perinatal grief and PTG was not conditionally based on levels of reliance on spirituality. Although perinatal grief was significantly related to PTG in earlier analyses, the relationship may not be as strong when compared to the association between grief and depression. Furthermore, the moderated moderation may not have worked as excepted due to the multifaceted nature of spirituality in the midst of grief. One perinatal researcher noted the diversity of spiritual
reactions to perinatal loss (i.e. being comforted by one’s faith vs having a crisis of faith) (Abi-hashem, 2014). Parents may vacillate between drawing comfort from their religious beliefs to questioning them altogether. Similarly, a qualitative study examining faith after perinatal loss identified specific religious reactions to grief (Bakker & Paris, 2013). Parents voiced experiencing a disruption of their faith, reorganization of their faith back into their lives and a search for purpose after loss (Bakker & Paris, 2017). Notably, researchers found that parents described forging a new spiritual relationship following a crisis of faith (Bakker & Paris, 2017).

Our study’s results in the context of previous research further demonstrate the need to explore the nuanced nature of spirituality and religion.

Further Examination of Religious Coping and Perinatal Grief

Due to the inconsistencies between the present study’s findings and previous research, it was decided to broaden the scope of spirituality to include negative religious coping in additional moderation analyses. In the present study, negative religious coping significantly moderated the relation between perinatal grief and depression. Interestingly, higher amounts of negative religious coping dampened the relationship between perinatal grief and depression. In essence, negative religious coping was somewhat protective against increased depressive symptoms.

These results appear to contradict the bulk of bereavement and coping literature. Several studies have linked negative religious coping with poorer outcomes such as poorer emotional regulation, quality of life, emotional welling and complicated grief (Boulware & Bui, 2016; Burke, Neimeyer, McDevitt-Murphy, Ippolito, & Roberts, 2011; Davis, Ashby, McElroy, & Hook, 2014; Lee, Roberts, & Gibbons, 2014). Specifically, among Black bereaved mothers following homicidal loss, negative religious coping was predictive of complicated grief across time (Burke,
Neimeyer, McDevitt-Murphy, Ippolito, & Roberts, 2011). Perhaps in cases of child loss, negative religious coping becomes protective while in other domains of grief it’s harmful.

The protective nature of negative religious coping was further validated by the results of simple moderation and moderated moderation. The significant interaction between obligation to manifest strength and negative religious coping indicated that higher religious coping paired with lower obligation to manifest strength results in lower depression symptoms. Similarly, the significant moderated moderation revealed that obligation to manifest strength’s influence on the relationship between perinatal grief and depression was conditionally based on levels of negative religious coping. Moreover, lower levels of obligation to manifest strength combined with higher levels of negative religious coping was associated with decreased depression as perinatal grief increased.

Further exploration of negative religious coping, can provide context to these results. As previously stated, negative religious coping represents distance from God that may be expressed as anger toward God, doubt of his sovereignty, or internalizing the loss as punishment (Pargament et al., 1998). Bereaved parents acknowledged use of negative religious coping after a perinatal loss (Kelley & Chan, 2012). Within Pushing On theory, Wright (2016) is notably silent on the role of spirituality in perinatal bereavement. However, Foyt's (2007) stage model of grief overviewed how Black women exhibited both positive and negative religious coping during the height of their grief. In particular, Black bereaved mothers endorsed aspects of negative religious coping such as self-blame, anger toward God and questioning their faith (Foyt, 2007). Both types of religious coping helped to facilitate meaning-making and personal growth (Foyt, 2007). In regard to the current study, the loss of a child may trigger a crisis of faith in which deeply religious individuals may vacillate between turning to God for support and blaming God for the
loss. Perhaps, authentically navigating through a crisis of faith may prove therapeutic than pretending it doesn’t exist, thus lessening one's depressive symptoms. Hence, working through one’s anger toward and questioning one’s faith may bolster PTG.

Similar to depression, the role of negative religious coping, in the context of perinatal grief and PTG yielded mixed results. Results demonstrated that the magnitude of obligation to manifest strength on the relationship between perinatal grief and PTG was conditionally based on levels of negative religious coping. Namely, lower levels of negative religious coping coupled with strong internalization of the obligation to manifest strength was associated with increased PTG. In other words, a Black mother who embodies strength and minimally struggles with her faith is most likely to experience personal growth. Similarly, the obligation to manifest strength continued to moderate the relation. Embodiment of strength again resulted to be adaptive when facing perinatal grief. However, when examined in isolation, negative religious coping did not moderate the relation.

In reviewing of both sets of analyses, it appears that when paired with embodying strength, negative religious coping has some protective features. In particular, the combined effect of both moderators weakened the relationship between perinatal grief and depression and amplified the relation between perinatal grief and PTG. Black American women who used negative religious coping reported increased personal growth. Negative religious coping within bereavement has been termed “complicated spiritual grief” by scholars (Burke, Neimeyer, Young, Bonin, & Davis, 2014, p. 269). The development of this concept was formed after a qualitative study of bereavement within a diverse sample (Burke et al., 2014). Results demonstrated that complicated spiritual grief entailed doubting God’s character (i.e. believing He is unkind, unfeeling, unsympathetic), feeling disappointed and angry with God, having general
difficulty processing their grief and invalidation of their grief by their faith community (Burke et al., 2014). Among Black women, this phenomenon has been identified as “spiritual forsakenness” (Borum, 2012, p. 321). In a qualitative exploration of spirituality and depression, Black women expressed feeling hopeless, lonely and abandoned by God in times of psychological distress (Borum, 2012). Both concepts may aptly describe a Black mother’s relationship with God following perinatal loss, in which she may feel disconnected from God. However, it is important to note that negative religious coping is not synonymous with complete loss of faith. Previous research has indicated that some bereaved parents do in fact reconcile with a higher power following a spiritual crisis (Bakker & Paris, 2013). Moreover, Black mothers have reported reconciliation of their faith after experiencing spiritual crises during bereavement (Foyt, 2007). As such, questioning one's spirituality and acknowledging anger toward God has utility and is adaptive, in the presence of embodied strength.

**Practical Implications: Therapy and Intervention**

The present study’s results have strong implications for counseling and grieving among Black American women. Previous studies suggest that Black women underutilize traditional bereavement care including individual counseling and support groups due to lack of cultural diversity and understanding among support groups and counselors (Wallace et al, 2017; Fenstermacher, 2014; Van & Meleis, 2003). Thus, additional methods of intervention as well as expansion of current therapeutic interventions should be considered.

Therapists are recommended to employ culturally informed interventions that recognize the intersections found within the lives of Black American women. Adopting a womanist approach can aid therapists in exploring dimensions of the SBW schema and its influence on the psychological well-being of their clients. Whether Black women subscribe to these beliefs or not,
SBW schema has a profoundly impact on their grieving process and external perceptions of their grief. Despite experiencing perinatal loss, mothers may feel pressured to exemplify attributes found within the SBW schema (i.e. obligation to manifest strength, self-sacrificial care, and strong spirituality) (Abrams et al., 2014). Hence, therapy should provide a safe for clients to examine which attributes are consistent with their personal values and which are unhelpful to their healing.

Chiefly, the role of spirituality should be incorporated into all psychosocial support. Womanist therapists acknowledge the intersecting role of spirituality in the lives of Black women (Sanchez-Hucles, 2016). It is important to note that although many Black American women endorsed engaging in some form of religious coping, they may not partake in organized religion. However, it may be beneficial to provide space within therapy to process patient's distance and closeness with a higher power. As seen within the present study, negative religious coping can lead to increased PTG in the presence of maintaining strength. Thus, another psychological intervention may entail examining aspects of the patient's spirituality that bolster personal growth as well as contribute to psychological distress. A powerful intervention may include value identification that involves naming which aspects of spirituality and religion the client wants to incorporate into their lives post-loss (Borum, 2012). Womanist therapists also help clients to recognize their own resilience while simultaneously challenging problematic aspects of strength maintenance (i.e. poor self-care, self-silencing). A womanist intervention might include self-care planning and taking time in therapy to processing distressing emotions (Sanchez-Hucles, 2016).

**Limitations**
Despite the intriguing findings and implications of the present study, there were several limitations found within the study design and implementation. Using a cross-section design limited our ability to generalize study findings and establish causality. In particular, we collected data from women at various points within their loss journey. As such, being at different stages of their bereavement may have confounded the study’s results. In addition to design, the online nature of the study presented unique challenges. For instance, online data collection allowed for the infiltration of individuals seeking an incentive and those who responded in irregular patterns. Although all efforts were taken to preserve the integrity of the study (i.e. data checks, strict data cleaning, and screening guidelines), the sample may have differed slightly from the intended population. Additionally, there may be differences between women who felt comfortable sharing their grief experiences and those who did not. More specifically, since most participants were solicited from online forums for perinatal grief, there may be a distinction between those who rely on virtual supports and those who prefer in person support. Lastly, using a web-based platform may have unintentionally excluded mothers who did not have access to the internet, which could explain the large representation of middle-class mothers.

In addition to study design’s limitations, the internal consistencies on the depression and religious coping measures were particularly low, which could be explained by a variety of factors. Low internal consistency could be due to the low internal validity of the measures among the subset of the Black bereaved mothers in our sample. Performance fatigue could also play a role as these measures were included last on the questionnaire for all participants. For the depression scale, the low internal consistency could be attributed to the fact that although it has been used within rural Black populations (Carson, Jackson, Nolan, Williams, & Baskin, 2017), it was not normed on Black perinatal women. Similarly, the religious coping scale performed well
in other samples with Black women (Poteat & Lassiter, 2019), however, it was not normed for bereaved mothers. Lastly, the study did not ascertain the degree to which participants were spiritual and/or religious beyond their participation in a faith-based community. Despite these limitations, the present study provided the basis for the quantitative study of Black perinatal loss that can be expanded in future research.

**Future Directions**

Building upon the current study, scholars can embark upon several different lines of research. Using a longitudinal study can address the above-stated limitations, in which researchers can observe coping with perinatal loss across time. With a longitudinal design, future scholars can also test progression through the stages of the Pushing on Theory and evaluate how dimensions of perinatal grief (e.g. active grieving, effective coping) affect movement through the stages. Subsequent studies are recommended to holistically assess religious and spiritual coping by using more robust measures. If possible, including a measure to examine each construct can provide more information on how Black American women use spirituality to cope with perinatal loss as well as their engagement in religious practices.

Beyond expanding upon the current study, there a several avenues of research within Black perinatal literature that necessitate further examination. First, previous studies have highlighted the influence of community and environmental factors on Black perinatal bereavement (Wallace et al., 2017). Specifically, studies should investigate how contextual factors (e.g. access to care, living resource-deprived community) shape Black perinatal grief. Second, Black perinatal literature has identified that compounded stress and trauma influence bereavement (e.g. loss of other family members, financial stress, work-related stress) (Kavanaugh & Hersherber, 2005), but they have yet to be quantitatively examined. Thirdly, the
help and hindrance of social support can also be explored. For instance, bereaved parents have reported feeling invalidated by well-meaning friends and family (Lang et al., 2011), while others noted feeling supported by them (Fenstermacher, 2014). Assessing the potential consequences of social support is fundamental to fully comprehending Black bereavement. Fourthly and most importantly, there is a gap in the literature surrounding the role of health and health systems in Black perinatal grief. Few studies have noted the effect of perinatal bereavement on parental physiological health (see Youngblut, Brooten, Cantwell, del Moral, & Totapally, 2013) and even fewer have exclusively analyzed the impact of patient-provider relations on perinatal grief. It is paramount to investigate patient-provider relations throughout pregnancy and post-loss. Moreover, an assessment of parental satisfaction, perceived racial discrimination, bias based on insurance status, among additional factors contributing to Black perinatal health should be closely examined. Lastly, the intersectional nature of perinatal grief should continue to be probed. Additional intersections may include ethnicity, religious affiliation, sexual orientation amid other aspects of identity.

**Concluding thoughts**

Despite the above-mentioned limitations, the present study has several significant strengths. Chiefly, it has augmented insight into Black perinatal grief. It has highlighted the experiences of Black American women from diverse socioeconomic backgrounds, primarily those from the middle class, which is often overlooked in research on Black populations. Additionally, it has summarized the experiences of Black American women across different types of perinatal losses. Moreover, it did not pathologize Black women but instead recognized their resilience and the challenges they face following perinatal grief. It also confirmed aspects of Pushing on Theory, in regard to strength maintenance and PTG. Moreover, this study
highlighted the intersections of Black womanhood, via examination of aspects of SBW ideology (i.e. embodiment of strength and spirituality). Most importantly, this study voiced the silent struggle of Black women and provided hope for growth, change, and empowerment, even after a life-altering loss.
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https://doi.org/10.1111/jssr.12066


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https://doi.org/10.1037/a0019174

https://doi.org/10.1016/j.pedn.2015.07.008


https://doi.org/10.1080/07481187.2011.553317


https://doi.org/10.1016/j.bpobgyn.2006.11.004


THE ROLE OF STRENGTH


Appendix A. Tables and Figures

Table 1

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>Min. - Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perinatal Grief</td>
<td>106.95</td>
<td>20.19</td>
<td>46 - 147</td>
</tr>
<tr>
<td>Obligation to Manifest Strength</td>
<td>3.39</td>
<td>.68</td>
<td>1.9 - 5</td>
</tr>
<tr>
<td>Reliance on Spirituality</td>
<td>17.39</td>
<td>3.93</td>
<td>7 - 28</td>
</tr>
<tr>
<td>Depression</td>
<td>15.83</td>
<td>4.77</td>
<td>1 - 28</td>
</tr>
<tr>
<td>Posttraumatic Growth (PTG)</td>
<td>60.48</td>
<td>16.68</td>
<td>7 - 101</td>
</tr>
</tbody>
</table>

Table 2

<table>
<thead>
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<th></th>
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<th>2.</th>
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<td>1. Perinatal Grief</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Obligation to Manifest Strength</td>
<td>.68**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Reliance on Spirituality</td>
<td>-.13</td>
<td>-.07</td>
<td>1</td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>4. Depression</td>
<td>.20*</td>
<td>.05</td>
<td>-.05</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>5. Posttraumatic Growth (PTG)</td>
<td>.32**</td>
<td>.22*</td>
<td>.14</td>
<td>-.16</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Loss Type</td>
<td>-.07</td>
<td>-.05</td>
<td>.11</td>
<td>.25**</td>
<td>-.11</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Relationship Status Change</td>
<td>-.24*</td>
<td>-.09</td>
<td>.17</td>
<td>.22*</td>
<td>-.20*</td>
<td>.03</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>8. SES</td>
<td>.04</td>
<td>.03</td>
<td>-.10</td>
<td>.03</td>
<td>.03</td>
<td>.15</td>
<td>-.09</td>
<td>1</td>
</tr>
</tbody>
</table>

*p < .05, **p < .001
Table 3.

**Moderated Moderation predicting Depression:**

*Perinatal Grief, Obligation to Manifest Strength, and Reliance on Spirituality*

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>[95% CI]</th>
<th>SE</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perinatal Grief</td>
<td>.05</td>
<td>[-.02, .12]</td>
<td>.12</td>
<td>.64</td>
<td>.144</td>
</tr>
<tr>
<td>Obligation to Manifest Strength</td>
<td>-.76</td>
<td>[-2.43, 1.0]</td>
<td>.84</td>
<td>-.91</td>
<td>.364</td>
</tr>
<tr>
<td>Reliance on Spirituality</td>
<td>-.10</td>
<td>[-.40, .20]</td>
<td>.15</td>
<td>-.65</td>
<td>.515</td>
</tr>
<tr>
<td>Perinatal Grief x Obligation Manifest Strength</td>
<td>.04</td>
<td>[-.02, .10]</td>
<td>.03</td>
<td>1.30</td>
<td>.195</td>
</tr>
<tr>
<td>Perinatal Grief x Reliance on Spirituality</td>
<td>.02</td>
<td>[.01, .04]</td>
<td>.01</td>
<td>3.19</td>
<td>.002*</td>
</tr>
<tr>
<td>Obligation Manifest Strength x Reliance on Spirituality</td>
<td>-.31</td>
<td>[-.81, .19]</td>
<td>.25</td>
<td>-1.22</td>
<td>.225</td>
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<tr>
<td>Perinatal Grief x Obligation Manifest Strength x Reliance on Spirituality</td>
<td>-.002</td>
<td>[-.01, .01]</td>
<td>.01</td>
<td>-.38</td>
<td>.707</td>
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<tr>
<td>Loss Type</td>
<td>1.85</td>
<td>[.10, 3.61]</td>
<td>.88</td>
<td>2.10</td>
<td>.039*</td>
</tr>
<tr>
<td>Relationship Status Change</td>
<td>2.71</td>
<td>[.90, 4.52]</td>
<td>.91</td>
<td>2.97</td>
<td>.004*</td>
</tr>
<tr>
<td>SES</td>
<td>-.002</td>
<td>[-.40, .39]</td>
<td>.20</td>
<td>-.01</td>
<td>.992</td>
</tr>
</tbody>
</table>

\[ R^2 = .57, p < .001, \ *p < .05, \ **p < .001 \]
<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>[95% CI]</th>
<th>SE</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>56.56</td>
<td>[46.87, 66.25]</td>
<td>4.88</td>
<td>11.58</td>
<td>.000*</td>
</tr>
<tr>
<td>Perinatal Grief</td>
<td>.08</td>
<td>[-.16, .32]</td>
<td>.12</td>
<td>.64</td>
<td>.522</td>
</tr>
<tr>
<td>Obligation to Manifest Strength</td>
<td>3.23</td>
<td>[-2.61, 9.09]</td>
<td>2.95</td>
<td>1.10</td>
<td>.275</td>
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<tr>
<td>Reliance on Spirituality</td>
<td>.18</td>
<td>[-.84, 1.21]</td>
<td>.52</td>
<td>.36</td>
<td>.723</td>
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<tr>
<td>Perinatal Grief x Obligation Manifest Strength</td>
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<td>[.17, .61]</td>
<td>.11</td>
<td>3.54</td>
<td>.001*</td>
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<tr>
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<td>-.05</td>
<td>[-.10, .00]</td>
<td>.03</td>
<td>-1.97</td>
<td>.051</td>
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<tr>
<td>Obligation Manifest Strength x Reliance on Spirituality</td>
<td>2.40</td>
<td>[.67, 4.13]</td>
<td>.87</td>
<td>2.75</td>
<td>.007*</td>
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<tr>
<td>Perinatal Grief x Obligation Manifest Strength x Reliance on Spirituality</td>
<td>.01</td>
<td>[-1.12, 1.63]</td>
<td>.02</td>
<td>.37</td>
<td>.710</td>
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<td>[-10.66, 2.07]</td>
<td>3.21</td>
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<td>.184</td>
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<td>[-1.12, 1.63]</td>
<td>.69</td>
<td>.37</td>
<td>.715</td>
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</table>

R² = .56, p < .001  *p < .05, **p < .001
### Table 5.
**Moderated Moderation predicting Depression:**
*Perinatal Grief, Obligation to Manifest Strength, and Negative Religious Coping*

<table>
<thead>
<tr>
<th></th>
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<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
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<td>Constant</td>
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<td>[12.29, 17.41]</td>
<td>1.29</td>
<td>11.51</td>
<td>.000**</td>
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<td>Perinatal Grief</td>
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<td>[-.06, .08]</td>
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<td>.28</td>
<td>.779</td>
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<tr>
<td>Obligation to Manifest Strength</td>
<td>-.25</td>
<td>[-3.76, 9.00]</td>
<td>.89</td>
<td>.82</td>
<td>.417</td>
</tr>
<tr>
<td>Perinatal Grief x Obligation Manifest Strength</td>
<td>.39</td>
<td>[-.05, .09]</td>
<td>.03</td>
<td>.66</td>
<td>.513</td>
</tr>
<tr>
<td>Perinatal Grief x Negative Religious Coping</td>
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<td>[-.04, -.01]</td>
<td>.01</td>
<td>-4.03</td>
<td>.0001**</td>
</tr>
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<td>Obligation Manifest Strength x Negative Religious Coping</td>
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<td>[.24, 1.20]</td>
<td>.24</td>
<td>2.99</td>
<td>.243</td>
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<tr>
<td>Perinatal Grief x Obligation Manifest Strength x Negative Religious Coping</td>
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<td>[.01, .03]</td>
<td>.01</td>
<td>2.87</td>
<td>.005*</td>
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<tr>
<td>Relationship Status Change</td>
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<td>[.86, 4.17]</td>
<td>.83</td>
<td>3.02</td>
<td>.003*</td>
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<td>[-.39, .35]</td>
<td>.19</td>
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<td>[-.63, 2.64]</td>
<td>.83</td>
<td>1.22</td>
<td>.226</td>
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</table>

R² = .20, p < .001, *p < .05, **p < .001

### Table 6.
**Moderated Moderation predicting PTG:**
*Perinatal Grief, Obligation to Manifest Strength, and Negative Religious Coping*

<table>
<thead>
<tr>
<th></th>
<th>B</th>
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<th>SE</th>
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<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
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<td>4.67</td>
<td>12.36</td>
<td>.000**</td>
</tr>
<tr>
<td>Perinatal Grief</td>
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<td>[-.05, .43]</td>
<td>.12</td>
<td>1.55</td>
<td>.123</td>
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<tr>
<td>Obligation to Manifest Strength</td>
<td>2.62</td>
<td>[-3.76, 9.00]</td>
<td>3.21</td>
<td>.82</td>
<td>.417</td>
</tr>
<tr>
<td>Negative Religious Coping</td>
<td>.18</td>
<td>[-.84, 1.21]</td>
<td>.52</td>
<td>.36</td>
<td>.960</td>
</tr>
<tr>
<td>Perinatal Grief x Obligation Manifest Strength</td>
<td>.28</td>
<td>[.04, .53]</td>
<td>.13</td>
<td>2.28</td>
<td>.025*</td>
</tr>
<tr>
<td>Perinatal Grief x Negative Religious Coping</td>
<td>.04</td>
<td>[-.01, .09]</td>
<td>.03</td>
<td>1.46</td>
<td>.148</td>
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<tr>
<td>Obligation Manifest Strength x Negative Religious Coping</td>
<td>-1.54</td>
<td>[-3.26, .18]</td>
<td>.87</td>
<td>-1.77</td>
<td>.079</td>
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<tr>
<td>Perinatal Grief x Obligation Manifest Strength x Negative Religious Coping</td>
<td>-.05</td>
<td>[-.09, -.01]</td>
<td>.02</td>
<td>-2.46</td>
<td>.016*</td>
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<tr>
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<td>[-8.61, 3.40]</td>
<td>3.03</td>
<td>-.86</td>
<td>.391</td>
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<td>[-1.19, 1.48]</td>
<td>.67</td>
<td>.21</td>
<td>.832</td>
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R² = .36, p < .05, *p < .05, **p < .001
Figure 1. Visual Depiction of the interaction between Perinatal Grief and Reliance on Spirituality on Depression Scores in the simple Moderation Model

Figure 2. Visual Depiction of the interaction between Perinatal Grief and Reliance on Spirituality on Depression Scores in the Moderated Moderation Model
THE ROLE OF STRENGTH

Figure 3. Visual Depiction of the interaction between Perinatal Grief and Obligation to Manifest Strength on PTG Scores in the simple Moderation Model

Figure 4. Visual Depiction of the interaction between Perinatal Grief and Obligation to Manifest strength on PTG Scores in the Moderated Moderation Model
Figure 5. Visual Depiction of the interaction between Perinatal Grief and Reliance on Spirituality on PTG Scores in the Moderated Moderation Model

Figure 6. Visual Depiction of the interaction between Perinatal Grief and Reliance on Spirituality on PTG Scores in the Moderated Moderation Model
Figure 7. Visual Depiction of the interaction between Perinatal Grief and Negative Religious Coping on Depression Scores in the Moderated Moderation Model

Figure 8. Visual Depiction of the interaction between Negative Religious Coping and Obligation to Manifest strength on Depression scores in the Moderated Moderation Model
Figure 9. Visual Depiction of the interaction between Perinatal Grief, Negative Religious Coping, Obligation to Manifest strength on Depression scores in the Moderated Moderation Model.

Figure 10. Visual Depiction of the interaction between Perinatal Grief and Obligation to Manifest Strength on PTG Scores in the Moderated Moderation Model.
Figure 11. Visual Depiction of the interaction between Perinatal Grief, Negative Religious Coping, Obligation to Manifest strength on PTG scores in the Moderated Moderation Model
Appendix B. Questionnaires and Measures

Demographic Questionnaire

1. Please mark one or more groups to indicate what race you consider yourself to be. *
   a. Black or African American
   b. White or European American
   c. American Indian or Alaska Native
   d. Asian or Asian American
   e. Native Hawaiian or Another Pacific Islander
   f. Hispanic or Latino; Please Specify

2. What is your gender? *
   a. Male
   b. Female
   c. Other

3. Have you experienced a miscarriage, fetal loss, infant loss, stillborn, or perinatal loss? *

4. I identify my ethnicity as:

5. Age:

6. I identify my sexual identity as:

7. Relationship Status (at time of loss)
   a. Single
   b. Casually Dating
   c. Committed Relationship/Partnership
   d. Married
   e. Separated/Divorced

8. Relationship Status (currently)
   a. Single
   b. Casually Dating
   c. Committed Relationship/Partnership
   d. Married
   e. Separated/Divorced

9. Are you apart of a religious community? If so, which community?

10. What is your education level?
    a. Less than a high school diploma?
    b. High School Graduate or equivalent (e.g. GED)
    c. Some college but No degree
    d. Associate degree
    e. Bachelor's degree
    f. Master's degree
    g. Professional Degree /Doctoral degree
    h. Don’t know

11. Which of the following best reflects your annual household income?
    a. Below Less than $10,000
b. $10,000 to $14,999
c. $15,000 to $24,999
d. $25,000 to $34,999
e. $35,000 to $49,999
f. $50,000 to $74,999
g. $75,000 to $99,999
h. $100,000 to $149,999
i. $150,000 to $199,999
j. $200,000 or more

12. What type of perinatal loss did you experience?
   a. Miscarriage (< 20 weeks)
   b. Stillborn (>20 weeks)
   c. Ectopic pregnancy
   d. Neonatal death (loss before 28 days)
   e. Infant loss (loss before 1st old)
   f. Other: (Please Specify)

13. How old was your baby when he/she died?
14. How long ago was your loss?
15. How many perinatal losses have you experienced?
16. Number of living children:

Screening Questions*
Perinatal Grief Scale

Each of the items is a statement of thoughts and feelings that some people have concerning a loss such as yours. There are no right or wrong responses to these statements. For each item, circle the number the best indicated the extent to which you agree or disagree with it at the present time. If you are not certain, use the “neither” category. Please try to use this category only when you truly have no opinion.

1 = Strongly Agree
2 = Agree
3 = Neither Agree nor Disagree
4 = Disagree
5 = Strongly Disagree

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I feel depressed.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>I find it hard to get along with certain people.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>I feel empty inside.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>I can’t keep up with my normal activities.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>I feel a need to talk about the baby.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>I am grieving for the baby.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>I am frightened.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>I have considered suicide since the time of the loss.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9</td>
<td>I take medicine for my nerves.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10</td>
<td>I very much miss the baby.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11</td>
<td>I feel I have adjusted well to the loss.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12</td>
<td>It is painful to recall memories of the loss.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>13</td>
<td>I get upset when I think about the baby.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>14</td>
<td>I cry when I think about him/her.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>15</td>
<td>I feel guilty when I think about the baby.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>16</td>
<td>I feel physically ill when I think about the baby.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>17</td>
<td>I feel unprotected in a dangerous world since he/she died.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>18</td>
<td>I try to laugh, but nothing seems funny anymore.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>19</td>
<td>Time passes so slowly since the baby died.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>20</td>
<td>The best part of me died with the baby.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>21</td>
<td>I have let people down since the baby died.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>22</td>
<td>I feel worthless since he/she died.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>23</td>
<td>I blame myself for the baby’s death.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>24</td>
<td>I get cross at my friends and relatives more than I should.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>25</td>
<td>Sometimes I feel like I need a professional counselor to help me get my life back together again.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>26</td>
<td>I feel as though I’m just existing and not really living since he/she died.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>27</td>
<td>I feel so lonely since he/she died.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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</tr>
<tr>
<td>28.</td>
<td>I feel somewhat apart and remote, even among friends.</td>
<td>1 2 3 4 5</td>
<td></td>
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</tr>
<tr>
<td>29.</td>
<td>It’s safer not to love.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>30.</td>
<td>I find it difficult to make decisions since the baby died.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>31.</td>
<td>I worry about what my future will be like.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>32.</td>
<td>Being a bereaved parent means being a “Second-Class Citizen.”</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33.</td>
<td>It feels great to be alive.</td>
<td>1 2 3 4 5</td>
<td></td>
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</tbody>
</table>
### Brief Religious Coping Scale

**Instructions:** The following statements describe specific ways people might cope with *perinatal loss*. As you think of the *loss* you have faced, how much do you use each of the following things to cope with *the loss of your child*. *

1 = Not at All  
2 = Somewhat  
3 = Quite a Bit  
4 = A Great Deal

<table>
<thead>
<tr>
<th></th>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pleased with God to make everything work out.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>Tried to deal with the situation on my own without God's help.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>Worked together with God to relieve my worries.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>Wondered whether God was punishing me because of my lack of faith.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>Felt that God has limits.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>Felt that God was working right along with me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>Didn’t try much of anything; simply expected God to take control.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8</td>
<td>Knew that I couldn’t handle the situation, so I just expected God to handle it for me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9</td>
<td>Prayed for a miracle.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10</td>
<td>Worked together with God as partners.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11</td>
<td>Saw my situation as part of God’s plan.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12</td>
<td>Decided that God was punishing me for my sins.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13</td>
<td>Questioned the power of God.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14</td>
<td>Prayed to get my mind off of my problems.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

As per original scale instructions, researchers are able to change the original instruction’s wording from (situation/stressor) to a specific stressor, see italics.
Superwoman Subscale- Stereotypical Roles of Black Woman Scale

This is a scale to determine attitudes and beliefs. There are no right or wrong answers. Please use the following scale to complete the questions.

CIRCLE THE NUMBER that indicates how much you agree or disagree with each statement

1= Strongly Agree
2 = Agree
3= Neither Agree nor Disagree
4= Disagree
5= Strongly Disagree

1. Black women are often loud and obnoxious
2. Black women are all about sex.
3. Black women have to be strong to survive.
4. Black women will use sex to get what they want.
5. If given a chance, Black women will put down Black men.
6. I am often expected to take care of family members.
7. If I fall apart, I will be a failure.
8. I often put aside my own needs to help others.
9. I often feel ignored by others.
10. I find it difficult to ask others for help.
11. I feel guilty when I put my own needs before others.
Post Traumatic Growth Inventory

Indicate for each of the statements below the degree to which this change occurred in your life as a result of the crisis/disaster, using the following scale.

0 = I did not experience this change as a result of my crisis.
1 = I experienced this change to a very small degree as a result of my crisis.
2 = I experienced this change to a small degree as a result of my crisis.
3 = I experienced this change to a moderate degree as a result of my crisis.
4 = I experienced this change to a great degree as a result of my crisis.
5 = I experienced this change to a very great degree as a result of my crisis.

1. I changed my priorities about what is important in life.  
2. I have a greater appreciation for the value of my own life.  
3. I developed new interests.  
4. I have a greater feeling of self-reliance.  
5. I have a better understanding of spiritual matters.  
6. I more clearly see that I can count on people in times of trouble.  
7. I established a new path for my life.  
8. I have a greater sense of closeness with others.  
9. I am more willing to express my emotions.  
10. I know better that I can handle difficulties.  
11. I am able to do better things with my life.  
12. I am better able to accept the way things work out.  
13. I can better appreciate each day.  
14. New opportunities are available which wouldn't have been otherwise.  
15. I have more compassion for others.  
16. I put more effort into my relationships.  
17. I am more likely to try to change things which need changing.  
18. I have a stronger religious faith.  
19. I discovered that I'm stronger than I thought I was.  
20. I learned a great deal about how wonderful people are.  
21. I better accept needing others.
Center for Epidemiologic Studies Short Depression Scale (CES-D-R 10)

Below is a list of some of the ways you may have felt or behaved. Please indicate how often you have felt this way during the past week.

0 = Rarely or None of the time  
1 = Some or a little of the time  
2 = Occasionally or a moderate amount of the time  
3 = All of the time

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<tbody>
<tr>
<td>1</td>
<td>I was bothered by things that usually don't bother me.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>I had trouble keeping my mind on what I was doing.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>I felt depressed.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>4</td>
<td>I felt that everything I did was an effort.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>I felt hopeful about the future.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>I felt fearful.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>My sleep was restless.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8</td>
<td>I was happy.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9</td>
<td>I felt lonely.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>10</td>
<td>I could not get going.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>