Impact of spirituality on resilience and coping during the COVID-19 crisis: A mixed-method approach investigating the impact on women

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Abstract:
Spirituality has been known to have a positive correlation to resilience during disasters. This study investigated the impact of spirituality on resilience during our current pandemic. A mixed-method approach was used to analyze correlations between spirituality and resilience of women. Correlations were noted to be statistically significant with Pearson's correlation of –.450 at 0.001, CD-RISC (M = 77.94), and DSES (M = 39.74). Thematic analysis of six open-ended questions provide depth to quantitative findings supporting the positive influence of spirituality on resilience, hope, optimism, peace, and comfort suggesting that spirituality may be an important dimension as this pandemic continues to unfold across the globe.

Globally, the majority of family caregiving is carried out by women (International Alliance of Carer Organizations, 2020). Two out of every three women in the US are caregivers (CDC, 2020), many of whom are known to be the glue to keep families together, children grounded, and friends connected. They are also matriarchs in villages, neighborhoods, and social circles where others depend on them for strength, guidance, peace, and connection. Women are known to be givers, protectors, nurturers, fixers among many other things; all while juggling careers, families, loved ones, pets, and households during our present reality of quarantine and social isolation. They have also been noted to be at greater risk for poor physical and mental health including depression and anxiety during the COVID-19 pandemic, perhaps due to the high demand in fulfilling traditional gender roles (CDC, 2020). Global increases in suicides have been forecasted due to economic hardship and joblessness in Canada, the US, Pakistan, India, France, Germany and Italy (McIntryre and Lee, 2020; Mamun and Ullah, 2020; Thakur and Jain, 2020). In addition, researchers conducting a systematic review of the literature exemplified the prevalence of mental health symptoms such as anxiety, depression and suicidal ideation during the Covid-19 pandemic (Xiong et al. 2020). Globally, depression is ranked as the leading cause of disability with anxiety as a major contributor to over 800,000 suicides per year (WHO, 2017). Generally, women have been noted to be a higher risk than men to suffer from both of these disabling mental health disorders (Jausoro & Marino, 2015) and may now be feeling alone, isolated, disconnected from additional social connections, feeling void of the role that gives them purpose and a sense of belonging and, a general sense of being overwhelmed with managing households and careers with limited time for self-care. In addition, traumatic effects of the COVID-19 pandemic have shown higher risk factors in females developing PTSD than their

male counterparts (Xiong et al, 2020), which many times manifest as depressive and anxiety symptoms.

Resilience is a protective factor in mental illness (Davidson, 2020). Individuals with positive coping skills have been found to have fewer symptoms of anxiety and stress during the Covid-19 pandemic (Wang et al., 2020). Researchers have shown the connection between spirituality and resilience and their impact on healing, emotional, and mental wellbeing, as well as coping and resilience (Walsh,2008; Ozawa, 2017). However, we were unable to identify any studies conducted that focus on the intersection of spirituality or religion, traumatic life events, and physical distancing during a pandemic. This gap in the literature adds new dimensions to how we understand coping and resilience. In this paper, we describe ways that women have stayed connected with others and with their spiritual selves, acquiring coping skills ultimately aiding in their resilience, during the COVID-19 pandemic.

Spirituality and Resilience

Spirituality has been defined as broader than religious faith and is a dynamic connectedness to oneself, others, nature, or God in meaning-making constructs (Jones et al., 2016). Research**e**rs have recognized that spiritually-grounded perspectives have been associated with better tolerance to psychological and physical stress, successful aging, and a better ability to cope with serious diseases and isolation (Le, Piedmont, & Wilkins, 2019; Sharma et al., 2017). Thus, religion and spirituality are important for everyday aspects of life. Spirituality can benefit both psychological and physical well-being (Rainbow et al., 2016). Researchers who conducted a meta-analysis of 32,000 patients suggest that those with greater religious/spirituality had better physical health outcomes (Jim et al., 2015). Spirituality has also been reported to positively influence one's quality of life, life satisfaction, and adjustment (Jones et al., 2016). A systematic

review of the literature conducted by researchers found that among fifteen articles, including eight international articles, found an association of religiosity and spirituality (R/S) in quality of life (QOL) for patients with cardiovascular disease (CVD) (Abu et al., 2018). Researchers aimed to understand strategies that promote spiritual well-being and QOL. A majority of the research teams, ten in total, revealed positive associations between R/S and QOL.

Resilience has been defined as the ability of an individual to recondition and rebuild a steady psychological and physical state when challenged with major adverse life events (Seiler & Jenewein, 2019). Being diagnosed with a terminal disease, the death of a loved one, the loss of income, abuse, and neglect, as well as being a witness to violence, are a few examples (Lydsdottir et al., 2019; Dorji, Dunne, Seib & Deb, 2017; Bryant, Oo & Damian, 2020). Researchers in Milan found that applying a family resilience framework to the cancer trajectory provides a map of resources to help overcome the distresses of illness (Faccio et al., 2018).These traumatic life events are on the rise during the COVID-19 pandemic and can create triggering memories during future circumstances when emotions, thoughts, or sensations remind them of past traumas causing the body to go into a fight, flight or, freeze state of mind. This retriggering can lead to PTSD manifesting as anxiety, panic, dissociation also known as, feeling as if one is out of the body and depression.

The brain's plasticity allows for healing from traumatic or adverse life events when protective factors are in place. The limbic system or what scientists call, the emotional brain, stores negative memories, images, and, thoughts from such adverse events. These symptoms may ultimately lead to long-term mental health psychopathology if left untreated (Hambrick, Brawner & Perry, 2019). However, one such protective factor that has been noted to allow brain structures to heal, is resilience. (Brunetti et al., 2017; Shapiro and Brown, 2019).

Scholars have also noted positive correlations between spirituality and resilience for individuals who suffer from physical illness, death of a loved one, man-made and natural disasters in addition to other disease outbreaks (Wild. El-Salahi & Esposti 2020; Raghavan & Sandanapitchai, 2020; Wermelinger Ávila, Granero Lucchetti & Lucchetti, 2017; Chua et al., 2019). However, researchers have not looked at the roles of spirituality and resilience during a pandemic and while social connections are either restricted or nonexistent.

COVID-19 and Social Isolation

The current societal impact of disease and isolation that Covid-19 has had on many may have a profound effect on health outcomes, including long-term mental health implications (Usher, Bhullar, & Jackson, 2020). There is evidence that social isolation can increase coronary heart disease, and depression, as well as anxiety (Malcom, Frost, & Cowie, 2019). Although being quarantined or physically distanced has helped the reduction of the spread of disease during this pandemic, researchers indicate there can be adverse, long-term consequences (Brooks, et al., 2020 & Xiong et al., 2020), including anticipatory anxiety, feelings of loss of control and, an overall sense of hopelessness. One may wonder when this pandemic will end and what will be the outcomes. As we see new cases lingering and prolonging both regional closures and travel bans, populations across the world may be at risk of mental health symptomatology and overall interruption of resilience levels.

Methods

We recruited participants by way of convenience and snowball sampling via distribution to listservs, email blasts, social media posts, and word of mouth to local, national, and international professional networks. Recruitment materials were in the English language. Due to

COVID-19 restrictions, we contacted participants virtually - no face to face recruitment took place. Participants had to be over the age of 18 with no other demographic restrictions as to provide access to an international pool of individuals. The survey was distributed electronically from mid-April 2020 to late July 2020 via e-flyers with a QR code that linked participants to a Qualtrics survey. The study was approved by the Institutional Review Board (IRB) at the University of North Carolina Wilmington.

We collected quantitative and qualitative data to investigate spirituality and resilience as it relates to coping during the COVID-19 pandemic. Participants completed demographic information, the Daily Spirituality Experience Scale (DSES), a 16-item scale, the Connor Davidson Resilience Scale (CD-RISC) ©, a 25-item scale, and six open-ended qualitative questions. Demographic information included age, gender, ethnicity, and religious affiliation. The DSES measures how spiritual experiences are a part of everyday life. It is meant to highlight experiences of relationship and connection with the divine or transcendent and capture moment by moment beliefs and understandings from a spiritual or religious perspective (Underwood, 2011). The first 15 items of the DSES are measured on a 6-point Likert-type scale: many times a day, every day, most days, some days, once in a while, and never or almost never. Item 16 is measured on a 4-point scale: Not close at all, somewhat close, very close, as close as possible (Underwood & Teresi, 2002). The lower the DSES score the more spirituality is experienced (Soosova & Mauer, 2020).The DSES has a Cronbach alpha of 0.94 (Graciete et al., 2016). Items on the DSES include questions that relate to feeling the presence of God, feeling connected to all of life, feelings of joy, strength, and comfort stemming from a sense of spirituality. The higher the score the less the participant feels these things for never is the 5 point of the Likert scale and many times a day is the first. The CD-RISC © measures resilience, or the ability to bounce back

in the face of adversity, and is grounded in 6 factors: 1) Personal competency, 2) high standards, and tenacity, 3) trust or tolerance of negative affect and stress, 4) acceptance of change and secure relationships, 5) control and 6) spirituality (Xi, Peng, Zuo and Li, 2016). The CD-RISC © uses a 5-point Liker scale: Not true at all, rarely true, sometimes true, often true, and true nearly all the time (Connor-Davidson, 2003). The CD-RISC © has a Cronbach alpha score that ranges between 0.88-0.89 (Xi, Peng, Zuo and LI, 2016 & Mealer, Schmiege, and Meek, 2016). Participants were also asked to answer six open-ended questions related to spirituality during the Covid-19 pandemic and their historical identification with spirituality. The six open-ended questions were as follows: 1) How would you describe your spiritual self? 2) How has your spiritual self or spiritual identity helped you cope during the COVID-19 crisis? 3) How do you believe past events have impacted your resilience during the COVID-19 crisis? 4) What has given you hope in the midst of the crisis? 5) If you can think of one word or one phrase that reflects the impact that your spirituality has had on your resilience as you cope during this COVID-19 crisis, what would it be? 6) How have you stayed connected with your spirituality during this COVID-19 crisis? (I.e.: daily devotions, zoom small group meeting, online church services, prayer, etc.).

We analyzed the qualitative data using inductive content analysis. The first and second authors analyzed the data separately and created their own codebook. They initially analyzed the data using open coding, each reading through the data thoroughly looking for general themes and organized data according to those themes. We then categorized themes were into major and sub-theme categories as the two codebooks were created. The authors met via video conference to discuss the thematic analysis and merged the two codebooks into one after our discussion and confirming results. A third author reviewed the originals and revised final codebooks for

clarification of themes created by the two authors and agreed upon themes based on the data. We analyzed the quantitative data using SPSS version 25. Our team analyzed descriptive statistics, correlations, and mean scoring of CD-RISC © and DSES among the female participants who completed the survey and analysis of the two scales. Finally, we calculated Pearson's Correlations and DSES and CD-RISC © means for gender, ethnicity, age, and religious affiliation.

Results

Our total sample included 127 respondents, 88 of whom were female and used for this analysis. We did not gather the respondent's country of residence, however from data it appears that the study participants were from the United States, a limitation in our study. Of the 88 women who completed the survey, 52 completed the CD-RISC ©, and 51 completed the DSES measurement tools. A total of 57 female participants completed the 6 open-ended qualitative questions (labeled respectively in Table 2 and 3).Therefore, the final sample for the quantitative findings were 50 and 57 for the qualitative findings. We analyzed the findings based on these numbers. Faith designations were as follows: 86.4% Christian, 3.4 % Atheist, 2.2 % Agnostic, and 8% as Spiritual but not religious. Race percentages were as follows: 79 % Caucasian, 16.1% African American, 1.1 %American Indian, 2.3% Asian, and 1.1% Pacific Islander. Ages varied with 31.8 % of women between age 22-44, 59.1% between age 45-64, and 9.1 % 65 and older. Marital status included 12.5% single and never married, 71.6% married or living with a domestic partner, 1.1 % widowed, 12.5% divorced and 2.3% separated (Table 1). Fifty female participants completed the quantitative section of the survey about their resilience using the CD-RISC © (M=77.94, SD =10.89) and their spirituality using the DSES (M= 39.74, SD = 12.06) (see table 2). We used Pearson's r data analysis to examine the relationship between spirituality and

resilience among women. It is important to note that the DSES scale is reverse-scored, the lower the number on the scale the higher the spirituality. This will result in a negative correlation when compared to other scales. Spirituality showed a negative moderate correlation to resilience and was statistically significant, $r = -.450$, $p<.001$, indicating that participants who reported having higher levels of spirituality (with lower DSES scores) also reported higher levels of resilience. (Table 3).

Overall, as it relates to race and ethnicity, African American women had higher scores in spirituality, DSES (M=30.70, SD=10.48) than Caucasian women (M=42.40, SD=11.67) and slightly lower CD-RISC © scores (M=76.7, SD=11.17) than Caucasian women (M=77.55, SD=11.23). Two women who identified as Asian showed the highest CD-RISC © (M=83, SD=4.24) and higher spirituality scores, DSES (M=37.5, SD= 9.19). There was only one woman who identified as American Indian with CD-RISC © (M= 90), DSES (M=48) (Table 5). Among age groups, women 65 and older had the highest spirituality scores (M=32.16, SD=12.16) and highest CD-RISC © scores (M=78.42, SD=12.16) (see table 4). Perhaps this is evidence of lived experiences. According to categories of marital status, single women and those who never married had higher CD-RISC © scores (M=81.5, SD=13.77) and higher spirituality scores, DSES (M=32.5, SD=10.24) than all other marital categories (Table 6). Married women or those in a domestic partnership scored lower on CD-RISC © (M=78.05, SD= 11.30) and DSES (M=40.23, SD=12.34). Widowed women had similar DSES scores (M=43) to divorced women (M=43.28, SD=10.71) but had lower CD-RISC © scores (M=71) than divorced women (M=77.71, SD=8.45). One additional category worth noting are CD-RISC © and DSES scores among faith categories. Christian women are noted to have had the highest spirituality scores, DSES (M=39.04, SD=77.81) with CD-RISC © (M=77.81, SD=10.97). Women who reported not

to be religious, but thought of themselves as spiritual, reported lower mean scores on both the CD-RISC and the DSES than Christian women; CD-RISC © (M=76.33, SD= 11.54) and DSES (M= 40.33, SD=6.65). Finally, one outlier in the study was noted to identify as an atheist/agnostic with low spirituality scores DSES (M=71) and higher CD-RISC © scores (M=89) (see table 7).

Thematic Findings

With the closing of religious institutions and potential disruptions to their normal spiritual practices, we were particularly interested in exploring participants' views of how they were coping during this unique time of social distancing and the role that spirituality could play in helping them to handle the unknowns and social isolation created by this pandemic. We asked participants to reflect on and share their thoughts on a series of short-answer questions related to spirituality and resilience. Despite disruptions to their normal spiritual practices, responses to these qualitative questions indicated that many participants were able to adapt, and spirituality was integral for their resiliency during the pandemic. Many shared their ability to utilize technology and digital platforms to stay connected with their congregations, as well as their "spiritual village of support". These women spoke of their ability to take part in zoom small groups, conduct digital group bible studies, have one to one time with friends who were on a spiritual journey with them, and having more downtime allowing them time to connect more with their higher power.

Five major themes and one minor theme were identified from what they shared. The major, interconnected themes were discussed within and across questions and largely focused on ways that participants were coping with the crisis: resilience, optimism, and hope; and peace and comfort. These subthemes were discussed by a few participants and represented the counter-

narrative to the larger themes: fear, despair, and doubt. The surveys were anonymous, and pseudonyms are used for each participant in discussion and quotes representing themes below.

Resilience

The emergence of resilience as a major theme highlights the complex ways that participants have built resiliency and includes their discussions of how their spirituality and past events shape their resiliency. For many participants, their spirituality has been a key aspect of fostering resilience and growth through challenging circumstances. Participants shared how past events strengthened their trust in God and their faith, with Sarah, a married middle-aged (45-64-year-old) white woman who identifies as a Christian, explained that she had "learned through many previous trials, death of a child, spouse and loss of health that most important relationship is with Christ." Similarly, Rachel, a younger (25-44 year old) married white woman who identifies as a Christian explained:

> They [past experiences] absolutely have taught me to trust in God, who acts and who provides, even if in unexpected ways. I look back at things that have turned out for the best, even if not the way I would have chosen, and that are far too coincidental to be mere coincidence. That foundation of trust helps me to be less afraid and to take risks I might not have taken otherwise, to be more open and compassionate with others who are afraid, but also less likely to put up with bullshit and speak truth even if it's not comfortable or what people want to hear. It's helped me be less a people-pleaser and more true to my authentic self, who I believe God created me to be.

Interestingly, two other participants also discussed how although nothing has prepared them for this, their trust in God has been key to helping them during this crisis. For example, Marie, an

older (65+ year old) married, white woman who identifies as a Christian, explained that they "… have never experienced anything like this before so I don't believe past events have helped or hurt me in this crisis. My faith that God is in control of my life has helped more than anything."

Participants talked about how their faith helped them through past challenges. Jessica, a younger (25-44-year-old) married, white woman who identifies as a Christian, explained, "I've leaned on my faith in past challenges. Though things may not have their 'happy ending", I was able to get through." Similarly, Jasmin, a younger (25-44) African American/Black, married woman who identifies as a Christian noted: "When, you experience trials and tribulations, and see God work in your life, it helps prepare you for the next trials." finally, Allison, a middle aged (45-64) white woman who is divorced and describes herself as spiritual but not religious explained that her spirituality helps to reminder her that she "can survive anything".

For many participants, resiliency was tied to their ability to make it through past events and develop tools and skills to help them grow as they faced new challenges. Several participants discussed strengths they developed from previous challenges including adaptability, emotional coping skills, wisdom, ability to keep things in perspective, and self-confidence. For example, Janelle a middle aged (45-64) white, Christian woman who is divorced explained "I've always been adaptable, so that has helped a ton. I moved a lot as a child and had to figure out new environments quickly. I've also used creativity in the past to cope with either stress or boredom - so cooking, sewing, etc. are helping now." Similarly, Ashley, a middle aged (45-64) white woman who is married and identifies as a Christian stated: "I've become a caregiver for elderly parents in the last 5 years or so; that's given me some confidence that I am capable and mentally strong enough to make good choices on behalf of others." Two participants discussed their

experiences with therapy after traumatic events and how that had given them tools and better equipped them to deal with the emotional strain during the current crisis, with Rebecca, a white, middle aged (45-64) woman who is married and identifies as a Christian noting: “Past trauma processed through therapy probably has made me more resilient and given me more tools.”

Hope and Optimism

Connected with ideas in the first theme, we identified the theme “Hope and Optimism” from participants’ discussions of having hope and finding positives, even in a time of crisis. For participants, three things were sources of hope and optimism: God/Spirituality, hope in others, and the natural world. Participants also spoke about what they are thankful for and how that helps to buoy their spirits.

Many women discussed their faith and trust in God's plan as the key to helping them remain hopeful. They also discussed how they hoped that through God, humans and the world would recover and grow from this experience, with Rachel, a married middle-aged (45-64-year-old) white woman who identifies as a Christian explaining:

> Scripture tells us that the first thing God does is create. I believe that human ingenuity and creativity is a reflection of God in us humans, who have been made in God's image. God called all of creation good and set us the example of ultimate, self-giving love in her incarnation in the person of Jesus Christ. As I look back through history, human ingenuity and creativity has helped advance the whole state of humanity (even though it can also sometimes harm it). When put to use for the good of the whole, the resilience of humans to refuse to accept the status quo and challenge us to be better than we default to, the ability to practice love instead of dehumanization and degradation, are all reflections

> of the divine at work even today. I fully believe that love, channeled and given voice, has power to transform the world around us. And I believe that humans, when they fully grasp the ramifications of choices and can empathize, can and do amazing things to transform our society. I trust that will happen now as it has in the past.

Related to their trust in God's plan, participants talked about how their religion/spirituality played an important role in helping them to reframe the crisis and look for positives. For example, Kiara, a younger (25-44) African American/Black, married woman who identifies as a Christian explained "I believe God allows things to take place for seasons. This season requires us to slow down, isolate, and take time to be involved in things we have previously overlooked or not had time to engage in while also avoiding and preventing to spread of COVID-19." Cathy, a middle aged (45-64) white, Christian woman who is divorced, noted:

> I've had more time to walk in my neighborhood and see the season change, which has helped me sense God's presence in ways I don't usually have time for. I've had to cut back on the busyness of errand-running and be more quiet. As a clergy person, I've found new ways to connect to my congregation and use a shared experience to understand our shared faith in new ways.

Participants shared another key factor that helped to give them hope: the kindness and ingenuity of others. Several participants discussed how seeing examples of people supporting each other gave them hope. Others focused on examples of people helping each other and following social distancing rules. Similarly, Mary, an older (65+) white woman who is divorced and identifies as a Christian explained, "Looking for the helpers. So many people going above and beyond to care for the ill, find treatments, help neighbors, keep essentials moving." A few participants also discussed the kindness of others on a community or global scale, with Laura, an older (65+)

white, married Christian noting that "The kindness of others in my community and across the world has given me hope."

In addition to discussing the kindness of others, the women highlighted the creativity and intelligence of scientists and others as a source of hope. For example, Hannah, a younger (25-44) white, married woman who identifies as a Christian explained, "We have brilliant minds all over the world working on treatments and a common goal." Participants discussed that this is not the first time we have gone through a crisis and that collective caring and action can see us through.

For a few of the women, hope was tied to the natural world as an opportunity to spend time in nature. Allison, noted that, "nature and sunshine" provided her with hope and Nina, a middle aged (45-64) American Indian woman who is married and identifies as a Christian explained, "I find hope in deep spiritual rest, in observing the resilience and renewal of nature, and in the loving relationships I have." Nina also explained:

> My spirituality means I don't have to be in proximity to people or even communicate with them frequently to feel connected to them. I feel closest to God when I am alone in nature. So, my spiritual life and practice during social isolation has helped me feel centered and connected to others.

A final important aspect of this theme was related to participants' discussions of having gratitude. They discussed being grateful for what they had and finding joy in little or new things. For some of the women, gratitude was directly tied to their spirituality or faith. For example, Page, a middle aged (45-64) white, married woman who described herself as spiritual but not religious, explained that her relationship with God and gratitude has given her hope amid this crisis and another noted, "I have learned how to rely on God and how to be content with little."

For others, discussions focused more on what they were grateful for and how they maintained that gratitude. For many participants, finding joy in the little things and the opportunity to slow down and spend their time doing things that they enjoy was something that they were thankful for. An example of this is, Isla, a middle aged (45-64) Asian woman who is married and identifies as a Christian, "I give gratitude to what I have each day. It could be worse. We really don't know what true suffering is and this COVID-19 is not it." Others focused on being thankful for the small things that made life better, with Eva, as younger (25-44) white woman who did not identify as being or having any religious or spiritual affiliation, explained "I think my hope is in the fact that I know we will get through this eventually, and I find joy in the little things … like the fact that Netflix is going to release Michelle Obama's documentary." Finally, one participant discussed keeping a gratitude journal to help her maintain her hope during the crisis.

Peace and Comfort

Spirituality was interwoven throughout the first three themes but was most present in this final theme. This theme relates to participants' discussions of the comfort or peace that their spirituality/faith has provided them in these challenging times. For many of the women, their spirituality/faith played an important role in maintaining or improving their mental health. Some participants discussed how they would likely be more anxious, worried, or lonely without their spirituality/faith. For example, Alexis, a younger (25-44) African American/Black woman who is married and identifies as a Christian, noted "Spirituality has shaped my response to COVID-19. The words of God are meditations in my heart. They float to my mind in scripture or even songs minister to me. I actively and passively apply them to my situations and push past worry." Others discussed feeling loved and strengthened by their spirituality/faith, with Susan, an older (65+)

white, married woman who identifies as a Christian noting “God loves me because I am part of God's entirety”.

The women discussed feeling comforted in recognizing and accepting that the current crisis is part of God’s larger plan. For example, Molly, an older (65+) white woman who is married and identifies as a Christian explained, "God has this!”. Others echoed this idea noting “It's [the pandemic] part of a plan I cannot understand because of my human limitations” or “God works all things for his good.” For some participants, their spirituality helped them make sense of finding the language to help them explain what is happening. For example, Nia, a younger (25-44) African American/Black woman who is married and identifies as being spiritual but not religious stated that her spirituality "helps with sense-making...all things work according to God's will." Another participant explained that her spirituality has “given me reminders that there is a larger community living and breathing outside my quarantine; [it] gives language for prayer, about suffering.”

Fear, Despair, and Doubt

While most of the participants tended to be positive in the discussions of their spirituality and resiliency, the theme “Fear, Despair, and Doubt” refers to the few participants who described feelings of fear, despair and doubt. For example, when discussing how past events have impacted their resilience, Emma, a younger (25-44) white woman who is married and identifies as a Christian, noted that past health experiences are impacting her negatively. She mentions, "I have had a few medical scares that made me develop anxiety about medical events." Claire, a younger (25-44) white woman who identifies as a Christian, explained that the sudden ending of her marriage prior to the pandemic has made this crisis particularly hard. Two participants discussed using coping mechanisms other than religion or spirituality, with Eva explaining that she does

not identify with spirituality or religion as they have "caused a lot of harm in my life, so it's not part of my normal coping mechanisms." Finally, Amy, a younger (25-44) white woman who is married and identifies as a Christian explained, "The crisis of health has caused a crisis of faith."

In summary, with the potential for increased social isolation and psychological distress, particularly the closing of religious institutions and the potential disruptions to normal spiritual practices, we've highlighted how the women in our study identified ways spirituality and resilience have helped them cultivate resistance, nurture hope and optimism and find peace and comfort in these challenging times. However, there were some participants who noted feelings of fear, doubt and despair because of other extenuating life circumstances or a lack of identification with religion or spirituality.

Discussion

In this study, we sought to understand the association between spirituality, resilience, and coping for women during COVID-19. We identified three major themes: resilience, optimism, and hope, as well as peace and comfort. Respondents also expressed thoughts and feelings related to fear, despair, and doubt. The predominant finding was that participants' faith and spirituality aided them in coping with the day-to-day experiences of living during a pandemic, as well as having hope for the future.

The impact of spirituality on resilience and coping in the context of the Covid-19 pandemic has significant implications. The opportunity to gather qualitative data from females provides context for the unique lifestyles and experiences of women affected by the pandemic. In particular, scholars have noted the intersection of culture and spirituality as particularly key for ethnic minority women as culturally relevant to their experiences of trauma and oppression

(Comas-Diaz, 2012; Hunter-Hernandez, 2015). African American women with additional hardships in, for example, welfare to work programs articulated embracing spirituality as ways to be more resilient (Banerjee, 2008). Other experiences of enacting spirituality as resilience have been noted as unique for older women and can serve as an agent for healthy aging (Manning, 2013).

As the world continues to manage its response to COVID-19, healthcare professionals must consider holistic approaches to addressing the pandemic, as well as the long-term emotional, social, and mental implications. This includes the continual promotion of sound Public Health-based guidelines and preventative measures; ensuring access to timely testing, follow-up, and treatment; as well as promoting practices that may help people cultivate hope and foster resilience. Researchers (Smother & Koenig, 2018; Koenig et al., 2015 & Memaryan, Ghaempanah, Aghababaei & Koenig, 2020) indicated the integration of spirituality and religion in medical care may be a central complement to providing holistic care and designing culturally relevant programs.

Fostering resilience can be a protective factor for external connections, meaning-making, self-care, positive perspectives on life, independence, and altruism (Bolton, Praetorius & Smith; Osborne, 2016) reducing the risk of developing long term mental illness (Holz, Tost & Meyer-Lindenberg, 2020). Musgrave, Allen, and Allen (2002) reported a positive correlation between spirituality and health among Hispanic, as well as African American, women. The researchers noted this relationship helped the women adapt to traumatic events and concluded that the promotion of health behaviors by faith-based leaders can be instrumental in promoting positive behavior change. Although the authors' emphasis on partnerships between faith-based communities and health care providers is not one studied by our research project, it is worth

noting. As we continue to grapple with the reality of COVID-19, these partnerships – particularly within communities of color in the U.S., as well as faith-based communities throughout the world – can help guide healthy behavior adaptation in response to the virus, including coping with trauma and fostering resilience.

Although some researchers differentiate between optimism and hope, what remains consistent is that possessing these attributes may be protective for some other behaviors. For example, Tucker, et al. (2013) reported an association between increased hope and optimism with lessened suicidal ideation. Hasanović & Pajević (2010) examined religious beliefs among war veterans and found that these beliefs were protective of many challenges associated with PTSD, including depression and anxiety. For women continuing to make adjustments related to the pandemic, identifying key ways to foster hope and optimism via faith-based communities and other mechanisms may be advantageous. Merry, Havyer, McCoy, Elrashidi, & Fischer (2020) noted specific guidelines for physicians advising faith-based communities. Thompkins Jr., Goldblum, Lai, Hansell, Barclay, & Brown, (2020) provide a model for culturally relevant PSAs targeting African Americans and faith-based leaders. These are but two examples of collaborations between faith-based communities and health professionals.

Researchers have noted that fear, despair, and doubt, increased rates of overdoses (Dubey et al., 2020; Volkow, 2020) and domestic violence (Usher, Bhullar, Durkin, Gyamfi, & Jackson, 2020) have been at the forefront of research and practice during this pandemic. Although behaviors such as domestic violence and substance misuse cannot be exclusively attributed to COVID-19, their prevalence highlights the need to provide tailored assistance to vulnerable populations - i.e. those struggling with addiction and facing domestic violence – as well as communities who perceive incongruence between science and religion. Some faith-based

communities throughout the U.S. and in other parts of the world ignored state-sanctioned social distancing and continued to meet (Vermeer & Kregting, 2020). As our findings indicate, fostering ongoing practices that support comfort received from faith and spirituality can be helpful, even in the absence of physical gatherings.

Conclusion

Covid-19 has presented unique challenges for women. These challenges are varied and include the short- and long-term impacts of physical and mental health; the potential of infection; anxiety about infection risks; change in work and family lifestyles; shifts in household and relationship dynamics; as well as coping, and mood dysregulation. Communities experience crises such as a pandemic as traumatic and adverse experiences that require novel, as well as best practice-based, responsive approaches to addressing trauma as an individual and as a collective community. In particular, health and healthcare professionals must be prepared to consider culturally sensitive, holistic approaches in both prevention and intervention strategies.

According to the Centers for Disease Control and Prevention (CDC), approximately 40% of adults in the United States were struggling with mental health or substance use issues related to Covid-19 as of late June 2020. One might predict that as time goes on, this percentage will increase. Best practice recommendations for addressing the experience of adverse events such as natural, man-made, or biological disasters are engaging in trauma-informed care. SAMSHA's National Center for Trauma-Informed Care includes six key principles: 1) safety, 2) trustworthiness and transparency, 3) peer support, 4) collaboration and mutuality, 5) empowerment voice & choice, and 6) cultural, history, and gender issues (SAMHSA, 2012). Organizations – including collaborations between faith-based organizations and health care

providers – seeking to provide relief and support to those adversely affected by the pandemic must consider the integration of these guiding principles.

Practioner-based community outreach to members of faith communities and those who were less connected before Covid-19 provides a unique opportunity for engagement. Also, communities at greater risk for Covid-19, particularly racial/ethnic minorities, who regard faith-based organizations or churches as cultural cornerstones may be critical outlets of support during these times (Ai et al., 2013; Villatoro, Dixon & Mays, 2016). These scholars have noted social isolation as a way of heightening feelings of loneliness and depression, especially amongst groups who are already vulnerable to health disparities. The connectedness that spirituality could offer via mind-body connection, meeting as a community for prayer or studying, introspection related to a higher power as a means of hope, optimism, and encouragement could certainly improve mental and behavioral health. Our findings encourage the importance of further exploring the relationships of spirituality to resiliency and coping, a consideration of healthcare to include spirituality and religiosity as holistic and trauma-informed care, and an opportunity to foster connectedness and collaboration across communities who may have been previously disconnected.

Just as building resiliency skills provides a buffering effect on the brain and experiences of trauma, leaders within multiple disciplines have recognized spirituality and religiosity as protective factors in the face of adverse events. Our study identified a positive correlation between spirituality and resilience, and an in-depth scope via qualitative data, of mechanisms for coping during this pandemic. Given this insight, faith-based organizations may provide a needed layer of support for people infected and affected by Covid-19 and a vehicle for trauma-informed care. Further, many faith-based organizations such as synagogues, mosques, and churches have

identified innovative ways of providing virtual support during these times where social distancing is critical (Merry, Havyer, McCoy, Elra & Fischer, 2020).

Limitations and Recommendations for Future Research

Our study has some strengths and limitations. A mixed-method approach allowed us to explore the relationship between spirituality and resiliency more holistically. The online format allowed us to potentially reach a broader audience during a time of lockdown and limited interactions. However, the use of snowball sampling and the authors' social media accounts as a way of distributing the survey may have limited our ability to reach individuals from different faith traditions. Another limitation was not knowing the geographical location of the women and whether they had children for this was not included in the demographic data. Also, the majority of the sample were married or in domestic partnerships, therefore the relationship between spirituality and resilience for single/divorced/widowed women is less clear.

The greatest limitation was the homogeneity of the sample in terms of race, ethnicity, religious affiliation, and assumed country of residence [U.S.A.] suggesting the need to carefully consider recruitment strategies to sample an international audience. Due to the homogeneity of the sample, this study would need to be replicated in other countries in which the predominant faith communities are not Christian, to gather an international lens. As the pandemic continues to change our lives, a larger international longitudinal study could help us to better understand and measure the change in spirituality/religion over time. Also, researchers designing studies with a focus on spirituality and resilience in different faith traditions could further our understanding of the connections between the two. Finally, exploring the similarities and differences between women with and without partners or children could offer important insights into the relationship

between social connections and spirituality and the buffering effects this may have on resiliency during a global crisis.

While this study offers insights into the important role of spirituality and resilience in helping women cope during a pandemic additional research is needed to further our understanding of the relationship between these two factors and their impact on health and wellbeing. Recommendations for future research might include expanding this study to an intentionally global audience.

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