

UNIVERSITY OF OKLAHOMA GRADUATE COLLEGE

EXPLORING FACTORS RELATED TO WELL-BEING AMONG INCARCERATED WOMEN:  
HOPE, SHAME, AND ADVERSE CHILDHOOD EXPERIENCES

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EXPLORING FACTORS RELATED TO WELL-BEING AMONG INCARCERATED WOMEN:  
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## **Abstract**

Incarceration rates among females have significantly increased in the United States over the past 40 years. Studies have documented how trauma, economic vulnerability, and mental illness may amplify psychological distress for women who are incarcerated. However, little research exists on the relationships between hope, shame, adverse childhood experiences (ACEs), and well-being among incarcerated women. To explore the relationship of these variables with well-being, data from the Oklahoma Department of Corrections was analyzed. A strong positive correlation between hope and flourishing was found with hope serving as the stronger predictor of hope within the model. Shame was found to have a moderate negative correlation with flourishing. The model was statistically significant and accounted for 41.7% of the variance in flourishing. Overall, this study contributes to the current body of research emphasizing the importance of hope in overall flourishing with shame serving as a potential barrier to well-being.

*Keywords:* Hope; incarcerated women; shame; flourishing

## **Background Interest, Appeal, Problem Statement**

In the United States, incarceration continues to serve as the primary civil response for those who deviate from law and order (Beckett & Beach, 2021). Research continually shows this form of punishment results in significant consequences for those imprisoned including exposure to dehumanizing environments, re-traumatization of vulnerable populations, and inequitable distribution of justice (Beckett & Beach, 2021; Cowan, 2019; Miller & Najavits, 2012; Wai-Ming Mak et al., 2021; Wattanaporn & Holtfreter, 2014; Wesely & Dewey, 2018). Currently, more individuals per capita are incarcerated in the United States than anywhere else in the world (Beckett & Beach, 2021). While criminal justice reform efforts are continuous, the incarceration rate for women has increased over 525% over the past forty years, twice the rate of men (The Sentencing Project, 2023).

Locally, Oklahoma continually ranks in the top three states with the highest rates of incarceration (Gateley, 2022), and at the time of this writing, has the third highest rate of incarceration for women (The Sentencing Project, 2023). Like all societal challenges, the reasons behind this excessive rate are complex and multifactorial. Looking at the macrolevel contributions, Oklahoma has stricter sentencing laws and utilizes incarceration more frequently despite having alternative options. Furthermore, prosecutors often stack multiple sentences or choose to enhance sentences resulting in longer periods of imprisonment when compared to geographically and politically similar states (Galoob et al., 2019; Rose et al., 2022). Oklahoma also uniquely faces numerous societal and health challenges, including high rates of adverse childhood experiences, poor health outcomes, high rates of poverty, and numerous negative

social determinants of health (Beaman et al., 2023; Child and Adolescent Health Measurement Initiative, 2021; Kinney et al., 2018; Oklahoma State Department of Health, 2020; United Health Foundation, 2022). These systemic issues further compound the individual experiences of Oklahomans. Cowan (2019) cites a failure to acknowledge the pathways to incarceration as one contribution to the issue of mass incarceration. Researchers have found that adverse childhood experiences (ACEs), child abuse, adult victimization, intimate partner violence (IPV), substance use disorders, and mental illness significantly contribute to incarceration (Boland et al., 2021; DeHart, 2008; Fuentes, 2013; Henry, 2019; King & Smith, 2023). Given the high rate of each of these in Oklahoma, those in vulnerable populations within Oklahoma may be at greater risk of experiencing these pathways to incarceration.

When looking at gender, women reportedly face higher rates and more significant histories of trauma, physical and sexual abuse, a lack of mental health care, economic vulnerability, and the use of substances or addiction which could put them at higher risk of incarceration (Cowan, 2019; DeHart, 2008; Herrschaft et al., 2009; Wesely & Dewey, 2018). Once incarcerated, these histories of trauma are further exasperated from the harsh prison environment and isolation and could result in further psychological distress (Brown & Bloom, 2018; Cowan, 2019; Miller & Najavits, 2012; Wesely & Dewey, 2018). According to Harner (2004), incarceration may be particularly difficult on women when compared to men due to the numerous roles they fulfill (mother, wife, daughter, etc.) and the self-worth and societal emphasis placed on fulfilling those roles. During incarceration, women are forced to leave these roles behind, and therefore, may have more difficulty adapting to prison life. Given the greater

vulnerability to trauma and increased pathways to incarceration, it is important to further explore how to prevent the negative psychological impact of incarceration on women once they become involved in the justice system.

While some research does look to potential protective factors for those experiencing incarceration (Chapman et al., 2014; Pinese et al., 2010; Vieira dos Santos et al., 2018; Wai-Ming Mak et al., 2021), the vast majority focuses on protective factors for preventing initial entry into the justice system or recidivism (Arumba et al., 2012; Bell et al., 2019; Bowles et al., 2012; Stanton et al., 2019; Wattanaporn & Holtfreter, 2014; Wesely & Dewey, 2018). Relatively few studies focus on the positive or protective components that can serve women well within prison life, and those that do, tend to be programmatic evaluations or focused on one specific concept or protective factor. In their 2018 study, Ptacek and Daubman found that incarcerated women who practiced and exhibited self-compassion toward themselves had higher levels of mindfulness and resiliency. Furthermore, a study done by Morley (2015) suggests that higher levels of self-compassion may result in lower levels of violent crime, more self-awareness, and less psychological distress. Other areas which potentially provide positive support during incarceration include exercise (Esmaeilzadeh Ghandehary et al., 2019), contact with family (Folk et al., 2019), and faith or spirituality (Eytan, 2011). While some literature does highlight specific components which bring positivity or provide protection against psychological distress, overall, there is a dearth of studies investigating the broad spectrum of positive forces impacting women during incarceration. More research is needed to understand what psychological protective factors contribute to the well-being and adaption to prison for incarcerated women.

The field of psychology has traditionally focused on addressing the pathologic and maladaptive behaviors impacting an individual's life (Seligman & Csikszentmihalyi, 2000). With the rise of positive psychology, this focus has slowly broadened to include positive and protective aspects of life including resilience, virtue, hope, courage, and what makes a good or meaningful life (Seligman & Csikszentmihalyi, 2000). When looking at those who are incarcerated, many individuals may never leave prison or experience what others perceive to be a purposeful or meaningful life. Given the histories of trauma and the continued impact of incarceration on individuals, exploring what factors positively contribute to the lives of those in prison is especially important. In their study, Kleiman and Beaver (2013) found that those who had meaning in life or were searching for meaning in life were less likely to feel burdensome, to feel a sense of thwarted belongingness, and to experience suicidal ideation or attempts. Stillman et al., (2009) found that those who are socially isolated are more likely to feel as though their life does not hold meaning or purpose. Given the nature of prisons and the inherent isolation it causes, this may be of particular importance among a population with already high rates of mental health challenges and suicidal ideation (Moore et al., 2021). The inherent importance of finding meaning in life provides a foundational purpose for exploring how those who are incarcerated find fulfillment and meaning in their lives despite isolation and imprisonment.

When looking at literature focused on similarly vulnerable or distressed populations, Synder's Hope Theory (Synder, 1995), another component of positive psychology, seems to correlate with more positive outcomes (Kirschman et al., 2010; Kylvä et al., 2009; Robitschek,

1996; Schrank et al., 2008; Weis & Speridakos, 2011). In their 2010 study, Berendes et al., found that patients with lung cancer who had higher levels of hope experienced fewer physical and psychological symptoms associated with their cancer. Hinton-Nelson et al., (1996) studied inner-city adolescents and found a positive correlation between high exposure to violence and high levels of hope. This seems to suggest that those who face adversity in their lives may develop higher levels of hope than those who have not been exposed to such challenges. Despite incarceration being an example of a highly traumatized and vulnerable population, there has been relatively little research on hope among these individuals (Martin & Stermac, 2010; Moulden & Marshall, 2005; Stearns et al., 2018; Wai-Ming Mak et al., 2021; Wright et al., 2023). Given the need to better understand what psychological aspects allow some women to adapt and thrive in prison while others do not, Snyder's Hope Theory could offer more insight with further research.

This study addresses the current gap in literature by exploring well-being among incarcerated women through the relationship of adverse childhood experiences, shame, and hope.

## **Literature Review**

### **Impact of Incarceration**

The literature continually highlights the ramifications of incarceration and the potential deleterious impact it has on those who interact with the justice system (Chapman et al., 2014; Goomany & Dickinson, 2015; Maschi et al., 2013; Pinese et al., 2010). With prisons maintaining strict control, harsh environments, and enforcing isolation from society, many incarcerated

individuals suffer psychological and physical consequences (Esposito, 2015; Lo et al., 2020; Massoglia & Pridemore, 2015; Moore et al., 2021). According to Carson (2021), between 2001 and 2019, suicides increased by 85% in state prisons and accounted for 5-8% of deaths in prisons and 24-35% of deaths in jails. In addition to negative mental health outcomes, those who are incarcerated experience significantly higher rates of infectious disease and have higher rates of long-term poor health outcomes and chronic disease (Dumont et al., 2012). In 2009, Yang et al., conducted a qualitative study exploring the impact on the mental health of those experiencing long-term incarceration. The individuals interviewed cited a significant increase in mental distress, feelings of anxiety and isolation, fear of others and the prison environment, and a sense of lost time (Yang et al., 2009).

In addition to the negative impact of prison on those who are incarcerated, there is significant research on the disenfranchisement of the children and families of those in prison (Bloom et al., 2004; Cooper-Sadlo et al., 2019; Dallaire, 2007; Hagen et al., 2005). The literature highlights negative outcomes in children including behavior challenges, psychological harm, tendency for risk-taking, disruption in home life, and challenges in school (Cooper-Sadlo et al., 2019; Dallaire, 2007; Hagen et al., 2005). According to Maruschak et al. (2021), nearly 1.5 million children have an incarcerated parent with 58% of incarcerated women having at least one minor child. Therefore, with each incarcerated mother, there are lasting and broad ramifications not only for them, but also their children, and other family members.

When looking toward potential sources of well-being, family and social connection seem to serve as positive support systems for those incarcerated. Clone and DeHart (2014) found that

maintaining relationships with those outside of prison is particularly helpful and necessary for maintaining hope and connection and reducing stress. Furthermore, they found that when women are able to maintain these relationships, they are less likely to assimilate into the negative cultural aspects of prison life, which may lead to a reduction in recidivism (Clone & DeHart, 2014). Similarly, Parsons and Warner-Robbins (2002) found that visitation and the continued support of family, particularly with children, inspired women to change maladaptive or criminal behaviors and improve their situations and lives. Folk et al., (2019) examined potential protective factors for incarcerated women and found that maintaining contact with family through visitation, letters, and phone calls helped reduce the psychological strain of prison on women. Therefore, while one of the more damaging aspects of incarceration is the isolation from family and friends, finding ways to continue the connection with those on the outside would serve as a protection for those in prison (Beer et al., 2007; Fogel, 1993; Greer, 2000; Harner, 2004; Lindquist, 2000; Loper & Gildea, 2004; Maeve, 1999; Nadel, 1996; Severance, 2005). Unfortunately, visitation by family and friends is often hindered by the rural location of prisons, strict scheduling of visitation, and the enforcement of security measures (Beer et al., 2007; Harner, 2004; Lindquist & Lindquist 1997; Nadel, 1996; Severance, 2005). With the significant negative impact on those experiencing incarceration, it is crucial that researchers and those working within the prison system look for ways to support and nurture the well-being prisoners.

Relatively few studies have focused on the positive or protective components within prison life. Those that do focus on these areas are highly specific in their focus. In their 2018

study, Ptacek and Daubman found that incarcerated women who practiced and exhibited self-compassion toward themselves had higher levels of mindfulness and resiliency. Furthermore, a study done by Morley (2015) suggests that higher levels of self-compassion may result in lower levels of violent crime, more self-awareness, and less psychological distress. Other areas which potentially provide positive support during incarceration include exercise (Esmaeilzadeh Ghandehary et al., 2019), contact with family (Folk et al., 2019), and faith or spirituality (Eytan, 2011). In 2018, Vieira dos Santos et al. conducted a qualitative study in Rio de Janeiro, Brazil in a women's facility exploring protective factors during incarceration. While the translation of this study results in some ambiguity, the researchers found that engagement in education, work, reading, music, and church were each activities contributing to the wellness of the women interviewed (Vieira dos Santos et al., 2018). Therefore, while some literature does highlight specific components which bring positivity or provide protection against psychological distress, overall, there is a dearth of studies investigating the broad spectrum of positive forces impacting women during incarceration.

### **Psychological Flourishing**

Due to the negative impact of incarceration, researchers have sought to find elements and interventions which might alleviate or mitigate the impact of incarceration on an already traumatized population. In the context of positive psychology, flourishing serves as a focus in the quest to understand the strengths and virtues that promote meaning and purpose (Diener et al., 2009). Well-being is explored through two main paradigms: hedonism and eudaimonism (Tan et al., 2021). The hedonistic viewpoint looks at well-being through the lens of pleasure and

happiness (Ryan & Deci, 2001). It often measures wellness based on life satisfaction or through emotional states and balance of affect as seen in Diener's Scale of Positive and Negative Experience (Diener et al., 2009; Tan et al., 2021). This lens of well-being is often thought of as short-term or temporary in nature. In contrast, eudaimonism views wellness as extending beyond the surface level aspects of happiness and pleasure and looks to what brings purpose, fulfillment, and self-actualization (Ryan & Deci, 2001; Tan et al., 2021). Diener's Flourishing Scale attempts to measure this eudaimonic approach toward well-being (Diener et al., 2009; Tan et al., 2021). When compared to emotions and feelings, flourishing is thought to be more consistent and stable over time (Diener et al., 2009). According to Diener et al. (2009), flourishing seeks to measure subjective well-being through a humanistic approach which operates under the assumption that there are core psychological needs of all people. Through this framework, Diener et al., (2009) addresses a sense of well-being beyond situational happiness and pleasure and looks at the social-psychological aspects impacting an individual's wellness. This more long-term approach toward well-being may serve as an avenue for answering what brings meaning and purpose to an individual's life.

When examining the literature, the importance and impact of flourishing can be seen across numerous fields of study. In a study focused on individuals with chronic, incurable pain, Clyne (2021) found that those who believed their pain could be alleviated were more likely to have high levels of flourishing. Additionally, those with high levels of hope were also found to have high levels of flourishing (Clyne, 2021). When looking at burnout levels in individuals working in the gynecologic oncology field, Vetter et al. (2018) found that burnout was inversely

related to resilience, flourishing, hope, and psychological well-being. Within this study, those who met criteria for depression or burnout were found to have lower levels of each of these measures. This could suggest that those who are experiencing burnout or high levels of stress and psychological distress, may experience an improvement in well-being by nurturing hope and flourishing. Within the field of education, Dowlatabadi and Mousavi (2021) found that high levels of flourishing were associated with higher levels of academic achievement. They also found that teaching students the practice of goal setting increased their flourishing scores (Dowlatabadi & Mousavi, 2021). This further supports the notion that those with higher levels of hope are more likely to possess higher levels of flourishing (Clyne, 2021). Similarly, in their 2020 study, Munoz et al., found that hope and resilience are strong predictors of flourishing and are linked to well-being in individuals with histories of childhood trauma. Given the high levels of trauma and adverse childhood experiences in incarcerated populations, interventions and systems which support and nurture hope and flourishing could provide an opportunity to increase well-being.

### **Adverse Childhood Experiences**

Women experiencing incarceration often have a long history of victimization and abuse starting in their childhood. In the early 1990s, Vincent Felitti began interviewing a specific cohort of patients in a Kaiser Permanente weight loss program. His goal was to better understand contributing factors after specific program participants began to either withdraw from treatment at the beginning signs of success or rapidly regain the weight they successfully lost after completion of the program (Felitti, 1993). He found that individuals who fell into these

two categories had significant histories of household dysfunction, sexual abuse, and physical abuse stemming from childhood. When interviewing patients, Felitti (1993) also found that patients cited using weight as a protective factor against sexual attention and using eating as a coping mechanism for the psychological harm from their early-life trauma. These findings led to further research resulting in the seminal adverse childhood experiences (ACE) study by Felitti et al. (1998). In this study, Felitti et al. (1998) linked a high prevalence of childhood trauma to adverse health outcomes as adults. In the survey completed by patients, the questions asked pertained to the following: emotional, physical, and sexual abuse; violence in the home; living with drug or substance users; living with someone who was mentally ill or suicidal; and having a family member who was incarcerated. These questions went on to become the standard ten-question adverse childhood experiences survey. Felitti et al., (1998) compared results from these surveys against behaviors and health outcomes and found that exposure to early adversity resulted in poorer health outcomes and a greater likelihood to participate in risky health behaviors. Furthermore, Felitti et al. (1998) found that there was a dose response effect for adverse childhood experiences meaning the greater number of experiences, the greater the risk and impact on health.

Following the initial ACE study, researchers have continued to support the findings that early adversity in life negatively contributes to the health and well-being of individuals throughout their lives (Anda et al., 2006; Giano et al., 2020; Merrick et al., 2017; Mersky et al., 2013; Monnat & Chandler, 2015; Mosley-Johnson et al., 2019). The impact of ACEs is far reaching and includes deleterious outcomes related to oral health (Kabani et al., 2018; Simon et

al., 2021), sleep (Lin et al., 2022; Vadukapuram et al., 2022), asthma (Lietzén et al., 2021; Ross et al., 2021; Wing et al., 2015), cardiovascular health (Flores-Torres et al., 2020; Wooldridge et al., 2023), pregnancy (Christiaens et al., 2015; Chung et al., 2010; Foti et al., 2023), and suicidality (Dube et al., 2001; Thompson et al., 2019). Children of those who have experienced adverse childhood events also seem to be impacted by the trauma of their parents whether through developmental delay, mental health challenges, or poor physical health (Ishikawa et al., 2022; Kang et al., 2021; Zhang et al., 2023). Researchers have also found a strong association between early life adversity and the early use of drug and alcohol in childhood often continuing on into adulthood (Cunradi et al., 2020; Friestad et al., 2014; Jones, Sharp et al., 2018; Jones, Worthen et al., 2018; Li et al., 2023; Stein et al., 2017).

Those with high ACE scores are also at a much higher risk of experiencing continued victimization and vulnerability into adulthood meaning they often experience poly-victimization of violence throughout their lives (Aizpurua et al., 2023; Andersson et al., 2020, Fanslow et al., 2021; Finkelhor et al., 2009; Jones et al., 2020; Ports et al., 2016; Voith et al., 2020). The increased vulnerability of this population, as well as the criminalization of drug use, supports the findings that adverse childhood experiences and exposure to trauma seem to be one of the root contributing factors leading to incarceration (Belknap & Holsinger, 2006; Bloom et al., 2004; Fuentes, 2013; Green et al., 2016; Henry, 2019; Messina & Schepps, 2021; Moore et al., 2021; Stensrud et al., 2018; Wattanaporn & Holtfreter, 2014; Wesely & Dewey, 2018).

Therefore, those involved in the justice system have often experienced numerous instances of

violence or victimization throughout the entirety of their lives which could be a contributing factor toward their incarceration.

## **Shame**

Part of the negative impact of trauma and adverse childhood experiences is the ongoing psychological impact. One such consequence is the feeling and experience of shame. When comparing shame to guilt, the key distinction is that those who feel guilty feel bad about or have negative emotions related to an action, whereas those who feel shame feel bad or have negative emotions related to oneself (Tangney et al., 1996; Wicker et al., 1983). According to Tangney et al. (1996), guilt is generally less impactful than shame because shame alters one's self-concept and worthiness by placing the focus on the self rather than the action taken. When looking at the literature surrounding trauma and adverse childhood experiences, there appears to be an increase in shame, particularly in women, following a traumatic incident which can exacerbate and predict PTSD symptoms (Aakvaag et al., 2016; DeCou et al., 2023; Garbutt et al., 2023; McCann et al., 2023; Øktedalen et al., 2014; Wojcik et al., 2019). There is relatively limited research focusing on shame in individuals currently incarcerated (Osei-Tutu et al., 2021; Tangney et al., 2011) with the majority focusing on recidivism (Hosser et al., 2008; Tangney et al., 2014) or released inmates (Abrams et al., 2023; DeCaro et al., 2022). Given the significant history of trauma among incarcerated populations, more research into how shame impacts the lives and well-being of those in prison is warranted.

## Hope

When exploring potential psychological factors which can protect individuals who have experienced significant trauma or victimization, hope has frequently been found to offer promising results. C.R. Snyder's Hope Theory addresses the psychological impact and cognitive constructs behind goal setting (Snyder et al., 1991; Snyder, 1995). According to Snyder (1995), in order to achieve a goal, a person must have both agency (willpower) and pathways (opportunities and direction). When either of these areas are lacking, reaching a goal can be thwarted and can ultimately lead to low hope. Research has continually found that hope can serve as a buffer to adverse circumstances in life (Pharris et al., 2022; Wright et al., 2023). Furthermore, hope has been found to be associated with health and well-being, whereas low hope has been found to be associated with distress and poor health (Martin & Stermac, 2010). Hope is considered a strengths-based approach to wellness and well-being, and because it is a cognitive construct, it is a skill and mindset which can be taught (Smedema et al., 2014; Snyder et al., 1991). According to Snyder (2000) for hope to be present, four main conditions must be met: focus on a specific aspiration or goal; a direction or pathway and desire to attain the goal; a sense of agency, self-efficacy, or will-power to achieve the goal; and a belief that achieving the goal is possible. It is when one or more of these areas is lacking that hope can be negatively impacted or diminished.

Hope has been applied to numerous fields including health care (Berendes et al., 2010; Elliott & Olver, 2009; Thornton et al., 2014), aging populations (Mathur, 2014; Moore et al., 2014; Wroblewski & Snyder, 2005), youth and education (Hellman & Gwinn, 2017; Hinton-Nelson

et al., 1996; Robitschek, 1996), and intimate partner violence interventions (Munoz, Brady et al., 2017; Munoz, Hellman et al., 2017; Muyan & Chang, 2019). Despite its successful application in other areas, research around hope with incarcerated individuals remains relatively limited (Martin & Stermac, 2010; Moulden & Marshall, 2005; Stearns et al., 2018; Wai-Ming Mak et al., 2021; Wright et al., 2023). Wright et al. (2023), note that there are two alternative lenses of hope within prison systems in addition to the framework created by Synder. Recasting is a form of hope in which people reframe their experiences through a lens of faith and adopt a belief that their struggles will result in reward or serve a higher purpose (Wright et al., 2023). Another concept of hope is that of acceptance. Through this approach, those who are incarcerated shift from fighting and resisting the pain and struggle of incarceration and instead develop a mindset of acceptance and surrendering (O'Donnell, 2014; Wright et al., 2023). With hope being a potential protective factor, and a trait that can be developed, more research needs to explore how hope can be nurtured to help mitigate the adversity and trauma of those who are incarcerated.

### **Current Study**

To address the current gap in literature and knowledge, this correlational and cross-sectional study explores the relationships between hope and well-being with adverse childhood experiences (ACEs) and shame among incarcerated women. Specific research questions include:

- What is the relationship between hope and psychological flourishing among incarcerated women?

- How are adverse childhood experiences (ACEs), shame, and hope associated with flourishing in incarcerated women?

Hypotheses include:

- High scores on hope will be associated with high scores on flourishing.
- High scores on ACEs will be associated with low scores on flourishing.
- High scores on shame will be associated with low scores on flourishing.
- Hope will serve as a stronger predictor of flourishing than ACEs or shame.

Because Oklahoma continually ranks in the top three states for both male and female incarceration, it served as an ideal location for this study (Carson, 2021). All data was collected entirely by Oklahoma Department of Corrections and provided to the researcher de-identified. Data was analyzed utilizing SPSS. The goal of this study is to expand upon current literature and better understand the relationships of adverse childhood experiences, shame, and hope with well-being among women experiencing incarceration.

## **Methods**

### **Sample**

The Oklahoma Department of Corrections utilized a purposive sampling strategy targeting the entire population of incarcerated women in Oklahoma. All 2006 inmates at both women's prisons, Eddie Warrior in Taft, Oklahoma and Mabel Bassett in McCloud, Oklahoma, had the opportunity to participate in the study. Of the 2006 incarcerated individuals, 149 participated with 61 from Mabel Bassett and 88 from Eddie Warrior. Demographic data for the entire prison population was provided to the researcher allowing for comparison with the

sample population. For the sample population, the average age was 41.06 with ages ranging from 22-70. Of those included in the sample population, 64.43% were Caucasian, 11.4% were African American, 14.1% were Native American, 4.7% were Hispanic, 4.7% were not reported, and 0.7% were Asian. The average time being served by the sample population was 12.14 years with 6.71% serving life sentences. Education levels included 44.97% not reported, 30.87% with some high school, 8.05% with a high school diploma or equivalency, 6.04% with some college, 6.04% with eighth grade or lower, 2.01% with either a vocational or technical degree, 1.34% with a bachelor's degree, and 0.67% with an associate degree. A comparison of participant demographics to the full prison population can be found in Table 1.

**Table 1.**

*Demographics Comparison*

|                                   | Entire Prison Population<br>(n=2006) | Study Participants<br>(n=149) |
|-----------------------------------|--------------------------------------|-------------------------------|
| <b>Race:</b>                      |                                      |                               |
| Alaskan Native:                   | 0.05%                                | 0.00%                         |
| American Indian:                  | 12.76%                               | 14.1%                         |
| Asian:                            | 0.35%                                | 0.7%                          |
| Black or African American:        | 19.89%                               | 11.4%                         |
| Hispanic or Latina:               | 6.13%                                | 4.7%                          |
| Native Hawaiian/Pacific Island:   | 0.15%                                | 0.00%                         |
| Not Reported:                     | 2.04%                                | 4.7%                          |
| Other:                            | 0.20%                                | 0.00%                         |
| Two or More Races (Not Hispanic): | 0.10%                                | 0.00%                         |
| White:                            | 58.33%                               | 64.43%                        |
| <b>Sentence in Years:</b>         |                                      |                               |
| Average Including Life Sentences: | 136.3                                | 80.39                         |
| Average Excluding Life Sentences: | 32.8                                 | 12.14                         |
| Mode:                             | 10                                   | 10                            |
| Median:                           | 10                                   | 10                            |

**Table 1 continued.**

*Demographics Comparison*

|                                            | Entire Prison Population<br>(n=2006) | Study Participants<br>(n=149) |
|--------------------------------------------|--------------------------------------|-------------------------------|
| <b>Sentence in Years:</b>                  |                                      |                               |
| Max:                                       | 1082.52                              | 1007.52                       |
| Min:                                       | 0.44                                 | 1                             |
| Death Row:                                 | 0.05%                                | 0.00%                         |
| Life with Possibility of Parole:           | 7.48%                                | 4.7%                          |
| Life without Possibility of Parole:        | 3.14%                                | 2.01%                         |
| Lifetime Supervision:                      | 0.5%                                 | 0.00%                         |
| <b>Type of Crime:</b>                      |                                      |                               |
| Assault/Battery:                           | 9.72%                                | 10.07%                        |
| Burglary/Embezzlement/Larceny:             | 12.81%                               | 18.79%                        |
| Child Abuse/Endangerment:                  | 19.19%                               | 18.79%                        |
| Drug Related:                              | 20%                                  | 21.48%                        |
| Manslaughter:                              | 5.33%                                | 4.03%                         |
| Murder:                                    | 15.7%                                | 8.05%                         |
| Sex Crimes:                                | 1.4%                                 | 2.01%                         |
| Other:                                     | 15.85%                               | 16.78%                        |
| <b>Age:</b>                                |                                      |                               |
| Average:                                   | 39.13                                | 41.06                         |
| Oldest:                                    | 86                                   | 70                            |
| Youngest:                                  | 19                                   | 22                            |
| <b>Most Frequently Occurring Counties:</b> |                                      |                               |
|                                            | Oklahoma: 22.28%                     | Oklahoma: 14.09%              |
|                                            | Tulsa: 15.05%                        | Tulsa: 8.72%                  |
|                                            | Cleveland: 4.89%                     | Comanche: 6.71%               |
|                                            | Comanche: 3.24%                      | Payne: 4.7%                   |
|                                            | Muskogee: 3.14%                      | Cleveland: 4.7%               |
| <b>Level of Education:</b>                 |                                      |                               |
| None:                                      | 0.7%                                 | 0.00%                         |
| Eighth Grade or Less:                      | 7.88%                                | 6.04%                         |
| Some High School:                          | 43.22%                               | 30.87%                        |

**Table 1 continued.**

*Demographics Comparison*

|                                     | Entire Prison Population<br>(n=2006) | Study Participants<br>(n=149) |
|-------------------------------------|--------------------------------------|-------------------------------|
| <b>Level of Education:</b>          |                                      |                               |
| High School Diploma or Equivalency: | 6.08%                                | 8.05%                         |
| Vocational/Technical Certification: | 1.99%                                | 2.01%                         |
| Some College:                       | 4.49%                                | 6.04%                         |
| Associate Degree:                   | 0.4%                                 | 0.67%                         |
| Bachelor's Degree:                  | 1.35%                                | 1.34%                         |
| Some Graduate:                      | 0.05%                                | 0.00%                         |
| Graduate:                           | 0.05%                                | 0.00%                         |
| Not Reported:                       | 33.8%                                | 44.97%                        |

Participation in the survey was completely voluntary, and participants were invited to sign up prior to data collection to indicate their interest in completing the survey. The Oklahoma Department of Corrections administered the surveys, collected, and maintained all data. The data was provided to the research team following de-identification. Because this study utilized secondary data provided by the Department of Corrections, it was granted expedited approval through the University of Oklahoma Institutional Review Board. See Appendix A.

**Measures**

The measures in this study include the Adult Hope Scale, an adapted Flourishing Scale, the Adverse Childhood Experiences Questionnaire (ACE), and the Others as Shamers Scale.

***Adult Hope Scale***

The Adult Hope Scale is an 8-item measure divided into two subscales, agency and pathways. Four items pertain to the agency scale and four items pertain to the pathways scale. The agency and pathways scores are added together to obtain the total hope score. Hope scores

range from 8 to 64 with 64 being high hope. Items are measured on an 8-point Likert scale ranging from 1 = Definitely False to 8 = Definitely True. Example items include: “I can think of many ways to get out of a jam” and “I energetically pursue my goals” (Snyder, 1995). Cronbach’s alpha for the original scale was reported to range between 0.74 and 0.84 (Snyder et al, 1991).

### ***Adapted Flourishing Scale***

This study utilized an Adapted Flourishing Scale utilizing Diener et al., (2009) Flourishing Scale. The original scale is an 8-item measure which represents self-perceived well-being. Items are measured on a 7-point Likert scale ranging from 1= Strongly Disagree to 7 = Strongly Agree. For the purpose of this study, the “mixed or neither agree nor disagree” option was eliminated. This altered the survey to be a 6-point Likert scale ranging from 1= Strongly Disagree to 6= Strongly Agree. Additionally, all questions from the original Flourishing Scale were adapted to reflect flourishing in the context of incarceration. Example items include: “I lead a purposeful and meaningful life” adapted to “While in prison, I can lead a purposeful and meaningful life” and “I am optimistic about my future” adapted to “Whether it is in prison or outside of prison, I am optimistic about my future”. Scores can range from 8 to 56 with high scores representing higher psychological well-being and strengths (Diener et al, 2009). Cronbach’s alpha reported with the original scale was 0.87 (Diener et al., 2009).

### ***Adverse Childhood Experiences Questionnaire***

The Adverse Childhood Experiences Questionnaire is a ten-item scale asking participants if they experienced physical, sexual, or emotional abuse, physical or emotional neglect, or household dysfunction prior to the age of eighteen. Each “yes” response to a question on the

survey tallies as one ACE for total possible score of ten adverse childhood experiences. Example questions include: “Did a parent or other adult in the household often or very often swear at, insult, or put you down” and “Did a household member go to prison?” (Felitti et al., 1998).

### ***Others as Shamer***

The Others as Shamer scale is an 18-item scale measuring feelings of shame based on how others view the individual. Items are measured on a 5-point Likert scale ranging from 0 = Never to 4 = Almost Always. This scale consists of three factors: Factor 1 representing inferiority, Factor 2 representing emptiness, and Factor 3 representing how others view the individual when they make a mistake. For this study, only items representing Factor1 were utilized. Examples of these items include: “I think that people look down on me” and “Other people see me as defective as a person”. Score totals for this factor can range from 0 to 28 with higher scores representing higher levels of shame (Goss et al., 1994).

### **Procedure**

The Department of Corrections oversaw and implemented all data collection. Two weeks prior to data collection, Department of Corrections administrators placed sign-up sheets in the common areas of the dorms and living quarters. On the date of data collection, only those individuals who had signed up were released to go to a meeting room to complete the survey. The women participating in the study completed a paper and pencil survey which included a required Department of Corrections consent form. Those collecting the data informed the women of the purpose of the study and addressed concerns and questions as they arose. Once all data was collected, Department of Corrections volunteers entered the data into an Excel

sheet and matched responses to pre-existing demographic data before providing the researcher with a de-identified dataset. See Appendix B for the administered survey and Appendix C for the coding.

### **Data Analysis**

Utilizing SPSS, descriptives of variables were calculated including the means and standard deviation. Score reliability for each measure was tested using Cronbach's Alpha. A single-sample *t*-test was conducted for the ACE questionnaire utilizing a population mean from the Centers for Disease Control and Prevention (CDC) compared to the sample mean. Pearson correlations were run to determine the strength and direction of each relationship between the variables. In order to further explore the relationships among variables, a multiple regression analysis was utilized with adverse childhood experiences, shame, and hope serving as the set of independent variables and flourishing as the dependent variable.

### **Testing Statistical Assumptions of Linear Regression**

Prior to testing the model, statistical assumptions of linear regression were assessed to determine if there were any violations (Lomax & Hahs-Vaughn, 2012). Assumptions tested included independence, homogeneity, normality, linearity, and collinearity among the set of independent variables. No violations were discovered during this process.

### **Results**

As reported in the methods section, deidentified data was provided to the research team by the Department of Corrections. In total, 149 incarcerated women completed the survey. The average age of participants was 41.06 and the average sentence length excluding

those with life sentences was 12.14 years. While a variety of crimes were represented in the sample population, the most frequently occurring offenses were drug related (21.48%), burglary/embezzlement/larceny (18.79%), and child abuse/endangerment (18.79%). Table 2 displays the descriptive statistics calculated for each variable.

**Table 2.**

*Descriptive Statistics for Variables*

|                               | N   | Mean  | Standard Deviation | Cronbach's Alpha |
|-------------------------------|-----|-------|--------------------|------------------|
| Hope                          | 144 | 49.17 | 8.16               | .776             |
| Flourishing                   | 141 | 37.94 | 7.02               | .876             |
| Shame                         | 144 | 10.04 | 6.90               | .943             |
| Adverse Childhood Experiences | 136 | 5.77  | 2.67               | .735             |

A one sample t-test was calculated utilizing the Centers for Disease Control and Prevention (CDC) mean of 1.61 adverse childhood experiences (ACEs) from a sample of 57,703 adults (Ford et al., 2014). Results, [ $t(135) = 18.15; p < .001$ ], demonstrate that the average ACE score of 5.77 for the incarcerated women participants in this study was significantly higher than the CDC rate of 1.61. Cohen's d-statistic was 2.67 indicating a large difference in average ACE score for the participants of incarcerated women in this study compared to the CDC national sample.

**Research Question 1**

In order to test the hypotheses associated with research question 1, a Pearson correlation was computed to determine the strength and direction of each relationship. Consistent with previous research, results indicated that hope and flourishing were strongly and positively correlated  $r(135) = .624, p < .001$  and shame and hope were moderately and

negatively correlated  $r(135) = -.352, p < .001$ . Similarly, shame and flourishing were found to be moderately and negatively correlated  $r(139) = -.363, p < .001$ . Finally, adverse childhood experiences and shame were found to represent a small, positive correlation  $r(132) = .234, p = .007$ . The correlation between adverse childhood experiences and flourishing was not significant  $r(128) = -.098, p = .270$ . These findings support hypotheses one and three, but not hypothesis two. Overall, high scores on hope were associated with high scores on flourishing, high scores on shame were associated with low scores on flourishing and hope, and high scores on adverse childhood experiences were associated with high scores on shame. Table 3 provides the Pearson product moment correlation among the variables.

**Table 3.**

*Correlation Matrix*

|                                  | 1.      | 2.      | 3.     | 4. |
|----------------------------------|---------|---------|--------|----|
| 1. Hope                          | --      |         |        |    |
| 2. Flourishing                   | .624**  | --      |        |    |
| 3. Shame                         | -.352** | -.363** | --     |    |
| 4. Adverse Childhood Experiences | -.112   | -.098   | .234** | -- |

\*\* Correlation is significant at the 0.01 level (2-tailed)

## Research Question 2

A multiple regression analysis was conducted to examine if the variance in flourishing could significantly be predicted by the set of independent variables of hope, shame, or adverse childhood experiences. Results of the multiple regression found the model to be statistically significant,  $F(3, 119) = 28.416, p < .001$ , and accounted for 41.7% of the variance ( $R^2 = .417$ ,  $R^2_{\text{Adjusted}} = .403$ ). Further examination of the standardized beta coefficients showed the specific

predictors of hope ( $\beta = .506, p < .001$ ) and shame ( $\beta = -.152, p = 0.049$ ) presenting a statistically significant relationship with flourishing. However, the association of adverse childhood experiences to flourishing ( $\beta = -.001, p = .985$ ) was not statistically significant. Overall, these findings support hypothesis four with hope as the stronger association of flourishing in the tested model. Data pertaining to the regression analysis can be found in Table 4. It would be logical to assume that certain demographics might impact the dependent variable or set of independent variables. However, when including sentence length, type of crime, and age in the model as a set of control variables, there was no meaningful relationship to the variables and the control variables did not impact the interpretation of the model. Therefore, the regression results presented do not include these demographic variables.

**Table 4.**

*Regression Analysis for Flourishing*

| Predictor                    | B     | SE B | $\beta$ | $p$   | $R^2$ | Adjusted $R^2$ |
|------------------------------|-------|------|---------|-------|-------|----------------|
| Hope                         | .506  | .066 | .577    | <.001 |       |                |
| Shame                        | -.152 | .076 | -.152   | .049  |       |                |
| Adverse Childhood Experience | -.004 | .189 | -.001   | .985  |       |                |
| Model                        |       |      |         |       | .417  | .403           |

### Discussion

The purpose of this study was to examine the relationship between hope and psychological flourishing among incarcerated women and to assess the association of adverse childhood experiences, shame, and hope with flourishing in incarcerated women. While the relationship between hope and flourishing is emerging in the literature, no research exists

within the context of incarcerated women. To that end, the findings of this study advance the literature.

Consistent with previous research, (Fredrickson, 2001; Kleiman & Beaver, 2013; Munoz et al., 2020; Vetter et al., 2018), this study found that the presence of positive psychological traits (hope) and the absence of negative psychological traits (shame) is associated with greater well-being. Results of the correlational analysis supported the hypotheses with high scores on hope associated with high scores on flourishing and high scores on shame associated with low scores on flourishing. Results of the multiple regression supported the hypothesis with hope being found to be the stronger predictor of flourishing within the model set forth in this study.

This study further supports previous research (Munoz et al., 2020) of hope being a significant predictor of flourishing within a sample population which has significantly higher adverse childhood experience scores than the general population. Additionally, the current study found a statistically significant correlation between adverse childhood experiences and shame which further supports the 2019 study by Wojcik et al., which found that those with high adverse childhood experience scores were more likely to be prone to shame.

Unique to this study is the exploration of the interaction between adverse childhood experiences, shame, hope, and flourishing in incarcerated women. Numerous studies have explored these concepts among various groups including children (Hellman & Gwinn, 2017; Hinton-Nelson et al., 1996; Robitschek, 1996), victims of domestic abuse (Munoz, Brady et al., 2017; Munoz, Hellman et al., 2017; Muyan & Chang, 2019), and patient populations (Berendes et al., 2010; Elliott & Olver, 2009; Thornton et al., 2014), however, few have explored these

concepts in relation to women experiencing incarceration. Of significance is the idea that those who are living a life that many would deem the opposite of flourishing do in fact find ways to thrive.

Snyder's Hope Theory (2000) is built upon the premise that hope is a cognitive construct which can be taught and developed. Hope is the act of goal setting and utilizing pathways and agency to attain that goal. This study offers potential insight into how shame can thwart hope, and ultimately, flourishing. When looking at the impact of adverse childhood experiences on the individual, those with high scores on adverse childhood experiences had higher scores on shame,  $r(132) = 0.234, p = .007$ . Of note, the correlation between adverse childhood experiences and hope,  $r(131) = -.112, p = .202$ , was not statistically significant, however, the correlation between shame and hope  $r(139) = -.352, p < .001$  was. This may indicate that experiencing a significant number of adverse childhood experiences does not necessarily lead to low hope. Instead, adverse childhood experiences could lead to high shame which in turn negatively impacts hope and then flourishing. As previously detailed, guilt is the negative emotion related to an action, whereas shame is the negative emotion related to oneself (Tangney et al., 1996; Wicker et al., 1983). Therefore, those experiencing shame have an altered negative sense of self. This negative self-concept could impede hope by impacting how worthy one feels about goal seeking or having a positive future. Furthermore, high shame may hinder an individual's agency in the process of hope as they may feel unworthy or unmotivated to pursue a goal. As indicated in the results of this study, having lower hope is associated with lower flourishing and overall well-being. Ultimately, the findings in this study should be advanced through the consideration

of shame as a mediating factor in the relationship between hope and adverse childhood experiences. This proposed mediation model would be consistent with previous research examining the relationship between adverse childhood experiences and hope (Hellman et al., 2022; Munoz et al., 2020; Munoz et al., 2022; Munoz & Hanks, 2021).

### **Implications for Practice**

Research has found that by decreasing negative psychological thought patterns, such as shame, and instead developing positive self-thought, such as self-compassion, an individual's well-being increases (Li et al., 2023; Neff, 2011; Ptacek & Daubman, 2018; Scoglio et al., 2018). This lends promise to those who are experiencing a life which could be viewed as inherently unhopeful. The results of this study provide evidence that even those with significant histories of adversity and trauma can possess and develop hope. Furthermore, even when these individuals are living in psychologically detrimental conditions, such as incarceration, with hope, they are able to flourish. Given the vulnerable nature of this population, prisons would benefit from increased interventions and programming which emphasize reducing shame, increasing hope, and shifting to trauma-informed environments (Miller & Najavits, 2012). By providing interventions of this nature, prisons could potentially see an increase in overall well-being or flourishing. Research has found that interventions focused on positive psychology, including self-compassion, hope, and mindfulness, result in increased self-control, self-esteem, and overall well-being (Lo et al., 2020; Morley, 2015; Moulden & Marshall, 2005). Therefore, increased interventions could decrease violence and misbehavior in prison populations and could help reduce the negative psychological and environmental ramifications of incarceration. Currently,

in Oklahoma prisons, the chaplain oversees all programming within the prison system. As previously cited, research has shown that involvement in faith and religion while incarcerated can lead to increased well-being (Eytan, 2011; Wright et al., 2023). Providing education on the importance and impact of hope to chaplains could serve as a means of increasing hope and well-being and reducing shame through hope-based programming in the prison system.

### **Potential Limitations**

The most significant limitation to this study is the small sample size relative to the population of incarcerated women. The Oklahoma Department of Corrections oversaw all recruitment and data collection, and therefore the researchers only analyzed deidentified data provided to them. The recruitment methodology may have limited the potential sample size as it required participants to sign up ahead of time without significant explanation of the purpose of the survey. Only those who had signed up were pulled from their cells or dormitories in order to participate in the survey. With only around 7% of the Oklahoma Department of Corrections female inmate population participating, generalizability of the findings is somewhat limited. Within this study, the variables of shame, hope, adverse childhood experiences, and flourishing were measured. Future research may find other contributing variables beyond what was tested in the context of this study.

### **Conclusion**

While the potential limitations warrant consideration, this study has several strengths that add significantly to the literature. Incarcerated women are rarely studied yet continue to be an increasing population within the prison system. The model for this study was built upon

previous literature and utilized established and validated scales. This study is the first of its kind to look at hope, adverse childhood experiences, shame, and flourishing among incarcerated women. The results indicate that even in highly traumatized individuals who are living in incarceration, hope can support overall well-being. While shame serves as a negative contributor to well-being, hope may provide a path toward flourishing.

## References

- Aakvaag, H. F., Thoresen, S., Wentzel-Larsen, T., Dyb, G., Røysamb, E., & Olff, M. (2016). Broken and guilty since it happened: A population study of trauma-related shame and guilt after violence and sexual abuse. *Journal of Affective Disorders, 204*(1), 16-23.  
<https://doi.org/10.1016/j.jad.2016.06.004>
- Abrams, L. S., Canlione, K. C., & Washington, D. M. (2023). "I wouldn't change who I've become": Released juvenile lifers on joy, shame, and the journey to an integrated self. *Crime & Delinquency, 69*(2), 367–391. <https://doi.org/10.1177/00111287221104045>
- Aizpurua, E., Caravaca-Sánchez, F., & Wolff, N. (2023). Patterns of childhood adversities and their associations with adult victimization among incarcerated men and women in Spanish prisons. *International Journal of Offender Therapy and Comparative Criminology, 67*(1), 89–104. <https://doi.org/10.1177/0306624X221102845>
- Anda, R. F., Felitti, V. J., Bremner, J. D., Walker, J. D., Whitfield, Ch., Perry, B. D., Dube, Sh. R., & Giles, W.H. (2006). The enduring effects of abuse and related adverse experiences in childhood. *European Archives of Psychiatry and Clinical Neuroscience, 256*, 174-186.  
<https://doi.org/10.1007/s00406-005-0624-4>
- Andersson, T., Pettersson, R., & Jacobsson, J. (2020). Women and men sexually violated by closely related perpetrators over a lifespan. Prevalence, revictimization, and association to adverse childhood conditions and experiences. *Children and Youth Services Review, 113*(1), 104897. <https://doi.org/10.1016/j.childyouth.2020.104897>

- Arumba, N., Dematteo, D., & Heilbrun, K. (2012). Social functioning, victimization, and mental health among female offenders. *Criminal Justice and Behavior*, 39(9), 1204-1218.  
<https://doi.org/10.1177/0093854812443489>
- Beer, A. M., Morgan, R. D., Garland, J. T., & Spanierman, L. B. (2007). The role of romantic/intimate relationships in the well-being of incarcerated females. *Psychological Services*, 4(4), 250–261. <https://doi.org/10.1037/1541-1559.4.4.250>
- Beaman, J., Miner, C., & Bolinger, C. (2023). Quantifying adverse childhood experiences in Oklahoma with the Oklahoma Adversity Surveillance Index System (OASIS): Development and cross-sectional study. *JMIR Public Health and Surveillance*, 9, E45891.  
<http://dx.doi.org/10.2196/45891>
- Beckett, K., & Beach, L. (2021). The place of punishment in twenty-first-century America: Understanding the persistence of mass incarceration. *Law & Social Inquiry*, 46(1), 1-31.  
<https://doi.org/10.1017/lsi.2020.4>
- Belknap, J., & Holsinger, K. (2006). The gendered nature of risk factors for delinquency. *Feminist Criminology*, 1(1), 48–71. <https://doi.org/10.1177/1557085105282897>
- Bell, K. E., Mathers, S. A., & Lindekugel, D. M. (2019). Gender and prison recidivism: The influence of protective and risk factors. *Journal of Penal Law and Criminology*, 7(2), 185-211. <http://dx.doi.org/10.26650/JPLC2019-0001>
- Berendes, D., Keefe, F. J., Somers, T. J., Kothadia, S. M., Porter, L. S., & Cheavens, J. S. (2010). Hope in the context of lung cancer: Relationships of hope to symptoms and

- psychological distress. *Journal of pain and symptom management*, 40(2), 174–182.  
<https://doi.org/10.1016/j.jpainsymman.2010.01.014>
- Bloom, B., Owen, B., & Covington, S. (2004). Women offenders and the gendered effects of public policy. *Review of Policy Research*, 21(1), 31–48. <https://doi.org/10.1111/j.1541-1338.2004.00056.x>
- Boland, J., Rock, R., Johnson, A. K., Jones, M. A., Salekin, R. T., & Anderson, J. L. (2021). Pathways to incarceration: An examination of childhood maltreatment and personality psychopathology in incarcerated adults. *Psychology, Crime, and Law*, 27(3), 253-264.  
<https://doi.org/10.1080/1068316X.2020.1798426>
- Bowles, M. A., DeHart, D., & Webb, J. (2012). Family influences on female offenders' substance use: The role of Adverse Childhood Events among incarcerated women. *Journal of Family Violence*, 27(7), 681-686. <https://dx.doi.org/10.1007/s10896-012-9450-4>
- Brown, M., & Bloom, B. E. (2018) Women's desistance from crime: A review of theory and the role higher education can play. *Sociology Compass*, 12(5), 1-11.  
<https://doi.org/10.1111/soc4.12580>
- Carson, E. A. (2021). Prisoners in 2020 – Statistical tables. Washington, DC: Bureau of Justice Statistics. <https://bjs.ojp.gov/content/pub/pdf/p20st.pdf>
- Chapman, A. L., Gratz, K. L., & Turner, B. J. (2014). Risk-related and protective correlates of nonsuicidal self-injury and co-occurring suicide attempts among incarcerated women. *Suicide and Life-Threatening Behavior*, 44(2), 139-154.  
<https://doi.org/10.1111/sltb.12058>

Child and Adolescent Health Measurement Initiative (2021). *Oklahoma fact sheet 2021: Strong roots grow a strong nation*. Johns Hopkins Bloomberg School of Public Health.

[https://www.cahmi.org/docs/default-source/resources/2021-aces-fact-sheets/cahmi-state-fact-sheet---ok.pdf?sfvrsn=e088a677\\_6](https://www.cahmi.org/docs/default-source/resources/2021-aces-fact-sheets/cahmi-state-fact-sheet---ok.pdf?sfvrsn=e088a677_6)

Christiaens, I., Hegadoren, K., & Olson, D. M. (2015). Adverse childhood experiences are associated with spontaneous preterm birth: A case-control study. *BMC Medicine*, 13(1), 124. <https://doi.org/10.1186/s12916-015-0353-0>

Chung, E. K., Nurmohamed, L., Mathew, L. Elo, I. T., Coyne, J. C., & Culhane, J. F. (2010). Risky health behaviors among mothers-to-be: the impact of adverse childhood experiences. *Academic Pediatrics*, 10(4), 245-251. <https://doi.org/10.1016/j.acap.2010.04.003>

Clone, S. & DeHart, D. (2014). Social support networks of incarcerated women: Types of support, sources of support, and implications for reentry. *Journal of Offender Rehabilitation*, 53(7), 503-521. <https://doi.org/10.1080/10509674.2014.944742>

Clyne, L. M. (2021). Hope and flourishing: The effect of hope on psychological flourishing in participants with chronic pain. [Proceedings of the International Society for the Study of Women's Sexual Health 2021 Annual Meeting]. *The Journal of Sexual Medicine*, 20(3), qdad068.043. <https://doi.org/10.1093/jsxmed/qdad068.043>

Cook, N. (2018). *Making the best of it: Measuring prison adjustment of life-sentenced women*. [Unpublished master's thesis]. Middle Tennessee State University.  
<https://jewlscholar.mtsu.edu/bitstreams/fb24e3dd-e5af-45f5-ad06-5adbc3d853a7/download>

- Cooper-Sadlo, S., Mancini, M. A., Meyer, D. D., & Chou, J. L. (2019). Mothers talk back: Exploring the experiences of formerly incarcerated mothers. *Contemporary Family Therapy*, 41, 92-101. <https://doi.org/10.1007/s10591-018-9473-y>
- Cowan, B. A. (2019). Incarcerated women: Poverty, trauma and unmet need. *The SES Indicator*. <https://www.apa.org/pi/ses/resources/indicator/2019/04/incarcerated-women>
- Cunradi, C. B., Caetano, R., Alter, H. J., & Ponicki, W. R. (2020). Adverse childhood experiences are associated with at-risk drinking, cannabis and illicit drug use in females but not males: An emergency department study. *The American Journal of Drug and Alcohol Abuse*, 46(6), 739-748. <https://doi.org/10.1080/00952990.2020.1823989>
- Dallaire, D. H. (2007). Children with incarcerated mothers: Developmental outcomes, special challenges, and recommendations. *Journal of Applied Developmental Psychology*, 28, 15-24. <https://doi.org/10.1016/j.appdev.2006.10.003>
- DeCaro, J. B., Straka, K., Malek, N., & Zalta, A. K. (2022). Sentenced to shame: Moral injury exposure in former lifers. *Psychological Trauma: Theory, Research, Practice, and Policy*. Advance online publication. <https://doi.org/10.1037/tra0001400>
- DeCou, C. R., Lynch, S. M., Weber, S., Richner, D., Mozafari, A., Huggins, H., & Perschon, B. (2023). On the association between trauma-related shame and symptoms of psychopathology: A meta-analysis. *Trauma, Violence, & Abuse*, 24(3), 1193–1201. <https://doi.org/10.1177/15248380211053617>

- DeHart, D. D. (2008). Pathways to prison: Impact of victimization in the lives of incarcerated women. *Violence Against Women*, 14(12), 1362-1381.  
<https://doi.org/10.1177/1077801208327018>
- Diener, E., Wirtz, D., Tov, W., Kim-Prieto, C., Choi, D. W., Oishi, S., & Biswas-Diener, R. (2009). New well-being measures: Short scales to assess flourishing and positive and negative feelings. *Social Indicators Research*, 97(2), 143–156. <https://doi.org/10.1007/s11205-009-9493-y>
- Dowlatabadi, M. D., & Mousavi, S. (2021). Effectiveness of goal-setting training on the psychological flourishing of students. *International Journal of School Health*, 8(2), 110-117. <https://doi.org/10.30476/intjsh.2021.90531.1134>
- Dube, S. R., Anda, R. F., Felitti, V. J., Chapman, D. P., Williamson, D. F., & Giles, W. H. (2001). Childhood abuse, household dysfunction, and the risk of attempted suicide throughout the life span: Findings from the Adverse Childhood Experiences Study. *JAMA*, 286(24), 3089–3096. <https://psycnet.apa.org/doi/10.1001/jama.286.24.3089>
- Dumont, D. M., Brockmann, B., Dickman, S., Alexander, N., Rich, J. D. (2012). Public health and the epidemic of incarceration. *Annual Review of Public Health*, 33, 325-329.  
<https://doi.org/10.1146/annurev-publhealth-031811-124614>
- Elliott, J., & Olver, I. (2009). Hope, life, and death: A qualitative analysis of dying cancer patients' talk about hope. *Death Studies*, 33(7), 609–638.  
<https://doi.org/10.1080/07481180903011982>

- Esmailzadeh Ghandehary, M. R., Mottaghy Shahri, M. R., & Mohamadi, F. (2019). Mental health status and resilience of female prisoners with an interventional role of physical activity. *Journal of Research and Health*, 9(6), 488-495.  
<http://dx.doi.org/10.32598/jrh.9.6.488>
- Esposito, M. (2015). Women in prison: Unhealthy lives and denied well-being between loneliness and seclusion. *Crime, Law, and Social Change*, 63, 137-158.  
<https://doi.org/10.1007/s10611-015-9561-y>
- Eytan, A. (2011). Religion and mental health during incarceration: A systematic literature review. *Psychiatric Quarterly*, 82, 287-295. <https://doi.org/10.1007/s11126-011-9170-6>
- Fanslow, J., Hashemi, L., Gulliver, P., & McIntosh, T. (2021). Adverse childhood experiences in New Zealand and subsequent victimization in adulthood: Findings from a population-based study. *Child Abuse & Neglect*, 117(1), 105067.  
<https://doi.org/10.1016/j.chiabu.2021.105067>
- Felitti, V. J. (1993). Childhood sexual abuse, depression, and family dysfunction in adult obese patients: A case control study. *Southern Medical Journal*, 88(7), 732-736.  
<https://doi.org/10.1097/00007611-199307000-00002>
- Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., Koss, M. P., & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The adverse childhood experiences (ACE) study. *American Journal of Preventive Medicine*, 14(4), 245-258.  
[https://doi.org/10.1016/S0749-3797\(98\)00017-8](https://doi.org/10.1016/S0749-3797(98)00017-8)

- Finkelhor, D., Ormrod, R. K., & Turner, H. A. (2009). Lifetime assessment of poly-victimization in a national sample of children and youth. *Child Abuse & Neglect*, 33(7), 403-411.  
<https://doi.org/10.1016/j.chiabu.2008.09.012>
- Flores-Torres, M. H., Comerford, E., Signorello, L., Grodstein, F., Lopez-Ridaura, R., de Castro, F., Familiar, I., Ortiz-Panozo, E., & Lajous, M. (2020). Impact of adverse childhood experiences on cardiovascular disease risk factors in adulthood among Mexican women. *Child Abuse & Neglect*, 99(1), 104175. <https://doi.org/10.1016/j.chiabu.2019.104175>
- Fogel, C. I. (1993). Hard time: The stressful nature of incarceration for women. *Issues in Mental Health Nursing*, 14, 367-377. <https://doi.org/10.3109/01612849309006900>
- Folk, J. B., Stuewig, J., Mashek, D., Tangney, J. P., & Grossmann, J. (2019). Behind bars but connected to family: Evidence for the benefits of family contact during incarceration. *Journal of Family Psychology*, 33(4), 453-464. <https://doi.org/10.1037%2Ffam0000520>
- Ford, D. C., Merrick, M. T., Parks, S. E., Breiding, M. J., Gilbert, L. K., Edwards, V. J., Dhingra, S. S., Barile, J. P., & Thompson, W. W. (2014). Examination of the factorial structure of adverse childhood experiences and recommendations for three subscale scores. *Psychology of Violence*, 4(4), 432–444. <https://doi.org/10.1037/a0037723>
- Foti, T. R., Watson, C., Adams, S. R., Rios, N., Staunton, M., Wei, J., Sterling, S. A., Ridout, K. K., & Young-Wolff, K. C. (2023). Associations between adverse childhood experiences (ACEs) and prenatal mental health and substance use. *International Journal of Environmental Research and Public Health*, 20(13), 6289. <https://doi.org/10.3390/ijerph20136289>

- Fredrickson, B.L. (2013). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, 56(3), 218-226.  
<https://psycnet.apa.org/doi/10.1037/0003-066X.56.3.218>
- Friestad, C., Åse-Bente, R., & Kjelsberg, E. (2014). Adverse childhood experiences among women prisoners: Relationships to suicide attempts and drug abuse. *International Journal of Social Psychiatry*, 60(1), 40-46. <https://doi.org/10.1177/0020764012461235>
- Fuentes, C. M. (2013). Nobody's child: The role of trauma and interpersonal violence in women's pathways to incarceration and resultant service needs. *Medical Anthropology Quarterly*, 28, 85-104. <https://doi.org/10.1111/maq.12058>
- Galoob, S., McCarty, C., & Gentzler, R. (2019). Oklahoma's State Question 780. *Federal Sentencing Reporter*, 31(3), 182-186. <https://doi.org/10.1525/fsr.2019.31.3.182>
- Garbutt, K., Rennoldson, M., & Gregson, M. (2023). Shame and self-compassion connect childhood experience of adversity with Harm inflicted on the self and others. *Journal of Interpersonal Violence*, 38(11–12), 7193–7214.  
<https://doi.org/10.1177/08862605221141866>
- Gateley, D. (2022, March 14). *The 2022 session brings rare opportunity for significant progress in our criminal justice system*. Oklahoma Policy Institute. <https://okpolicy.org/the-2022-session-brings-rare-opportunity-for-significant-progress-in-our-criminal-justice-system/>
- Giano, Z., Wheeler, D. L., & Hubach, R. D. (2020). The frequencies and disparities of adverse childhood experiences in the U.S.. *BMC Public Health*, 20(1), 1327.  
<https://doi.org/10.1186/s12889-020-09411-z>

- Goomany, A., & Dickinson, T. (2015). The influence of prison climate on the mental health of adult prisoners: A literature review. *Journal of Psychiatric and Mental Health Nursing*, 22, 413-422. <https://doi.org/10.1111/jpm.12231>
- Goss, K., Gilbert, P., & Allan, S. (1994). An exploration of shame measures: I. The Other As Shamer Scale. *Personality and Individual Differences*, 17(5), 713–717.  
[https://doi.org/10.1016/0191-8869\(94\)90149-X](https://doi.org/10.1016/0191-8869(94)90149-X)
- Green, B. L., Dass-Brailsford, P., Hurtado de Mendoza, A., Mete, M., Lynch, S. M., DeHart, D. D., & Belknap, J. (2016). Trauma experiences and mental health among incarcerated women. *Psychological Trauma: Theory, Research, Practice, and Policy*, 8(4), 455–463.  
<https://doi.org/10.1037/tra0000113>
- Greer, K. R. (2000). The changing nature of interpersonal relationships in a women's prison. *The Prison Journal*, 80(4), 442–468. <https://doi.org/10.1177/0032885500080004009>
- Hagen, K. A., Myers, B. J., Mackintosh, V. H. (2005). Hope, social support and behavioral problems in at-risk children. *American Journal of Orthopsychiatry*, 75(2), 211-219.  
<https://doi.org/10.1037/0002-9432.75.2.211>
- Harner, H. M. (2004). Relationships between incarcerated women: Moving beyond stereotypes. *Journal of Psychosocial Nursing and Mental Health Services*, 42(1), 38–46.  
<https://doi.org/10.3928/02793695-20040101-11>
- Hellman, C. M., Pharris, A. B., & Munoz, R. T. (2022). Responding to adverse childhood experiences: The science of hope as a framework for action. *Advances in Social Work*, 22(3), 1066-1083. <https://doi.org/10.18060/25632>

- Hellman, C., & Gwinn, C. (2017). Camp HOPE as an intervention for children exposed to domestic violence: A program evaluation of hope, and strength of character. *Child & Adolescent Social Work Journal*, 34(3), 269-276. <https://doi-org.ezproxy.lib.ou.edu/10.1007/s10560-016-0460-6>
- Henry, B. F. (2019). Adverse experiences, mental health, and substance use disorders as social determinants of incarceration. *Journal of Community Sociology*, 48(30), 744-762. <https://doi.org/10.1002/jcop.22289>
- Herrschaft, B., Veysey, B., Tubman-Carbone, H., & Christian, J. (2009). Gender differences in the transformation narrative: Implications for revised reentry strategies for female offenders. *Journal of Offender Rehabilitation*, 48(6), 463-482. <https://doi.org/10.1080/10509670903081250>
- Hinton-Nelson, M., Roberts, M. C., & Snyder, C. R. (1996). Early adolescents exposed to violence: Hope and vulnerability to victimization. *American Journal of Orthopsychiatry*, 66(3), 346-353. <https://doi.org/10.1037/h0080185>
- Hosser, D., Windzio, M., & Greve, W. (2008). Guilt and shame as predictors of recidivism: A longitudinal study with young prisoners. *Criminal Justice and Behavior*, 35(1), 138–152. <https://doi.org/10.1177/0093854807309224>
- Ishikawa, K., Azuma, N. & Ohka, M. (2022). Intergenerational transmission of maternal adverse childhood experiences on next generation's development: A mini-review. *Frontiers in Psychology*, 13(1), 852467. <https://doi.org/10.3389/fpsyg.2022.852467>

Jones, M. S., Sharp, S. F., & Worthen, M. G. F. (2018). Broken hearts and battered lives: Adverse and abusive life histories and externalized responses to anger as pathways to illicit drug use among incarcerated women. *Women & Criminal Justice*, 28(3), 167-188.

<https://doi.org/10.1080/08974454.2017.1372329>

Jones, M. S., Worthen, M. G. F., Sharp, S. F., & McLeod, D. A. (2018). Bruised inside out: The adverse and abusive life histories of incarcerated women as pathways to PTSD and illicit drug use. *Justice Quarterly*, 35(6), 1004-1029.

<https://doi.org/10.1080/07418825.2017.1355009>

Jones, M. S., Burge, S. W., Sharp, S. F., & McLeod, D. A. (2020). Childhood adversity, mental health, and the perpetration of physical violence in the adult intimate relationships of women prisoners: A life course approach. *Child Abuse & Neglect*, 101(1), 104237.

<https://doi.org/10.1016/j.chiabu.2019.104237>

Kabani, F., Lykens, K., & Tak, H. J. (2018). Exploring the relationship between adverse childhood experiences and oral health-related quality of life. *Journal of Public Health Dentistry*, 78(4), 313-320. <https://doi.org/10.1111/jphd.12274>

Kang, N. R., Kwack, Y. S., Song, J. K., Kim, M. D., Park, J. H., Kim, B. N., & Moon, D. S. (2021). The impact of maternal adverse childhood experiences on offspring's internalizing and externalizing problems. *Psychiatry Investigation*, 18(11), 1050-1057.

<https://doi.org/10.30773/pi.2021.0343>

- Kirschman, K. J. B., Roberts, M. C., Shadlow, J. O., & Pelley, T. J. (2010). An evaluation of hope following a summer camp for inner-city youth. *Child & Youth Care Forum*, 39(6), 385–396. <https://doi.org/10.1007/s10566-010-9119-1>
- King, S. E., & Smith, H. P. (2023). Reexploring female pathways to incarceration: Assessing the role of mental illness. *International Journal of Offender Therapy and Comparative Criminology*, 0, 1-24. <https://doi.org/10.1177/0306624X221144297>
- Kinney, S., Darden, A., Konrad, K. M. L., Darden, P. M., & Madden, C. (2018). Community engagement: Why Oklahoma? Why now? *The Journal of the Oklahoma State Medical Association*, 111(8), 790–794. <http://www.ncbi.nlm.nih.gov/pmc/articles/pmc6615740/>
- Kleiman, E. M., & Beaver, J. K. (2013). A meaningful life is worth living: Meaning in life as a suicide resiliency factor. *Psychiatry Research*, 210(3), 934-939. <https://doi.org/10.1016/j.psychres.2013.08.002>
- Kylmä, J., Duggleby, W., Cooper, D., & Molander, G. (2009). Hope in palliative care: an integrative review. *Palliative & supportive care*, 7(3), 365–377. <https://doi.org/10.1017/S1478951509990307>
- Li, J., He, H., Wang, P., Li, J., Zhang, Y., You, J., & Chongsuvivatwong, V. (2023). Pathway of effects of adverse childhood experiences on the poly-drug use pattern among adults using drugs: A structural equation modeling. *Frontiers in Public Health*, 11(1), 1043222. <https://doi.org/10.3389/fpubh.2023.1043222>
- Lietzén, R., Suominen, S., Sillanmäki, L., Virtanen, P., Virtanen, M., & Vahtera, J. (2021). Multiple adverse childhood experiences and asthma onset in adulthood: Role of adulthood risk

- factors as mediators. *Journal of Psychosomatic Research*, 143(1), 110388.  
<https://doi.org/10.1016/j.jpsychores.2021.110388>
- Lin, S. X., Cheslack-Postava, K., McReynolds, L., Amsel, L., Bresnahan, M. & Hoven, C. W. (2022).  
 Adverse childhood experiences and insufficient sleep among U.S. children and  
 adolescents. *Academic Pediatrics*, 22(6), 965-971.  
<https://doi.org/10.1016/j.acap.2022.02.007>
- Lindquist, C. H. (2000). Social integration and mental well-being among jail detainees.  
*Sociological Forum*, 15, 431-455. <https://doi.org/10.1023/A:1007524426382>
- Lindquist, C. H., & Lindquist, C. A. (1997). Gender differences in distress: mental health  
 consequences of environmental stress among jail inmates. *Behavioral sciences & the  
 law*, 15(4), 503–523. [https://doi.org/10.1002/\(SICI\)1099-0798\(199723/09\)15:4<503::AID-BSL281>3.0.CO;2-H](https://doi.org/10.1002/(SICI)1099-0798(199723/09)15:4<503::AID-BSL281>3.0.CO;2-H)
- Lo, L., Iasiello, M., Carey, M., & Agteren, J. V. (2020). Improving the wellbeing of female  
 prisoners via psychological skills training: A feasibility study. *International Journal of  
 Offender Therapy and Comparative Criminology*, 64(15), 1571-1586.  
<http://dx.doi.org/10.1177/0306624X20928029>
- Lomax, R. G. & Hahs-Vaughn, D. L. (2012). *Statistical concepts: A second course* (4<sup>th</sup> edition).  
 Routledge: Taylor & Francis Group.
- Loper, A. B., & Gildea, J. W. (2004). Social support and anger expression among incarcerated  
 women. *Journal of Offender Rehabilitation*, 38(4), 27–50.  
[https://doi.org/10.1300/J076v38n04\\_03](https://doi.org/10.1300/J076v38n04_03)

- Maeve, M. K. (1999). The social construction of love and sexuality in a woman's prison. *Advances in Nursing Science*, 21(3), 46–65. <https://doi.org/10.1097/00012272-199903000-00007>
- Martin, K., & Stermac, L. (2010). Measuring hope: Is hope related to criminal behaviour in offenders? *International Journal of Offender Therapy and Comparative Criminology*, 54(5), 693–705. <https://doi.org/10.1177/0306624X09336131>
- Maruschak, L. M., Bronson, J., & Alper, M. (2021). *Parents in prison and their minor children: Survey of prison inmates, 2016*. Washington, DC: Bureau of Justice Statistics. <https://bjs.ojp.gov/content/pub/pdf/pptmcspi16st.pdf>
- Maschi, T., Viola, D., & Morgen, K. (2013). Unraveling trauma and stress, coping resources, and mental well-being among older adults in prison: Empirical evidence linking theory and practice. *The Gerontologist*, 54(5), 857-867. <https://doi.org/10.1093/geront/gnt069>
- Massoglia, M., & Pridemore, W. A. (2015). Incarceration and Health. *Annual Review of Sociology*, 41, 291-310. <https://doi.org/10.1146/annurev-soc-073014-112326>
- Mathur, S. (2014). Social network size and hope as predictors of life satisfaction in the elderly. *Indian Journal of Health and Wellbeing*, 5(8), 904-908. [http://www.iahrw.com/index.php/home/journal\\_detail/19#list](http://www.iahrw.com/index.php/home/journal_detail/19#list)
- McCann, J. P., Tipsword, J. M., Brake, C. A., & Badour, C. L. (2023). Trauma-related shame and guilt as prospective predictors of daily mental contamination and PTSD symptoms in survivors of sexual trauma. *Journal of Interpersonal Violence*, 38(19–20), 11117–11137. <https://doi.org/10.1177/08862605231179721>

Merrick, M. T., Ports, K. A., Ford, D. C., Afifi, T. O., Gershoff, E. T., Grogan-Kaylor, A. (2017).

Unpacking the impact of adverse childhood experiences on adult mental health. *Child Abuse & Neglect*, 69(1), 10-19. <https://doi.org/10.1016/j.chiabu.2017.03.016>

Mersky, J. P., Topitzes, J., & Reynolds, A. J. (2013). Impacts of adverse childhood experiences on health, mental health, and substance use in early adulthood: A cohort study of an urban, minority sample in the U.S.. *Child Abuse & Neglect*, 37(11), 917-925.

<https://doi.org/10.1016/j.chiabu.2013.07.011>

Messina, N. P., & Schepps, M. (2021). Opening the proverbial ‘can of worms’ on trauma-specific treatment in prison: The association of adverse childhood experiences to treatment outcomes. *Clinical Psychology & Psychotherapy*, 28(5), 1210–1221.

<https://doi.org/10.1002/cpp.2568>

Miller, N. A., & Najavits, L. M. (2012). Creating trauma-informed correctional care: A balance of goals and environment. *European Journal of Psychotraumatology*, 3(1), 1-8.

<https://doi.org/10.3402/ejpt.v3i0.17246>

Monnat, S. M., & Chandler, R. F. (2015). Long-term physical health consequences of adverse childhood experiences. *The Sociological Quarterly*, 56(4), 723-752.

<https://doi.org/10.1111/tsq.12107>

Moore, S. L., Hall, S. E., & Jackson, J. (2014). Exploring the experience of nursing home residents’ participation in a hope-focused group. *Nursing Research & Practice*, 2014, 1–9.

<https://doi:10.1155/2014/623082>

- Moore, K. E., Siebert, S., Brown, G., Felton, J., & Johnson, J.E. (2021). Stressful life events among incarcerated women and men: Association with depression, loneliness, hopelessness, and suicidality. *Health and Justice*, 9, 1-15. <https://doi.org/10.1186/s40352-021-00140-y>
- Morley, R. H. (2015). Violent criminality and self-compassion. *Aggression and Violent Behavior*, 24, 226–240. <https://doi.org/10.1016/j.avb.2015.05.01>
- Mosley-Johnson, E., Garacci, E., Wagner, N., Mendez, C., Williams, J. S., & Egede, L. E. (2019). Assessing the relationship between adverse childhood experiences and life satisfaction, psychological well-being, and social well-being: United States longitudinal cohort 1995–2014. *Quality of Life Research*, 28(1), 907–914. <https://doi.org/10.1007/s11136-018-2054-6>
- Moulden, H. M., & Marshall, W. L. (2005). Hope in the treatment of sexual offenders: The potential application of hope theory. *Psychology, Crime, & Law*, 11(3), 329-342. <https://doi.org/10.1080/10683160512331316361>
- Munoz, R. T., Brady, S., & Brown, V. (2017). The psychology of resilience: A model of the relationship of locus of control to hope among survivors of intimate partner violence. *Traumatology*, 23(1), 102–111. <http://dx.doi.org/10.1037/trm0000102>
- Munoz, R., Hellman, C., & Brunk, K. (2017). The relationship between hope and life satisfaction among survivors of intimate partner violence: The enhancing effect of self efficacy. *Applied Research in Quality of Life*, 12(4), 981-995. <https://doi-org.ezproxy.lib.ou.edu/10.1007/s11482-016-9501-8>

- Muñoz, R.T., & Hanks, H. (2021). A structural model of adverse childhood experiences as antecedents of rumination leading to lower hope. *Journal of Interpersonal Violence*, 36(19-20), 9790-9807. <https://psycnet.apa.org/doi/10.1177/0886260519868195>
- Munoz, R. T., Hanks, H., & Hellman, C. M. (2020). Hope and resilience as distinct contributors to psychological flourishing among childhood trauma survivors. *Traumatology*, 26(2), 177–184. <https://doi.org/10.1037/trm0000224>
- Munoz, R. T., Pharris, A. B., & Hellman, C. M. (2022). A linear model of adverse childhood experiences (ACEs) as drivers of lower hope mediated by lower attachment security in an adult sample. *Journal of Family Violence*, 37(8), 671-679. <https://link.springer.com/article/10.1007/s10896-021-00282-5>
- Muyan, M., & Chang, E. C. (2019). Hope as a mediator of the link between intimate partner violence and suicidal risk in Turkish women: Further evidence for the role of hope agency. *Journal of Interpersonal Violence*, 34(21–22), 4620–4637. <https://doi-org.ezproxy.lib.ou.edu/10.1177/0886260516675465>
- Nadel, B. A. (1996). Designing for women: Doing time differently. *Corrections Compendium*, 21(11), 1-5. <https://www.ojp.gov/ncjrs/virtual-library/abstracts/designing-women-doing-time-differently>
- Neff, K.D. (2011). Self-compassion, self-esteem, and well-being. *Social and Personality Psychology Compass*, 5(1), 1-12. <https://doi.org/10.1111/j.1751-9004.2010.00330.x>
- O'Donnell, I. (2014). *Prisoners, solitude, and time*. Oxford: Oxford University Press.

Oklahoma State Department of Health (2020). *Oklahoma Health Improvement Plan*.

<https://oklahoma.gov/content/dam/ok/en/health/health2/documents/ohip-2020.pdf>

Øktedalen, T., Hagtvet, K. A., Hoffart, A., Langkaas, T. F., & Smucker, M. (2014). The Trauma Related Shame Inventory: Measuring trauma-related shame among patients with PTSD. *Journal of Psychopathology and Behavioral Assessment*, 36, 600–615. <https://doi-org.ezproxy.lib.ou.edu/10.1007/s10862-014-9422-5>

Osei-Tutu, A., Cowden, R. G., Kwakye-Nuako, C. O., Gadze, J., Oppong, S., & Worthington, E. L. (2021). Self-forgiveness among incarcerated individuals in Ghana: Relations with shame- and guilt-proneness. *International Journal of Offender Therapy and Comparative Criminology*, 65(5), 558–570. <https://doi.org/10.1177/0306624X20914496>

Parsons, M. L., & Warner-Robbins, C. (2002). Factors that support women's successful transition to the community following jail/prison. *Health care for women international*, 23(1), 6–18. <https://doi.org/10.1080/073993302753428393>

Pharris, A. B., Munoz, R. T., & Hellman, C. M. (2022). Hope and resilience as protective factors linked to lower burnout among child welfare workers. *Children and Youth Services Review*, 136, 106424. <https://doi.org/10.1016/j.childyouth.2022.106424>

Pinese, C. S. V., Furegato, A. R. F., & Santos, J. L.F. (2010). Demographic and clinical predictors of depressive symptoms among incarcerated women. *Annals of General Psychiatry*, 9(34), 1-7. <https://doi.org/10.1186/1744-859X-9-34>

- Ports, K. A., Ford, D. C., & Merrick, M. T. (2016). Adverse childhood experiences and sexual victimization in adulthood. *Child Abuse & Neglect*, 51(1), 313-322.  
<https://doi.org/10.1016/j.chiabu.2015.08.017>
- Ptacek, J. T., & Daubman, K. A. (2018). An exploration of self-compassion in incarcerated women. *Journal of Police and Criminal Psychology*, 35(2), 182–190.  
<https://doi.org/10.1007/s11896-018-9304-y>
- Robitschek, C. (1996). At-risk youth and hope: Incorporating a ropes course into a summer jobs program. *The Career Development Quarterly*, 45(2), 163–169.  
<https://doi.org/10.1002/j.2161-0045.1996.tb00266.x>
- Rose, F., Sankofa, J., & Silveira, A. (2022). Turning the page: Oklahoma’s criminal justice reform story. FWD.us. <https://turningthepage.fwd.us/pdf/report-print-friendly.pdf>
- Ross, M. K., Romero, T., & Szilagyi, P. G. (2021). Adverse childhood experiences and association with pediatric asthma severity in the 2016-2017 National Survey of Children’s Health. *Academic Pediatrics*, 21(6), 1025-1030. <https://doi.org/10.1016/j.acap.2021.04.021>
- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potential: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 52(1), 141-166.  
<https://doi.org/10.1146/annurev.psych.52.1.141>
- Schrank, B., Stanghellini, G., & Slade, M. (2008). Hope in psychiatry: a review of the literature. *Acta Psychiatrica Scandinavica*, 118(6), 421–433. <https://doi.org/10.1111/j.1600-0447.2008.01271.x>

- Scoglio, A. A. J., Rudat, D. A., Garvert, D., Jarmolowski, M., Jackson, C., & Herman, J. L. (2018). Self-compassion and responses to trauma: The role of emotion regulation. *Journal of Interpersonal Violence, 33*(13), 2016-2036. <https://doi.org/10.1177/0886260515622296>
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist, 55*(1), 5–14. <https://doi.org/10.1037/0003-066X.55.1.5>
- The Sentencing Project. (2023). *Incarcerated women and girls*.  
<https://www.sentencingproject.org/wp-content/uploads/2016/02/Incarcerated-Women-and-Girls.pdf>
- Severance, T. A. (2005). “You know who you can go to”: Cooperation and exchange between incarcerated women. *The Prison Journal, 85*(3), 343–367.  
<https://doi.org/10.1177/0032885505279522>
- Simon, A., Cage, J., & Akinkugbe, A. A. (2021). Adverse childhood experiences and oral health outcomes in U.S. children and adolescents: A cross-sectional study of the 2016 National Survey of Children’s Health. *International Journal of Environmental Research and Public Health, 18*(23), 12313. <http://dx.doi.org/10.3390/ijerph182312313>
- Smedema, S. M., Chan, J. Y., & Phillips, B. N. (2014). Core self-evaluations and Snyder’s hope theory in persons with spinal cord injuries. *Rehabilitation Psychology, 59*(4), 399-406.  
<https://doi.org/10.1037/rep0000015>
- Snyder, C. R. (1995). Conceptualizing, measuring, and nurturing hope. *Journal of Counseling and Development, 73*(3), 355-360. <https://doi.org/10.1002/j.1556-6676.1995.tb01764.x>

- Snyder, C.R. (2000). The past and possible futures of hope. *Journal of Social and Clinical Psychology, 19*, 11-28. <http://dx.doi.org/10.1521/jscp.2000.19.1.11>
- Snyder, C. R., Harris, C., Anderson, J. R., Holleran, S. A., Irving, L. M., Sigmon, S. T., Yoshinobu, L., Gibb, J., Langelle C., & Harney, P. (1991). The will and the ways: Development and validation of an individual-differences measure of hope. *Journal of Personality and Social Psychology, 60*, 570-585. <https://doi.org/10.1037//0022-3514.60.4.570>
- Staton, M., Dickson, M., Tillson, M., Webster, J., & Leukefeld, C. (2019). Staying out: Reentry protective factors among rural women offenders. *Women & Criminal Justice, 29*(6), 368-384. <https://doi.org/10.1080%2F08974454.2019.1613284>
- Stearns, A. E., Yang, Y., & Boudreaux, L. (2018). Hope springs eternal: An exploration of hope at a local jail. *Women & Criminal Justice, 28*, 297-417. <https://doi.org/10.1080/08974454.2018.1450177>
- Stein, M. D., Conti, M. T., Kenney, S., Anderson, B. J., Flori, J. N., Risi, M. M., & Bailey, G. L. (2017). Adverse childhood experience effects on opioid use initiation, injection drug use, and overdose among persons with opioid use disorder. *Drug and Alcohol Dependence, 179*(1), 325-329. <https://doi.org/10.1016/j.drugalcdep.2017.07.007>
- Stensrud, R. H., Gilbride, D. D., & Bruinekool, R. M. (2019). The childhood to prison pipeline: Early childhood trauma as reported by a prison population. *Rehabilitation Counseling Bulletin, 62*(4), 195–208. <https://doi.org/10.1177/0034355218774844>
- Stillman, T. F., Baumeister, R. F., Lambert, N. M., Crescioni, A. W., Dewall, C. N., & Fincham, F. D. (2009). Alone and without purpose: Life loses meaning following social exclusion.

- Journal of Experimental Social Psychology*, 45 (4), 686-694.  
<https://doi.org/10.1016%2Fj.jesp.2009.03.007>
- Tan Q., Zhang L., Li W., Kong F. (2021). Longitudinal measurement invariance of the Flourishing Scale in adolescents. *Current Psychology*, 40(6), 5672–5677.  
<https://doi.org/10.1007/s12144-021-01754-z>
- Tangney, J. P., Miller, R. S., Flicker, L., & Barlow, D. H. (1996). Are shame, guilt, and embarrassment distinct emotions? *Journal of Personality and Social Psychology*, 70(6), 1256–1269. <https://doi.org/10.1037/0022-3514.70.6.1256>
- Tangney, J. P., Stuewig, J., & Martinez, A. G. (2014). Two faces of shame: The roles of shame and guilt in predicting recidivism. *Psychological Science*, 25(3), 799–805.  
<https://doi.org/10.1177/0956797613508790>
- Tangney, J. P., Stuewig, J., Mashek, D., & Hastings, M. (2011). Assessing jail inmates' proneness to shame and guilt: Feeling bad about the behavior or the self? *Criminal Justice and Behavior*, 38(7), 710-734. <https://doi.org/10.1177/0093854811405762>
- Thompson, M. P., Kingree, J. B., & Lamis, D. (2019). Associations of adverse childhood experiences and suicidal behaviors in adulthood in a U.S. nationally representative sample. *Child: Care, Health, and Development*, 45(1), 121–128.  
<https://doi.org/10.1111/cch.12617>
- Thornton, L. M., Cheavens, J. S., Heitzmann, C. A., Dorfman, C. S., Wu, S. M., & Andersen, B. L. (2014). Test of mindfulness and hope components in a psychological intervention for

- women with cancer recurrence. *Journal of Consulting and Clinical Psychology*, 82(6), 1087–1110. <https://doi.org/10.1037/a0036959>
- United Health Foundation (2022). *America's health rankings*.  
[https://assets.americashealthrankings.org/app/uploads/ahr\\_2022annualreport.pdf](https://assets.americashealthrankings.org/app/uploads/ahr_2022annualreport.pdf)
- Vadukapuram, R., Shah, K., Ashraf, S., Srinivas, S., Elshokiry, A. B. Trivedi, C., Mansuri, Z., & Jain, S. (2022). Adverse childhood experiences and their impact on sleep in adults: A systematic review. *The Journal of Nervous and Mental Disease*, 210(6), 397-410.  
<https://doi.org/10.1097/nmd.0000000000001480>
- Vetter, M. H., Vetter, M. K., & Fowler, J. (2018). Resilience, hope and flourishing are inversely associated with burnout among members of the Society for Gynecologic Oncology. *Gynecologic Oncology Reports*, 25, 52–55. <https://doi.org/10.1016/j.gore.2018.06.002>
- Vieira dos Santos, M., Alves, V. H., Pereira, A. V., Rodrigues, D. P., Marchiori, G. R. S., & Guerra, J. V. V. (2018). Protecting factors of the mental health of incarcerated women: a descriptive-exploratory study. *Online Brazilian Journal of Nursing*, 16(4), 471-479.  
<https://www.redalyc.org/articulo.oa?id=361456643009>
- Voith, L. A., Anderson, R. E., & Cahill, S. P. (2020). Extending the ACEs framework: Examining the relations between childhood abuse and later victimization and perpetration with college men. *Journal of Interpersonal Violence*, 35(17–18), 3487–3512.  
<https://doi.org/10.1177/0886260517708406>

- Wai-Ming Mak, V., Man-Yin Ho, S., Li, W.L., & Ka-Yan Pau, B. (2021). Relationships between hope and mental health among women in prison. *Criminal Behaviour and Mental Health*, 31(2), 96–108. <https://doi.org/10.1002/cbm.2191>
- Waterman, A. S. (1993). Two conceptions of happiness: contrasts of personal expressiveness (eudaimonia) and hedonic enjoyment. *Journal of Personality and Social Psychology*, 64, 678–91
- Wattanaporn, K. A., & Holtfreter, K. (2014). The impact of feminist pathways research on gender-responsive policy and practice. *Feminist Criminology*, 9(3), 191–207. <https://doi.org/10.1177/1557085113519491>
- Weis, R., & Speridakos, E.C. (2011). A Meta-Analysis of hope enhancement strategies in clinical and community settings. *Psych Well-Being*, 1(5). <https://doi.org/10.1186/2211-1522-1-5>
- Wesely, J. K., & Dewey, S. C. (2018). Confronting gendered pathways to incarceration: Considerations for reentry programming. *Social Justice*, 45(1), 57–82. <https://doi.org/10.2307/26677646>
- Wicker, F. W., Payne, G. C. & Morgan, R. D. (1983). Participant descriptions of guilt and shame. *Motivation and Emotion*, 7, 25–39. <https://doi-org.ezproxy.lib.ou.edu/10.1007/BF00992963>
- Wing, R., Gjelsvik, A., Nocera, M., & McQuaid, E. L. (2015). Association between adverse childhood experiences in the home and pediatric asthma. *Annals of Allergy, Asthma, & Immunology*, 114(5), 379-384. <https://doi.org/10.1016/j.anai.2015.02.019>

- Wojcik, K. D., Cox, D. W., & Kealy, D. (2019). Adverse childhood experiences and shame- and guilt-proneness: Examining the mediating roles of interpersonal problems in a community sample. *Child Abuse & Neglect*, 98(1), 104233.  
<https://doi.org/10.1016/j.chiabu.2019.104233>
- Wooldridge, J. S., Tynan, M., Rossi, F. S., Gasperi, M., McLean, C. L., Bosch, J., Trivedi, R. B., Herbert, M. S., & Afari, N. (2023). Patterns of adverse childhood experiences and cardiovascular risk factors in U.S. adults. *Stress and Health*, 39(1), 48-58.  
<https://doi.org/10.1002/smi.3167>
- Wright, S., Hulley, S., & Crewe, B. (2023). Trajectories of hope/lessness among men and women in the late stage of a life sentence. *Theoretical Criminology*, 27(1), 66-84).  
<https://doi.org/10.1177/13624806211067770>
- Wroblewski, K., & Snyder, C. (2005). Hopeful thinking in older adults: Back to the future. *Experimental Aging Research*, 31(2), 217-233.  
<https://doi-org.ezproxy.lib.ou.edu/10.1080/03610730590915452>
- Yang, S., Kadouri, A., Revah-Levy, A., Mulvey, E. P., & Falissard, B. (2009). Doing time: A qualitative study of long-term incarceration and the impact of mental illness. *International Journal of Law and Psychiatry*, 22, 294-303.  
<https://doi.org/10.1016/j.ijlp.2009.06.003>
- Zamble, E., & Porporino, F. (1988). *Coping, behavior, and adaption in prison inmates*. New York, NY: Springer.

Zhang, L., Mersky, J. P., & Lee, C. P. (2023). Intergenerational pathways linking mothers' adverse childhood experiences and children's social-emotional problems. *Child Maltreatment*, 28(1), 107–118. <https://doi.org/10.1177/10775595211067212>

## Appendix A

### IRB Letter



**Institutional Review Board for the Protection of Human Subjects**  
**Approval of Initial Submission – Expedited Review – AP01**

Date: April 04, 2024

IRB#: 17020

Principal Investigator: Liz Kollaja  
Approval Date: 04/04/2024  
Status Report Due: 03/31/2025  
Study Title: Trauma, Hope, and Well-Being in Incarcerated Women  
Expedited Category: 7  
Collection/Use of PHI: No

On behalf of the Institutional Review Board (IRB), I have reviewed and granted expedited approval of the above-referenced research study. To view the documents approved for this submission, open this study from the *My Studies* option, go to *Submission History*, go to *Completed Submissions* tab and then click the *Details* icon.

Requirements under the Common Rule have changed. The above-referenced research meets one or more of the circumstances for which continuing review is not required. However, as Principal Investigator of this research, you will be required to submit an annual status report to the IRB.

As principal investigator of this research study, you are responsible to:

- Conduct the research study in a manner consistent with the requirements of the IRB and federal regulations 45 CFR 46.
- Obtain informed consent and research privacy authorization using the currently approved, stamped forms and retain all original, signed forms, if applicable.
- Request approval from the IRB prior to implementing any/all modifications.
- Promptly report to the IRB any harm experienced by a participant that is both unanticipated and related per IRB policy.
- Maintain accurate and complete study records for evaluation by the HRPP Quality Improvement Program and, if applicable, inspection by regulatory agencies and/or the study sponsor.
- Submit an annual status report to the IRB to provide the study/recruitment status and report all harms and deviations that may have occurred.
- Submit a final closure report at the completion of the project.

If you have questions about this notification or using iRIS, contact the IRB @ 405-325-8110 or [irb@ou.edu](mailto:irb@ou.edu).

Cordially,

Lara Mayeux, Ph.D.  
Chair, Institutional Review Board

## Appendix B

### Surveys

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#### Trait Hope Scale

(Snyder, 1995)

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*Please choose the response that best describes YOU.*

---

**1. I can think of many ways to get out of a jam.**

|                                              |                                          |                                            |                                            |                                           |                                           |                                         |                                             |
|----------------------------------------------|------------------------------------------|--------------------------------------------|--------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------|---------------------------------------------|
| Definitely<br>False<br><input type="radio"/> | Mostly<br>False<br><input type="radio"/> | Somewhat<br>False<br><input type="radio"/> | Slightly<br>False<br><input type="radio"/> | Slightly<br>True<br><input type="radio"/> | Somewhat<br>True<br><input type="radio"/> | Mostly<br>True<br><input type="radio"/> | Definitely<br>True<br><input type="radio"/> |
|----------------------------------------------|------------------------------------------|--------------------------------------------|--------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------|---------------------------------------------|

**2. I energetically pursue my goals.**

|                                              |                                          |                                            |                                            |                                           |                                           |                                         |                                             |
|----------------------------------------------|------------------------------------------|--------------------------------------------|--------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------|---------------------------------------------|
| Definitely<br>False<br><input type="radio"/> | Mostly<br>False<br><input type="radio"/> | Somewhat<br>False<br><input type="radio"/> | Slightly<br>False<br><input type="radio"/> | Slightly<br>True<br><input type="radio"/> | Somewhat<br>True<br><input type="radio"/> | Mostly<br>True<br><input type="radio"/> | Definitely<br>True<br><input type="radio"/> |
|----------------------------------------------|------------------------------------------|--------------------------------------------|--------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------|---------------------------------------------|

**3. There are lots of ways around any problem.**

|                                              |                                          |                                            |                                            |                                           |                                           |                                         |                                             |
|----------------------------------------------|------------------------------------------|--------------------------------------------|--------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------|---------------------------------------------|
| Definitely<br>False<br><input type="radio"/> | Mostly<br>False<br><input type="radio"/> | Somewhat<br>False<br><input type="radio"/> | Slightly<br>False<br><input type="radio"/> | Slightly<br>True<br><input type="radio"/> | Somewhat<br>True<br><input type="radio"/> | Mostly<br>True<br><input type="radio"/> | Definitely<br>True<br><input type="radio"/> |
|----------------------------------------------|------------------------------------------|--------------------------------------------|--------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------|---------------------------------------------|

**4. I can think of many ways to get the things in life that are important to me.**

|                                              |                                          |                                            |                                            |                                           |                                           |                                         |                                             |
|----------------------------------------------|------------------------------------------|--------------------------------------------|--------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------|---------------------------------------------|
| Definitely<br>False<br><input type="radio"/> | Mostly<br>False<br><input type="radio"/> | Somewhat<br>False<br><input type="radio"/> | Slightly<br>False<br><input type="radio"/> | Slightly<br>True<br><input type="radio"/> | Somewhat<br>True<br><input type="radio"/> | Mostly<br>True<br><input type="radio"/> | Definitely<br>True<br><input type="radio"/> |
|----------------------------------------------|------------------------------------------|--------------------------------------------|--------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------|---------------------------------------------|

**5. Even when others get discouraged, I know I can find a way to solve the problem.**

|                                              |                                          |                                            |                                            |                                           |                                           |                                         |                                             |
|----------------------------------------------|------------------------------------------|--------------------------------------------|--------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------|---------------------------------------------|
| Definitely<br>False<br><input type="radio"/> | Mostly<br>False<br><input type="radio"/> | Somewhat<br>False<br><input type="radio"/> | Slightly<br>False<br><input type="radio"/> | Slightly<br>True<br><input type="radio"/> | Somewhat<br>True<br><input type="radio"/> | Mostly<br>True<br><input type="radio"/> | Definitely<br>True<br><input type="radio"/> |
|----------------------------------------------|------------------------------------------|--------------------------------------------|--------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------|---------------------------------------------|

**6. My past experiences have prepared me well for my future.**

|                                              |                                          |                                            |                                            |                                           |                                           |                                         |                                             |
|----------------------------------------------|------------------------------------------|--------------------------------------------|--------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------|---------------------------------------------|
| Definitely<br>False<br><input type="radio"/> | Mostly<br>False<br><input type="radio"/> | Somewhat<br>False<br><input type="radio"/> | Slightly<br>False<br><input type="radio"/> | Slightly<br>True<br><input type="radio"/> | Somewhat<br>True<br><input type="radio"/> | Mostly<br>True<br><input type="radio"/> | Definitely<br>True<br><input type="radio"/> |
|----------------------------------------------|------------------------------------------|--------------------------------------------|--------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------|---------------------------------------------|

**7. I've been pretty successful in life.**

|                                              |                                          |                                            |                                            |                                           |                                           |                                         |                                             |
|----------------------------------------------|------------------------------------------|--------------------------------------------|--------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------|---------------------------------------------|
| Definitely<br>False<br><input type="radio"/> | Mostly<br>False<br><input type="radio"/> | Somewhat<br>False<br><input type="radio"/> | Slightly<br>False<br><input type="radio"/> | Slightly<br>True<br><input type="radio"/> | Somewhat<br>True<br><input type="radio"/> | Mostly<br>True<br><input type="radio"/> | Definitely<br>True<br><input type="radio"/> |
|----------------------------------------------|------------------------------------------|--------------------------------------------|--------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------|---------------------------------------------|

**8. I meet the goals I set for myself.**

|                                              |                                          |                                            |                                            |                                           |                                           |                                         |                                             |
|----------------------------------------------|------------------------------------------|--------------------------------------------|--------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------|---------------------------------------------|
| Definitely<br>False<br><input type="radio"/> | Mostly<br>False<br><input type="radio"/> | Somewhat<br>False<br><input type="radio"/> | Slightly<br>False<br><input type="radio"/> | Slightly<br>True<br><input type="radio"/> | Somewhat<br>True<br><input type="radio"/> | Mostly<br>True<br><input type="radio"/> | Definitely<br>True<br><input type="radio"/> |
|----------------------------------------------|------------------------------------------|--------------------------------------------|--------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------|---------------------------------------------|

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**Scale of Positive and Negative Experience**

(Diener et al., 2009)

---

*Please think about what you have been doing and experiencing during the past four weeks. Then report how much you experienced each of the following feelings, using the scale below.*

---

**1. Positive**

Very Rarely or  
Never

☐

Rarely

☐

Sometimes

☐

Often

☐

Very Often or  
Always

☐**2. Negative**

Very Rarely or  
Never

☐

Rarely

☐

Sometimes

☐

Often

☐

Very Often or  
Always

☐**3. Good**

Very Rarely or  
Never

☐

Rarely

☐

Sometimes

☐

Often

☐

Very Often or  
Always

☐**4. Bad**

Very Rarely or  
Never

☐

Rarely

☐

Sometimes

☐

Often

☐

Very Often or  
Always

☐**5. Pleasant**

Very Rarely or  
Never

☐

Rarely

☐

Sometimes

☐

Often

☐

Very Often or  
Always

☐**6. Unpleasant**

Very Rarely or  
Never

☐

Rarely

☐

Sometimes

☐

Often

☐

Very Often or  
Always

☐**7. Happy**

Very Rarely or  
Never

☐

Rarely

☐

Sometimes

☐

Often

☐

Very Often or  
Always

☐**8. Sad**

Very Rarely or  
Never

☐

Rarely

☐

Sometimes

☐

Often

☐

Very Often or  
Always

☐**9. Afraid**

Very Rarely or  
Never

☐

Rarely

☐

Sometimes

☐

Often

☐

Very Often or  
Always

☐

|                         |                       |                       |                       |                         |
|-------------------------|-----------------------|-----------------------|-----------------------|-------------------------|
| <hr/>                   |                       |                       |                       |                         |
| 10. <b>Joyful</b>       |                       |                       |                       |                         |
| Very Rarely or<br>Never | Rarely                | Sometimes             | Often                 | Very Often or<br>Always |
| <input type="radio"/>   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>   |
| <hr/>                   |                       |                       |                       |                         |
| 11. <b>Angry</b>        |                       |                       |                       |                         |
| Very Rarely or<br>Never | Rarely                | Sometimes             | Often                 | Very Often or<br>Always |
| <input type="radio"/>   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>   |
| <hr/>                   |                       |                       |                       |                         |
| 12. <b>Contented</b>    |                       |                       |                       |                         |
| Very Rarely or<br>Never | Rarely                | Sometimes             | Often                 | Very Often or<br>Always |
| <input type="radio"/>   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>   |
| <hr/>                   |                       |                       |                       |                         |

---

**Flourishing Scale**

(Diener et al., 2009)

---

*Please indicate the extent to which you agree with each of the following statements.*

---

1. **While in prison, I can lead a purposeful and meaningful life.**

|                       |                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Strongly<br>Disagree  | Disagree              | Slightly<br>Disagree  | Slightly<br>Agree     | Agree                 | Strongly<br>Agree     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

---

2. **My social relationships in prison are supportive and rewarding.**

|                       |                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Strongly<br>Disagree  | Disagree              | Slightly<br>Disagree  | Slightly<br>Agree     | Agree                 | Strongly<br>Agree     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

---

3. **I am engaged and interested in my daily activities while incarcerated.**

|                       |                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Strongly<br>Disagree  | Disagree              | Slightly<br>Disagree  | Slightly<br>Agree     | Agree                 | Strongly<br>Agree     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

---

4. **While in prison, I actively contribute to the happiness and well-being of others.**

|                       |                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Strongly<br>Disagree  | Disagree              | Slightly<br>Disagree  | Slightly<br>Agree     | Agree                 | Strongly<br>Agree     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

---

5. **I am competent and capable in the activities that are important to me while in prison.**

|                       |                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Strongly<br>Disagree  | Disagree              | Slightly<br>Disagree  | Slightly<br>Agree     | Agree                 | Strongly<br>Agree     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

---

6. **I am a good person and live a good life even while incarcerated.**

|                       |                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Strongly<br>Disagree  | Disagree              | Slightly<br>Disagree  | Slightly<br>Agree     | Agree                 | Strongly<br>Agree     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

---

7. **Whether it is in prison or outside of prison, I am optimistic about my future.**

|                       |                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Strongly<br>Disagree  | Disagree              | Slightly<br>Disagree  | Slightly<br>Agree     | Agree                 | Strongly<br>Agree     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

---

8. **In the prison, people respect me.**

|                       |                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Strongly<br>Disagree  | Disagree              | Slightly<br>Disagree  | Slightly<br>Agree     | Agree                 | Strongly<br>Agree     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

---

---

**Others As Shamer Scale (OAS)**

(Goss et al., 1994)

---

*We are interested in how people think others see them. Below is a list of statements describing feelings or experiences about how you may feel other people see you.*

*Read each statement carefully and circle the number to the right of the item that indicates the frequency with which you find yourself feeling or experiencing what is described in the statement.*

---

**13. I feel other people see me as not good enough**

Never

☐

Seldom

☐

Sometimes

☐

Frequently

☐

Almost Always

☐**14. I think that other people look down on me**

Never

☐

Seldom

☐

Sometimes

☐

Frequently

☐

Almost Always

☐**15. I feel insecure about others opinion of me**

Never

☐

Seldom

☐

Sometimes

☐

Frequently

☐

Almost Always

☐**16. Other people see me as not measuring up to them**

Never

☐

Seldom

☐

Sometimes

☐

Frequently

☐

Almost Always

☐**17. Other people see me as small and insignificant**

Never

☐

Seldom

☐

Sometimes

☐

Frequently

☐

Almost Always

☐**18. Other people see me as defective as a person**

Never

☐

Seldom

☐

Sometimes

☐

Frequently

☐

Almost Always

☐**19. People see me as unimportant compared to others**

Never

☐

Seldom

☐

Sometimes

☐

Frequently

☐

Almost Always

☐

---

## Adverse Childhood Experiences

(Felitti et al., 1998)

---

*Please answer the following questions about your first 18 years of life.*

---

1. Did a parent or other adult in the household **often**...

Swear at you, insult you, put you down, or humiliate you?

OR

Act in a way that made you afraid that you might be physically hurt?

☐ Yes ☐ No

---

2. Did a parent or other adult in the household **often**...

Push, grab, slap, or throw something at you?

OR

**Ever** hit you so hard that you had marks or were injured?

☐ Yes ☐ No

---

3. Did an adult or person at least 5 years older than you **ever**...

Touch or fondle you or have you touch their body in a sexual way?

OR

Try to or actually have oral, anal, or vaginal sex with you?

☐ Yes ☐ No

---

4. Did you **often** feel that...

No one in your family loved you or thought you were important or special?

OR

Your family didn't look out for each other, feel close to each other, or support each other?

☐ Yes ☐ No

---

5. Did you **often** feel that ...

You didn't have enough to eat, had to wear dirty clothes, and had no one to protect you?

OR

Your parents were too drunk or high to take care of you or take you to the doctor if you needed it?

☐ Yes ☐ No

---

6. Were your parents **ever** separated or divorced?

☐ Yes ☐ No

---

7. Was your mother or stepmother:

**Often** pushed, grabbed, slapped, or had something thrown at her?

OR

**Sometimes or often** kicked, bitten, hit with a fist, or hit with something hard?

OR

**Ever** repeatedly hit over at least a few minutes or threatened with a gun or knife?

☐ Yes ☐ No

---

8. Did you live with anyone who was a problem drinker or alcoholic or who used street drugs?

☐ Yes ☐ No

---

---

9. Was a household member depressed or mentally ill or did a household member attempt suicide?

☐ Yes ☐ No

---

10. Did a household member go to prison?

☐ Yes ☐ No

---

---

**Prison Adaptation Scale**

(Cook, 2018 adapted from Zamble & Porporino, 1988)

---

*Please rate the following aspects of prison based on how frequently they bother you*

---

**1. Being separated from family members**

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Never                 | Rarely                | Sometimes             | Often                 | Always                |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

**2. Not knowing where you stand with parole**

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Never                 | Rarely                | Sometimes             | Often                 | Always                |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

**3. Dealing with your loss of freedom**

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Never                 | Rarely                | Sometimes             | Often                 | Always                |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

**4. Missing friends and outside social life**

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Never                 | Rarely                | Sometimes             | Often                 | Always                |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

**5. Worried of getting sick in here**

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Never                 | Rarely                | Sometimes             | Often                 | Always                |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

**6. Wishing you had more privacy and quiet**

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Never                 | Rarely                | Sometimes             | Often                 | Always                |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

**7. Feeling out of touch with the world**

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Never                 | Rarely                | Sometimes             | Often                 | Always                |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

**8. Family members who have forgotten you**

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Never                 | Rarely                | Sometimes             | Often                 | Always                |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

**9. Staff not listening to grievances**

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Never                 | Rarely                | Sometimes             | Often                 | Always                |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

**10. Being bored/lots of idle time**

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Never                 | Rarely                | Sometimes             | Often                 | Always                |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

**11. Feeling comfortable in your prison quarters**

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Never                 | Rarely                | Sometimes             | Often                 | Always                |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

**12. Being afraid of going crazy**

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Never                 | Rarely                | Sometimes             | Often                 | Always                |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

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|                                                     |                                |                                 |                                    |                                |                                 |
|-----------------------------------------------------|--------------------------------|---------------------------------|------------------------------------|--------------------------------|---------------------------------|
| <b>13. Not feeling physically safe</b>              | Never<br><input type="radio"/> | Rarely<br><input type="radio"/> | Sometimes<br><input type="radio"/> | Often<br><input type="radio"/> | Always<br><input type="radio"/> |
| <b>14. Having no goals and ambitions</b>            | Never<br><input type="radio"/> | Rarely<br><input type="radio"/> | Sometimes<br><input type="radio"/> | Often<br><input type="radio"/> | Always<br><input type="radio"/> |
| <b>15. Getting annoyed or irritated</b>             | Never<br><input type="radio"/> | Rarely<br><input type="radio"/> | Sometimes<br><input type="radio"/> | Often<br><input type="radio"/> | Always<br><input type="radio"/> |
| <b>16. Worried about becoming institutionalized</b> | Never<br><input type="radio"/> | Rarely<br><input type="radio"/> | Sometimes<br><input type="radio"/> | Often<br><input type="radio"/> | Always<br><input type="radio"/> |
| <b>17. Not fitting in with other inmates</b>        | Never<br><input type="radio"/> | Rarely<br><input type="radio"/> | Sometimes<br><input type="radio"/> | Often<br><input type="radio"/> | Always<br><input type="radio"/> |
| <b>18. Relation with prison staff</b>               | Never<br><input type="radio"/> | Rarely<br><input type="radio"/> | Sometimes<br><input type="radio"/> | Often<br><input type="radio"/> | Always<br><input type="radio"/> |
| <b>19. Getting along with other inmates</b>         | Never<br><input type="radio"/> | Rarely<br><input type="radio"/> | Sometimes<br><input type="radio"/> | Often<br><input type="radio"/> | Always<br><input type="radio"/> |
| <b>20. Performing job assigned to you</b>           | Never<br><input type="radio"/> | Rarely<br><input type="radio"/> | Sometimes<br><input type="radio"/> | Often<br><input type="radio"/> | Always<br><input type="radio"/> |
| <b>21. Abiding by prison rules and policies</b>     | Never<br><input type="radio"/> | Rarely<br><input type="radio"/> | Sometimes<br><input type="radio"/> | Often<br><input type="radio"/> | Always<br><input type="radio"/> |

## Appendix C

### Coding for Surveys

#### Adult Hope Scale

|                  |   |
|------------------|---|
| Definitely False | 1 |
| Mostly False     | 2 |
| Somewhat False   | 3 |
| Slightly False   | 4 |
| Slightly True    | 5 |
| Somewhat True    | 6 |
| Mostly True      | 7 |
| Definitely True  | 8 |

#### SPANE

|                      |   |
|----------------------|---|
| Very Rarely or Never | 1 |
| Rarely               | 2 |
| Sometimes            | 3 |
| Often                | 4 |
| Very Often or Always | 5 |

#### Flourishing

|                   |   |
|-------------------|---|
| Strongly Disagree | 1 |
| Disagree          | 2 |
| Slightly Disagree | 3 |
| Slightly Agree    | 4 |
| Agree             | 5 |
| Strongly Agree    | 6 |

#### Others as Shamer

|               |   |
|---------------|---|
| Never         | 0 |
| Seldom        | 1 |
| Sometimes     | 2 |
| Frequently    | 3 |
| Almost Always | 4 |

#### Adverse Childhood Experiences

|     |   |
|-----|---|
| Yes | 1 |
| No  | 0 |

**Prison Adaptation Scale**

|           |   |
|-----------|---|
| Never     | 1 |
| Rarely    | 2 |
| Sometimes | 3 |
| Often     | 4 |
| Always    | 5 |