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# Why Are So Many Indigenous Peoples Dying and No One Is Paying Attention? Depressive Symptoms and “Loss of Loved Ones” as a Result and Driver of Health Disparities

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## Abstract

Indigenous peoples have not only experienced a devastating rate of historical loss of lives, they are more likely to experience mortality disparities. The purpose of this article is to examine Indigenous women's lived experiences of grief and loss in two Southeastern tribes and the relationship between depressive symptoms and recent loss of a loved one. Our exploratory sequential mixed-methods research was informed by the Indigenous based Framework of Historical Oppression, Resilience, and Transcendence (FHORT). We summarized key qualitative themes from ethnographic data from 287 female participants across the two tribes, collected

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through focus groups, family interviews, and individual interviews. We then quantitatively examined how these themes predicted depressive outcomes among 127 respondents. Specifically, we examined associations between depressive symptoms and components of historical oppression—historical loss, loss of lives, and the presence of PTSD symptoms—along with resilience and transcendence.

### **Keywords**

grief, depressive symptoms, health disparities, Indigenous, American Indian or Alaska Native, Native American, historical loss

Indigenous peoples have experienced a devastating rate of historical loss of lives, and they are more likely to experience mortality disparities (Evans-Campbell, 2008; Indian Health Service [IHS], 2019). Because of the extensive mental and physical effects of grief and loss, the loss of loved ones perpetuates and drives additional health disparities such as depression and post-traumatic stress disorder (PTSD). According to the IHS (2019), American Indian and Alaska Natives (AI/ANs) in the IHS service area experience disparities in mortality rates, as compared with the non-AI/AN population. For the purpose of this article, AI/ANs and Native Americans will be identified as Indigenous peoples of the contiguous United States. Native Hawaiians are also Indigenous peoples of the United States but operate under distinct rights in relation to the U.S. government, warranting separate examinations.

Deaths due to suicide, violence, substance abuse, cardiovascular disease, and diabetes are drivers of mortality among Indigenous peoples (IHS, 2019). Indigenous peoples tend to experience a 4.4-year lower life expectancy in comparison with the general U.S. population. This disparity in losses of lives defies simple explanation, as research has shown AI/ANs experience death from many different causes at significantly higher rates than all races in the United States between 2009 and 2011 (IHS, 2019). Compared to deaths of non-AI/ANs, AI/AN deaths from accidents (e.g., unintentional injuries, including those from motor vehicle accidents) were 2.5 times higher; deaths from diabetes were 3.2 times higher; alcohol-induced deaths were 6.6 times higher; deaths from chronic liver disease and cirrhosis were 4.6 times higher; drug-induced deaths were 1.8 times higher; deaths from kidney disease were 1.5 times higher; deaths by suicide were 1.7 times higher; and deaths by homicide were 2.1 times higher (IHS, 2019).

Indigenous peoples suffer a disproportionate burden of mental health problems in comparison with the general population, including PTSD, depression, suicide, and substance use disorders (SUD; Gone & Trimble, 2012).

Mental health disparities are inseparable from physical health disparities, with SUD and depression being known associates of many causes of mortality (e.g., suicide, diabetes, chronic liver disease, drug and alcohol deaths, motor vehicle accidents). Although the figures are startling and demonstrate the glaring failure of the U.S. government to fulfill its responsibility to provide for the health and well-being of federally recognized sovereign tribes as part of treaty agreements with domestic dependent nations (Gone & Trimble, 2012; Bureau of Indian Affairs [BIA], 2020; U.S. Civil Rights Commission, 2004), numbers alone are unable to elucidate the true lived experiences of suffering such losses.

With an exploratory sequential mixed-methods research design with the Indigenous-based Framework of Historical Oppression, Resilience, and Transcendence (FHORT), this article builds upon a qualitative examination of lived experiences of the loss of loved ones among women from two Southeastern Indigenous groups. Data for this article were part of a larger study aimed at understanding ecological risks and protective factors of associated with social and behavioral health disparities among these two tribes (McKinley et al., 2019). The purpose of this article is to examine Indigenous women's lived experiences of grief and loss in two Southeastern tribes, and examine the relationship between depressive symptoms and recent loss of a loved one.

After reporting qualitative findings, which provide lived experiences of enduring the aforementioned mortality disparities, we quantitatively analyzed how components of historical oppression—historical loss, loss of lives, presence of PTSD symptoms—family resilience, and transcendence are associated with the known disparity of depressive symptoms. To our knowledge, this is the first study to assess disparities Indigenous people experience in exposure to the death of multiple loved ones across the life course and the first to assess such disparities for any ethnic minority group using a mixed-methods approach (Umberson et al., 2017).

## **Theoretical Framework: The Framework of Historical Oppression, Resilience, and Transcendence**

The FHORT explicates how social problems may be perpetuated far after original forms of oppression have been imposed, connecting structural causes to resultant disparities. This framework contextualizes experiences of death and bereavement among study participants. The quantitative study variables—PTSD, historical losses, loss of loved ones, family resilience, and transcendence—were derived from qualitative results situated in this Indigenous framework. Thus, each will be reviewed in the context of the FHORT.

To comprehend high rates of historical and contemporary losses of lives among the two tribes who participated in this study, the context of

historical oppression in which the tribes are embedded must be considered. *Historical oppression*, a key component of the FHORT, refers to the insidious, pervasive, and cross-generational experiences of subjugation imposed upon Indigenous peoples throughout colonization to the present time, which, may be inadvertently normalized and internalized into individuals', families', and communities' daily lives (Burnette & Renner, 2017). Historical oppression encompasses *both* historical *and* present-day forms of oppression (i.e., proximal stressors), which tend to perpetuate marginalization, such as higher levels of stress, frequent losses, lower incomes, and health disparities. Not only have Indigenous peoples experienced premature losses of lives through disease and warfare in colonization, they experience heightened mortality in contemporary times (Evans-Campbell, 2008; IHS, 2019).

Extant research has indicated Indigenous populations experience a greater risk and prevalence of PTSD, in comparison with any other U.S. ethnicity or race (Beals, Belcourt-Dittloff, et al., 2013; Beals, Manson, et al., 2013). Studies conducted by Beals, Belcourt-Dittloff, et al. (2013) and Beals, Manson, et al. (2013) indicated high-risk environments/communities contribute to trauma exposure and PTSD. Studies have indicated women are more likely to have been exposed to trauma, such as intimate partner violence (IPV) primarily by family members (Beals, Belcourt-Dittloff, et al., 2013; Beals, Manson, et al., 2013), resulting in PTSD. Trauma type varied by gender, with women being exposed to more interpersonal trauma than men (Beals, Belcourt-Dittloff, et al., 2013).

Historical losses as a result of historical oppression are an important factor for health and mental health disparities. For example, historical trauma has led to related losses in lives, which may be related to mental health symptoms. Worden (2009) described grief as an internal reaction to a loss, regardless of whether loss is death or non-death related (Worden, 2009). It is assumed the primary loss, such as the loss of a parent or a home, is the most significant part of loss; however, secondary losses—losses that stem from primary loss—were found to be the most significant, as they are constant reminders of the loss and the resultant changes in one's life (Worden, 2009). Cumulative losses exacerbate extant challenges, as Indigenous communities are increasingly exposed to the impacts of substance use, violence, poverty, discrimination, and oppression—effects and forms of historical oppression. Historical losses have been measured and connected to associated symptoms (e.g., the Historical Loss Scale; Whitbeck et al., 2004).

In contrast to research traditions that focus only on deficits, especially among ethnic minorities, the FHORT is rooted in resilience and transcendence. *Resilience* can be defined as bouncing back and recovering well after experiencing adversity, whereas *transcendence* refers to a higher level of functioning, similar to posttraumatic growth (Tedeschi & Calhoun, 2004); posttraumatic growth, akin to transcendence is an experience of positive change (i.e., increased

gratitude, improved personal relationships, sense of personal strength, changing priorities, enriched meaning and spirituality) after a struggle with challenging life circumstances. In defining resilience, it is important to recognize all systems—families, communities, and societies—have protective qualities, making resilience applicable across multiple levels (Masten, 2018). However, coping with grief and loss has also been disrupted, as religious and spiritual suppression are insidious forms of historical oppression that have affected Indigenous people, as evidenced by the Indian Religious Crimes Code of 1883 (Irwin, 1997). This law prohibited transcendence of loss through Indigenous ceremonial activity under the penalty of imprisonment (for a history of AI religious suppression and resistance, see Irwin, 1997, pp. 35–55). The multitude of legal precedents outlawing Indigenous religious and spiritual practices de-legitimized Indigenous spiritual traditions (Irwin, 1997). With such overt suppression of religious coping, which has been found to be protective (Roh et al., 2018), many communities have not developed healthy coping strategies for dealing with loss, although loss has become a common denominator in their lives. Individuals and whole communities are facing significant disenfranchised grief where the losses that have occurred are not socially recognized, sanctioned, discussed, or memorialized.

A limited amount of research has indicated the salience of culturally relevant factors in understanding health and well-being, yet further research is needed to deepen this understanding. Following the FHORT, loss of loved ones due to mortality disparities is extensive, but lived experiences of these losses are largely unknown. Moreover, whether and how culturally relevant risk and protective factors may be related to loss and depressive outcomes has not been examined. This mixed-methods inquiry examines Indigenous women's lived experiences of losing loved ones, and then examines factors that may be related to depressive outcomes among women and men in the same two tribal populations. Specifically, we examine factors related to the FHORT, historical loss, loss of loved ones, PTSD, and lower income (measures of the concepts related to historical oppression) family resilience, and spiritual well-being (a measure of transcendence) to predict depressive outcomes.

## **Method**

### ***Research Design***

This exploratory sequential mixed-methods study began with qualitative data collection ( $n = 287$ ), which informed quantitative data collection and analysis ( $n = 127$ ), synthesizing findings from quantitative and qualitative data from 414 participants (Creswell, 2015). As aforementioned, data for this article was part of a larger data set, which is described elsewhere (McKinley et al., 2019). This paper focuses on themes specific to historical loss. An in-depth, critical

ethnographic approach was used to understand lived experiences of losses of loved ones and the effects on Indigenous peoples' well-being. A critical ethnographic inquiry incorporates critical theory in its investigation by attending to power relationships among dominant and marginalized groups (Carspecken, 1996). To promote cultural relevance, we coupled the critical ethnographic approach with the toolkit for ethical and culturally sensitive research with Indigenous communities (Burnette et al., 2014).

This article was built on qualitative results from 287 female participants across two Southeastern tribes through focus groups, family interviews, and individual interviews. Participants spanned the life course, including elders (60 or older), adults (24–55), and young people (11–23) and social/behavioral health professionals working with Indigenous peoples. The overarching research questions were:

- How do Indigenous women experience the loss of loved ones?
- What causes do Indigenous women attribute to losses of loved ones?
- How did losses of loved ones affect Indigenous women?

After qualitative data collection and analysis were complete, we conducted a survey to examine how themes identified in qualitative research predicted depressive outcomes, using a quantitative approach. This survey was administered to both women and men who were members of the same two Southeastern tribes.

## Setting

Two tribes were included in this research process, enabling us to understand commonalities and differences across Indigenous populations. Due to agreements with the tribes, names of the tribes are kept confidential to protect community identity. Following the recommendation of the toolkit for ethical and culturally sensitive research and our agreements with the tribes, we left out details that could indicate the identity of a tribe (Burnette et al., 2014). *Inland Tribe* has been federally recognized, while *Coastal Tribe* has been recognized at the state but not federal level. Tribal recognition is important to note, as it can have a considerable influence on the tribe's community infrastructure, resource availability, and social and health outcomes. Tribes are heterogeneous, with great variability across tribes and regions, given they have distinct experiences of colonization during different historical periods.

The federally recognized Inland Tribe is located inland from the Gulf Coast. Inland Tribe has its own schools, health care and medical services, health and human services facilities, land management agency, and police force and other first responders—signs of significant economic development. The state-recognized Coastal Tribe is near the water, in close proximity to the Gulf of Mexico. The lack of federal recognition has undermined the Coastal Tribe's

ability to develop a tribal infrastructure for its members, and limits the availability of economic resources; however, the Coastal Tribe provides an array of programs for youth and other tribal members, including employment and educational programs. Following the study methodology (Carspecken, 1996), multiple forms of data were collected from both tribes (e.g., existing data, qualitative data, and quantitative survey data).

### *Data Collection*

Recruitment efforts included posting fliers on Facebook, on tribal websites, in newsletters, and in tribal agencies. Word of mouth was also an intentional and effective recruitment method. After tribal and Institutional Review Board approval, data collection for the qualitative portion of the critical ethnography included participant observation ( $n = 58$ ), individual interviews ( $n = 254$ ), family interviews ( $n = 217$  participants across 27 groups), and focus groups ( $n = 163$  across 64 family interviews) across the two tribes. For participation in individual interviews and focus groups, participants received a \$20 gift card to a local department store; for participation in family interview, families received a \$60 gift card. Interview questions derived from our research aims were developed into a semi-structured interview guide for focus groups and interviews. For individual interviews, a life history approach was employed to maintain cultural sensitivity as recommended for critical methodologies (Burnette et al., 2014, 2019; Carspecken, 1996). Examples of probes from the semi-structured interview guide included “Describe what you remember about growing up in your family”; “Describe a hard time growing up”; and “What helped you get through this challenge?” Participants were given a copy of their life histories as a memento. Wording for questions was aimed at the 5th-grade reading level because some participants were as young as age 11. Because themes of loss emerged among the women in the sample, we examined their experiences separately, as there may have been gender differences.

Following qualitative data collection, tribal community members were invited to participate in a survey, delivered online through Qualtrics. Participants were entered into a drawing for \$50 gift cards; and approximately one in two ( $n = 70$ , 55%) participants received a gift card. Participants’ names were only supplied for the purpose of participant compensation and kept separately from data. A total of 161 participants began the survey and 79% ( $n = 127$ ) completed the survey. The final sample consisted of 127 adult respondents (see Table 1 in the Supplementary Materials).

### *Data Analysis*

We used collaborative, team-based data analysis methods, which included Indigenous and non-Indigenous analysts, due to the breadth and richness of



Table 1. Table of Measures.

Variable and measure	# Items	Response set	Example items	Scoring	Reliability	Citation
Depressive Symptoms: Patient Health Questionnaire (PHQ-9)	9	0 = not at all 3 = nearly every day	Feeling down, depressed, or hopeless; having little energy	Added: Total scores 0–27; none or minimal (0–4); mild (5–9), moderate (10–14); moderately (15–19); severe (20–27)	( $\alpha = .92$ )	Kroenke et al. (2001)
Age	–	Raw age	–	–	–	–
Income	–	<\$15,000 \$15,001–\$25,000 \$25,001–\$50,000 \$50,001–\$75,000 >\$75,001	–	–	–	–
Gender	–	0 = female 1 = male	–	–	–	–
Marital Status	–	0 = unmarried 1 = married	–	–	–	–
Primary Care PTSD Screen (PC-PTSD)	4	0 = no 1 = yes	Experiencing past-month nightmares about it or thought about it when you did not want to?	Added. Considered “positive” scores > 3	( $\alpha = .88$ )	Prins et al. (2004)
Historical Loss Scale (HLS) (Adapted)	15	never (1)–several times a day (6)	Losses from the effects of alcoholism on our people” and “Losing our culture”, among others	Added: Totals 15–75 with higher values indicating greater historical loss.	( $\alpha = .95$ )	Whitbeck et al. (2004)
Recent Loss of Loved one	1	1 = very much to 4 = not at all	Stress from recent loss of loved one	Lower scores indicate higher levels of distress	–	–
Family Resilience Index (FRI)	20	0 = no 1 = yes	See Figure B in Supplementary Materials for complete scale.	Added: Total scores 0–20	( $\alpha = .92$ )	McKinley et al. (2019)
Spiritual Health and Life-Orientation Measure (SHALOM)	17	1 = very low to 5 = very high	Meaning in life; Inner peace; Harmony with the environment; and Respect for others	Finding the mean response rate, ranging from 1 to 5	( $\alpha = .95$ )	Fisher (2010)

ethnographic data collected (Guest & MacQueen, 2008). Interviews were professionally transcribed and transferred to two separate NVivo<sup>1</sup> files—one for Inland Tribe and one for Coastal Tribe. Data analysis teams were composed of PhD students, two of whom are Indigenous (one from each tribe) and two of whom are non-Indigenous. Tribal members were included in data collection and analysis to increase cultural sensitivity and ensure accurate interpretations of the data. Data analysis followed a reconstructive approach in which data analysts read and listened to audio files and transcripts two to four times, followed by low-level coding used to create a hierarchical scheme of codes and sub-codes. Final coding schemes were collaboratively developed. We analyzed data for both implicit and explicit interpretations. Interrater reliability was calculated across team members using Cohen's kappa coefficients (McHugh, 2012). Interrater reliability statistics were extremely high (kappa coefficients .90 or above).

This article focuses on qualitative data concerning how women experience the loss of loved ones. For the purpose of this article, we looked across sources for unifying themes across participants and tribes, and for culturally specific themes in tribes, noting the tribe and participants in the results for reference. The theme Loss of Loved One was coded across 186 sources. Broken down by tribe, this theme was spoken about by 103 Inland Tribe participants and 83 Coastal Tribe participants. Data were analyzed to identify differences in male and female perspectives and themes. Given the theme of loss of loved ones was most prominent among women and previous research indicates the experience of losing a loved one is gendered (Walsh & McGoldrick, 2004), we focused on Indigenous women's experiences in qualitative results.

**Rigor.** Participants who could be reached received a descriptive summary of results (i.e., overarching themes and explanation/description of each theme), interview transcripts, information about the survey, and an invitation to discuss, amend, add to, or make any changes to the interview transcript or results. Group interview transcripts were not provided to participants to protect fellow group members' confidentiality. No participants disagreed with any interpretations and instead elaborated on findings. Results have been reported to the tribes on over 10 occasions through training sessions, reporting to agencies, tribal councils, and community groups, and the facilitation of community dialogue groups. Peer debriefing occurred weekly across the four research team members who participated in follow up. Consistency checks were completed throughout the interviews, encouraging participants' explanations of statements. Over half (55.5%) of participants were interviewed several times.

**Quantitative.** We investigated the hypotheses that risk factors associated with historical oppression (e.g., historical loss, PTSD, low income, loss of a loved one) are positively associated with depressive symptoms, whereas

resilience (e.g., family resilience) and transcendence (e.g., spiritual well-being) are negatively associated with depressive symptoms. The analyses proceeded in two steps. Listwise deletion was used for missing data (Kang, 2013). We examined the bivariate relationships between the independent variables (e.g., historical oppression, income, family resilience) and depressive symptoms, following the conceptual model. We investigated the association between covariates, such as age, gender, educational attainment, and tribal membership, and the outcome. We used linear regression to examine multivariate main effects of predictor variables. To create a parsimonious multivariate model for depressive symptoms, we entered a variable into the model if it was related to the dependent variable in the bivariate analyses at the  $p < .05$  level. Historical loss, spiritual well-being, income, family resilience, PTSD symptoms, and stress from recent loss of a loved one were significantly associated with depressive symptoms, whereas gender, tribal affiliation, educational attainment, marital status, number of children, and age were not. Thus, these variables were not included as covariates in the final model. All analyses were performed using SPSS Version 25 software. Table 1 shows details of each measure for demographics, along with depressive symptoms, PTSD symptoms, historical loss, recent loss of a loved one, family resilience, and transcendence.

## **Qualitative Results: Loss of Loved Ones**

Qualitative findings revealed multiple causes of death connected to health disparities experienced across both tribes. These causes included suicide and violent deaths, and deaths related to alcohol and other drugs, cardiovascular disease, and diabetes and related complications. Motor vehicle accidents were another common cause of death, and were often related to alcohol abuse, according to interview participants. Behavioral health professionals in the Inland Tribe were asked during a focus group, "What are the most common problems for which people seek services?" A female counselor replied, "PTSD, grief." When asked about what she meant by grief, her reply was "Loss of a loved one." This was affirmed by a second (male) counselor, who also stated, "Loss of loved ones." In another focus group with the Inland Tribe, one woman indicated death has far reaching consequences for many people due to the close-knit nature of Indigenous communities. She explained:

It effects people here a lot because everybody's so close. A lot of grandparents raised their grandkids, a lot of aunts raised their niece and nephews. I know my kids had a hard time when my grandma died, their great grandma. Even my uncle, which was their great uncle. It's hard because everybody grows up knowing each other.

The experience of loss was difficult for close-knit communities, and it was startling to hear how many participants had lost multiple family members, often due to similar diseases. The theme of cumulative losses is apparent throughout the results. For example, one participant from the Coastal Tribe recalled losing four family members within a few months: "Her brother before that died in March. [Name] died in March. [Name] died in November. [Name], my cousin, the one that's had surgery today, his son died that year too. Then my dad. There was four in our family." Another woman from the Coastal Tribe described her ability to cope with cumulative losses through her faith/spirituality. She had two husbands, a sister, and two children die of cancer. She stated, "Everybody asks me, 'How you cope with all of that that happened?' I say 'I don't have no problem with that.' I say, 'The Lord is with me all the way.'"

With so many deaths, the loss of important caregivers was also a theme. In the Inland Tribe, the early death of a parent meant children were raised by a single parent, or the role of caregiver was taken up by another family member. As one woman in a focus group participant stated, "My dad, he was raised only by his mother because his daddy died when he was two years old." In these situations, the loss of important supports is felt sharply, as a woman in a focus group recalled, "When my grandma passed away—Yeah, it really hurt because I was like, okay, out of all the people, she was taking care of us. I was like, 'Who's going to take care of me now?'" After transcending such a difficult experience, this woman was determined not to put her children in the same position, making sure there was always someone to care for them.

## **Causes of Death**

### ***Behavioral Causes: Suicide and Violent Deaths***

In keeping with the theme of cumulative losses, many women experienced the loss of multiple family members due to behavioral causes including suicide and violence. As one woman related, "My daddy died in '03, my grandmother died in '04, and my mama passed in '07." She added later, "My uncle got murdered." Another woman said, "My brothers passed away. I have three brothers that passed away." When asked how these multiple deaths happened, she explained, "Two of them were murdered. One of them passed away in a car accident."

Another woman described coping with multiple sibling losses. She explained, "My sister passed away. She drowned. It's still hard to talk about, and my brother passed away." When asked about the circumstances of her brother's death, she explained, "He committed suicide." She stated it was very traumatic, then added, "Oh my God, yes. I lost a baby the same year." She stated, "That's when I went through everything with my husband, thinking he might've cheated on me." Her husband's infidelity was confirmed, and she explained, "I found out later. It was hard. I realize now why I lost the baby. Because I wasn't far along

and when my sister passed. I took that really hard. I got really depressed.” Her experience shows how mental health consequences of one loss can lead to another, compounding her depression. She stated she was depressed several times, and went on to state:

I was always in counseling . . . I was very depressed. I missed my little brother. I didn’t want to live anymore. I missed him tremendously. I found out I was pregnant a year after. After I had him . . . I had postpartum for him. Postpartum depression.

One woman spoke about how she lost her daughter due to domestic violence, recalling, “About 20 years now. Her husband shot her.” She described the perpetrator [her husband], “Yeah, he was a big ol’ jealous guy, and everything that she did, he *made* her do.” She spoke about how this loss was so tragic, especially because it occurred after she ended the abusive relationship:

She was over there at her friend’s apartment, which she [friend] lived on the top floor above her apartment. She was over there, and [her husband] went over there to bring the set of keys. When he knocked on the door, the little girl answered the door, and the little girl told him that she was in the bedroom. When he went in the bedroom, he shot her.

She added, “She [the daughter] was trying to leave him.” The death didn’t end there. She added how her daughter’s son was killed:

It just got worse over the years. Her son and her daughter was [sic] 15 and 17 at the time of her death . . . Then [the son] bought himself a house up in town. [The son] was killed too . . . He died . . . His car had broke [sic] down on the top of the bridge . . . and this person coming behind him didn’t see him, and he side-swiped him, and he killed him instantly.

Similar to the prior situation, one tragic loss was followed by the loss of another family member, causing devastating effects on the entire family system. Another woman spoke about the loss of her unborn child, seemingly as a result of a past violent relationship, stating, “Me [sic] and my first husband had gotten into some physical fights.” After she had divorced this partner, she became pregnant with her current partner but was still was dealing with a situation with her ex, when the following events occurred:

I had to go in the house to go get my phone, and then we got into a fight. He picked me up and slammed me on the ground, and a couple of days later, I found out I had a miscarriage . . . It was sad. It really was sad because I had been with my ex-husband three years, and this was my first pregnancy ever.

This woman not only experienced violence at the hands of her ex-husband, she felt the effect of this abusive relationship again as she lost her only pregnancy due to his continual violence, even after the relationship ended. In both cases, the violent former partners caused death and damage, despite these women having left their partners.

### ***Behavioral Causes: Alcohol and Other Drugs***

Stories of cumulative losses due to alcohol and drug abuse were strikingly frequent. A woman from the Coastal Tribe in a family interview noted how she lost her daughter: "My other daughter got killed. She liked to smoke and she used to take pills." Another mother talked about the death of her son after he started taking opioids following a neck injury: "My oldest son, he passed away. . . . When they did the autopsy on him, he had his pain pills, and he had some heroine in his body, so he smothered to death. Overdose."

A woman from the Inland Tribe in a family interview described the unfortunate and multiple losses she and her family had experienced: "My, my dad and his brother and his sister—Well, two sisters, so all of them are late now—They died off of the alcohol." When asked about her own children, she replied, "I got one. I just lost one about 2 years ago—A car accident. He was 15 years old." She also lost her mom, who died at the age of 47–48 "of a stroke. Diabetes and a stroke." When asked where she got most of her support growing up, a woman from the Inland Tribe remembered, "My grandma." She added, "She passed away when I was eight." When asked how, she replied, "Liver cirrhosis" from alcohol.

A woman lost her mom due to "alcoholism—She passed when she was mid-40's." Another woman spoke about how her aunt, who was like a mother to her, died of an alcohol-related motor vehicle accident, and this alcohol abuse permeated her family and caused her to put her own career in jeopardy. In speaking of her aunt, she stated, "I guess just like everybody else, she had her demons to wrestle with as well." When her aunt died, it was particularly hard because she no longer had a mother figure. Her aunt was "somebody that believed in me. . . . And, you know, I improved myself. . . . Was going to, to school." She described her own struggles with alcohol that almost prevented her from continuing her higher education:

I almost got derailed because...when I graduated from [community college], I went to [a local university], but I was still battling with alcohol and that kind of stuff. . . . I would take a class here and go to class maybe two or three times and not go, and I did that for maybe like three or four years. . . and the, the chair lady there at that time...she said, "I don't think you're, you're cut out for this program."

Because this woman had help from a supportive boss, she appealed, got back into college, and completed her degree. Thus, despite major losses and setbacks, a caring figure enabled her to persevere and overcome her own struggles with alcohol abuse and educational attainment.

### *Behavioral Causes: Motor Vehicle Accidents*

The connection between motor vehicle accidents and alcohol abuse was frequently mentioned. When asked about a harder memory, a woman from the Inland Tribe mentioned, “My family going away. Well, they died.” She described her aunt, who was diabetic and only 30 when she died. In this death, she lost important instrumental and social support. She also lost her “grandpa and my baby cousin.” Her grandpa died in a “car wreck” when, “I guess someone was drunk and ran into him.” A woman in a family interview from the Coastal Tribe spoke about how she lost two siblings, “My oldest sister died February, 2011. Two months later my baby sister died in a car wreck.” A woman from the Coastal Tribe mentioned, “I have one sister and two brothers, and one is deceased.” She said it happened “in a car accident” at the age of 25 or 26. This accident was due to “drinking and driving.” Another woman in a focus group recalled multiple tragic losses as the result of a motor vehicle accident:

I was in the eighth or ninth grade when they all [parents] went out drinking. My step-father—My mother was driving, and there was another woman, and my uncle was sitting in the back. And, they had four, five kids that was living, and four of them was, is dead, so . . . They got in a car wreck on highway [name], hit against a big pine tree, and they all died instantly.

A woman from the Coastal Tribe described multiple losses, “My husband . . . died July the 12th. He died. Then my daughter died 4 years ago in an automobile accident. Yeah, in 5 years I lost five—six of my family.” Another woman described the death of her daughter:

A drunk driver went straight into the front of the car. She didn’t have a very big car, you know . . . So her [sic] and her boss got killed . . . I say, “Why God? Why you did that? Why you took my child away from me?”

She added how she coped, “Everybody saying, ‘How you doing?’ You know? Well, only thing I [sic] doing is praising God that He’s got something for me. You know, that He’s letting me go through all of these things, you know?” Despite this woman’s coping through prayer and talking about things, losing key supportive figures in her life had left a lasting gap in her life.

A woman in a family interview talked about multiple losses, one the result of a motor vehicle accident. She stated, "I had four—two girls and two boys—but I lost my baby girl five years ago in a [car] wreck . . . . She had trauma to the head. She had three kids that she left behind." She had another loved one die when she was 18 due to an automobile accident.

Some people spoke about death affecting the family unit. A woman in a family interview from the Coastal Tribe described the consequences of the death of her brother at age 26 who died in a motor vehicle accident:

I thank God for my younger brother because I don't know what I would have did [sic] without him . . . . My older brother, we were like partners in crime. We got in trouble together . . . . When we lost him—For me it was, like, it was hard because you lost part of yourself. My younger brother, it brought us a lot closer. A lot, lot closer. I'm glad it's like that because that's how family's supposed to be. You supposed to stay close. 'Cause you could lose that person.

A woman from a family interview in the Coastal Tribe stated the multiple tragic losses in her family, stating, she lost three siblings in a short time. She went on to describe how she lost two of her children in car accidents in the span of two years: "They both got killed in a car accident." When asked about their ages, she replied, "He was 18 and she was 25." This participant also lost her dad. When asked how it affected her, she stated, "It was hard. It was around Christmas time. That's when he died." She added, "The first time we moved over here for Christmas, I couldn't take it. I couldn't cope with it. I went outside. I just started hollering."

### *Physical Causes: Cardiovascular Disease*

One woman from the Inland Tribe explained how she lost her husband at a premature age due to heart disease. She described, "He had a heart attack. He was 55." Another Inland Tribe woman stated, "My oldest brother died at 45 of a massive heart attack. My sister died of a heart attack." Another woman similarly described multiple cardiovascular-related deaths in a short time:

We had a lot of deaths in our family. My dad's mom, dad and brother died exactly eight months apart from each other of massive heart attack also. In between that, my mom's mom and dad died, and we lost all four of our great grandmothers within that time too. . . . We had 13 funerals, we attended in two and a half or three years—first cousins, grandparents—My dad's mom and dad died of massive heart attacks. My grandmother actually died and passed away in the backseat of my car all the way to the hospital. Had a massive heart attack in the yard. His dad had a massive heart attack the night of tropical storm [name]. They said it was the pressure from the hurricane.



With so much death, one woman described the importance of maintaining close familial ties and not holding grudges. In contrast to the in-law's family, who would not talk for years after a grudge, this woman stated:

We're still close. But we've lost—I've lost a brother. I've lost three brothers. One at 45, one at 44 and one at 33. And [name] died three years ago of brain cancer, and it didn't hurt. Four brothers I've lost. Four brothers I lost.

When asked about the causes of death, she replied, "Heart attacks. All of them but [the brother who died of brain cancer]. [The remaining brothers] died of massive heart attacks."

A woman from the Coastal Tribe in a family interview said she lost her son and her grandma in a short time, all before she turned 20. She described the impact this made on her life. When asked about how many children she had, she stated, "Four, but three are living." She added, "My little boy that passed away. He died of [heart disease]. He passed away in his sleep. . . . He was four years old." She explained, "He is still my strength even though I did lose him. . . . I mean, I'd give anything to see my little boy." When asked, "How often do you think about that?" She replied:

Every day. Losing him made me who I was. Having him changed me. It made me grow up and finish school, but losing him made me find my strength. If that makes sense. I try and take the negative and make it positive. I've had lots of people ask me, how do I do it? How do I still survive after losing my kid and this and that? But I have kids that need me. I have a boyfriend that loves me and takes care of my kids like they're his own, and I have family that supports me. My mom, my dad, my brothers, my sisters, every time something went down they were always there.

This participant did seek mental health services, stating, "I've seen a psychiatrist." She added:

It's good to have somebody to talk to. I can actually talk right now and not cry anymore. It's good to just have somebody to talk to about stuff. . . . A lot of people told me that I can inspire people. . . . Yeah, people have said I have a Lifetime [movie network] story.

### *Physical Causes: Diabetes and Associated Problems*

Multiple participants described losing family members to diabetes-related complications. One woman from the Inland Tribe stated, "My mom passed away because of diabetes." When asked how her dad had passed away, a woman recalled, "Complications from diabetes. And so did my sisters [at ages 39

and 52].” This participant described how she lost two of her four children. When asked how they had died in their late 30s, she replied, “One was because of diabetes and the other one, auto accident.” Another woman recalled how her siblings died: “I have one brother deceased . . . and another one still alive. And I have four sisters. Two passed away.” When asked how they died, she replied, “It was diabetes [and] high blood pressure.” Another participant lost close family members: “I was, like, in eight grade when my aunt passed away. Then, like, three months later, my grandma passed away.” This participant said her grandma died because “she was a diabetic.” A woman lost two siblings due to diabetes and alcohol abuse: “They passed away a couple years back. She was a heavy drinker and she was a diabetic, too.”

### *Disruption in Higher Education*

Members of Inland Tribe spoke about how death disrupted their educational attainment. A woman remembered, “I was, like, in eighth grade when my aunt passed away. Then, like, three months later my grandma passed away.” Later, her grandpa died. She remembered, “When he passed away, it was like I lost everything.” After this, she did not graduate from high school:

I ended up dropping out. He passed away in December. Before I graduated. And I don’t know. I didn’t have no more motivation and nothing to just keep my spirits up, and it just went downhill from there, and I was gonna fail anyways. I just dropped out anyway.

A woman in a family interview mentioned how the loss of her mom and sister, with whom she was very close at a young age, according to her husband, resulted in direct loss and potential career consequences. Taking care of her ailing mother and sister disrupted her ability to participate in higher education. She explained how she and her husband “were taking like classes together, and everything, and, then, my mom got sick. So, then, we kind of had to stop that [college].” She added: “I had a sister. She passed away from cancer.” She described how focusing on school was hard with multiple deaths and family illnesses:

It was hard to focus, especially, when I was in [college]. After I graduated high school, my sister was sick then. She [mom] had cancer also. So I was having to go back and forth from [city about an hour away]. . . . They was [sic] having to call me out of class and say, “You know, your sister took a turn for the worse.” I would have to drive straight from [college to the hospital, which was an additional hour and a half to two hour drive].

Her sister died of cancer at the age of 39.

## Results: Quantitative

As indicated by the qualitative results, depressive symptoms often result from the loss of a loved one. Our qualitative analysis pointed to additional culturally relevant variables that influenced the onset of depressive symptoms, including historical losses (which includes loss of lives), stress from the recent loss of a loved one, PTSD through exposure to violence, and seeking support through faith and family (spiritual well-being and family resilience). We examined these factors, along with economic marginalization (operationalized as income level), to see how these factors related to depressive symptoms.

Just over 25% of participants reported moderate or clinically significant depressive symptoms (Brody et al., 2018). The average score for PTSD was 1.65 ( $SD = 1.67$ , range 0–4), indicating on average, participants reported between one and two positive symptoms for PTSD. Upon closer examination, 39% ( $n = 50$ ) of the sample reported three or four symptoms of PTSD, which is considered a positive screen for PTSD. The participants reported a moderate level of historical losses ( $M = 41.45$ ,  $SD = 15.74$ , range = 15–75): on average, they thought about historical losses monthly or at special times. The majority of participants reported an annual household income level between \$25,001 and \$50,000. Participants reported high family resilience ( $M = 18.03$ ,  $SD = 3.22$ , range = 0–20) and relatively high spiritual well-being ( $M = 3.91$ ,  $SD = .70$ , range = 2–5). On average, people reported feeling somewhat stressed or worried about the loss of a loved one ( $M = 2.39$ ,  $SD = 1.17$ , range = 1–4). There was a significant difference in the scores for PTSD among men ( $M = 1.35$ ,  $SD = 1.50$ ) and women ( $M = 1.72$ ,  $SD = 1.71$ );  $t(125) = .0105$ ,  $p = .05$ , indicating that women, on average, reported higher symptoms.

At the bivariate level, each independent variable was significantly associated ( $p < .01$ ) with the dependent variable of depressive symptoms, in the expected direction, which supports our hypotheses (recent loss of a loved one,  $r = -.29$   $p < .001$ ; PTSD,  $r = -.23$   $p < .009$ ; Spiritual Well-being,  $r = -.30$   $p < .001$ ; Historical Loss,  $r = .42$   $p < .000$ ; Family Resilience,  $r = -.49$   $p < .000$ ; Income,  $r = -.46$   $p < .000$ ). The multivariate linear regression model produced an adjusted  $R^2 = .517$ ,  $F(6, 112) = 22.05$ ,  $p = .000$  (see Table 2). The five variables proved statistically significant in predicting depressive symptoms and accounted for 51.7% of variability in depressive symptoms. Higher levels of spiritual well-being were associated with lower reports of depressive symptoms ( $\beta = -1.75$ ,  $p = .008$ ). A negative relationship was found between family resilience and depressive symptoms ( $\beta = -.488$ ,  $p = .001$ ), and lower income was associated with greater depressive symptoms ( $\beta = -.955$ ,  $p = .000$ ). Higher scores on PTSD symptoms were associated with higher levels of depressive symptoms ( $\beta = .904$ ,  $p = .002$ ). Feeling more stressed about having recently lost a loved one also led to higher levels of depressive symptoms ( $\beta = -1.091$ ,  $p = .004$ ). Finally, having more frequent symptoms of historical loss was

**Table 2.** Predictors on Depressive symptoms.

Variable	B (SE)	Beta	P
Spiritual well-being	−1.75 (.65)	−.18	.008
Family resilience	−.488 (.15)	−.24	.001
PTSD	.90 (.28)	.23	.002
Recent loss of a loved one <sup>a</sup>	−1.09 (.38)	−.19	.004
Lower income	−.96 (.23)	−.28	.000
Historical loss	.11 (.03)	.26	.000

Note. <sup>a</sup>Lower scores indicted higher levels of stress from the loss of a loved one. Parallel to the FHORT, spiritual well-being is a measure of transcendence, family resilience is a measure of resilience, PTSD, recent loss of a loved one, and income are measures of proximal or contemporary stressors, and historical loss is a measure of historical oppression.

associated with concomitant higher levels of depressive symptoms ( $\beta = -.110$ ,  $p = .000$ ).

## Discussion

Our qualitative results demonstrate the lived experiences and support extant health disparities research indicating deaths due to suicide and violence, substance abuse, cardiovascular disease, and diabetes are primary drivers of mortality among Indigenous peoples (IHS, 2019). These forms of death are contemporary forms of historical oppression, exacerbating the cumulative oppression throughout history. Several women were killed as result of IPV, rates of which are disproportionately high for Indigenous peoples. Both tribes reported losses from AOD, motor vehicle accidents, and cardiovascular disease. These causes were not mutually exclusive, as AOD is a risk factor for motor vehicle accidents, diabetes, cardiovascular disease, violence and suicide (Breiding et al., 2014; Thayer et al., 2017). As qualitative results show, AOD abuse and violence in families are co-occurring risk factors (Breiding et al., 2014; U.S. Department of Health and Human Services, 2013) that drive health disparities and mortality (Klostermann et al., 2010; Moran & Bussey, 2007).

Qualitative results support data suggesting deaths in Indigenous communities occur more frequently and at earlier ages, and have greater impacts on the family system due to the close-knit and family-oriented nature of these tribes. Death of loved ones in Indigenous communities is problematic given higher mortality rates and tight-knit nature of communities, often characterized by extended family units, wherein community members experienced the effects of these losses more acutely (Burnette & Cannon, 2014). The presence of cumulative losses of multiple family members—often in a short time span and at premature ages—was evident across both tribes. Exemplifying the far-reaching impacts of these losses in close-knit communities and family-oriented cultures,

female participants described losing a loved one as having “lost everything,” including a part of themselves. Several participants gave up higher education pursuits due to strains associated with losing loved ones, although others found meaning through the loss and used it as motivation to continue their education. Indigenous peoples tend to have a lower educational attainment, and this could be due to educational discrimination and other barriers, including family strain from losing loved ones at young ages, as this data suggests (Gone & Trimble, 2012). This data also shows the loss of a loved one can mean the loss of an important caregiver and social support system. Many women coped through faith and spirituality, and some experienced a lasting gap in their lives due to the loss.

Experiencing the loss of a loved one, especially when death was due to violence or suicide, had far-reaching consequences, including feelings of depression. Approximately 25% of the sample reported clinically levels of depressive symptoms, which is much higher than the rate of 8.1% of all Americans age 20 and older between 2013 and 2016 using the same scale (Brody et al., 2018). Thus, quantitative analyses examined the relationship between recent loss of a loved one and several other culturally indicated risk and protective factors across two tribes.

The FHORT offers further explanation of these findings, contributing to greater understanding of the disparities experienced by Indigenous peoples, and the risk and protective factors that might predict well-being. First, historical loss, which includes loss of lives and losses from alcoholism, was positively associated with concomitant depressive symptoms. As expected, stress from the recent loss of a loved one was also associated with higher depressive symptoms. These findings further substantiate the qualitative finding that people who experience the loss of a loved one (a component of historical oppression) are at risk for depressive symptoms. Thus, the experience of historical and contemporary losses is related to depression, a threat to well-being. Post-traumatic stress disorder was found to be present among 39% of the sample (much higher than the national average), and exposure to the proximal stressors of high losses and trauma was related to PTSD. Results indicate PTSD is a possible result of historical oppression, which includes the loss of lives. Finally, economic marginalization, which is considered a form of contemporary oppression and was measured by level of income, was associated with higher depressive symptoms. The quantitative results also reveal the resilience and transcendence of the Indigenous people included in our sample, as having a high level of family support and a high level of spiritual well-being reduced the likelihood of experiencing depressive symptoms. These might be considered culturally relevant protective factors that help to buffer against trauma.

### *Strengths, Limitations, and Future Research*

This is the first study to examine the disparities in loss of loved ones Indigenous people experience, and the first mixed-methods study to assess these disparities

for any ethnic minority group (Umberson et al., 2017). This study used mixed methodology as part of an in-depth culturally grounded and community-based research project, exploring Indigenous women's experiences of the loss of a loved one, and found several significant variables associated with depressive symptoms for men and women across two tribes, despite a relatively small sample size. The qualitative and quantitative findings bolster each other and support the FHORT.

As with all studies, there are limitations to this work that merit discussion. All variables were assessed via self-report measures. Some measures, such as that for depressive symptoms was not developed with Indigenous peoples in mind; though it has been used with Indigenous peoples before and participants reported symptoms, having tools developed specifically for Indigenous peoples may be illustrative. Though variables were positively and negatively associated with depressive outcomes in the direction hypothesized, further research, including moderation and mediation analysis, is necessary to confirm their risk and/or protective functions and whether they were protective or promotive in nature. More analysis examining the cumulative effect of risk and protective factors is also warranted. Although we have no reason to believe study participants were enhancing or under-reporting their experiences, it is important to acknowledge all information was gathered through a single source. This research represents an important step forward for supporting the FHORT and reporting results for two tribes in the Southeast United States; however, the findings are not generalizable.

Some variables, such as gender, age, and educational status were not found to be significant. Given the diversity of Indigenous peoples, these findings require further investigation across distinct contexts and with larger samples for a fuller understanding. Addressing gaps in the literature examining gender-specific experiences of loss, this predominantly women sample speaks to women's health. More work is needed to replicate our findings in other populations and to further test the utility of the FHORT for explaining and predicting mental health outcomes, including but not limited to depressive symptoms. Researchers must continue to extend their examination of physical and social health disparities.

## Conclusions

The national mortality disparity statistics tell an important story (IHS, 2019), indicating the United States has fallen short of meeting the trust responsibility of providing for the health and well-being of Indigenous peoples. Although these numbers are striking, even more alarming are the actual, lived experiences of Indigenous women routinely losing multiple family members to what are often preventable causes. Parallel to this sample, women tend to be exposed to more trauma and violence (Burnette & Renner, 2017), creating an intersectionality of cumulative oppression that causes extensive adverse consequences for women.

Thus, historical oppression imposed by colonization continues to perpetuate inequities through premature loss of lives, which then perpetuates more disparities through grief, loss, and cumulative trauma. The primary loss of family members caused issues, and secondary losses related to depression, higher education, and caregivers exacerbated the contemporary and historic losses. Indeed, the culturally relevant factors of historical loss, loss of a loved one, lower income, and PTSD were all associated with higher depressive symptoms in this sample, whereas family resilience and spiritual well-being are promising pathways to resilience and transcendence. To ameliorate disparities, a multi-pronged approach is needed to redress historical oppression and losses formally and explicitly. Community development, resources, and infrastructures are needed to offset high-risk community environments and exposure to traumas. Culturally relevant programs that promote the strengths, resilience, and spiritual well-being of the whole family, while recovering from grief and loss are needed as pathways toward healing and health equity.

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### **Note**

1. A qualitative data analysis software program.



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## Supplemental Material

Supplemental material for this article is available online.

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### Author Biographies

**Catherine E. McKinley** is an associate professor at Tulane University School of Social work who conducts health disparities research with Indigenous Peoples (e.g. Native American, American Indian, Alaska Native, and/or Native Hawaiian in the U.S.), acknowledging their many of the distinct strengths as well as the high disparities related to violence, mental, and physical health. She has worked in collaboration with tribes to spearhead the ecological “Framework of Historical Oppression, Resilience, and Transcendence”, which identifies and organizes culturally relevant risk and protective factors across ecological (i.e., societal, community/cultural, family, and individual) levels to understand disparities. Since coming to Tulane in 2013, she has published 60 peer-reviewed journal articles, and her work is supported by the National Institutes of Health, internal grants, as well as external foundational grants. Her federally-funded clinical trials research addresses violence, substance abuse and health inequities while promoting resilience and wellness using culturally relevant intervention approaches.

**Jennifer Miller Scarnato** is a PhD candidate in the Social Work track of the interdisciplinary City, Culture, and Community program at Tulane University. Her work centers on the lived experiences and well-being of Latino and Indigenous peoples with a focus on participatory digital approaches to collaboration. During her doctoral studies, She has published ten peer-reviewed articles. Her dissertation examines the digital *testimonios* of Latino youth in New Orleans. She is an alumna of the inaugural cohort of the Mellon

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**Sara Sanders** serves as the associate dean for Strategic Initiatives and the director of Diversity, Equity, and Inclusion for the College of Liberal Arts and Sciences (CLAS). In this role, She provides leadership to CLAS and its departments around strategic planning and implementation of key initiatives; serves as a liaison between CLAS and other University of Iowa entities around joint initiatives to benefit students, faculty, staff, and the larger community; partners with departments to develop and implement DEI initiatives; and coordinates DEI activities at the collegiate level. She is a professor in the School of Social Work. She earned her PhD in social work from the University of Maryland in 2002 and joined the University of Iowa faculty in January 2003. She was awarded the Distinguished Professor Award in the School of Social Work four times and was awarded the President and Provost Award for Teaching Excellence in 2015. She was also named a Dean's Scholar in 2011, named a fellow of the Gerontological Society of America in 2013, and named an Emerging Leader in Professional Practice by the Social Work Hospice and Palliative Care Network in 2013. She served as the Undergraduate Program director from 2011-2015 and as the director of the School of Social Work from 2015-2019. She was also an administrative fellow in the College of Liberal Arts and Sciences from 2018-2019. She has published multiple articles in the area of gerontology and death and dying. She presents nationally on topics associated with grief and loss; professional boundaries and ethics; and caregiving for older adults. Her current work involves end-of-life care in prisons. She is currently co-authoring a book on grief and loss that will be published in 2021. She is a co-author of an edited book titled *Gerontological Social Work and the Grand Challenges: Focusing on Policy and Practice* (2019).