A Transdisciplinary Conceptual Framework of Contextualized Resilience for Reducing Adverse Birth Outcomes

Tijen Sumbul1, Solaire Spellen2, and Monica R. McLemore1

Abstract
Research in preterm birth has focused on the disparate outcomes for Black, Hispanic, and Latina women as compared with White women. However, research studies have not focused on centering these women in frameworks that discuss how resilience is embodied. This article is a presentation of our transdisciplinary contextual framework of resilience, building on work that centers Black, Hispanic, and Latina women, as well as historical oppression and trauma resilience frameworks developed by transcultural psychiatry, psychology, public health, anthropology, medicine, nursing, sociology, and social work. To develop the model, we reviewed 115 articles and books (1977–2019), which were then evaluated and synthesized to develop a transdisciplinary framework of contextualized resilience to enable a better understanding of the complex interplay of medical and social conditions influencing preterm birth. The framework includes multiple ecological layers that cross the individual, familial and intimate, community, structural, policy and law, and hegemonic domains.

Keywords
resilience framework; women of color; preterm birth, racial disparities; structural violence; historical oppression; health disparities; embodiment; qualitative research, California

Introduction
“Helplessness and isolation are the core experiences of trauma. Power and reconnection are the core experiences of recovery” (Herman, 2015).

Research in preterm birth has historically focused on the disparate poor birth outcomes for Black, Hispanic, and Latina women as compared with White women. Research to date has focused on how stress (Dunkel Schetter, 2011), racism (Chae et al., 2018; Krieger, 2012; Nuru-Jeter et al., 2009; Prather et al., 2018), discrimination (McLemore et al., 2018; Sealy-Jefferson, Giurgescu, Slaughter-Acey, Caldwell, & Misra, 2016), individual traits (Dunkel Schetter, 2011; Dunkel Schetter & Dolbier, 2011), social support (Campos et al., 2008; Dunkel Schetter & Dolbier, 2011; Dunkel Schetter et al., 2013), residential segregation (Mehra, Boyd, & Ickovics, 2017), and the built environment (Bonam, Bergsieker, & Eberhardt, 2016) influences poor birth outcomes during pregnancy. Black women born in the United States are twice more likely than White women to experience preterm birth (defined as birth before 32 weeks gestation), and their babies are twice as likely to not survive the first year of life (Hamilton, Martin, Osterman, Driscoll, & Rossen, 2017; Ramey et al., 2015). For the purposes of this article, we discuss both preterm birth and low birth weight (LBW) as adverse birth outcomes.

Embodiment of contemporary and historical trauma has been shown to influence both disease and adverse birth outcomes for Black women (Prather et al., 2018; Prather, Fuller, Marshall, & Jeffries, 2016; Sealy-Jefferson et al., 2016; Williams & Mohammed, 2013). Exposure to structural violence and threats in the form of discrimination and racism can be embodied as a higher allostatic load, or cumulative “wear and tear” on the body (Lu et al., 2010), which can result in weathering, an increased susceptibility of disease (Geronimus, Hicken, Keene, & Bound, 2006; Williams & Mohammed, 2013) and poorer reproductive health outcomes among Black women (Collins et al., 2004; Nuru-Jeter et al., 2009; Prather et al., 2018; Prather et al., 2016).
Hispanic and Latina women in the United States have been shown to experience birth outcomes similar to White women, even while experiencing more socioeconomic disparities, buffered in part by strong social support systems (Campos et al., 2008; Hoggatt, Flores, Solorio, Wilhelm, & Ritz, 2012). The “Latina Paradox” has been refuted by past researchers, with researchers reporting foreign-born Latinas have stronger social supports that result in better birth outcomes. While U.S.-born Latinas were more likely to have lower birth weight babies and moderate increases in preterm birth as they become more acculturated (Campos et al., 2008; Flores, Simonsen, Manuck, Dyer, & Turok, 2012; Hoggatt et al., 2012).

Other studies have shown neither foreign-born nor U.S.-born Latinas had the same or better birth weights than Whites (Sanchez-Vaznaugh et al., 2016), with a slight variation for foreign-born Latinas who sometimes may have better birth weights than U.S.-born Latinas. Stress, discrimination, poverty, nutrition, obesity, and decreased social supports are factors that researchers have postulated influence these different rates (Fleuriet & Sunil, 2017a, 2017b; Hoggatt et al., 2012; Novak, Geronimus, & Martinez-Cardoso, 2017; Ospyuk, Bates, & Acevedo-Garcia, 2010). Recent studies show a rise in preterm births associated with increased maternal stressors among Latinas after the anti-immigrant rhetoric and policies of the 2016 elections (Gemmill et al., 2019; Krieger, Huynh, Li, Waterman, & Wye, 2018). Additional sociopolitical stressors, such as the increasing threat of immigration raids and racialized legal status scrutiny (Asad & Clair, 2018), have been shown to be detrimental physically and mentally, which can result in poor pregnancy outcomes for Hispanic and Latina women (Lu et al., 2010; Novak et al., 2017; Nuru-Jeter et al., 2009; Prather et al., 2018; Ramey et al., 2015).

Resilience, among the social sciences, has traditionally been defined by psychology as a personal and socially influenced trait that allows an individual to return to a normal state after adverse or traumatic events (Antonovsky, 1993; Dunkel Schetter, 2011; Dunkel Schetter & Dolbier, 2011; Eriksson, 2017; Hobfoll, 2014; Masten, 2001; Southwick, Bonanno, Masten, Panter-Brick, & Yehuda, 2014). The fields of social work (Burnette & Billiot, 2015; Burnette & Hefflinger, 2017; Ungar, 2008, 2011a, 2011b, 2012), transcultural psychology (Allen et al., 2014; Eln, Lewis, Walters, & Sef, 2016; Kirmayer, Dandeneau, Marshall, Phillips, & Williamson, 2011; Kirmayer, Sehdev, Witherly, Dandeneau, & Issac, 2009), anthropology (Bourdieu, 2003; Castañeda et al., 2015; Farmer, 2004; Panter-Brick, 2014, 2015), public health (Krieger, 2001), and sociology (Pinderhughes, Davis, & Williams, 2015) have added contextual ecological layers to build upon how resilience can be best understood. While medicine and nursing has focused on the experiences of survivors’ resilience via connectedness (Epstein & Krasner, 2013) and how health care providers (Turner & Kaylor, 2015) buffer adverse experiences for patients while increasing positive health outcomes (see Supplementary Table S1).

Resilience is a temporal, multilevel processes that varies from context to context—individual, familial, community, local, structural, political, and historical—it involves many trajectories and often actions, inactions, and acts of resistance that are not always positive or advantageous to the individual. To this purpose, we are defining resilience as a strengths-based processes that is impacted by structural violence and historical oppression, including how the intersection of race, class, gender identity, sexuality, and varied abilities are shaped by institutional and social power differences. We define resilience as not only indicating a forward positive trajectory but representing a process of “harnessing key resources to sustain well-being” (Panter-Brick, 2014) in which political economies, access to power, cultural norms, and expectations are influenced by structural vulnerabilities, historical oppression and the ecological layers and environments of the individual, family, and community.

It is important to note throughout this article that the original terminology used by the cited authors will be maintained; however, ecosocial context encompasses ecosocial theory (Krieger, 2001, 2012) and ecosystematic approaches (Burnette & Figley, 2016) and perspectives. In addition, other elements related to our presented contextualized framework will include gendered roles and structural vulnerability, and will focus particular attention to the ways in which women of color survive, manage, thrive, transcend, and heal.

Contextualized Historical Resilience Framework Development

Historically, few research studies have focused on centering Black, Hispanic, and Latina women in conceptual models that describe resilience. The Preconception Stress and Resilience Pathways (PSRP) model, developed by the National Institutes of Health Community Child Health Network, identified both stress and resilience along various ecological levels while focusing on strengths-based processes among women in low resourced communities (Ramey et al., 2015). The PSRP model provides a simplistic framework for how everyday resilience works on six ecological levels to impact healthy birth outcomes. The model was National Institutes of Health (NIH) funded and was community engaged and developed; however, this model heavily relies on individual factors, while also attempting to assess social and community resources and the psychological stress caused by discrimination and racism (Ramey et al., 2015). The PSRP model is limited in
its approach because it does not place individuals in the context of historical oppression as related to historical racism, oppression and trauma, structural vulnerabilities, and gendered roles and constraints. To address the need for a strengths-based and woman-centered resilience framework and the limited research surrounding the adverse birth outcomes for Black, Hispanic, and Latina women, we developed a preconceptual contextualized resilience model. To address these limitations, this article presents the results of a comprehensive scoping literature review of resilience and our preconceptual model that incorporates existing theories and new concepts from transdisciplinary works to inform and support how resilience is embodied. This preconceptual model supplemented historical oppression and trauma resilience frameworks that have been developed in the fields of transcultural psychiatry, psychology, public health, anthropology, medicine, nursing, and social work (Burnette & Figley, 2016; Fast & Collin-Vézina, 2010; Hinds & Haase, 2011; Kirmayer et al., 2011 Panter-Brick, 2014, 2015; Panter-Brick & Eggerman, 2017).

A secondary focus of this article is to discuss how the study findings can be applied to better understand the strength-based, dynamic resilience enacted in the everyday lives of women of color, specifically Black, Hispanic, and Latina women in relation to reducing adverse birth outcomes and improving healthy birth outcomes. Although we have borrowed and learned from the extensive previous work on resilience frameworks focused on Native American and Indigenous peoples, we have not focused on Native women’s birthing outcomes, as given the context of European colonization and resulting historical oppression Native and Indigenous authors must first do a resilience analysis. While keeping the focus on centered Black, Hispanic, and Latina women within an ecologic context, women are seen as enacting their resilience through action and praxis. Expanding on the work of Bourdieu (1977), we transitioned from an agency/structure binary construct for how resilience is lived and sought to instead understand the processes of resilience as dynamic and in constant flux over time. Furthermore, resilience centers the individual as both influential and influenced within the contextual situations and circumstances managed daily (Bourdieu, 1977; Kirmayer et al., 2009; Paulle, 2003).

Analytic and Preconceptual Model Development

The preconceptual model that we developed was based on ecological models in public health, social work, and sociology. We then used the theories, frameworks, and concepts gleaned from the scoping literature review (Kastner et al., 2012). We investigated how resilience interacts within and across ecological layers, and how it is manifested and expressed in the everyday lives of women. The focus on analysis began with an examination of current views of resilience across disciplines while seeking to understand theoretically how issues of power, the legacy of historical oppression, and structural vulnerabilities affects women’s lives.

Theoretical influences included the following foundational works on structural violence (Bourgois, 2001, 2003; Farmer, 2004; Peña, 2011; Pinderhughes et al., 2015), systems of power, and their mechanisms along the ecological layers (Bourdieu, 1977, 1990; Foucault, 1982; Gramsci, 2011; Krieger, 2001), critical theory, critical race theory, and intersectionality (Burnette & Billiot, 2015; Burnette & Hefflinger, 2017; Chapman & Berggren, 2005; Crenshaw, 1991; Ford & Airhihenbuwa, 2010; Freire, 1972). The research team used thematic analysis to identify relevant and emerging threads from the literature reviewed and discussed. After incorporating an understanding of concepts and layers, we then participated in weekly meetings to determine the structure to represent the domains in the multiple layers of the framework. Next, each section was written to reflect current and past frameworks and conceptual themes. As articles were coded and reviewed, a statement was developed to describe each layer. Finally, a single theme and corresponding label for conceptualized field and resilience factor was chosen to represent each layer of the framework. Themes reflected the main concepts that we determined to be paramount in the literature and research and considered important in the consideration of contextualized resilience and the reduction of adverse birth outcomes (see Supplementary Table S2).

We used the theoretical existing frameworks of historical oppression (Burnette, 2015; Burnette & Figley, 2016), structural vulnerabilities (Bourgois, Holmes, Sue, & Quesada, 2017), embodiment (Nuru-Jeter et al., 2009; Scheper-Hughes & Lock, 1987; Walters et al., 2011) as the primary underlining influences. In addition, the theoretical concept of capacity was adapted (Kirmayer et al., 2009; Mancini & Bonanno, 2009; Masten, 2001). We also developed the concept of entitlement, which is our extended definition of “sense of coherence” (Antonovsky, 1993; Dunkel Schetter, 2011; Dunkel Schetter & Dolbier, 2011; Kirmayer et al., 2009; Masten, 2001).

The framework of historical oppression includes historical and contemporary experience of both normalized and internalized oppression, including the experience of inequities, subjection, and structural violence. Historical oppression encompasses an examination of how structural violence and gendered roles intersect to uniquely impact the lives of women (Burnette, 2015; Burnette & Figley, 2016). Structural vulnerability is an individual’s or group’s experience of being at risk for adverse health...
outcomes through their interactions with “socioeconomic, political, and cultural/normative hierarchies” (Bourgois et al., 2017, p. 3). Embodiment can be understood as to how stressors, inequities, symbolic, and/or literal insults are held, housed, and experienced in the self, as well as how wellness, belonging, and love are experienced (hooks, 2001; Scheper-Hughes & Lock, 1987; Walters et al., 2011).

Capacity is an overarching term defined as individual characteristics and traits that increase the ability to overcome and experience trauma and hardship without negative outcomes and/or while experiencing growth and can involve support networks and community (Bonanno, Romero, & Klein, 2015; Kirmayer et al., 2009; Masten, 2001). Capacity changes based on access to power and power dynamics across and within the layers of our ecological framework. Entitlement is a sense of belonging and worthiness that is inherent in the intimate level of how we construct our value, and right to exist compared with the world around us. Entitlement, as we define it, can be profoundly damaged and altered by experienced and embodied trauma, and consequently, healed or buffered by belonging and attunement (Van der Kolk, 2014). Capacity includes a sense of coherence, the belief that the world and one’s existence in it, is logical and consistent (Antonovsky, 1993), whereby entitlement is our term developed to expand upon and add to a “sense of coherence” (Antonovsky, 1993; A. Y. Davis, Barat, & West, 2016; Fanon, 1961/1965; Kirmayer et al., 2009; Masten, 2001; Popova, 2015). In addition, an emphasis was added on historical and contemporary power dynamics and how individuals interact, both proactive and, reactively, within inequitable power constraints (see Table 1).

Method

A scoping review of the literature was conducted from 2016 to 2019 to support the development of the contextual framework (Kastner et al., 2012). Search terms in PubMed, JSTOR, Antro Source, Science Direct, Google Scholar, included resilience, resilience and trauma, resilience and women of color, resistance, resistance and Black/African American women, resistance and Hispanic and Latina women, resilience and community, embodiment, preterm birth, adverse birth outcomes, structural violence, communities of color, and women of color. One hundred and fifteen articles from peer reviewed journals and 10 books met inclusion criteria, based on the quality assessment tool, QATSDD (Fenton, Lauckner, & Gilbert, 2015). Research articles were limited to those that met inclusion criteria. Inclusion criteria were (a) written in English; (b) study outcomes were related to resilience; (c) study outcomes needed to include but were not limited to birth related outcomes; (d) studies that described resilience in Black/African American, Hispanic/Latina women, and communities of color in North America; (e) Articles in the initial search were not limited by age range of participants, but special focus was given to childbearing years. Exclusion criteria were studies that described (a) war-related trauma and resilience; (b) sports-related resilience; (c) studies that exclusively defined resilience as only individual choices, traits, or chronic characteristics; and (d) studies of resilience that only consider trauma or adversity within a singularly adverse event such as 9/11. For the purposes of this review, historical oppressions (Burnette, 2015; Burnette & Figley, 2016) and structural vulnerabilities (Bourgois et al., 2017; Quesada, Hart, & Bourgois, 2011) were included as potential stressors that contribute to adverse birth outcomes (see Supplementary Figure S1).

Results

The results of the scoping literature review resulted in major threads from which themes were incorporated into our initial preconceptual model to develop our final contextualized resilience framework (Supplemental Figure S2). Five major themes were determined from the resulting connecting literature and include, (a) embodiment via biobehavioral links and biophysiological mechanisms to stress, discrimination, and adverse conditions that increase inflammation, higher allostatic load, and multiple responses that can lead to adverse health and birth outcomes for Black, Hispanic, and Latina women; (b) capacity via access to personal and social supports, socioemotional knowledge, and access to resources and types of capital within various contexts; (c) Entitlement and understanding of one’s own worth and belonging in the world based on a sense of safety, control, and attunement with others; (d) Resistance as a transformative mechanism to create better birthing outcomes via improved equity in communities and groups that have been historically discriminated against; and (e) Both historical oppression and structural vulnerability as important contextual reoccurring themes that provide the sociopolitical foundation for our ecological layers and are interwoven within each theme above.

Our contextual resilience framework was designed by integrating the five themes above into our preconceptual model, which consists of six ecological layers. The initial label for each layer represents our ecologically focused preconceptual model, whereas the gleaned corresponding contextual fields and resilience themes are represented via labels we have given them in parentheses after the initial ecological layer (Supplemental Figure 1). The six layers of our framework represent (a) individual (capacity); (b) familial, intimate, and friends (entitlement); (c) community and collective culture (entitlement);
(d) structural and institutional (structural vulnerability and reformation); (e) policy (historical oppression and manifesting); and (f) hegemonic discourse (embodiment and transformation) areas. Within the interacting ecological layers as a backdrop, we identified resilience as a strength-based processes, praxis, and symbolic action or belief that women use as a means of claiming sovereignty over themselves (Supplemental Figure 1).

Our contextualized resilience framework is presented and described in order of the innermost circle to the surrounding overlapping layers. The Individual layer at the center should be understood as moving through, influenced by, and influencing all overlapping layers in the framework.

**Discussion of Results**

The five primary theme findings were synthesized to develop our concept of a multilayered contextualized resilience framework. The conceptual framework of contextualized resilience presented here was created to better understand how resilience works via both lived processes and symbolically for women of color, specifically Black, Hispanic, and Latina women to create better birth outcomes. Our framework was purposively developed using transdisciplinarity, as transdisciplinarity is achieved when a group develops an overarching framework that includes but transcends individual disciplines (Adler & Stewart, 2010). The resulting framework will be vetted and informed by Black, Hispanic, and Latina women based on their personal and community experiences. That said, we also intend our framework of contextualized resilience to expand on existing conceptual transdisciplinary knowledge and offer a starting point of theoretical discussion regarding how an ecological, critically aware, women of color centered resilience framework can be further constructed. A table of strategies to increase resilience was developed from the literature reviewed, and can be expanded through future community involvement and research (see Supplemental table S3).

**Layer 1—Capacity**

The first resilience layer of the framework is described through the lens of individual capacity and internal abilities. The individual in the framework has been placed at the center and is represented through arrows that move within and throughout the overlapping layers of the
framework, indicative of the resilient making praxis of the individual and the field within symbolic and collective bodies in which individual interacts (Bourdieu, 1977). Social networks and supports have also been factored into the likelihood of an individual to display resilient behavior (Dunkel Schetter, 2011; Dunkel Schetter & Dolbier, 2011; Dunkel Schetter et al., 2013; Ungar, 2008, 2011a; Ungar, Brown, Liebenberg, & Othman, 2007). We choose capacity as the descriptor to delineate the traits that represent resilience of the self. Although traits such as self-esteem, mastery, self-regulation, positivity, and other coping skills can no doubt build resilience in many environments, centering resilience in an individual's personality or characteristics takes away from understanding how the ecological and social environments influence how individuals shift and negotiate resources as a process of resilience (Hobfoll, 2014). The primary focus on individual traits and capacity is based on a Eurocentric, dominant culture and western value-laden lens, and can fail to provide a deep understanding of how Black, Hispanic, and Latina women build strength and support in their lives (Burnette & Figley, 2016; Kirmayer et al., 2011; Ungar, 2011a).

Resilience at the individual layer can be displayed in many different manners with the ability to adapt, shape, and “shift and persist” or to “navigate and negotiate” as a process that ultimately bids to create better health outcomes amid the context of these disparate conditions (Burnette, 2015, 2017; Dunkel Schetter et al., 2013; Panter-Brick, 2014, 2015; Ungar, 2008, 2011b) Building self-regulatory skills through learning cognitive behavioral stress management has been shown to reduce perceived stress levels during pregnancy for Black, Latina, Asian, mixed, and White low-income women, although these skills did not improve cortisol levels during pregnancy (Urizar, Yim, Rodriguez, & Dunkel Schetter, 2019). A recent study on U.S.-born and foreign-born Latinas experiencing anxiety while pregnant showed a pathway between mid-term anxiety and a placental corticotrophin-releasing hormone, resulting in shorter gestation as compared with their non-Latina White counterparts (Ramos et al., 2019). Given that discrimination, racism, and various forms of stress cause poor health outcomes and birthing experiences, it is necessary to gain a better understanding of how the lived experiences around resilience create and safeguard wellness against the stress response (Burnette, 2015, 2017; Chae et al., 2018; Farmer, 2004; Krieger & Davey Smith, 2004; Nuru-Jeter et al., 2009; Selita & Kovas, 2018; Walters et al., 2011b).

Layer 2—Entitlement

The second layer of entitlement is aligned with family, intimates, and friends. Entitlement includes a sense of coherence, the belief that the world and one’s existence in it, is logical and consistent (Antonovsky, 1993). Entitlement is an essential part of resistance resources where a sense of coherence includes (a) comprehensibility: belief that the world is comprehensible and ordered; (b) manageability: belief that one has the skill, ability, support/help, or resources to face challenges; (c) meaningfulness: belief that life is worthwhile and has purpose. In terms of understanding resilience for Black, Hispanic, and Latina women, we include an important fourth additional element, the sense that one has the right to exist—which is not contested, denied, or ignored in the lived context of other layers in the contextual framework. This addition is important to understand in the context of symbolic violence (Bourdieu, 1977) and vulnerability via limited opportunities and the racist, classist, and gendered assaults experienced in everyday life (Michau, Horn, Bank, Dutt, & Zimmerman, 2015). This sense of entitlement is inherent in the intimate level of how we construct our value and right to exist compared with the world around us (Popova, 2015).

Entitlement involves the processes and symbolic concept of finding belonging, love, and solace in intimate, familial, and friend relationships, while also experiencing a sense of continuity and a right to essential life, belonging (Antonovsky, 1993), and a notion of self-worth. Women experience and affirm their worth and identities through building relationships which provide belonging through a sense of coherence, which helps to manage a chaotic world (Bourdieu, 1977; Eriksson, 2017). Family and friends also provide connections to community relationships and supports for women (Campos et al., 2008). Researched foreign-born and U.S.-born pregnant Latinas benefited from higher levels of social supports via familialism compared with their non-Latina White counterparts (Campos et al., 2008). Social supports were related to higher birth weights for foreign-born Latinas, as compared with their U.S.-born Latinas and European American counterparts (Campos et al., 2008). Close relationships build resilience by reflecting back self-esteem and self-love for Black, Hispanic, and Latina women (hooks, 2001).

Reshaping and struggling against cultural scripts, such as gender roles, stereotypes, and other representations, allows women the movement to create authentic forms of love, solace, and belonging in relationships (S. Davis, 2014; Mullings, 1997, 2002; Ross & Solinger, 2017). Sociopolitical contexts and economic forces heavily influence gendered roles and cultural scripts. Migration, poverty, and cultural expectations can combine to create gender inequities. Research of Mexican-origin immigrant women in the United States found that gender inequity and, subsequently, reproductive health behaviors linked with unequal distribution of labor at home, family levels of stability, and socioeconomic disparities. Although
cultural norms influenced gendered roles, those roles were also influenced by migration patterns and resulting educational and economic opportunities for women (Coleman-Minahan, 2017).

Black, Hispanic, and Latina women use known forms of cultural capital from their own histories and cultures as well as “dominant” White middle-class culture (Bourdieu, 1977; Yosso, 2005) to actively build resources through negotiating and navigating community support systems and socioeconomic environments (Panter-Brick, 2014, 2015; Ungar, 2011b) even among social fields and contexts in which resources have been historically restricted. In terms of birthing experiences, Black, Hispanic, and Latina women manage the sense of chaos that is a consequence of historical oppressions and structural violence by creating order and a sense of meaning via the agency of loving relationships with their own bodies, future children, lovers, and close family members (hooks, 2001; Mullings, 1997, 2002; Mullings & Wali, 2001). Creating a sense of safety via connection and belonging, produces better social supports, buffers stressful experiences, and may disrupt or negate biosocial mechanisms that influence adverse birth outcomes.

Layer 3—Resistance

The third layer in our resilience framework is community—representing culture, intersectional identities, the local environment, and collective cultures, both historical and contemporary. Communities are complex systems, involving the social–cultural, physical, economic, and built environment (Pinderhughes et al., 2015), and often contain intergenerational histories of trauma, and structural violence. Collective and intergenerational community trauma and adverse life experiences (Anda, Butchart, Felitti, & Brown, 2010; Felitti et al., 1998) leads to poor health for all members of the community, including birthing women. Resistance, as an operational term, is used for this third layer and is defined as defying or opposing dominant individuals or institutions in a “context of differential power relationships” and, at times, can involve “refusal,” or rejecting unequal relationships to assert new ways in which power is configured (Seymour, 2006). Resistance activates and embodies resilience in the community. The movement of collective culture resisting inequities has been the basis of many positivist political and human rights movements in recent history, with the civil rights movement being the most famous example (A. Y. Davis et al., 2016; Quesada et al., 2014). Organizing and giving collective support is restorative at the community, familial, and individual levels (Kirmayer et al., 2011; Lorde, 1999; Pinderhughes et al., 2015).

Healing collective trauma through social networks, rebuilding broken down built environments, and creating resources to combat socioeconomic barriers allow the act of communal self-caring and engagement to be transformative on an individual level, which directly and positively impacts women’s lives, stress level responses, and pregnancies. The individual self, and in this case pregnant and birthing women, can then survive through involvement in collective community (hooks, 2016a, 2016b) because the process of solidarity provides immunity or a buffer to maladaptive health outcomes (Pinderhughes et al., 2015; Quesada et al., 2011; Ramey et al., 2015). The internalization of social status and pregnancy-related anxiety among Mexican immigrant women has been shown to predict LBW (Fleuriet & Sunil, 2015, 2017a), as has the reproductive habitus, defined as the manner of living the “reproductive body, bodily practices, and the creation of new subjects through interactions with people and structures” (Fleuriet & Sunil, 2015; Smith-Oka, 2012). The embodiment of selfhood via community agency can provide women with the ability to engage in personal practices that bolster self-regulation, self-efficiency, stress management, positive coping skills, and contributes to better social economic resources (Dunkel Schetter & Dolbier, 2011) that produce an embodied impact on pregnant Black, Hispanic, and Latina women.

Layer 4—Structural Vulnerability

The fourth layer of structural vulnerability describes the economic forces, institutional mechanisms, as well as the local policies that influence the quality of life and health of community members. Black, Hispanic, and Latina women are disproportionately negatively impacted by structural forces, both institutionally, and through local policies that have not been created and managed to serve women of color (Bourgois et al., 2017; Krieger, 2012; Nuru-Jeter et al., 2009; Sealy-Jefferson et al., 2016; Walters et al., 2011). Structural vulnerability is an operationalized term that strongly aligns along all layers of the framework and can best inform the structural layer. Structural vulnerability (Bourgois et al., 2017; Green, 2011) describes an individual’s or a group’s condition of being at risk for negative health outcomes through their interactions with socioeconomic, political, cultural, and normative hierarchies. Individuals are structurally vulnerable when their location in societal interactive reinforcing power hierarchies (e.g., socioeconomic, racial, cultural) and institutional and policy statuses (e.g., immigration status, labor force participation, legal histories) constrain their ability to access health care and pursue healthy lifestyles (Bourgois et al., 2017, p. 2).

Privilege and access to power in the United States was built through the development of natural and financial resources, while the historical disparity of access to these
resources is the foundation of racial oppression and inequity (Du Bois, 1909). Community trauma involves a lack of resources and opportunity, a disregard for the built environment, and a proliferation of neglected urban social spaces that serve as visual indicators of segregation. These in turn negatively impact the health of the Black, Hispanic, and Latina women and increase stress levels that contribute to adverse pregnancy outcomes (Bonam et al., 2016; Burton, Kemp, Leung, Matthews, & Takeuchi, 2011; Gravlee, 2009; Mehra et al., 2017 Pinderhughes et al., 2015; Suglia et al., 2010). Claiming power and producing praxis-based agency, which accordingly produces resilience, can reduce biosocial links to stress responses for birthing women.

Layer 5—Historical Oppression

The fifth layer represents the policy, law, and historical legacy of racism and oppression of our framework and highlights the established mechanisms of segregation that perpetuated inequities for communities of color and historically underrepresented groups. The operationalized term we are using that clarifies this process is historical oppression. Historical oppression focuses on “historically situating social problems in their structural causes, rather than inappropriately locating problems solely within the populations who tend to disproportionately experience them” (Burnette & Hefflinger, 2017; Waller, 2001). This definition also includes the internalization of historical and contemporary oppressions, hierarchical power relationships, and an understanding of the intersectionality of racism, sexism, and colonial histories of U.S. policies (Crenshaw, 1991; Ford & Airhihenbuwa, 2010; Freire, 1972).

Building social resilience through community and common narratives of belonging can bolster a sense of entitlement across the intimate, familial, and community levels. Building community around healing is a step toward resilience in itself because hope is within the narrative of belonging and the right, or entitlement to exist. The processes of building resilience through active resistance in civil and social activism become more important as a function of hope (Castañeda et al., 2015; A. Y. Davis et al., 2016).

Understanding how structural violence is normalized within communities in both overt and silent ways helps us demonstrate how resilience is produced via joy, intimacy, and hope, even in spaces where the experience of collective community has been historically underresourced and undervalued (Abdou et al., 2010; Burnette, 2015, 2017; Kirmayer et al., 2009; Krieger, 2012; Pinderhughes et al., 2016). Daily interactions of indignities with health care personnel add up to increased stress and worry for Black, Hispanic, and Latina women, resulting in increased adverse birth outcomes (Colen, Ramey, Cooksey, & Williams, 2018; McLemore et al., 2018; Novak et al., 2017; Nuru-Jeter et al., 2009; Suglia et al., 2010). Any fundamental shift in attitude, understanding, and policy toward creating systems of dignity, such as accessible, consistent supportive health care, in addition to informative, culturally humble and respectful health providers, can improve Black, Hispanic, and Latina women’s birth experiences by reducing cumulative stress and physiological responses in the body during pregnancy. Increased access to health and preconception care, nutritional fresh foods, economic opportunities, and family supports can also provide an understructure to promote healthy birth outcomes and resilient pregnancies (Hamad, Collin, Baer, & Jelliffe-Pawloski, 2019; Lu et al., 2010; Prather et al., 2018).

Layer 6—Embodiment

The final layer of our framework, embodiment, involves the hegemonic discourse and the rejection of oppressive ideological representations, stereotypical norms, and a process of healing by means of developing critical consciousness and resistance around previously naturalized power inequities. The reacquisition of places, memory, self, and history becomes a means of remaking the self (A. Y. Davis et al., 2016; Freire, 1972). Resilience can be cultivated through the rejection of norms based on stereotypical representations, resulting in ongoing healing and transformation (Allen et al., 2014; Burnette & Figley, 2016; Panter-Brick, 2014, 2015; Pinderhughes et al., 2016; Ungar, 2012). Embodiment represents this layer of the framework and exists in all overlapping layers. Embodiment represents how stressors, inequities, and symbolic and/or literal insults are held, housed, and experienced in the self (Schep–Hughes & Lock, 1987). It is an important concept and highlights how both trauma and resilience can affect the health and well-being of Black, Hispanic, and Latina women, influencing reproductive health and pregnancy outcomes in numerous ways (Krieger & Davey Smith, 2004; Nuru-Jeter et al., 2009). More specifically, it is crucial to understand how hegemonic discourse shapes and influences the reproductive rights and health of women of color (Roberts, 1999). Embodiment represents the ways in which resilience, healing, and transformation lives in the symbolic space of thought and action on all layers of our framework.

After experiencing collective or individual experiences of trauma, various types of protective dissociation through the creation of art and cultural narratives can serve as projections of future hope and functional forms of escape. Similarly to art, transformation can be manifested through innovation and community knowledge, producing social action and local systems of positive change (Akom, Shah, Nakai, & Cruz, 2016). Along historical collective groups,
solidarity acts as a transformative element via shared action, hope, and the healing of the larger social body (Kirmayer et al., 2011; Teufel-Shone, Tipps, McCravy, Ehiri, & Sanderson, 2018). Solidarity through political and social movements also provides witnessing of wrongs and inequities. Constructing narratives around people’s collective experiences of inequities influences policy change, reduces health disparities through increased access to care, and lowers experiences of discrimination and stress for pregnant and birthing women.

**Conclusion and Future Research**

This analysis was conducted using a preconceptual model for a scoping literature review of resilience from various fields relating to the definition, processes, and creation of resilience that resulted in a multilayered contextual resilience framework. The studies included in the review were synthesized by women of color to understand how Black, Hispanic, and Latina women create and cultivate resilience in their lives to influence healthy pregnancies and birth outcomes. However, any assertion of this contextual resilience framework is ineffective and unproductive if not further refined and vetted among communities of Black, Hispanic, and Latina women (Wallerstein, Yen, & Syme, 2011). The resulting contextual resilience framework was developed with women of color, with intention to women of color scholarship and developing different ways of thinking about resilience and how it is captured in future studies. Thus, our framework identifies the limitations of how resilience has been defined and finds issue with how communities have been engaged or included in determining how to measure and present the information gleamed about them and for them. Although centering Black, Hispanic, and Latina women within the creation and ongoing development of this framework and any measures developed to further its evolution, we also welcome a discussion regarding how a contextualized resilience framework can be better conceptualized with a lived understanding of the multi-dynamic processes that Black, Hispanic, and Latina women manage and negotiate while engaging resiliently. Future research should also consider biosocial links and biopsychological pathways, a viable and important method of research to understand how resilience is embodied among pregnant Black, Hispanic, and Latina women.

This contextual framework is the first step in the development of a praxis-based framework that has been conceptualized with the sole intent of identifying resilient strength-based practices that women of color currently manifest in their lives. The conceptual review was not exhaustive but aimed to cover many major works and fields of thought across different conceptualizations on resilience theory. The strength of our contextual framework is that it pulls from many fields and concepts to build upon our basic premise, and women of color are central to the narrative of their own health, well-being, and transformative strengths. Black, Hispanic, and Latina women in the United States have been navigating and negotiating their ability to survive and thrive for centuries, as well as endeavoring to embody healthy pregnancies and babies. Within this centrally focused view, we must strive to understand the overlapping layers of the ecological system developed by historical oppressions and shaped via structural vulnerabilities (Bourgois et al., 2017; Burnette & Figley, 2016; Krieger, 2012).

Future research and understanding should focus on how people in diaspora create and interact in resilient communities. Our review also did not include a discussion of trans men and lesbian women of color’s experience with pregnancy and birth outcomes, as well as omitted a very relevant discussion of discrimination and its impact on pregnancy and birth outcomes for lesbian, gay, bisexual, transgender, queer, inter- and asexual individuals. We also did not research or discuss the experience of differently abled women’s birthing experiences or outcomes, thus falling short of providing an important and more comprehensive understanding of the adverse and different experiences they also have.

Subsequent resilience research should include feedback and opinions of Black, Hispanic, Latina women and birthing people in relation to their pregnancy and birthing experiences. Collaboration with women and birthing people is needed to better understand biosocial links and biopsychological pathways that influence pregnancy outcomes. Suggested activities and research include (a) the creation of contextual resilience measures with community members; (b) further development of narrative definitions for layers of the ecological framework, coauthored with women in represented communities to identify the processes and needs to bolster resilience; (c) implementation of vetted resilience supporting programs, education and structures to build community leadership, wealth, social support systems, and wellness; and (d) educational training for service providers, and community leadership and activism to create supportive health policies and wellness for birthing Black, Hispanic, Latina women, and birthing people’s families and communities.

**Declaration of Conflicting Interests**

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

**Funding**

The authors received no financial support for the research, authorship, and/or publication of this article.
Supplemental Material

Supplemental Material for this article is available online at journals.sagepub.com/home/qhr. Please enter the article’s DOI, located at the top right hand corner of this article in the search bar, and click on the file folder icon to view.

References


**Author Biographies**

**Monica R. McLemore** PhD, MPH, RN is an associate professor in the Family Health Care Nursing Department, a clinician-scientist at Advancing New Standards in Reproductive Health, a program of the Bixby Center for Global Reproductive Health.

**Tijen Sumbul** MPH, MA is a public health researcher who served as a fellow with UCSF’s Preterm Birth Initiative (PTBi) in summer 2017 – spring 2018 through the Minority Training Program in Cancer Control Research (MTPCCR) cohort that operates in collaboration with UCSF and UCLA.

**Solaire Spellen**, MPH is a maternal health advocate dedicated to improving birth outcomes for Black women in the United States. She received her MPH from UC Berkeley in 2018, where her graduate research explored the impacts of racism and discrimination on the relationship between stress and adverse birth outcomes among Black and Latinx women.