University of Denver

Digital Commons @ DU

Graduate School of Professional Psychology: Doctoral Papers and Masters Projects

Graduate School of Professional Psychology

2024

Suicidality Among Black Women: Considering Resiliency Within the Historic and Societal Context of Risk

Samantha J. North

Follow this and additional works at: https://digitalcommons.du.edu/capstone_masters

Part of the African American Studies Commons, Clinical Psychology Commons, and the Women's Studies Commons



This work is licensed under a Creative Commons Attribution-NonCommercial-No Derivative Works 4.0 International License.

Suicidality Among Black Women: Considering Resiliency Within the Historic and Societal Context of Risk

Abstract

Suicide is a global health challenge that has been historically understudied among Black women. The interpersonal-psychological theory of suicidality (IPTS) is a primary theory examined in suicidality; however, the three factors within the theory (lack of belongingness, perceived burdensomeness, and capability to die) focus on the individual. The purpose of the current study was to examine these factors in an expanded context of the historical and societal impact of oppression. A mixed methods Qualtrics study was administered to Black women who voluntarily completed the survey anonymously. Quantitatively, the study found significant differences between the impact of the IPTS factors on different ecological systems (self, immediate environment, community, larger culture) within participants' lives. The study also revealed significant differences between the assessed factors that impacted participants in general, and more specifically contributed to their suicidality. Qualitatively, there were also differences across ecological systems. Themes emerged around financial stressors and trauma related to risk, and family, jobs, and comradery of experience amongst protective factors. Moving forward, prevention and intervention efforts should take the lived experiences of Black women into account.

Document Type

Doctoral Research Paper

Degree Name Psy.D.

Department Graduate School of Professional Psychology

First Advisor Noelle Lefforge

Second Advisor Hillary Potter

Third Advisor Hale Martin

Keywords Black women, Suicide, Resiliency, Interpersonal theory of suicide, Intersectionality

Subject Categories

African American Studies | Clinical Psychology | Psychology | Social and Behavioral Sciences | Women's Studies

Publication Statement

Copyright is held by the author. User is responsible for all copyright compliance.

Suicidality Among Black Women: Considering Resiliency within the Historic and Societal

Context of Risk

A DOCTORAL PAPER PRESENTED TO THE FACULTY OF THE GRADUATE SCHOOL OF PROFESSIONAL PSYCHOLOGY OFFICE OF GRADUATE EDUCATION UNIVERSITY OF DENVER

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE DOCTOR OF PSYCHOLOGY

> BY SAMANTHA J. NORTH June 27, 2023

> > APPROVED:

Noelle Lefforge, PhD, ABPP, Chair

Hillary Potter, PhD, Committee Member

Hale Martin, PhD, Committee Member

Abstract

Suicide is a global health challenge that has been historically understudied among Black women. The interpersonal-psychological theory of suicidality (IPTS) is a primary theory examined in suicidality; however, the three factors within the theory (lack of belongingness, perceived burdensomeness, and capability to die) focus on the individual. The purpose of the current study was to examine these factors in an expanded context of the historical and societal impact of oppression. A mixed methods Qualtrics study was administered to Black women who voluntarily completed the survey anonymously. Quantitatively, the study found significant differences between the impact of the IPTS factors on different ecological systems (self, immediate environment, community, larger culture) within participants' lives. The study also revealed significant differences between the assessed factors that impacted participants in general, and more specifically contributed to their suicidality. Qualitatively, there were also differences across ecological systems. Themes emerged around financial stressors and trauma related to risk, and family, jobs, and comradery of experience amongst protective factors. Moving forward, prevention and intervention efforts should take the lived experiences of Black women into account.

Keywords: Black women, suicide, resiliency, Interpersonal Theory of Suicide, intersectionality

Suicidality Among Black Women: Considering Resiliency within the Historic and Societal Context of Risk

Suicide is a universal public health concern. Suicidal thoughts and behaviors affect people around the world, without regard for their race, ethnicity, geographic location, gender identity, age, ability status, spoken language, socioeconomic status (SES), education level, sexual orientation, nor other identity factors. Worldwide over 700,000 people are believed to die each year by suicide and a far greater number make suicide attempts (World Health Organization [WHO], 2021). In the United States, 48,000 people die by suicide annually (Suicide Awareness Voices of Education [SAVE], 2019), making it the 10th leading cause of death (Center for Disease Control and Prevention [CDC], 2021b). This number translates to about one individual dying by suicide every 11 minutes (CDC, 2021b). Similar to international statistics, many more people have thoughts, make a plan or attempt to end their life. In the US about 12 million adults think about dying by suicide annually and just over a quarter of those people make a plan for how they would die. 1.4 million people go on to attempt to kill themselves (CDC, 2021b).

Understanding Suicidality: Definitions

Suicide is defined as death resulting from an individual harming themselves with intention to die (CDC, 2021c). A suicide attempt is demarcated as injuring oneself with the intent to die, but not dying as a result (CDC, 2021c). Suicidal ideation is thoughts or desires of wanting to kill oneself (Harmer et al., 2021).

Prevalence of Suicidality

While suicide affects people of all identities, some populations of people have higher rates than others and these groups have different etiologies for increased risk. Age is one factor that suicide affects differently throughout the lifespan. For example, for young people age 10-29 years old, suicide is the second leading cause of death (Curtin & Heron, 2019). The highest rates

of suicide in 2019 were for those over 85 years old followed by those between the ages of 45-54 years old (American Foundation for Suicide Prevention [AFSP], 2019). Sex at birth is another factor related to suicidality with more males dying by suicide and more females making suicide attempts (AFSP, 2019). Gender identity and sexual orientation can impact the risk for suicide. Young people that identify within the LGBTQIA+ population are disproportionately affected by higher rates of suicide (CDC, 2021b). Military involvement has an impact on suicidality with veteran suicide having significantly higher rates than the general population (CDC, 2021b)

Different racial and ethnic groups are also impacted in diverse ways. The highest rates of suicide fall within White populations or those who identify as American Indian/Alaska Native. Other ethnic groups such as those who identify as Asian/Pacific Islander or Black have lower rates of suicide, yet the impact on their communities is still great. While research is slowly beginning to expand to consider diverse identities, the history of suicidology, research and suicide prevention is white-washed. White people have been the focus of psychological studies to learn more about suicide, while marginalized populations have been essentially ignored. There is a call for more research on suicide in Black women and girls as suicide rates have increased for these populations (Vance et al., 2022).

Suicidality Among Black Americans

Black Americans are one group that has been largely understudied despite making up over 13% of the population (Suicide Prevention Resource Center [SPRC], 2021a). The overall population rate of suicide per 100,000 in the general public is 13.2, while in the Black community this number drops to 7.4 (SPRC, 2021a). This may be in part due to several protective factors amongst those who hold a Black identity.

Protective and Resiliency Factors

There are a myriad of protective or resiliency factors from suicidality for people in the Black community. One study found micro, mezzo, and macro level factors that were protective for Black adults. These included private regard and strong ethnic identity, family support, intact marriages, women's important role in systems, religion, and social support (Reed et al., 2021). Other studies have replicated the findings that religion and social support are population level protective factors for Black individuals. For example, Walker et al. (2014) discovered that in the relationship between discrimination and suicidality, higher levels of extrinsic religiosity acted as a protective buffer in Black adults. In a study assessing the role of social support as a moderator between depression and suicidal thoughts in Black adults, they found that for Black women specifically, high social support decreased the relationship between depression and suicide (Khan et al., 2021).

Individual factors have also been identified as protective. Among Black college students, life satisfaction is a protective factor for men, while reasons for living is a protective factor for women (Wang et al., 2013). Several of these factors have been replicated in other studies in the Black population. In young adults, they found that purpose in life acted as a moderating buffer between racial discrimination and suicidal ideation (Hong et al., 2018). Hollingsworth et al. (2016) examined if hope would buffer the association between lack of belongingness and suicidal thinking or the association between feeling as if one is a burden and suicidal thoughts. The study found that hope acted as a moderator for both of those relationships in Black college students (Hollingsworth et al., 2016).

Black women's resiliency factors against suicide have also been studied. Perry et al. (2012) looked at the intersection of gendered racism and found that this experience did not

impact suicidality if women had moderate levels of coping, well-being and self-esteem, but did impact them negatively if they had high or low levels . Perry et al. (2013) found that a deeper ethnic identity was protective against gendered racism. Similarly, Mekwai et al. (2020) found that those who had strong racial identity and positive associations with their race had less suicidal thoughts and hopelessness . Reasons for living has also garnered lots of support in relation to protection from suicide in this population. Street et al. (2012) found that women with higher private regard (more favorable beliefs about the Black race), reported more reasons for living. Reasons for living or valuing life are protective against suicidal behavior in Black women (Flowers et al., 2014). Reasons for living can be predicted by higher reports of spiritual wellbeing, family support, and optimism (West et al., 2011). Motherhood in relation to reasons for living was also determined to be a protective factor in this population (Woods et al., 2013). Other protective factors for Black women included spirituality (Borum, 2012), existential well-being (Fischer et al., 2016), interaction of spiritual well-being and ethnic identity (Vinson & Oser, 2016), and intrapersonal strength (Kapoor et al., 2018).

Spates and Slatton (2017) examined protective factors in Black women, but also, further explored the origin of this resiliency. They found that social support and religiosity in Black women's lives were protective. They also discovered through semi-structured interviews that an ongoing history of oppressive experiences has increased resiliency and strength for Black women. Black women also have a respected role within their communities and this commitment is protective against suicide (Spates & Slatton, 2017).

One treatment approach to focusing on protective factors was called the Grady Nia Project. The Nia project aimed at providing a culturally sensitive treatment modality to Black women who had recently made a suicide attempt and had a history of abuse (Taha et al., 2015). The goal of the group intervention was to increase hopefulness, effective resource obtainment and self-esteem as protective factors to suicide, and it was found to be beneficial (Taha et al., 2015). Zhang et al. (2013). found that existential well-being seemed to mediate the effect of this treatment. Both studies highlight the importance of culturally sensitive interventions for Black women experiencing suicidality.

Prevalence

While the rate of death from suicide in Black individuals is lower than the general public, there are several notable patterns related to suicide in Black Americans. For example, the general population sees peaks in suicide during midlife, specifically around the ages of 45-54 years old (SPRC, 2021a). However, Black people in the United States experience the highest rates beginning in adolescence (i.e., around 15 years old) and through young adulthood (mid-late 30s) (SPRC, 2021a).

Another unique pattern to this population arises when comparing rates of suicidal thoughts, plans and attempts across the lifespan. The overall US population has higher rates of thoughts and plans, while Black people generally experience higher rates of suicide attempts (SPRC, 2021a). This finding was also noted by Ammerman et al. (2020) through a survey that found Black individuals endorsed less likelihood of lifetime suicidal ideation or plan. Yet in another study they found that Black United States college students had both higher attempts and consideration compared to White counterparts (Sa et al., 2020). Older Black adults are also a unique subgroup of this population. In one study they found that about 6% of older Black adults have ideation and 2% have plans. In this age bracket, men had more thoughts about suicide and made more attempts than women, which is atypical as women are normally the gender with the higher reported rates of attempts (Joe et al., 2014).

Previous studies in the 1990s and early 2000s demonstrated a lower rate of suicide attempts in Black individuals, yet more recently, the rates of suicide deaths and attempts have risen in this community, specifically among youth (Perez-Rodriguez et al., 2008). This rise is despite overall rates of suicide decreasing in the United States during 2018-2019 (CDC, 2021a). The discrepancy of lower reports of thoughts and plans and higher attempts in Black-identifying people may be due to underreporting and because some studies have shown a lower tendency to report ideation prior to making an attempt (Perez-Rodriguez et al., 2008). Another important finding from the study on older Black adults is that 25% of those who made attempts and 20% of those who had plans to end their life had never gotten psychological treatment (Joe et al., 2014). *Gender*

Black women are another subset of this population who are important to consider in suicide-related research. Suicide is the sixth leading cause of death for Black girls between the ages of 1-19 years old and the 8th leading cause of death for Black women age 20-44 years old (CDC, 2016). While the rates of death by suicide have increased for males and females of several different races over the past 20 years including Black women (CDC, 2019), this population continues to have lower rates of suicide deaths than Black men, White men or White women in the United States (SPRC, 2021a). This phenomenon, referred to as the Black-White suicide paradox, often leads to limited research on Black women's experience of suicide (Spates & Slatton, 2017).

Risk Factors

In the Black population more generally, there are distinctive risk factors that may play a role in suicidality. For example, several studies have attempted to understand the relationship between race-related factors such as racism and discrimination with suicidal thoughts and

behaviors. The history of oppression, racism, and violence against Black people in the United States dates back to the forced displacement and enslavement of Black individuals in the US in 1619 (Berry, 1995). From that moment forward, there has been constitutionally sanctioned violence and death against this community. This existed historically through slavery and white mob violence (Berry, 1995), and continues today in various forms including police brutality (Holmes IV, 2020). Oppression and discrimination also existed through blatant segregation, slavery, and Jim Crow laws (Berry, 1995) in the past, and continued through legislation such as the GI Bill (Herbold, 1994) and restrictive voting (Bentele & O'Brien, 2013). It continues today through structural racism in criminal justice, housing, employment, health care, and education (Bailey et al., 2017). The question then arises of how these instances of endorsed brutality and hatred in the United States contribute to suicidal thoughts, behaviors, and attempts.

One study (Chu et al., 2020) examined the cultural pathways that lead to suicide. The pathway reviewed included considerations around minority stress, family conflict, cultural suicide sanctions, depression, hopelessness, and idioms of distress (a social or cultural way of showing upset). They found that family conflict and minority stress had a direct impact on suicidal ideation (Chu et al., 2020). Culturally related idioms of distress were also found to be a notable part of general distress that contributed to predicting suicidal thoughts and behaviors (Chu et al., 2020). Another study homed in on what contributes to the link between trauma exposure and discrimination with suicide risk (Polanco et al., 2021). While no direct link was revealed, it was found that there was an indirect pathway between discrimination and suicidal ideation and attempts. This association was through sensitivity to stress and dissociative and depressive symptoms.

Other associations with discrimination and suicidality have been assessed across the lifespan. For example, rates of suicide have increased in Black youth in the United States. Argabright et al. (2021) acknowledged that Black children experience higher rates of racial discrimination and this childhood adversity has a significant association with suicidality. Castle et al. (2011) looked at Black young adults self-report of discrimination and acculturation and how that impacted lifetime suicidal thoughts and attempts. They found that when an individual believed they had acculturated more to the White dominant society, their risk for suicidal thoughts increased, possibly due to the inclination towards suicidality amongst White people in the United States (Castle et al., 2011). Racial discrimination was associated with higher rates of suicide in Black adolescents and young adults through both conventional definitions and through victim precipitated homicide (Talley et al., 2021). This phenomenon occurs when Black youth participate in reckless activities or crime that unconsciously or consciously leads to their death (Talley et al., 2021).

In adults, experiencing higher rates of discrimination generally can lead to increased experiences of suicidal thoughts, plans, and attempts (Oh et al., 2019). Certain discriminatory events also increase the risk for suicidality more than others (Oh et al., 2020). Particular events (i.e., unfairly fired, denied promotion) specifically impacted ideation, while others (i.e., discouraged from pursuing education) impacted plans, and still others (i.e., excluded from neighborhood, neighborhood harassment) impacted attempts. It is worth noting that police abuse came close to impacting rates of all three (Oh et al., 2020). Some discriminatory events, for example not being hired, did not impact suicidality, suggesting that certain forms of discrimination have a more detrimental impact than others as it relates to suicidal thoughts and behaviors (Oh et al., 2020).

Additional factors can impact the relationship between suicide and discrimination in Black individuals. One study found that those who perceived they had experienced racial discrimination had increased suicidal ideation and depressive symptoms, which also increased suicidal thoughts (Walker et al., 2014). Another explanation for this association is that racial discrimination creates social pain. Over time this pain wears down one's trust in bodily sensations and leads to greater risk for suicide (Kinkel-Ram et al., 2021). Perceived public stigma around mental health treatment was an additional factor that contributed to suicidality among college students, and this was particularly true for Black college students (Goodwill & Zhou 2020).

The association between discrimination and suicidality has also been explored in Black women. It was found that the intersecting identities of being Black and a woman each have unique and compounding stressors that lead to increased risk for suicidal ideation (Perry et al., 2012). The 'Strong Black Woman' identity similarly considers intersectionality. This schema posits that there are certain expectations that Black women experience including unwavering strength and the need to take care of others (Liao et al., 2020). In a study exploring the 'Strong Black Woman' identity's impact on the relationship between depression and suicidality, it was found that it had a moderating impact increasing suicidal risk (Green, 2019). This was shown specifically related to affect regulation, particularly when Black women reported restricting their emotional expressions and detaching from their internal emotions as a coping style (Green, 2019). Other factors contributing to suicidality in Black women included depression, hopelessness, and perceived burdensomeness (Lamis et al., 2012); which mirror several of Joiner's (2005) drivers of suicidality.

Theory

While there were several aforementioned risk and resiliency factors that contribute to or protect from suicidal thoughts and behaviors for Black people and Black women specifically, there is not a comprehensive culturally sensitive theoretical model that attempts to understand the Black-White Suicide Paradox that exists for Black women. There are however, many theories that generally speculate on the contributing factors that lead to death by suicide. One of the most commonly cited and endorsed models is the Interpersonal Psychological Theory of Suicide (IPTS) pioneered by Joiner (2005). This theory postulates that for someone to die by suicide they need to experience thwarted belongingness, perceived burdensomeness, and have the acquired capacity for suicide, along with feelings of hopelessness (Van Orden et al., 2010).

Thwarted belongingness is a feeling that one does not belong or is alone; perceived burdensomeness refers to feeling as if one is a burden to others and that the world/their family/etc. would be better off without them; and acquired capability is the tolerance to withstand the pain and violence inherently needed to die by suicide (Opara et al., 2020). This model has been tested numerous times since its conception, often with supporting results. In a 2013 study testing the IPTS model through a survey of over 6,000 people, they found an interaction when examining thwarted belongingness and perceived burdensomeness that predicted suicidal ideation and an interaction of suicidal ideation and acquired capability that predicted suicide plans or attempts (Christensen et al., 2013). One meta-analysis reviewed 122 samples discussing the IPTS theory and found the majority of studies supported both its relation to suicidal ideation and suicide attempts (Chu et al., 2017). This theory has been uniquely explored in reference to the Black community. For example, one study looked at school connectedness for Black youth in impoverished neighborhoods to asses if it acted as a protective factor to combat the thwarted belongingness factor of Joiner's model. They found that school connectedness did reduce the likelihood of suicidal thoughts and attempts for both genders of Black youth (Tomek, et al., 2018). Another study explored the IPTS model when comparing Black and White adults and their acquired capability for suicide. They assessed whether discriminatory events counted as exposure to painful stimuli that would increase acquired capability and thus increase likelihood of suicide outcomes. They found that Black adults associated discrimination with a higher capability for suicide (Brooks et al., 2020).

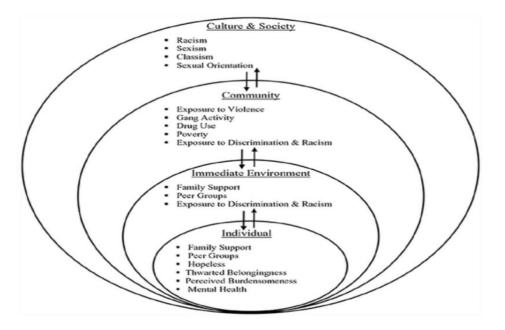
In another study comparing Black and White adults, researchers assessed the IPTS model in conjunction with Hope Theory to better understand risk and protective factors. They found that Black adults reported higher levels of hope, goals, motivation, intrinsic religiosity, and church attendance (Davidson & Wingate, 2011) than the Caucasian sample. They also identified that Black adults reported more risk factors; however, they found no race difference between individual factors of the IPTS model (Davidson & Wingate, 2011). Additionally, studies have looked at the IPTS model in relation to Black women specifically. Allbaugh et al. (2017) assessed the association of three individual types of child abuse, cumulative abuse, and cumulative abuse-severe with suicide resilience and examined whether the factors of IPTS mediated these relationships. Results revealed that acquired capability mediated all five relationships with childhood abuse (emotional, physical, sexual, cumulative, and cumulativesevere) and perceived burdensomeness mediated three relationships including emotional abuse, cumulative abuse, and cumulative abuse-severe.

A conceptual paper was published looking at the IPTS model as it relates to intersectionality theory in Black youth (Opara et al., 2020). The goal of the paper was to provide guidance for those working with Black youth on how to engage in culturally appropriate and supportive suicide prevention and intervention efforts. Intersectionality theory is a term coined by Kimberlé Crenshaw that posits that people hold multiple identities and the combination of these identities can create a specific social experience of oppression (Carbado et al., 2013). Specifically, the term was created to highlight how Black women were marginalized both through racist and anti-feminist practices (Carbado et al., 2013). Opara et al. (2020) drew attention to how this theory is necessary to understand the unique social positions that lead to increased suicide risk for Black youth. As the IPTS model is criticized for its individualized and simplistic focus, Opara et al. (2020) viewed it through the Bronfenbrenner bioecological model to take into consideration larger spheres of influence.

Figure 1, created by Opara et al. (2020) and shown below, illustrated how these systems could be viewed as interacting to influence suicide-related outcomes in Black youth.

Figure 1

Interpersonal-Psychological Theory of Suicide through an Intersectional Framework



Note. Reprinted from "Suicide among Black children: An integrated model of the interpersonalpsychological theory of suicide and intersectionality theory for researchers and clinicians." By Opara, I. et. al., 2020, *Journal of Black Studies*, *51*(6), p. 621

Current Study

The aim of the current study was to expand on the conceptual framework of Opara et al. (2020) to understand the lived experience of Black women who have suicidal thoughts or behaviors. The goal was to reframe the three factors of the IPTS model in this broadened lens such that certain historical, cultural, societal and community influences contribute to perceived burdensomeness, thwarted belonging, and acquired capability of suicide, and can create hopelessness. Intersectionality theory was considered as Black women hold two marginalized identities that face unique forms of oppression and strength. We aimed to use a self-report mixed-method measure to look at how a broadened lens on the Interpersonal Psychological Theory of Suicide can help to explain the power of internal, familial, and community resiliency factors in the face of historical, cultural, societal, and community risk for suicidality in Black women. The goal of this approach was to draw attention to the detrimental external forces impacting suicidality in Black women, while also utilizing a strengths-based approach to understand how resiliency overcomes risk. This was in an effort to better inform future prevention and intervention efforts through the voices of Black women.

Method

The current study consisted of 20 quantitative and qualitative self-report surveys. The criteria needed to complete the study was as follows: 1) Currently live in Colorado, 2) Currently at least 18 years old, 3) Identify as a woman/female (transgender and cisgender inclusive), 4) Identify as Black, African, African-American, Afro-Caribbean, or Black African Descent, and 5) Have ever had thoughts about wanting to die or kill oneself, made a plan to die or kill oneself, and/or attempted to die or kill oneself.

The survey was developed to contain questions about suicidality. The definition for suicidality I used was: suicidality can include any of the following: thoughts about wanting to die or kill oneself, making a plan for how to die or kill oneself, making a suicide attempt/trying to kill oneself. I decided to include qualitative survey items because lived experience is not routinely part of research to develop better models of suicide prevention and intervention (Watling, 2020), however, the importance of including lived experience has notable benefits (SPRC, 2021b). Specifically, the integration of lived experience into research has benefits such as increasing trust from communities in the research process, increasing engagement, improving ethical standards, and making it more likely communities will accept treatment options (Beames et al., 2021). Additionally, I chose a self-report survey over an interview to provide safer spaces for participants to respond in open ways. Prior research has demonstrated that Black individuals, women in particular, are less likely to endorse suicidality to white researchers in comparison to researchers of color. The detrimental impact of lessened disclosure could lead to underreporting (Samples et al., 2014).

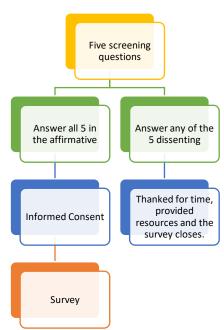
Dissemination

The online survey was disseminated throughout the Graduate School of Professional Psychology at the University of Denver via email. People were invited to participate in and share the survey within social media outlets, blogs, or through other electronic modalities. The survey was also shared with Dr. Hillary Amma Potter who further distributed it through the following networks on Facebook: Division on People of Color and Crime of the American Society of Criminology, Black Women Criminologists Collective, Binder Full of Black Women and Black Nonbinary People in Academia, Binders Full of Women and Nonbinary People of Color in Academia, Boulder County Branch NAACP, The Sistahood Circle: A Social Network for Women of Color, Black Women's Resource Symposium, Sister to Sister: A Project of Sociologists for Women in Society, Coloradans Against the War on Women, Black Academics, Sister Scholars, and Section of Racial and Ethnic Minorities of the American Sociological Association. Unfortunately, the survey was compromised both times it was administered despite efforts to address this. See Appendix B for a full account of these incidences.

Qualtrics Survey

First, participants who met screening criteria completed the informed consent for participation. If a participant was not eligible they were thanked for their interest, notified they do not meet eligibility for this particular study, and offered resources for people dealing with suicidality. If they answered in the affirmative to all five screening questions, they proceeded to the survey. See Figure 2 for a visual depiction of the process.

Figure 2



Flow of Screening Questions

Participants next had indicated the experience of suicidality that best fit them between choices of experiencing suicidality recently (past 30 days), in the past (more than 30 days ago), or both. The survey then reviewed risk factors through the Interpersonal Psychological Theory of Suicide through a broadened bioecological lens of historical, cultural/societal, and community risk. See Appendix A for the complete survey.

Thwarted Belonging: Feeling that One Does Not Belong or is Alone.

Participants were asked to rate and explain their experience of thwarted belonging and positive belonging within their self, immediate environment/family, community, and in a cultural/historical/societal context through a series of Likert scale and qualitative descriptions. The aforementioned series of questions were then administered in a similar manner for the concepts of Perceived Burdensomeness and Acquired Capability.

Perceived Burdensomeness: Feeling as if One is a Burden to Others and that the World/Their Family/etc. Would be Better Without Them.

Next participants were asked to rate and explain their experience of perceived burdensomeness or sense that they are needed and contribute within their self, immediate environment/family, community, and in a cultural/historical/societal context through a series of Likert scale and qualitative descriptions.

Acquired Capability: The Tolerance to Withstand the Pain and Violence Inherently Needed to Die by Suicide.

Participants were then asked to rate and explain their experience of acquired capability meaning their capability to die or fear/lack of fear around death in themselves, immediate environment/family, community and in a cultural/historical/societal context through a series of Likert scale and qualitative descriptions.

Resiliency

Resiliency was then addressed. Participants were encouraged to think of their strengths, protective factors, and coping skills that help keep them alive or prevent them from dying by suicide.

Mental Health Support

Following, participants were asked about their current involvement in mental health support and if not involved in current support, what would lead them to getting involved.

Demographics

The final set of information collected was demographic information. All demographic questions had the option of "prefer not to respond."

Compensation

The survey concluded by thanking participants and providing them an optional link to complete another survey for a \$10 Amazon gift card for participation. Their survey responses were kept separate from their identifying information (name and email addresses) needed to complete the gift card request. Lastly, resources were provided at the conclusion of the survey to support mental health and challenges with suicidality.

Data Analysis

The Qualtrics survey used in this study was compromised multiple times, leading to a substantial reduction in usable data. This resulted in 20 usable surveys completed between November 2022 to March 2023; however, the remaining data are still questionable in their validity. See Appendix B for a full account of the data analysis process and challenges. All participants included in the analysis endorsed all screening criteria.

Quantitative Approach

The quantitative data were analyzed through descriptive statistics. Specifically, the mean or mathematical average and standard deviation of participants responses were collected for each question and discussed. Additionally, each item was analyzed with a one-way ANOVA to determine if there were significant differences in how participants responded to the components of the item. Only significant test results are reported. Post hoc Tukey tests were utilized with the significant ANOVAs to determine which responses were statistically different from others.

Qualitative Approach

The qualitative data were analyzed through an inductive thematic analysis in which themes were generated from the data provided, and subsequently reviewed.

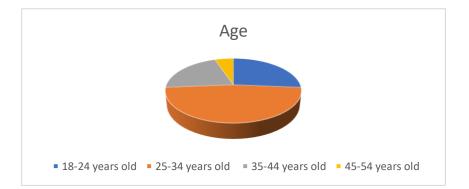
Results

Demographics

As shown in Figure 3, of the 20 participants, five were between the age of 18-24 years old (25%), nine were between the age of 25-34 years old (45%), four were between the age of 35-44 years old (20%), one was between the age of 45-54 years old (5%), and one did not report their age (5%).

Figure 3

Age of Participants



All 20 participants confirmed their gender identity as a cisgender woman. In regard to sexual orientation, 12 participants identified as heterosexual or straight¹ (60%), seven participants identified as bisexual² (35%), and two identified as queer (10%). See Figure 4.

Figure 4



Sexual Orientation of Participants

All 20 participants confirmed their racial identity as Black, African American, Afro-Caribbean, or Black African Descent. Of those, 15% identified as multiracial (e.g., Black and Hispanic; Black, Asian, and White; and Black and White). Participants largely reported their ethnicity similarly to their race; however, one individual shared their ethnicity is Jamaican American and one described their ethnicity as "mixed." In this study, 18 participants identified their nationality as American (90%), one identified as Jamaican American (5%), and one did not answer the question (5%).

As shown in Figure 5, of the 20 participants, 12 reported that they have never been married (60%), four reported they are divorced (20%), three reported they are married (15%), and one reported they are separated (5%). Detailed in Figure 6, 15 of the 20 participants reported

¹⁻²One participant reported their sexual orientation as both "heterosexual or straight" and "bisexual" and was counted among both.

having 0 children (75%), four reported that they have two children (20%), and one reported

having one child (5%).

Figure 5

Marital Status of Participants

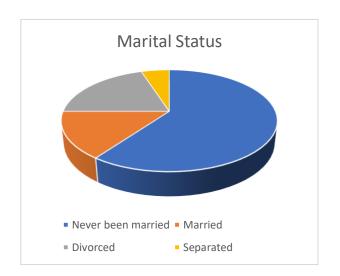
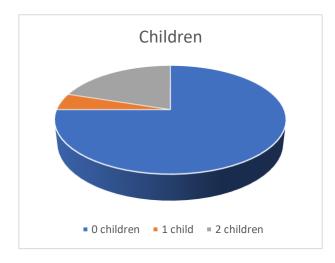


Figure 6

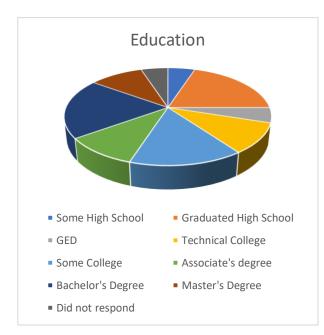
Number of Children



In regards to their educational background, four participants reported that they graduated high school (20%), four earned bachelor's degrees (20%), three completed some college but did

not get a degree (15%), two attended technical college (10%), two earned associate's degree (10%), two earned master's degrees (10%), one participant completed some high school (5%), one received their GED (5%), and one elected not to respond (5%). These data are reflected in Figure 7. When asked about current employment as shown in Figure 8, nine indicated that they work full time (45%), eight shared that they work part time (40%), one participant chose not to respond (5%), one indicated they were not employed because they were a student (5%), and one reported they worked a contract position (5%). The last demographic variable assessed was current income. Of the 20 participants, eight reported making under \$5,000 annually (40%), four shared their income is between \$15,000 and \$25,000 (20%), three participants reported their income as between \$5,000 and \$15,000 (15%), two participants noted that they currently make between \$25,000 and \$35,000 (10%), two reported income between \$45,000 and \$55,000 (10%), and one makes between \$35,000 and \$45,000 (5%). See Figure 9.

Figure 7



Participants' education level

Figure 8

Employment Status of Participants

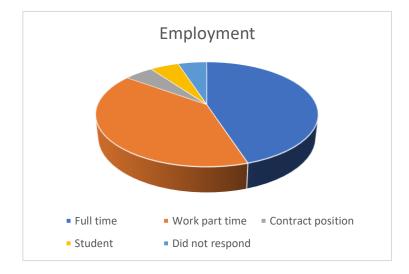
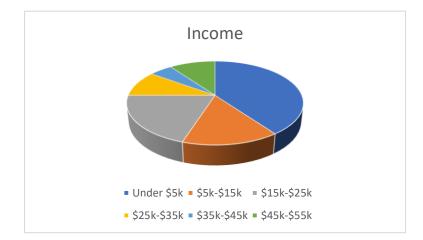


Figure 9

Income Level of Participants



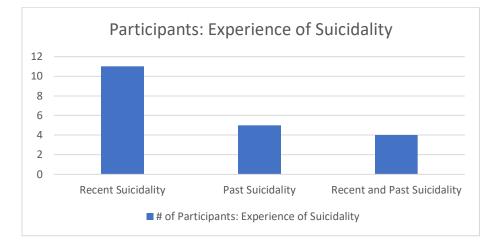
Quantitative Findings

The results of the data shown in Figure 10, revealed that 11 participants (55%) endorsed experiencing suicidality recently (within the past 30 days), five participants (25%) endorsed

experiencing suicidality in the past (more than the 30 days ago), and four participants (20%) endorsed both recent and past suicidality.

Figure 10

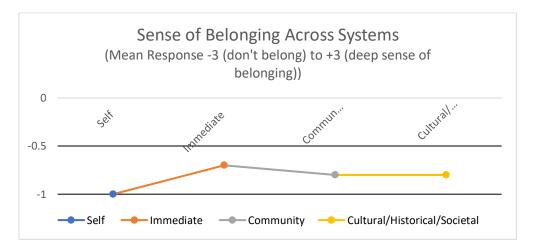
Participants Experience of Suicidality



Regarding participants' sense of belonging, on average, participants reported a similar sense of belonging across all four domains. Belongingness was reported to be around -1 on this scale (Self: M = -1, SD = 1.2; Immediate: M = -0.7, SD = 1.7; Community: M = -0.8, SD = 1.3; Cultural/Historical/Societal: M = -0.8, SD = 1.1). See Figure 11 and Table 1.

Figure 11

Sense of Belonging Across Systems



Sense of Belonging Across Systems		
System	Mean Response -3 (don't belong) to +3 (deep sense of belonging)	Standard Deviation
Self	-1	1.2
Immediate	-0.7	1.7
Community	-0.8	1.3
Cultural/Historical/Societal	-0.8	1.1

Sense of Belonging Across Systems

Regarding the sense of belonging that was associated with risk of suicide, on average,

participants reported a similar impact of the four domains on their suicidality. The impact

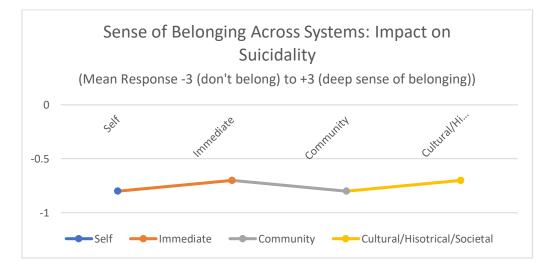
reported was about -0.8. (Self: M = -0.8, SD = 1.5; Immediate Environment: M = -0.7, SD = 1.6;

Community: M = -0.8, SD = 1.5, Cultural/Historical/Societal: M = -0.7, SD = 1.3). See Figure 12

and Table 2.

Figure 12

Sense of Belonging Across Systems: Impact on Suicidality

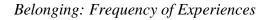


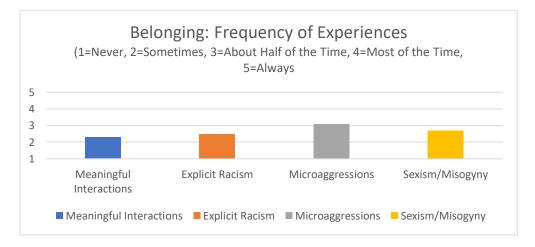
Sense of Belonging Across Systems: Impact on Suicidality		
System	Mean Response -3 (don't belong) to +3 (deep sense of belonging)	Standard Deviations
Self	-0.8	1.5
Immediate environment	-0.7	1.6
Community	-0.8	1.5
Cultural/Historical/Societal	-0.7	1.3

Sense of Belonging Across Systems: Impact on Suicidality

On average during a typical week, participants reported having meaningful interactions with other people 'sometimes' (M = 2.3, SD = 0.9), experiencing explicit racism 'about half the time' (M = 2.5, SD = 1.2), experiencing microaggressions 'about half the time' (M = 3.1, SD = 1), and experiencing sexism/misogyny 'about half the time' (M = 2.7, SD = 1.3). See Figure 13 and Table 3.

Figure 13





Belonging: Frequency of Experiences		
Type of Experience	Mean Frequency of Experience (1=Never, 2=Sometimes, 3=About half the time, 4=Most of the time, 5=Always)	Standard Deviation
Meaningful interactions with other people	2.3	0.9
Explicit racism	2.5	1.2
Microaggressions	3.1	1
Sexism/Misogyny	2.7	1.3

Belonging: Frequency of Experiences

In terms of the impact of factors from day-to-day life on sense of belonging, results from a one-way ANOVA indicated a statistically significant effect was obtained, F (2.56), p < .05. A post hoc test (Tukey) indicated that participants reported being impacted significantly more by lack of representation than by the GI Bill (p = .047). They reported that lack of representation impacts their life 'a lot' (M = 3.7, SD = 1.1). As shown in Figure 14 and Table 4, participants also reported being impacted by historical oppression (M = 3.6, SD = 1.1), and current laws/legislation (M = 3.5, SD = 1.0) 'a lot'. Participants reported that in their day to day life, they were affected by historical segregation (M = 3.1, SD = 1.2), slavery (M = 3, SD = 1.1), Jim Crow laws (M = 2.9, SD = 1.1), and the GI bill 'a moderate amount' (M = 2.6, SD = 1.1).

Figure 14

Belonging: Impact of Factors on Day-to-Day Life

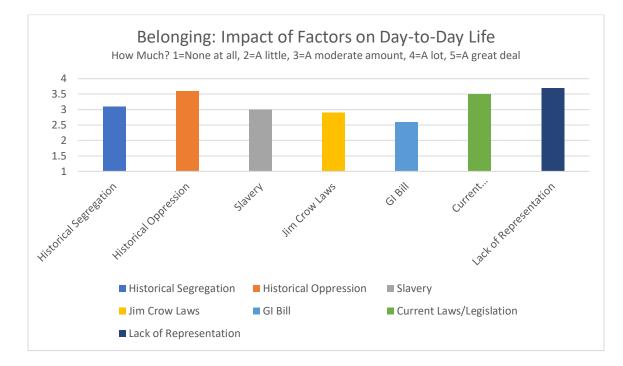


Table 4

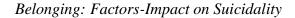
Belonging: Impact of Factors on Day-to-Day Life

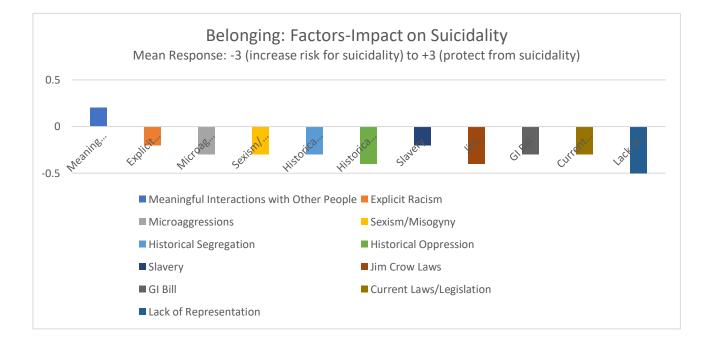
Belonging: Impact of Factors on Day-to-Day Life		
Factors	Mean Response (How Much?) 1=None at all, 2=A little, 3=A moderate amount, 4=A lot, 5=A great deal	Standard Deviation
Historical Segregation	3.1	1.2
Historical Oppression	3.6	1.1
Slavery	3	1.1
Jim Crow Laws	2.9	1.1
GI Bill	2.6	1.1
Current Laws/Legislation	3.5	1.0

Factors	Mean Response (How Much?) 1=None at all, 2=A little, 3=A moderate amount, 4=A lot, 5=A great deal	Standard Deviation
Lack of Representation	3.7	1.1

On average, participants endorsed a range of impact on their suicidality from various risk factors. The following factor had a protective rating: meaningful interactions (M = 0.2, SD = 1.7). All the additional factors had risk ratings and included: explicit racism (M = -0.2, SD = 1.4), microaggressions (M = -0.3, SD = 1.3), sexism/misogyny (M = -0.3, SD = 1.4), historical segregation (M = -0.3, SD = 1.5), historical oppression (M = -0.4, SD = 1.1), slavery (M = -0.2, SD = 1.3), Jim Crow laws (M = -0.4, SD = 1.2), GI Bill (M = -0.3, SD = 1.4). This information is reflected in Figure 15 and Table 5.

Figure 15





Belonging: Factors-Impact on Suicidality		
Factors	Mean Response: -3 (increase risk for suicidality) to +3 (protect from suicidality)	Standard Deviations
Meaningful interactions with other people	0.2	1.7
Explicit racism	-0.2	1.4
Microaggressions	-0.3	1.3
Sexism/Misogyny	-0.3	1.4
Historical Segregation	-0.3	1.5
Historical Oppression	-0.4	1.1
Slavery	-0.2	1.3
Jim Crow Laws	-0.4	1.2
GI Bill	-0.3	1.2
Current Laws/Legislation	-0.3	1.3
Lack of Representation	-0.5	1.4

Belonging: Factors-Impact on Suicidality

Participants reported similar feelings of burdensomeness across all four domains. Burdensomeness ranged from -1 to -0.4 on this scale (Self: M = -1, SD = 1.6; Immediate: M = -0.5, SD = 1.5; Community: M = -0.4, SD = 1.3; Cultural/Historical/Societal: M = -0.4, SD = 1). See Figure 16 and Table 6.

Figure 16

Feelings of Burdensomeness Across Systems

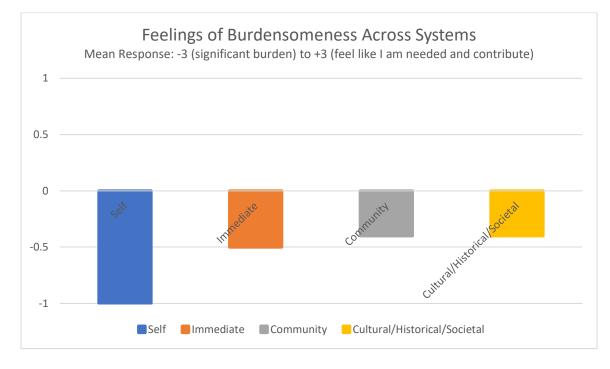


Table 6

Feelings of Burdensomeness Across Systems

Feelings of Burdensomeness Across Systems		
System	Mean Response: -3 (significant burden) to 3 (feel like they are needed and contribute)	Standard Deviations
Self	-1	1.6
Immediate environment	-0.5	1.5
Community	-0.4	1.3
Cultural/Historical/Societal	-0.4	1

Regarding the feelings of burdensomeness that were associated with risk of suicide, on average, participants reported a similar impact of the four domains on their suicidality. The

impact reported ranged from -0.3 to -1 (Self: M = -1, SD = 1.6; Immediate Environment: M = -0.5, SD = 1.6; Community: M = -0.3, SD = 1.4; Cultural/Historical/Societal: M = -1, SD = 0.9). See Figure 17 and Table 7.

Figure 17

Feelings of Burdensomeness Across Systems: Impact on Suicidality

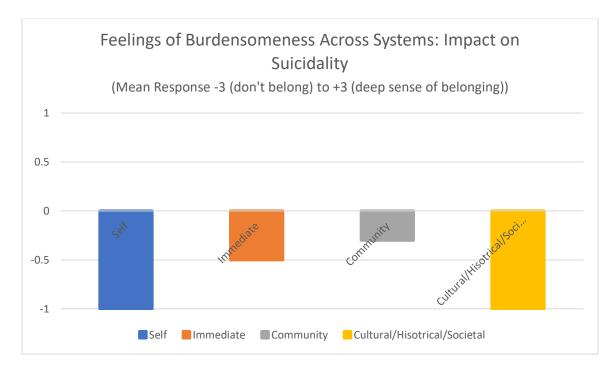


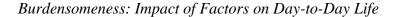
Table 7

Feelings of Burdensomeness Across Systems: Impact on Suicidality

Feelings of Burdensomeness Across Systems: Impact on Suicidality		
System	Mean Response -3 (don't belong) to +3 (deep sense of belonging)	Standard Deviation
Self	-1	1.6
Immediate environment	-0.5	1.6
Community	-0.3	1.4
Cultural/Historical/Societal	-1	0.9

In terms of the impact of factors from day-to-day life on feelings of burdensomeness, results from a one-way ANOVA indicated a statistically significant effect was obtained, F (3.24, p < .05. A post hoc test (Tukey) indicated that participants reported experiencing burdensomeness impact less from pregnancy/birth medical maltreatment (M = 2.1, SD = 1) compared to most other factors. Participants reported that this had 'a little' impact on their lives. Pregnancy/birth medical maltreatment was less of an impact than financial dependence on someone else (M = 3.2, SD = 1), health inequality (M = 3.2, SD = 1), political climate (M = 3.6, SD = 1.1), hiring/promotion discrimination (M = 3.3, SD = 1), and income inequality (M = 3.2, SD = 1). They reported that these factors impact their lives 'a moderate amount' to 'a lot." (p's < .05). As shown in Figure 18 and Table 8, participants also reported being impacted by unemployment (M = 2.7, SD = 1.3), Affirmative Action (M = 3, SD = 1.2), housing inequality (M = 2.8, SD = 1.1), and financial/lending inequality (M = 2.6, SD = 0.9) a 'moderate amount.'

Figure 18



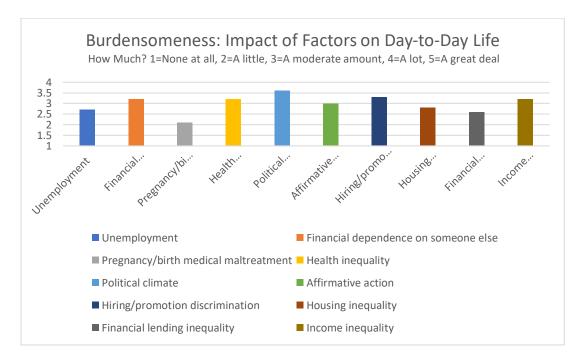


Table 8

Burdensomeness: Impact of Factors on Day-to-Day Life					
Factors	Mean Response (How Much?) 1=None at all, 2=A little, 3=A moderate amount, 4=A lot, 5=A great deal	Standard Deviation			
Unemployment	2.7	1.2			
Financial dependence on someone else	3.2	1			
Pregnancy/birth medical maltreatment	2.1	1			
Health inequality	3.2	1			
Political climate	3.6	1.1			
Affirmative Action	3	1			
Hiring/promotion discrimination	3.3	1			
Housing inequality	2.8	1.1			
Financial/lending inequality	2.6	0.9			
Income inequality	3.2	1			

Burdensomeness: Impact of Factors on Day-to-Day Life

On average, participants endorsed a range of impact on their suicidality from various risk factors. These included: unemployment (M = -0.8, SD = 1.3), financial dependence on someone else (M = -0.5, SD = 1.4), pregnancy/birth medical maltreatment (M = -0.5, SD = 1.2), health inequality (M = -0.3, SD = 1.3), political climate (M = -0.7, SD = 1.1), Affirmative Action (M = -0.2, SD = 1.1), hiring/promotion discrimination (M = -0.6, SD = 1.6), housing inequality (M = -0.3, SD = 1.3), financial/lending inequality (M = -0.6, SD = 1.1), and income inequality (M = -0.7, SD = 1.5). This information is reflected in Figure 19 and Table 9.

Figure 19

Burdensomeness: Factors-Impact on Suicidality

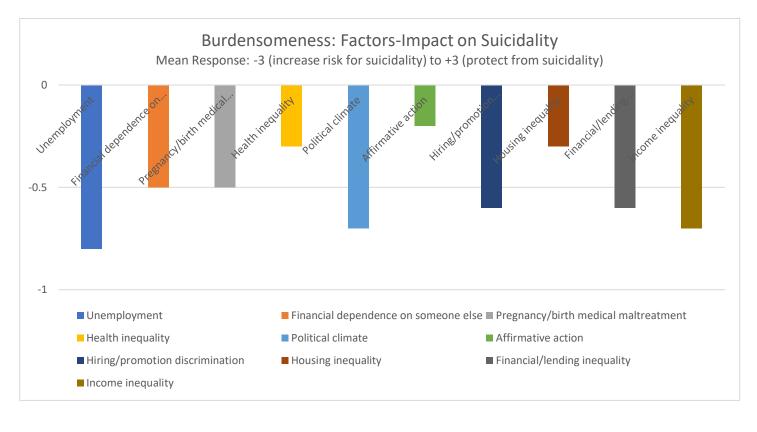


Table 9

Burdensomeness: Factors-Impact on Suicidality

Burdensomeness: Factors-Impact on Suicidality				
Factors	Mean Response: -3 (increase risk for suicidality) to +3 (protect from suicidality)	Standard Deviation		
Unemployment	-0.8	1.3		
Financial dependence on someone else	-0.5	1.4		
Pregnancy/birth medical maltreatment	-0.5	1.2		
Health inequality	-0.3	1.3		
Political climate	-0.7	1.1		

Factors	Mean Response: -3 (increase risk for suicidality) to +3 (protect from suicidality)	Standard Deviation
Affirmative Action	-0.2	1.1
Hiring/promotion discrimination	-0.6	1.6
Housing inequality	-0.3	1.3
Financial/lending inequality	-0.6	1.1
Income inequality	-0.7	1.5

In regards to capability to die, results from a one-way ANOVA indicated a statistically significant effect was obtained, F (3.18), p < .05. Participants reported varying capabilities to die across the four domains. Capability to die related to different systems ranged from -05 to 0.8 on this scale (Self: M = -0.5, SD = 1.5; Immediate environment: M = 0.8, SD = 1.4; Community: M = 0.4, SD = 1.3; Cultural/Historical/Societal: M = -0.3, SD = 1.4). A post hoc test (Tukey) indicated that participants reported a significantly greater impact of capability to die/lowest fear of death within themselves compared to the immediate environment. This is reflected in Figure 20 and Table 10. (p = .029).

Figure 20

Capability to Die Across Systems

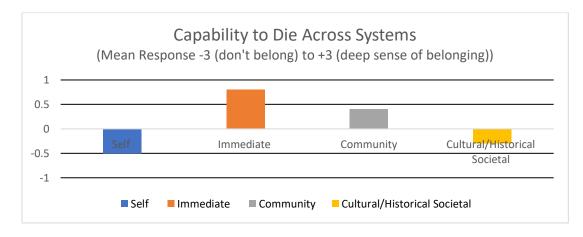


Table 10

Capability to Die Across Systems				
System	Mean Response -3 (don't belong) to $+3$ (deep sense of	Standard Deviation		
	belonging)			
Self	-0.5	1.5		
Immediate	0.8	1.4		
Community	0.4	1.3		
Cultural/Historical/Societal	-0.3	1.4		

Capability to Die Across Systems

Regarding capability to die that was associated with risk of suicide, results from a oneway ANOVA indicated a statistically significant effect was obtained, F (4.65), p < .05). On average, participants reported varying impact of the four domains on their suicidality. The impact reported ranged from -0.9 to -0.5. (Self: M = -0.9, SD = 1; Immediate Environment: M = 0.5, SD = 1.4; Community: M = -0.4, SD = 1, Cultural/Historical/Societal: M = -0.2, SD = 1.2). See Figure 21 and Table 11. A post hoc test (Tukey) indicated that participants reported a significantly greater impact of capability to die/lowest fear of death on their risk of suicide within themselves compared to the immediate environment. (p = .0049).

Figure 21

Capability to Die Across Systems: Impact on Suicidality

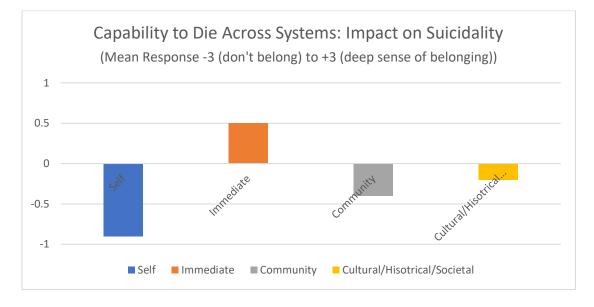


Table 11

Capability to Die Across Systems: Impact on Suicidality

Capability to Die Across Systems: Impact on Suicidality					
System	Mean Response -3 (don't belong) to +3 (deep sense of belonging)	Standard Deviations			
Self	-0.9	1			
Immediate environment	0.5	1.4			
Community	-0.4	1			
Cultural/Historical/Societal	-0.2	1.2			

On average, as shown in Figure 22 and Table 12, participants reported that in their day to day life, they experienced exposure to violence 'sometimes' (M = 2.4, SD = 0.75), exposure to substance use or self-use 'about half the time' (M = 2.7, SD = 1), self-harm behaviors

'sometimes' (M = 2.1, SD = 0.9), and recreational risk/behaviors 'about half the time' (M = 2.6,

SD = 1).

Figure 22

Capability to Die: Frequency of Experiences

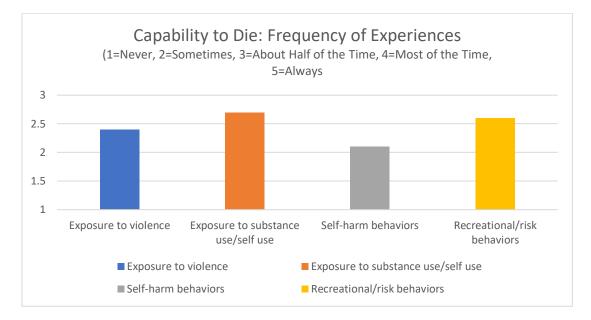


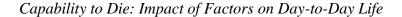
Table 12

Capability to Die: Frequency of Experiences

Capability to Die: Frequency of Experiences				
Type of Experience	Mean Frequency of Experience (1=Never, 2=Sometimes, 3=About half the time, 4=Most of the time, 5=Always)	Standard Deviations		
Exposure to violence	2.4	0.8		
Exposure to substance use/self- use	2.7	1		
Self-harm behaviors	2.1	0.9		
Recreational/risk behaviors	2.6	1		

In terms of the impact of factors from day-to-day life on capability to die/fear of death, results from a one-way ANOVA indicated a statistically significant effect was obtained, F (3.39), p < .05). A post hoc test (Tukey) indicated that participants reported being significantly more impacted by other traumatic experiences (M = 3.5, SD = 1.1) and adverse childhood experiences (M = 3.4, SD = 1.2) than by corporal punishment (M = 2.3, SD = 1.1) and gun ownership (M = 2.2, SD = 1.1). (p's < .05). They reported that the first two factors impacted their lives 'a moderate amount' to 'a lot' and the subsequent factors had a 'little impact' on their capability to die/fear of death. As shown in Figure 23 and Table 13, participants also reported being impacted by slavery (M = 2.6, SD = 0.9), police brutality (M = 3.3, SD = 1), physical labor (M = 2.9, SD = 1.3), high risk jobs (M = 2.9, SD = 1.2), and school/educational response to discipline 'a moderate amount' (M = 2.8, SD = 1). Participants endorsed incarceration (M = 2.5, SD = 1.1) had a 'little impact' their capability to die/fear of death.

Figure 23



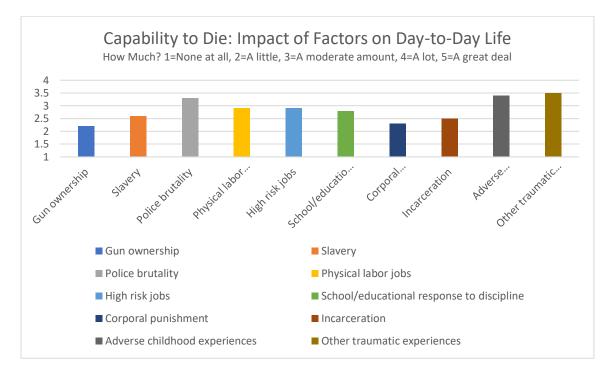


Table 13

Capability to Die: Impact of Factors on Day-to-Day Life				
Factors	Mean Response (How Much?) 1=None at all, 2=A little, 3=A moderate amount, 4=A lot, 5=A great deal	Standard Deviations		
Gun ownership	2.2	1.1		
Slavery	2.6	0.9		
Police brutality	3.3	1		
Physical labor	2.9	1.3		
High risk jobs	2.9	1.2		
School/educational response to discipline	2.8	1		
Corporal punishment	2.3	1.1		
Incarceration	2.5	1.1		
Adverse childhood experiences	3.4	1.2		
Other traumatic experiences	3.5	1.1		

Capability to Die: Impact of Factors on Day-to-Day Life

On average, participants endorsed a range of impact on their suicidality from various risk factors. These included: exposure to violence (M = -0.7, SD = 1.1), exposure to substance use/self-use (M = -0.4, SD = 1.3), self-harm behaviors (M = -0.5, SD = 1.2), recreational/risk behaviors (M = -0.3, SD = 1.5), gun ownership (M = -0.1, SD = 1.1), slavery (M = -0.5, SD = 1.5), police brutality (M = -0.7, SD = 1.2), physical labor jobs (M = -0.1, SD = 1.6), high risk jobs (M = -0.2, SD = 1), school/education response to discipline (M = -0.3, SD = 1), corporal

punishment (M = -0.3, SD = 1.3), incarceration (M = -0.4, SD = 1), adverse childhood experiences (M = -0.9, SD = 1.3), and other traumatic experiences (M = -0.8, SD = 1.3). This information is reflected in Figure 24 and Table 14.

Figure 24

Capability to Die: Factors-Impact on Suicidality

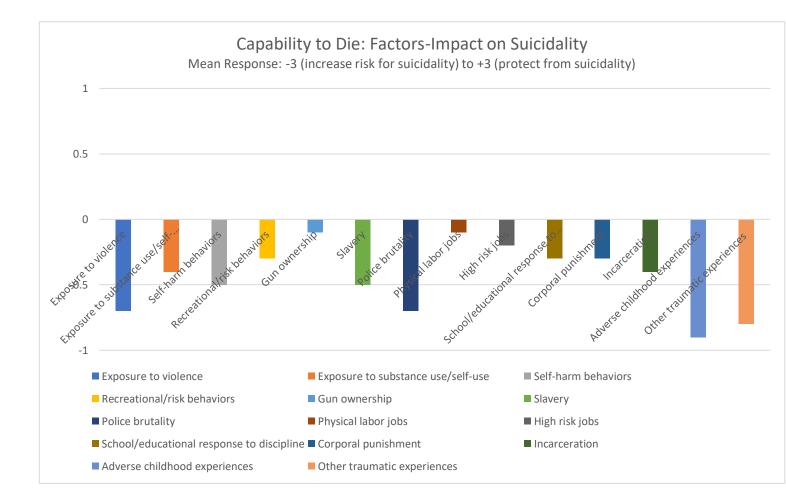


Table 14

Capability to Die: Factors-Impact on Suicidality

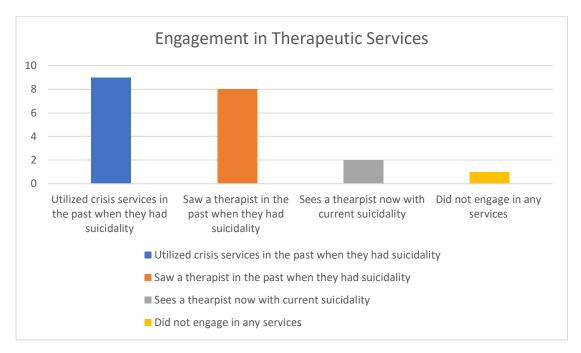
Capability to Die: Factors-Impact on Suicidality			
Factors	Mean Response: -3 (increase risk for suicidality) to +3 (protect from suicidality)	Standard Deviations	
Exposure to violence	-0.7	1.1	
Exposure to substance use/self- use	-0.4	1.3	
Self-harm behaviors	-0.5	1.2	
Recreational/risk behaviors	-0.3	1.5	
Gun ownership	-0.1	1.1	
Slavery	-0.5	1.5	
Police brutality	-0.7	1.2	
Physical labor jobs	-0.1	1.6	
High risk jobs	-0.2	1	
School/education response to discipline	-0.3	1	
Corporal punishment	-0.3	1.3	
Incarceration	-0.4	1	
Adverse childhood experiences	-0.9	1.3	
Other traumatic experiences	-0.8	1.3	

In regards to engagement in therapy as shown in Figure 25, nine participants (45%) reported utilizing crisis services in the past when they had suicidality, eight (40%) reported seeing a therapist in the past when they experienced suicidality, two (10%) with current

suicidality endorsed seeing a therapist, and one participant (5%) reported that they did not engage in any services.

Figure 25





Qualitative

Several themes around what contributed to participants' sense of belongingness included family and feeling understood. More specifically, participants reported the following sentiments about feeling that they belong: "when I feel loved and wanted by the people close to me," "my family. I feel like I have a forever connection to them," and "being around people who understand me without explanation." Contrarily, participants reported that family/relatives, feeling out of control, negative internal thoughts, lack of social connection, and discrimination/racism as contributing factors to why they feel like they do not belong. For example, participants shared: "Everything. I feel like my presence isn't important," "my internal thoughts: I will never be good enough, no one truly loves me," and "discrimination because of

the color of your skin." In regards to burdensomeness, themes that added to participants feeling as if they are needed and contribute included their jobs, families, and being able to give to others/help others. Related to feelings of burdensomeness, participants responded that their family and relatives, along with financial stress contribute to feelings of burdensomeness. Specifically, participants noted "because of financial problems, I feel that my education is a burden on my family" and "economic problems are big." In regards to acquired capability, specifically, what creates a low or high capability to die, participants shared that their pets, their family, and the fear of death helped them maintain a low capability to die. One participant shared, "I've lost very important people, so I'm afraid of death," while another noted "anxiety about the thought of one's own death." Alternatively, family, feeling out of control, finances, loneliness, and childhood trauma were listed as factors that increase capability to die. For example, one participant reported, "I don't fear death. Death seems easy once it is done and almost like a relief. Things could finally just stop and I could rest."

In describing resiliency factors participants hold within themselves, participants reported grit, hope, tolerance of negative emotions, strong character, and the ability to overcome difficult things and cope. They shared examples such as, "my ability to repair myself," "my ability to cope with stress," and "tolerance of negative emotions." Within their immediate environment, participants reported their family and friends added to their resiliency. Specifically, they reported "[my] father has often told me I'm stronger than most men," "niece and nephew," and "the care and comfort of friends and family." In the community, participants noted that their job contributes to resiliency. One participant reported, "I'm a chef in the kitchen industry. Everyone has their own version of resilience." Within the larger culture/society that participants live in, they reported not feeling alone and the belief that everyone goes through it, and movement with

racial equality in policy and government as factors contributing to their resilience. For example, participants shared, "just watching Black women thrive in this world," "coming together and seeing culture and sharing in the same pain and confusion," and "the understanding that 'everyone goes through it' so you gotta push too." Several themes emerged related to participants' top three reasons for living such as: music, pets, family (particularly nieces and nephews), chasing their dreams and hope for the future, friends, and their jobs. Several participants went on to explain their reason for living, noting that they want to be there for their nieces and nephews.

Discussion

Suicide is a universal health concern understudied among Black women. The interpersonal-psychological theory of suicidality (IPTS) identifies the primary drivers of suicidality as lack of belongingness, increased burdensomeness, and capacity for suicide in conjunction with hopelessness. The purpose of the current study was to examine these factors within the context of systemic racism, misogyny, and other oppressive factors. This mixed method study surveyed Black women to better understand resiliency and risk factors during their experiences of suicidality. Quantitatively, several factors significantly impacted how participants assessed the IPTS drivers of suicidality. More specifically, participants reported that lack of representation had a notable impact on their sense of belonging. Participants also noted that the capability to die they held within themselves impacted their suicidality more so than their immediate environment. Additionally, other traumatic experiences and adverse childhood experiences had a significantly greater impact on participants than other factors related to capability to die. Qualitatively, participants reported that family was a complicated factor both contributing to their sense of belonging and leading some to feel as if they don't belong. Discrimination also negatively contributed to a sense of belonging. In regards to

burdensomeness, several participants endorsed their jobs as being protective and financial stress as being a risk factor. Related to capability to die, several participants endorsed a fear of death as protective, while others shared childhood trauma increased risk. Related to resiliency, participants reported factors such as their ability to cope, family, their job, and not feeling alone as factors that enhanced resiliency. Increased understanding of drivers of suicidality through direct accounts of Black women while holding societal context accountable will improve prevention and intervention efforts.

Strengths

This study had several strengths. The first strength of the study was the mixed method approach to collecting survey data. Because of this approach, participants were able to expand on their responses and put their experiences into their own words. This allowed individuals to not have to fit their experience into a box and instead provide nuanced information that may be missed in a purely quantitative study. Similarly, this allowed for greater lived experience to be incorporated into the study. Additionally, this study was a self-report survey in which participants did not have to interact directly with researchers. This allowed for more open and honest responding about people's experience with suicidality (Samples et al., 2014). Finally, this study included a strengths-based component when examining experience of suicidality, and included a large focus on resiliency across systems.

Limitations

This study also had notable limitations. The primary limitation of the study was the impact of bots or automatic survey takers on the process of data collection. Bots pose a serious risk to integrity in research. Because of advances in technology, bot responses are becoming harder to discern from actual valid human responses (Storozuk et al., 2020). An additional limitation to the study was also related to data collection. This limitation involved the inherent

mistrust as research participants for individuals identifying as Black. In one study, mistrust was attributed to historical events such as Tuskegee, and continuous discrimination in numerous systems today (Scharff et al., 2010). The study went on to share that systematic racism and unjust policies need to be addressed in order to reduce mistrust in research participation. An additional limitation of the study is that the lead investigators, including myself, are both White women, and thus studying a population we are not a part of. We are deeply appreciative for the support of our committee that allowed for greater representation to try to overcome this limitation.

Future Directions & Conclusion

This study provided further insight into the experiences of suicidality for Black women. The study revealed that several systemic factors such as historical oppression, historically racist laws (i.e. Jim Crow), and income inequality were rated as some of the major contributors for risk of suicidality. Additionally, when asked about resilience, participants most commonly reported that societal factors such as knowing everyone goes through similar challenges and seeing movement with racial equality in policy and government as strong factors contributing to their resiliency.

Moving forward, researchers should continue to examine the experience of suicidality of Black individuals, particularly women and children who are historically understudied. First, it will be important to support policy changes and examine colonial practices in research to build back trust with Black communities involved in research. Next, it would be beneficial to gain additional information from a larger group of participants in order to better generalize the data. From the data collected, both prevention and intervention efforts can be better targeted towards individuals in the Black community to reduce suicidality. Additionally, given that data collection was compromised due to bots, continued studies should examine how to better secure online data collection.

References

Allbaugh, L. J., Florez, I. A., Render Turmaud, D., Quyyum, N., Dunn, S. E., Kim, J., & Kaslow, N. J. (2017). Child abuse—Suicide resilience link in African American women:
Interpersonal psychological mediators. *Journal of Aggression, Maltreatment & Trauma, 26*(10), 1055–1071. <u>https://doi-org.du.idm.oclc.org/10.1080/10926771.2017.1350773</u>

American Foundation for Suicide Prevention [AFSP]. (2019). Suicide Statistics.

https://afsp.org/suicide-statistics/

- Ammerman, B. A., Fahlgren, M. K., Sorgi, K. M., & McCloskey, M. S. (2020). Differences in suicidal thoughts and behaviors among three racial groups: Exploratory analyses in a college sample. Crisis: *The Journal of Crisis Intervention and Suicide Prevention*, 41(3), 172–178. <u>https://doi-org.du.idm.oclc.org/10.1027/0227-5910/a000621</u>
- Argabright, S. T., Visoki, E., Moore, T. M., Ryan, D. T., DiDomenico, G. E., Njoroge, W. F. M., Taylor, J. H., Guloksuz, S., Gur, R. C., Gur, R. E., Benton, T. D., & Barzilay, R. (2021).
 Association between discrimination stress and suicidality in preadolescent children. *Journal of the American Academy of Child & Adolescent Psychiatry*. <u>https://doi-org.du.idm.oclc.org/10.1016/j.jaac.2021.08.011</u>
- Bailey, Z. D., Krieger, N., Agénor, M., Graves, J., Linos, N., & Bassett, M. T. (2017). Structural racism and health inequities in the USA: Evidence and interventions. *The Lancet, 389* (10077), 1453-1463. <u>https://doi.org/10.1016/S0140-6736(17)30569-X</u>.
- Beames, J. R., Kikas, K., O'Gradey-Lee, M., Gale, N., Werner-Seidler, A., Boydell, K. M., & Hudson, J. L. (2021). A New Normal: Integrating Lived Experience Into Scientific Data Syntheses. *Frontiers in psychiatry*, *12*, 763005.

Bentele, K., & O'Brien, E. (2013). Jim Crow 2.0? Why States Consider and Adopt Restrictive
Voter Access Policies. *Perspectives on Politics*, 11(4), 1088-1116.
doi:10.1017/S1537592713002843

- Berry, M. F. (1995). Black Resistance, White law: A History of Constitutional Racism in America. Penguin Books.
- Borum, V. (2012). African American women's perceptions of depression and suicide risk and protection: A womanist exploration. Affilia: *Journal of Women & Social Work*, 27(3), 316–327. <u>https://doi-org.du.idm.oclc.org/10.1177/0886109912452401</u>
- Brooks, J. R., Hong, J. H., Cheref, S., & Walker, R. L. (2020). Capability for suicide:
 Discrimination as a painful and provocative event. *Suicide and Life-Threatening Behavior*, 50(6), 1173-1180. <u>https://doi-org.du.idm.oclc.org/10.1111/sltb.12671</u>
- Carbado, D., Crenshaw, K., Mays, V., & Tomlinson, B. (2013). INTERSECTIONALITY:
 Mapping the Movements of a Theory. Du Bois Review: *Social Science Research on Race*, *10*(2), 303-312. doi:10.1017/S1742058X13000349
- Castle, K., Conner, K., Kaukeinen, K., & Tu, X. (2011). Perceived racism, discrimination, and acculturation in suicidal ideation and suicide attempts among Black young adults. *Suicide* and Life-Threatening Behavior, 41(3), 342–351. <u>https://doiorg.du.idm.oclc.org/10.1111/j.1943-278X.2011.00033.x</u>
- Christensen, H., Batterham, P.J., Soubelet, A., Mackinnon, A.J. (2013) A test of the Interpersonal Theory of Suicide in a large community-based cohort. *Journal of Affective Disorders*, 144(3), 225-234. <u>https://doi.org/10.1016/j.jad.2012.07.002</u>.

Center for Disease Control and Prevention (CDC). (2016). *Leading Causes of Death – Females – Non-Hispanic black – United States, 2016.* Health Equity.

https://www.cdc.gov/women/lcod/2016/nonhispanic-black/index.htm

Center for Disease Control and Prevention (CDC). (2019). Suicide Rates for Females and Males

by Race and Ethnicity: United States, 1999 and 2017. National Center for Health

Statistics. https://www.cdc.gov/nchs/data/hestat/suicide/rates_1999_2017.htm

Center for Disease Control and Prevention (CDC). (2021a February 26). Changes in Suicide

Rates-United States, 2018-2019. Morbidity and Mortality Weekly Report.

https://www.cdc.gov/mmwr/volumes/70/wr/mm7008a1.htm?s_cid=mm7008a1_w&utm_

source=STAT+Newsletters&utm_campaign=f422c7db39-

MR_COPY_14&utm_medium=email&utm_term=0_8cab1d7961-f422c7db39-

<u>149758985</u>

- Center for Disease Control and Prevention (CDC). (2021b April). *Facts About Suicide*. Suicide Prevention. https://www.cdc.gov/suicide/facts/index.html
- Center for Disease Control and Prevention (CDC). (2021c May 22). *Fast Facts*. Suicide Prevention. <u>https://www.cdc.gov/suicide/facts/index.html</u>
- Chu, C., Buchman-Schmitt, J. M., Stanley, I. H., Hom, M. A., Tucker, R. P., Hagan, C. R., Rogers, M. L., Podlogar, M. C., Chiurliza, B., Ringer, F. B., Michaels, M. S., Patros, C., & Joiner, T. E. (2017). The interpersonal theory of suicide: A systematic review and meta-analysis of a decade of cross-national research. Psychological bulletin, 143(12), 1313–1345. https://doi.org/10.1037/bul0000123
- Chu, J., Maruyama, B., Batchelder, H., Goldblum, P., Bongar, B., & Wickham, R. E. (2020). Cultural pathways for suicidal ideation and behaviors. *Cultural Diversity and Ethnic*

Minority Psychology, 26(3), 367-377. https://doi-

org.du.idm.oclc.org/10.1037/cdp0000307.supp (Supplemental)

Curtin, S. C., & Heron, M. (2019). Death rates due to suicide and homicide among persons aged 10–24: United States, 2000–2017. Center for Disease Control and Prevention. https://www.cdc.gov/nchs/data/databriefs/db352-h.pdf

Davidson, C. L., & Wingate, L. R. (2011). Racial disparities in risk and protective factors for suicide. *Journal of Black Psychology*, 37(4), 499–516. <u>https://doiorg.du.idm.oclc.org/10.1177/0095798410397543</u>

- Fischer, N. L., Lamis, D. A., Petersen-Coleman, M. N., Moore, C. S., Zhang, H., & Kaslow, N. J. (2016). Mediating effects of existential and religious well-being among abused, suicidal African American women. *Journal of Family Violence*, *31*(3), 315–323. https://doi-org.du.idm.oclc.org/10.1007/s10896-015-9771-1
- Flowers, K. C., Walker, R. L., Thompson, M. P., & Kaslow, N. J. (2014). Associations between reasons for living and diminished suicide intent among African-American female suicide attempters. *Journal of Nervous and Mental Disease*, 202(8), 569–575. <u>https://doiorg.du.idm.oclc.org/10.1097/NMD.00000000000170</u>
- Goodwill, J. R., & Zhou, S. (2020). Association between perceived public stigma and suicidal behaviors among college students of color in the US. *Journal of Affective Disorders*, 262, 1–7. <u>https://doi-org.du.idm.oclc.org/10.1016/j.jad.2019.10.019</u>
- Green, B. "Nilaja." (2019). Strong like my mama: The legacy of "strength," depression, and suicidality in African American women. Women & Therapy, 42(3–4), 265–288. <u>https://doi-org.du.idm.oclc.org/10.1080/02703149.2019.1622909</u>

- Harmer, B., Lee, S., Duong, T.V.H., Saadabadi A. (2021). Suicidal ideation. *Stat Pearls* [Internet]. Treasure Island (FL): StatPearls Publishing; PMID: 33351435. <u>https://pubmed.ncbi.nlm.nih.gov/33351435/</u>
- Herbold, H. (1994). Never a Level Playing Field: Blacks and the GI Bill. *The Journal of Blacks in Higher Education*, 6, 104–108. <u>https://doi.org/10.2307/2962479</u>

Hollingsworth, D. W., Wingate, L. R., Tucker, R. P., O'Keefe, V. M., & Cole, A. B. (2016).
Hope as a moderator of the relationship between interpersonal predictors of suicide and suicidal thinking in African Americans. *Journal of Black Psychology*, *42*(2), 175–190.
https://doi-org.du.idm.oclc.org/10.1177/0095798414563748

- Holmes IV, O. (2020). Police brutality and four other ways racism kills Black people. *Equality*,
 Diversity and Inclusion: An International Journal, 39 (7), 803-809. DOI 10.1108/EDI-06-2020-0151
- Hong, J. H., Talavera, D. C., Odafe, M. O., Barr, C. D., & Walker, R. L. (2018). Does purpose in life or ethnic identity moderate the association for racial discrimination and suicide ideation in racial/ethnic minority emerging adults? *Cultural Diversity and Ethnic Minority Psychology*. <u>https://doi-org.du.idm.oclc.org/10.1037/cdp0000245</u>
- Joe, S., Ford, B. C., Taylor, R. J., & Chatters, L. M. (2014). Prevalence of suicide ideation and attempts among Black Americans in later life. *Transcultural Psychiatry*, 51(2), 190–208. <u>https://doi-org.du.idm.oclc.org/10.1177/1363461513503381</u>
- Joiner, T. E. (2005). Why people die by suicide. Harvard University Press.
- Kapoor, S., Domingue, H. K., Watson-Singleton, N. N., Are, F., Elmore, C. A., Crooks, C. L., Madden, A., Mack, S. A., Peifer, J. S., & Kaslow, N. J. (2018). Childhood abuse, intrapersonal strength, and suicide resilience in African American females who attempted

suicide. Journal of Family Violence, 33(1), 53–64. https://doiorg.du.idm.oclc.org/10.1007/s10896-017-9943-2

- Khan, H., Zhang, S., Gutowski, E., Jessani, S. N., & Kaslow, N. J. (2021). Does social support moderate between depression and suicidal ideation in low-income African Americans? *American Journal of Orthopsychiatry*, 91(5), 617–625. <u>https://doiorg.du.idm.oclc.org/10.1037/ort0000561</u>
- Kinkel-Ram, S. S., Kunstman, J., Hunger, J. M., & Smith, A. (2021). Examining the relation between discrimination and suicide among Black Americans: The role of social pain minimization and decreased bodily trust. *Stigma and Health*. <u>https://doi-</u>

org.du.idm.oclc.org/10.1037/sah0000303

- Lamis, D. A., & Lester, D. (2012). Risk factors for suicidal ideation among African American and European American College Women. *Psychology of Women Quarterly*, *36*(3), 337–349. <u>https://doi-org.du.idm.oclc.org/10.1177/0361684312439186</u>
- Liao, K. Y.-H., Wei, M., & Yin, M. (2020). The Misunderstood Schema of the Strong Black Woman: Exploring Its Mental Health Consequences and Coping Responses Among African American Women. Psychology of Women Quarterly, 44(1), 84–104. <u>https://doi.org/10.1177/0361684319883198</u>
- Mekawi, Y., Lewis, C. B., Watson-Singleton, N. N., Jatta, I. F., Ander, Ilana, Lamis, D., Dunn, S. E., & Kaslow, N. J. (2020). Racial identity profiles among suicidal Black women: A replication and extension study. *Journal of Black Studies*, 51(7), 685–704. <u>https://doiorg.du.idm.oclc.org/10.1177/0021934720935601</u>

- Oh, H., Stickley, A., Koyanagi, A., Yau, R., & DeVylder, J. E. (2019). Discrimination and suicidality among racial and ethnic minorities in the United States. *Journal of Affective Disorders*, 245, 517–523. <u>https://doi-org.du.idm.oclc.org/10.1016/j.jad.2018.11.059</u>
- Oh, H., Waldman, K., Koyanagi, A., Anderson, R., & DeVylder, J. (2020). Major discriminatory events and suicidal thoughts and behaviors amongst Black Americans: Findings from the National Survey of American Life. *Journal of Affective Disorders*, 263, 47–53. <u>https://doi-org.du.idm.oclc.org/10.1016/j.jad.2019.11.128</u>
- Opara, I., Assan, M. A., Pierre, K., Gunn, J. F., III, Metzger, I., Hamilton, J., & Arugu, E. (2020). Suicide among Black children: An integrated model of the interpersonal-psychological theory of suicide and intersectionality theory for researchers and clinicians. *Journal of Black Studies*, *51*(6), 611–631. <u>https://doi-</u>

org.du.idm.oclc.org/10.1177/0021934720935641

- Perez-Rodriguez, M. M., Baca-Garcia, E., Oquendo, M. A., & Blanco, C. (2008). Ethnic Differences in Suicidal Ideation and Attempts. *Primary Psychiatry*, 15(2), 44–53.
- Perry, B. L., Pullen, E. L., & Oser, C. B. (2012). Too much of a good thing? Psychosocial resources, gendered racism, and suicidal ideation among low socioeconomic status African American women. Social Psychology Quarterly, 75(4), 334–359. <u>https://doiorg.du.idm.oclc.org/10.1177/0190272512455932</u>
- Perry, B. L., Stevens-Watkins, D., & Oser, C. B. (2013). The moderating effects of skin color and ethnic identity affirmation on suicide risk among low-SES African American women. *Race and Social Problems*, 5(1), 1–14. <u>https://doi-org.du.idm.oclc.org/10.1007/s12552-</u>012-9080-8

Polanco-Roman, L., Miranda, R., Hien, D., & Anglin, D. M. (2021). Racial/ethnic discrimination as race-based trauma and suicide-related risk in racial/ethnic minority young adults: The explanatory roles of stress sensitivity and dissociation. *Psychological Trauma: Theory, Research, Practice, and Policy, 13*(7), 759–767. <u>https://doi-</u>

org.du.idm.oclc.org/10.1037/tra0001076

- Reed, D. D., Stoeffler, S. W., & Joseph, R. (2021). Suicide, race, and social work: A systematic review of protective factors among African Americans. *Journal of Evidence-Based Social Work, 18*(4), 379–393. <u>https://doi-org.du.idm.oclc.org/10.1080/26408066.2020.1857317</u>
- Sa, J., Choe, S., Cho, B., Chaput, J.-P., Lee, J., & Hwang, S. (2020). Sex and racial/ethnic differences in suicidal consideration and suicide attempts among US college students, 2011-2015. *American Journal of Health Behavior*, 44(2), 214–231. <u>https://doi-org.du.idm.oclc.org/10.5993/AJHB.44.2.9</u>
- Samples, T. C., Woods, A., Davis, T. A., Rhodes, M., Shahane, A., & Kaslow, N. J. (2014). Race of interviewer effect on disclosures of suicidal low-income African American women. *Journal of Black Psychology*, 40(1), 27–46. <u>https://doi-</u>

org.du.idm.oclc.org/10.1177/0095798412469228

Scharff, D. P., Mathews, K. J., Jackson, P., Hoffsuemmer, J., Martin, E., & Edwards, D. (2010). More than Tuskegee: understanding mistrust about research participation. Journal of health care for the poor and underserved, 21(3), 879–897.

https://doi.org/10.1353/hpu.0.0323

Spates, K., & Slatton, B. C. (2017). I've Got My Family and My Faith: Black Women and the Suicide Paradox. Socius. <u>https://doi.org/10.1177/2378023117743908</u>

- Storozuk, A., Ashley, M., Delage, V., & Maloney, E. A. (2020). Got bots? Practical recommendations to protect online survey data from bot attacks. The Quantitative Methods for Psychology, 16(5), 472-481.
- Street, J. C., Taha, F., Jones, A. D., Jones, K. A., Carr, E., Woods, A., Woodall, S., & Kaslow, N. J. (2012). Racial identity and reasons for living in African American female suicide attempters. *Cultural Diversity and Ethnic Minority Psychology*, 18(4), 416–423. https://doi-org.du.idm.oclc.org/10.1037/a0029594
- Suicide Awareness Voices of Education (SAVE). (2019). Suicide Statistics and Facts. https://save.org/about-suicide/suicide-facts/.
- Suicide Prevention Resource Center (SPRC). (2021a). Black Populations. https://www.sprc.org/scope/racial-ethnic-disparities/black-populations
- Suicide Prevention Resource Center (SPRC). (2021b). Engaging People with Lived Experience. https://www.sprc.org/keys-success/lived-experience
- Taha, F., Zhang, H., Snead, K., Jones, A. D., Blackmon, B., Bryant, R. J., Siegelman, A. E., & Kaslow, N. J. (2015). Effects of a culturally informed intervention on abused, suicidal African American women. *Cultural Diversity and Ethnic Minority Psychology*, 21(4), 560–570. <u>https://doi-org.du.idm.oclc.org/10.1037/cdp0000018</u>
- Talley, D., Warner, Ş. L., Perry, D., Brissette, E., Consiglio, F. L., Capri, R., Violano, P., & Coker,
 K. L. (2021). Understanding situational factors and conditions contributing to suicide among Black youth and young adults. *Aggression and Violent Behavior*, 58. <u>https://doi-org.du.idm.oclc.org/10.1016/j.avb.2021.101614</u>
- Tomek, S., Burton, S., Hooper, L. M., Bolland, A., & Bolland, J. (2018). Suicidality in Black American youth living in impoverished neighborhoods: Is school connectedness a

protective factor? School Mental Health: A Multidisciplinary Research and Practice Journal, 10(1), 1–11. <u>https://doi-org.du.idm.oclc.org/10.1007/s12310-017-9241-4</u>

- Vance, M.M., Wade, J.M., Brandy, M., & Webster, A.R. (2022). Contextualizing Black Women's Mental Health in the Twenty-First Century: Gendered Racism and Suicide-Related Behavior. Journal of Racial and Ethnic Health Disparities. https://doi.org/10.1007/s40615-021-01198-y
- Van Orden, K. A., Witte, T. K., Cukrowicz, K. C., Braithwaite, S. R., Selby, E. A., & Joiner, T. E., Jr (2010). The interpersonal theory of suicide. *Psychological review*, *117*(2), 575–600. <u>https://doi.org/10.1037/a0018697</u>
- Vinson, E. S., & Oser, C. B. (2016). Risk and protective factors for suicidal ideation in African American women with a history of sexual violence as a minor. Violence Against Women, 22(14), 1770–1787. <u>https://doi-org.du.idm.oclc.org/10.1177/1077801216632614</u>
- Walker, R. L., Salami, T. K., Carter, S. E., & Flowers, K. (2014). Perceived racism and suicide ideation: Mediating role of depression but moderating role of religiosity among African American adults. Suicide and Life-Threatening Behavior, 44(5), 548–559. <u>https://doiorg.du.idm.oclc.org/10.1111/sltb.12089</u>
- Wang, M.-C., Lightsey, O. R., Tran, K. K., & Bonaparte, T. S. (2013). Examining suicide protective factors among Black college students. *Death Studies*, 37(3), 228–247. <u>https://doi-org.du.idm.oclc.org/10.1080/07481187.2011.623215</u>
- Watling, D., Preece, M., Hawgood, J., Bloomfield, S., & Kõlves, K. (2020). Developing an intervention for suicide prevention: A rapid review of lived experience involvement. Archives of Suicide Research. <u>https://doiorg.du.idm.oclc.org/10.1080/13811118.2020.1833799</u>

- West, L. M., Davis, T. A., Thompson, M. P., & Kaslow, N. J. (2011). "Let me count the ways:" Fostering reasons for living among low-income, suicidal, African American women. *Suicide and Life-Threatening Behavior*, 41(5), 491–500. <u>https://doi-org.du.idm.oclc.org/10.1111/j.1943-278X.2011.00045.x</u>
- Winerman, L. (2019). By the numbers: An alarming rise in suicide. *Monitor on Psychology*, 50(1),
 80. <u>http://www.apa.org/monitor/2019/01/numbers</u>
- Woods, A. M., Zimmerman, L., Carlin, E., Hill, A., & Kaslow, N. J. (2013). Motherhood, reasons for living, and suicidality among African American women. *Journal of Family Psychology*, 27(4), 600–606. <u>https://doi-org.du.idm.oclc.org/10.1037/a0033592</u>
- World Health Organization (WHO). (2019). Suicide worldwide in 2019. https://apps.who.int/iris/rest/bitstreams/1350975/retrieve#:~:text=Suicide%20worldwide %20in%202019%3A%20Global%20Health%20Estimates,-%2D%204%20%2D&text=In%202019%2C%20an%20estimated%20703,100%20000%2

Opopulation%20for%202019.

- World Health Organization (WHO). (2021). *Suicide*. <u>https://www.who.int/news-room/fact-sheets/detail/suicide</u>
- Zhang, H., Neelarambam, K., Schwenke, T. J., Rhodes, M. N., Pittman, D. M., & Kaslow, N. J. (2013). Mediators of a culturally-sensitive intervention for suicidal African American women. *Journal of Clinical Psychology in Medical Settings*, 20(4), 401–414. <u>https://doiorg.du.idm.oclc.org/10.1007/s10880-013-9373-0</u>

Appendix A

Qualtrics Survey

Start of Block: Belongingness

On a scale of -3 (I don't feel that I belong at all) to +3 (I feel a deep sense of belonging), please rate the following:

please rate the l	-3 (1)	-2 (2)	-1 (3)	0 (4)	+1 (5)	+2 (6)	+3 (7)
Your sense of belonging that you hold within yourself (1)	0	0	0	0	0	0	0
Your sense of belonging in your immediate environment (like your family and friends) (2)	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	0
Your sense of belonging within your community (like your neighborhood, school/work, places you go to do activities) (3)	0	\bigcirc	0	0	\bigcirc	\bigcirc	0
Your sense of belonging based on cultural, historical and societal factors (e.g., United States, government, history, law/policy) (4)	0	0	0	0	\bigcirc	\bigcirc	0

If you have recently (in the past 30 days) experienced suicidality, answer the following questions based on your recent experience. If you experienced suicidality in the past (prior to 30 days ago), think back to that experience when answering the following questions.

	-3 (1)	-2 (2)	-1 (3)	0 (4)	+1 (5)	+2 (6)	+3 (7)
Your sense of belonging that you hold within yourself (1)	0	0	0	0	0	0	0
Your sense of belonging in your immediate environment (like your family and friends) (2)	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	0
Your sense of belonging within your community (like your neighborhood, school/work, places you go to do activities) (3)	0	\bigcirc	0	\bigcirc	\bigcirc	\bigcirc	0
Your sense of belonging based on cultural, historical and societal factors (e.g., United States, government, history, law/policy) (4)	0	0	\bigcirc	\bigcirc	0	0	0

How does each sense of belonging either increase your risk for suicidality (-3) or protect you from suicidality (+3)?

What helps you feel like you belong?

	Never (1)	Sometimes (2)	About half the time (3)	Most of the time (4)	Always (5)
Meaningful interactions with other people (1)	\bigcirc	0	\bigcirc	0	0
Explicit Racism (outward and obvious) (2)	\bigcirc	0	\bigcirc	\bigcirc	\bigcirc
Microaggressions (Microaggressions are everyday verbal, nonverbal slights or insults, whether intentional or not that communicate negative messages to people based on their identities) (3)	\bigcirc	0	\bigcirc	\bigcirc	0
Sexism/Misogyny (4)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc

How often do you experience the following during a typical week?

	None at all (1)	A little (2)	A moderate amount (3)	A lot (4)	A great deal (5)
Historical segregation (1)	0	\bigcirc	0	\bigcirc	0
Historical oppression (2)	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Slavery (3)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Jim Crow Laws (4)	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc
GI Bill (5)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Current laws/legislation (6)	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Lack of representation (media, positions of power) (7)	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc

How much is your current day-to-day life affected by each of the following?

If you have recently (in the past 30 days) experienced suicidality, answer the following questions based on your recent experience. If you experienced suicidality in the past (prior to 30 days ago), think back to that experience when answering the following questions.

How does each of the below topics/experiences increase your risk for suicidality (-3) or protect you from suicidality (+3)?

We recognize many of these factors are negative experiences that we imagine would only increase suicidality or have a neutral impact. Given there are a range of experiences listed, all potential impacts on suicidality are left as choices.

	-3 (1)	-2 (2)	-1 (3)	0 (4)	+1 (5)	+2 (6)	+3 (7)
Meaningful interactions with other people (1)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	0
Explicit Racism (outward and obvious) (2)	\bigcirc						
Microaggressions (Microaggressions are everyday verbal, nonverbal slights or insults, whether intentional or not that communicate negative messages to people based on their identities) (3)	0	\bigcirc	0	0	\bigcirc	\bigcirc	0
Sexism/Misogyny (4)	\bigcirc						
Historical segregation (5)	\bigcirc						
Historical oppression (6)	\bigcirc						
Slavery (7)	\bigcirc						
Jim Crow Laws (8)	\bigcirc						
GI Bill (9)	\bigcirc						
Current laws/legislation (10)	\bigcirc						

Lack of representation (media, positions of power) (11)	0	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc

Please feel free to use this space to provide additional explanation on how these factors have impacted your suicidality.

End of Block: Belongingness

Start of Block: Burdensomeness

contribute), please	-3 (1)	-2 (2)	-1 (3)	0 (4)	1 (5)	2 (6)	3 (7)
Your sense of burdensomeness that you hold within yourself (1)	0	0	0	0	0	0	0
Your sense of burdensomeness in your immediate environment (like your family and friends) (2)	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	0
Your sense of burdensomeness within your community (like your neighborhood, school/work, places you go to do activities) (3)	\bigcirc	0	0	\bigcirc	0	0	0
Your sense of belonging based on cultural, historical and societal factors (e.g., United States, government, history, law/policy) (4)	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	0

On a scale of -3 (I feel like I am a significant burden) to +3 (I feel like I am very needed and contribute), please rate the following:

If you have recently (in the past 30 days) experienced suicidality, answer the following questions based on your recent experience. If you experienced suicidality in the past (prior to 30 days ago), think back to that experience when answering the following questions.

How does each sense of burdensomeness either increase your risk for suicidality (-3) or protect you from suicidality (+3)?

	-3 (1)	-2 (2)	-1 (3)	0 (4)	1 (5)	2 (6)	3 (7)
Your sense of burdensomeness that you hold within yourself (1)	0	0	0	0	0	0	0
Your sense of burdensomeness in your immediate environment (like your family and friends) (2)	0	0	\bigcirc	0	0	0	\bigcirc
Your sense of burdensomeness within your community (like your neighborhood, school/work, places you go to do activities) (3)	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	0
Your sense of belonging based on cultural, historical and societal factors (e.g., United States, government, history, law/policy) (4)	0	\bigcirc	0	\bigcirc	\bigcirc	0	0

What helps you feel as if you are needed and contribute?

What makes you feel as if you are a burden?

	None at all (1)	A little (2)	A moderate amount (3)	A lot (4)	A great deal (5)
Unemployment (1)	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Financial dependence on someone else (2)	0	\bigcirc	\bigcirc	\bigcirc	0
Pregnancy/birth medical maltreatment (3)	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Health inequality (4)	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Political climate (5)	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Affirmative action (6)	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Hiring/promotion discrimination (7)	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Housing inequality (8)	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Financial lending inequality (9)	0	\bigcirc	0	\bigcirc	\bigcirc
Income inequality (10)	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc

How much is your current day-to-day life affected by each of the following?

If you have recently (in the past 30 days) experienced suicidality, answer the following questions based on your recent experience. If you experienced suicidality in the past (prior to 30 days ago), think back to that experience when answering the following questions.

How does each of the below topics/experiences increase your risk for suicidality (-3) or protect you from suicidality (+3)?

We recognize many of these factors are negative experiences that we imagine would only increase suicidality or have a neutral impact. Given there are a range of experiences listed, all potential impacts on suicidality are left as choices.

	-3 (1)	-2 (2)	-1 (3)	0 (4)	1 (5)	2 (6)	3 (7)
Unemployment (1)	\bigcirc	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	0
Financial dependence on someone else (2)	\bigcirc						
Pregnancy/birth medical maltreatment (3)	\bigcirc						
Health inequality (4)	\bigcirc						
Political climate (5)	\bigcirc						
Affirmative action (6)	\bigcirc						
Hiring/promotion discrimination (7)	\bigcirc						
Housing inequality (8)	\bigcirc						
Financial lending inequality (9)	\bigcirc						
Income inequality (10)	\bigcirc						

Please feel free to use this space to provide additional explanation on how these factors have impacted your suicidality.

End of Block: Burdensomeness

Start of Block: Acquired capability:

Humans have a built in system that makes us want to stay alive. However, various experiences can decrease our desire for survival or make us more capable to harm ourselves. The following questions will ask about this desire to stay alive that can be reduced through: contact with death, dying, injury, exposure to violence, pain tolerance, risky behaviors, and decreased fear of death and dying.

	-3 (1)	-2 (2)	-1 (3)	0 (4)	1 (5)	2 (6)	3 (7)
Your capability to die that you hold within yourself (1)	0	0	0	0	0	0	0
Your immediate environment (like your family and friends) that contributes to your capability to die (2)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	0	\bigcirc	0
Your community (like your neighborhood, school/work, places you go to do activities) that contribute to your capability to die (3)	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	0	0
Cultural, historical and societal factors (e.g., United States, government, history, law/policy) that contribute to your capability to die (4)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	0

On a scale of -3 (I have a high capability to die/don't fear death) to +3 (I have a low capability to die/do fear death), please rate the following:

If you have recently (in the past 30 days) experienced suicidality, answer the following questions based on your recent experience. If you experienced suicidality in the past (prior to 30 days ago), think back to that experience when answering the following questions.

from suicidality	-3 (1)	-2 (2)	-1 (3)	0 (4)	1 (5)	2 (6)	3 (7)
Your capability to die that you hold within yourself (1)		0	0		0	0	0
Your immediate environment (like your family and friends) that contributes to your capability to die (2)	0	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	0
Your community (like your neighborhood, school/work, places you go to do activities) that contribute to your capability to die (3)	0	0	0	\bigcirc	\bigcirc	\bigcirc	0
Cultural, historical and societal factors (e.g., United States, government, history, law/policy) that contribute to your capability to die (4)	0	0	0	0	\bigcirc	\bigcirc	0

How does capability or fear of death either increase your risk for suicidality (-3) or protect you from suicidality (+3)?

What helps you maintain a low capability to die/fear of death?

What makes you feel as if you have a high capability to die/no fear of death?

How often do you experience the following during a typical week?

	Never (1)	Sometimes (2)	About half the time (3)	Most of the time (4)	Always (5)
Exposure to violence (1)	0	0	\bigcirc	0	0
Exposure to substance use/self-use (2)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Self-harm behaviors (e.g., cutting, etc.) (3)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Recreational/risk behaviors (e.g., driving fast, skydiving, etc.) (4)	\bigcirc	\bigcirc	0	\bigcirc	\bigcirc

	None at all (1)	A little (2)	A moderate amount (3)	A lot (4)	A great dea (5)
Gun ownership (1)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Slavery (2)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Police brutality (3)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Physical labor jobs (4)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
High risk jobs (have contact with death, emergency, or potential for physical harm) (5)	0	\bigcirc	0	\bigcirc	0
School/Educational response to discipline (6)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Corporal punishment (spanking) (7)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Incarceration (8)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Adverse childhood experience (e.g., childhood physical/sexual/emotional abuse) (9)	0	\bigcirc	0	\bigcirc	0
Other traumatic experiences (10)	\bigcirc	\bigcirc	0	\bigcirc	\bigcirc

How much is your current day-to-day life affected by each of the following?

If you have recently (in the past 30 days) experienced suicidality, answer the following questions based on your recent experience. If you experienced suicidality in the past (prior to 30 days ago), think back to that experience when answering the following questions.

How does each of the below topics/experiences increase your risk for suicidality (-3) or protect you from suicidality (+3)?

We recognize many of these factors are negative experiences that we imagine would only increase suicidality or have a neutral impact. Given there are a range of experiences listed, all potential impacts on suicidality are left as choices.

	-3 (1)	-2 (2)	-1 (3)	0 (4)	1 (5)	2 (6)	3 (7)
Exposure to violence (1)	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Exposure to substance use/self-use (2)	\bigcirc						
Self-harm behaviors (e.g., cutting, etc.) (3)	\bigcirc						
Recreational/risk behaviors (e.g., driving fast, skydiving, etc.) (4)	0	\bigcirc	0	0	\bigcirc	0	0
Gun ownership (5)	\bigcirc						
Slavery (6)	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Police brutality (7)	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Physical labor jobs (8)	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
High risk jobs (have contact with death, emergency, or potential for physical harm) (9)	0	\bigcirc	\bigcirc	0	\bigcirc	\bigcirc	\bigcirc
School/Educational response to discipline (10)	\bigcirc						
Corporal punishment (spanking) (11)	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Incarceration (12)	\bigcirc						
Adverse childhood experience (e.g., childhood physical/sexual/emotional abuse) (13)	0	0	0	0	0	0	0
Other traumatic experiences (14)	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc

Please feel free to use this space to provide additional explanation on how these factors have impacted your suicidality.

End of Block: Acquired capability:

Resiliency was then addressed. Participants were encouraged to think of their strengths,

protective factors, and coping skills that help keep them alive or prevent them from dying by

suicide.

Start of Block: Resiliency

Resiliency means the capacity to recover from or adapt after experiencing challenges. The following questions will ask about resiliency in different areas of your life.

What resiliency factors or traits do you hold within yourself?

What resiliency factors exist within your immediate environment (like your family and friends)?

-	/ factors ex o do activit	•	our comn	nunity (lil	ke your ne	eighborho	od, school	/work,

What resiliency factors exist within your culture, history and society (e.g., United States, government, history, law/policy)?

Please list your top three reasons for living.

○ Reason #1 (1)	
O Reason #2 (2)	
O Reason #3 (3)	

Describe how the reasons listed above keep you alive/prevent you from dying?

How much do the following reasons keep you alive/prevent you from dying by suicide?

	None at all (1)	A little (2)	A moderate amount (3)	A lot (4)	A great deal (5)
Reason for living #1 (1)	\bigcirc	\bigcirc	0	\bigcirc	0
Reason for living #2 (2)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Reason for living #3 (3)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc

The Strong Black Woman identity says that there are certain expectations for Black women including tremendous strength and the need to take care of others. How prevalent is this identity in your life on a scale of 0-4, with 0 being it is not prevalent in your life, 2 being somewhat prevalent and 4 being it is significantly prevalent?

	0 (1)	1 (2)	2 (3)	3 (4)	4 (5)
Strong Black Woman Identity (1)	0	0	0	0	0

suicidality a	lot) to +3 (p	rotect you fi	rom suicidali	ity a lot)?			
	-3 (1)	-2 (2)	-1 (3)	0 (4)	1 (5)	2 (6)	3 (7)
Strong Black Woman Identity (1)	0	0	0	0	0	0	0

How does this identity (Strong Black Woman) impact suicidality from -3 (increase your risk for suicidality a lot) to +3 (protect you from suicidality a lot)?

End of Block: Resiliency

Following, participants were asked about their current involvement in mental health support

and if not involved in current support, what would lead them to getting involved.

Start of Block: Mental Health Support

When you experienced suicidality in the past (prior to 30 days ago) or if you have experienced it recently (past 30 days), did you participate in mental health support services?

Yes, in the past when I had suicidality I saw a therapist (1)

 \bigcirc Yes, in the past when I had suicidality, I used crisis services (walk in, phone) (2)

Yes, in the past when I had suicidality, I used other mental health services (Please describe) (3)

No, in the past when I had suicidality I did not participate in any mental health services.
 (4)

• Yes, currently I have suicidality and I see a therapist (5)

○ Yes, currently I have suicidality and I use crisis services (walk in, phone) (6)

Yes, currently I have suicidality and I use other mental health services (Please describe)
 (7) ______

 \bigcirc No, currently I have suicidality and do not use any mental health services (8)

If you responded to the previous questions that you did not in the past or did not recently use mental health services related to your suicidality, explain what prevents you from accessing services. If you did access services, put N/A.

End of Block: Mental Health Support

The final set of information collected was demographic information. All demographic questions had the option of "prefer not to respond."

Start of Block: Demographics

How old are you?

- 18-24 years old (1)
- 25-34 years old (2)
- 35-44 years old (3)
- \bigcirc 45-54 years old (4)
- 55-64 years old (5)
- \bigcirc 65+ years old (6)
- Prefer not to respond (7)

With what gender do you identify? (Select all that apply)

Female (1)
Trans female (2)
Non-binary / third gender (3)
Agender (4)
Genderqueer (5)
Questioning or unsure (6)
Prefer to self-describe (7)
Prefer not to respond (8)

What was your biological sex at birth? (Select all that apply)

	Female (1)
	Male (2)
	Intersex (3)
	Prefer to self-describe (4)
	Prefer not to respond (5)

Heterosexual/straight (1)
Asexual (2)
Bisexual (3)
Lesbian (4)
Pansexual (5)
Queer (6)
Questioning or unsure (7)
Prefer to self-describe (8)
Prefer not to respond (9)

How do you identify your sexual orientation? (Select all that apply)

How do you ic	lentify your race? (Select all that apply)
	American Indian or Alaska Native (1)
	Asian (2)
	Black/African American/Afro-Caribbean/Black African Descent (3)
	White/European (4)
	Hispanic (5)
	Prefer to self-describe (6)
	Prefer not to respond (7)

How do you identify your ethnicity? (Select all that apply)

American Indian or Alaska Native (1)
Asian (2)
Black/African American/Afro-Caribbean/Black African Descent (3)
White/European (4)
Hispanic (5)
Prefer to self-describe (6)
Prefer not to respond (7)

How do you identify your nationality? (Select all that apply)

American (1)
Prefer to self-describe (2)
Prefer not to respond (3)

What is your marital status?

O Married (1)
O Widowed (2)
O Divorced (3)
O Separated (4)
O Never married (5)
O Prefer not to respond (6)

How many children do you have?

O 0 (1)

O 1 (2)

O 2 (3)

- O 3 (4)
- O 4 (5)
- O 5 (6)
- 06 (7)
- 7 or more (8)

93

What is your educational background?

O Some high school (1)

○ Graduated high school (2)

○ GED (3)

 \bigcirc Some college (no degree) (4)

 \bigcirc Technical college (5)

• Associates degree (6)

O Bachelor's degree (7)

O Master's degree (8)

O Doctoral degree (9)

O Prefer not to respond (10)

Are you currently employed?

 \bigcirc Yes-full time (1)

• Yes-part time (2)

○ Yes-contract (3)

O No-student (4)

O No-other (5) _____

O Prefer not to respond (6)

What is your current income?

- \bigcirc \$0/no income (1)
- \$1-\$5,000 (2)
- \$5,000-\$15,000 (3)
- \$15001-\$25,000 (4)
- \$25001-\$35,000 (5)
- \$35,001-\$45,000 (6)
- \$45,001-\$55,000 (7)
- \$55,001-\$65,000 (8)
- \$65,001-\$75,000 (9)
- \$75,001-\$85,000 (10)
- \$85,001-\$95,000 (11)
- \$95,001-\$105,000 (12)
- Over \$105,000 (13)
- O Prefer not to respond (14)

End of Block: Demographics

Appendix B

Data Analysis Process

The initial round of data collection occurred in July 2022. On Thursday, July 21st, the student principal investigator (Sam North) met with community member (Dr. Hillary Potter) from CU Boulder who is on the doctoral paper committee assisting with dissemination of the survey (as noted in the original IRB application). The community member talked through the dissemination plan and reviewed the approved outreach materials. During the evening on Thursday, July 21st, the student principal investigator published the survey in Qualtrics and sent the survey link to the community member. Around noon on Friday, July 22nd, the community member emailed the student principal investigator that the link had been disseminated to her Facebook communities. On the morning of Saturday, July 23rd, the student principal investigator logged into Qualtrics and saw 3,200 survey responses and over 5,000 responses for the separate gift card survey. The student principal investigator immediately reached out to the faculty investigator (Dr. Noelle Lefforge) to notify. Immediately following this communication, data collection was suspended in Qualtrics. On the afternoon of Monday, July 25th the student principal investigator and faculty investigator convened and reached out to the University of Denver IRB to notify and request assistance. Later that afternoon, on Monday July 25th, the student principal investigator consulted with Qualtrics IT team and learned about the limitations on the University of Denver Qualtrics's accounts ability to detect bot/artificial intelligence responses.

The IRB responded on July 26th, 2022 with the following information: "Please reach out to Katia Miller in Institutional Research & Analysis to have her help you develop a plan for collecting valid survey responses. Once you've met with Katia and have a plan to move forward,

please submit a new package (not a new project) to IRBNet and complete the Reportable New Information form to describe what happened and the plan to address it. We recommend you remove all of these survey responses from your dataset and only include the responses you collect once you've implemented the plan you've described in the RNI." The above steps were completed. A meeting took place with Katia Miller from the IRB team on Wednesday September 7th, 2022 with Dr. Noelle Lefforge and Sam North, M.A. During the meeting several revisions were made to the survey in order to increase security from bots. Following the meeting with Katia Miller from the IRB team, the following Qualtrics settings were put into place: for the primary survey, customized the display name and description, turned on prevent indexing, turned on prevent multiple submissions, added a captcha question at the beginning, set the quota to 50 participants that meet the inclusion criteria, added one honey pot question, and had incomplete responses deleted after one week. With the secondary gift card survey (optional), the following settings were added or changed: customized the display name and description, turned on prevent indexing, turned on prevent multiple submissions, added a captcha question, set quota to 50 participants/responses, turned off anonymize responses (to collect IP addresses on this optional survey in which de-identified data (email addresses) is already collected but not tied to data on the first survey), turned on the feature of accessing the survey link only through a specific website and input the primary survey website link as the website, and had incomplete surveys delete after one week.

The above changes were made and the survey began dissemination again in November of 2022. The initial dissemination from November 2022-beginning of March 2023 yielded several valid survey responses. However, on Friday, March 24th 2023, the student principal investigator (Sam North) met again with the community member on the doctoral paper committee (Dr.

Hillary Potter). The community member and student principal investigator reviewed the updated dissemination plan and updated outreach materials. Following the meeting with Dr. Potter and following several changes made to the Qualtrics survey to increase protections in consultation with Katia Miller in the fall of 2022, the survey was published again. During the evening of Friday, March 24th 2023, the student principal investigator logged into Qualtrics and noticed just under 200 survey responses (189) and slightly over 200 responses (235) for the separate gift card survey (despite adding a quota of 50 responses). The student principal investigator immediately reached out to the faculty investigator (Dr. Noelle Lefforge) and Katia Miller to notify of the results. Data collection in Qualtrics was suspended and the surveys were both closed. The student principal investigator met with the faculty investigator on the following dates to discuss the project: April 12th, April 26th, and May 17th 2023. The student principal investigator also met with Katia Miller on Friday April 14th, 2023, as well. After these consultations, the IRB was notified on May 17th, 2023. Due to the repeated occurrence of bot involvement in the data collection, no further data collection took place.

The data that was collected in the second round of data collection was assessed for validity based on the following parameters: surveys that had completion duration under five minutes were removed, surveys that had completion rates under 85% were removed, surveys that did not answer any qualitative questions were removed, duplicate answers were removed, and those surveys that appeared to be generated through artificial intelligence as evidenced by formal language/definitions as responses were also removed. The survey responses initially collected in the second round of data collection totaled 189. After reviewing the data using the above parameters, 20 responses were determined to be valid and were analyzed as described below.