Traumatology

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Trauma, Stress, and Coping Among Older Adults in Prison: Towards a Human Rights and Intergenerational Family Justice Action Agenda

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Although there is a growing body of research on older adults and coping in prison, many inquiries about areas of concern remain unanswered. Specifically, what are the primary traumatic experiences and stressors of the incarceration experience and how do incarcerated older adults, many of whom have served long-term prison sentences, cope with or manage prison life? We analyzed the experiences of 677 incarcerated adults 50 and older and a subsample ($n = 201$) using a combination of deductive (frequency counts) and inductive (thematic identification) content analysis methods to identify what they reported about trauma, stress, and coping in prison. The primary causes of trauma and stress from our categorization are social (e.g., specifically, lack of contact with and concerns about family; 45%), followed by interpersonal (31%), institutional (29%), and cultural (15%). The majority of participants (54%) identified the use of social coping (e.g., interaction with family or other inmates) followed by cognitive (35%) and spiritual coping (33%) as important strategies to help them manage the prison experience. Our findings suggest that the aging in prison crisis and conditions of confinement are human rights and intergenerational family justice issues that violate older adults in prison, their rights to dignity and respect and their access to political, civil, economic, social and cultural resources. Recommendations are made for humanistic and human rights action strategies, including the allocation of resources for programs that reestablish family and community relationships and training. This may be an important step toward improving the conditions of prison, addressing human rights issues and promoting the overall well-being of those whom we incarcerate; further, it might promote greater acceptance from the communities they hope to reenter. These findings have implications for culturally responsive trauma informed prevention, assessment, and interventions, including advocacy to address human rights violations of alleged abuse and neglect.

Keywords: aging, prison, human rights, trauma, stress, coping

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In the aftermath of World War II, after experiencing the horrors of the extermination and imprisonment of millions of human beings based on their religion and social status, the Universal Declaration of Human Rights (United Nations, 1948) was created with the goal of eradicating these kinds of injustices. Presently, in the United States, there is a crisis pertaining to the more than two million people who are in custody in our overcrowded prison system (American Civil Liberties Union [ACLU], 2012). Human and civil rights groups have sounded an alarm protesting the use of excessively punitive sentencing practices, prison treatment, and parole practices, especially among vulnerable populations, including the elderly and people with serious physical and mental illnesses (Human Rights Watch [HRW], 2012).

To date, there has been minimal investigation into incarcerated, older adults' experiences of trauma, stress, and well-being while in prison. Approximately 250,000 (16%) adults aged 50 or older are incarcerated in the United States; of that total, 40% are estimated to have some type of mental health issue (ACLU, 2012; James & Glaze, 2006). The extent to which these individuals developed mental health issues prior to or during incarceration is largely unknown. However, it is well-documented that the overall well-being of older adults is significantly compromised based on poor personal health risk and trauma histories, coupled with the stressful conditions of confinement (Maschi, Viola, & Morgen, 2014; Maschi, Viola, Morgen, & Koskinen, 2015). In our earlier research of older adults in a Northeastern prison system, we found that in a sample of 677 adults, 70% reported one or more traumatic experiences, including being sexually or physically abused in childhood, witnessing family violence, or the sudden death of a loved one (see Maschi, Morgen, Zgoba, Courtney, & Ristow, 2011). In addition, we empirically explored the relationship between cumulative trauma, stress, coping and physical and mental well-being

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and found that coping resources (i.e., physical, cognitive, emotional, social, and spiritual coping activities) mediated the relationship between lifetime cumulative trauma and stress and later life physical and mental well-being (see Maschi, Viola, & Morgen, 2014). In the present article, we expand on this prior research to include detailed first-hand accounts of older adults' experiences of prison trauma and stress during incarceration. We also explore how they manage or cope with trauma and stress to maintain their well-being despite the stressful conditions of confinement. We present a qualitative analysis of a subsample (n = 201) of these adults' experiences.

Because of the high moral, economic, social, and legal costs associated with incarceration, research in this area has significant implications for social work, psychology, public health, other allied disciplines, and society at large. Studies show the extent of human rights issues associated with the 'cruel and unusual punishment' experienced as a result of prison trauma and stress; this is in conflict with the criminal justice system's mission to promote accountability and rehabilitation (HRW, 2012). Research in this area is also important in light of the new *Diagnostic and Statistical Manual* (see Table 1; DSM-5; APA, 2013) reclassification of trauma and stress-related disorders, including updates to the criteria for Post Traumatic Stress Disorder (PTSD). The insights gained from this study are not limited to improving care for the incarcerated but will help inform trauma and stress prevention, assessment, and intervention to promote for diverse age groups. In addition to reducing human suffering, there is a clear cost benefit to society at large. The annual cost of incarceration for adults aged 50 and older is roughly three times that of younger inmates, or approximately $70,000 (Pew Charitable Trust, 2008). A recent Pew Charitable Trust article (Pew Charitable Trust, 2014) estimates that prison health care costs cost tax payers $16 billion per year and is expected to rapidly increase over the next two decades. A clearer understanding of the trauma and stress experienced by older adults in prison better informs us of the influence on health and well-being and the potential impact on the process of accelerated aging. It also empowers service providers to structure more cost-effective prevention and intervention programs and create more humane conditions of confinement. Overall, wellness initiatives not only lessen the burden of disease but also allow for a healthier reentry to communities.

Review of the Literature

To contribute to the knowledge base, we provide a comprehensive review of existing knowledge about trauma, stress, and coping among incarcerated people of all ages. A search of the literature on trauma, stress, and coping resulted in 30 studies published between 1980 and 2012. These studies focused on one of four major research areas: (a) trauma and stress prior to incarceration, (b) trauma and stress associated with incarceration, (c) coping strategies, and (d) theoretical models.

Trauma and Stress Prior to Incarceration

Before experiencing trauma and stress associated with prison life, research suggests that incarcerated youth and adults enter the system with complex trauma and stress histories which places them at heightened risk for strain across their life course (Maschi, Viola, & Morgen, 2014). In a study of 373 male juvenile offenders incarcerated in the California Department of Juvenile Justice facility, participants reported trauma and stress from a variety of living conditions including residing in a dangerous neighborhood, living with a divorced parent, and experiencing the death of a loved one or close friend (Shulman & Cauffman, 2011). Many individuals have histories of childhood physical and emotional

Table 1
Select Trauma and Stress-Related Disorders in the DSM-5 (APA, 2013)

Posttraumatic stress disorder (PTSD)
Criterion
1. The individual was exposed to actual death or threatened death, actual or threatened serious injury or sexual violence in the form of at least one of the following: (a) direct exposure, (b) witnessing (in-person), (c) indirect exposure by learning that a close relative or friend was exposed to trauma (must be violent or accidental for situations of actual or threatened death), or (d) repeated or extreme indirect exposure to an event (e.g., first responders)
2. Intrusion symptoms (one to five symptoms needed): (a) recurrent, involuntary and intrusive recollections, (b) traumatic nightmares, (c) dissociative symptoms (such as flashbacks), (d) intense prolonged distress after exposure to traumatic reminders, and (e) marked physiological reactivity after exposure to the trauma-related stimuli
3. Persistent avoidance of stimuli associated with the trauma (one of two symptoms needed): (a) trauma related thought or feelings and (b) trauma-related external reminders (e.g., social interactions, objects, places)
4. Negative changes in cognitions and mood that are associated with the traumatic event (two of seven symptoms needed): (a) inability to recall key features of the traumatic event (e.g., dissociative amnesia), (b) persistent and commonly distorted negative beliefs and expectations about oneself or the world, (c) persistent distorted blame of self and other for causing the trauma or its consequences, (d) persistent negative trauma related emotions (such as horror, fear, anger, guilt, and shame), (e) markedly diminished interest in (pre-traumatic) significant activities, (f) feeling alienated, detached or estranged from others, and (g) constricted affect and persistent inability to positive emotions
5. Changes in arousal and reactivity that are associated with the traumatic event (two of six symptoms needed): (a) Irritable or aggressive behavior, (b) self-destructive or reckless behavior, (c) hypervigilance, (d) exaggerated startle response, (e) problems in concentration, and (f) sleep disturbance
6. Persistence of symptoms (in criteria of 2, 3, 4, and 5) for more than one month
7. Significant symptom-related distress or functional impairment
8. Not attributable to medication, substance misuse, or illness
Other specified trauma/stressor
Adjustment disorder more than 6 months without prolonged duration of trauma/stressor

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abuse and have lived with one or more parents who used or abused alcohol and/or drugs (Morgen, Maschi, Viola, & Zgoba, 2013; Sealock & Manasse, 2012). In another study of 224 incarcerated, adult women, more than half (64%) reported a history of childhood sexual abuse (Johnson & Lynch, 2013). In a sample of 59 incarcerated and 55 wait-listed women, participants reported abuse histories before prison as a child or adult, which included forced sexual intercourse (72%), physical assault (86%), and being attacked with a weapon (56%) (Lynch et al., 2012). In a sample of 677 older adults in prison, 70% of participants reported a history of some type of life course trauma that causes them a high level of subjective stress. These included childhood physical or sexual abuse, combat and war experiences, living in a violent neighborhood, the death of someone close, caregiving stress, having another incarcerated family member, or being diagnosed with a serious illness (Maschi, Viola, & Morgen, 2014). Research by Grella et al. (2013) corroborates the impact on youth who grow up with a parent who is or was incarcerated. These findings suggest that incarcerated people of any age enter the prison system with histories of trauma and stress that may trigger their trauma response as well as influence their coping capacities and adaptive functioning while in prison.

Trauma and Stress Associated With Incarceration

There is a paucity of research available on the sources and consequences of the trauma and stress related to incarceration among older adults in prison. For many incarcerated older adults, the prospect of living out the remainder of their lives in prison is highly stressful (Aday, 2005–2006). The deprivations created by imprisonment are both physical and psychological (Eytan, 2011). Isolation, boredom, bullying, and fear of potential victimization from physical and sexual assault each have adverse physical or psychological consequences (Brown & Ireland, 2006; Maschi, Viola, & Morgen, 2014). In Aday's (1994) study of 25 first-time, older adult offenders housed in a maximum security facility in the southeastern U.S., many participants reported feelings of fear, depression, and anxiety as a result of the vulnerability of living in a hostile environment and feelings of shame related to the social stigma of crime. Participants expressed worries about declining health and uncertainty due to continual changes in the quality of health care delivery. Other studies have found that older adults in prison reported feeling lonely, attributable to separation from their families, and depressed or anxious by a lack of choices about their living conditions (Kopera-Frye et al., 2013; Zamble & Porporino, 1990).

Coping Resources and Strategies

Studies have shown that incarcerated older adults use a variety of coping methods, strategies, or resources in their effort to psychologically survive their past and manage their current situation in prison. Sources of coping resilience include physical, cognitive, emotional, social, and spiritual domains (Maschi, Viola, & Morgen, 2014). In a review of 19 research articles from 1988 to 2010, Maschi, Dennis, Gibson, MacMillan, Sternberg, & Hom (2011) found that coping resources are a protective factor, strengthening incarcerated older adults from the adverse physical, mental, and behavioral consequences of stress and trauma.

Several studies suggest that social coping has an important role in positive adaptation. In an empirical literature review of articles related to coping strategies, Picken (2012) found social coping, such as participation in therapeutic groups and communities, was shown to be beneficial to overall adjustment of older men in prison. In another study of incarcerated adolescents (Nieland, McCluskie, & Tait, 2001) sociability was shown to protect against depression. In a recent study by Sealock and Manasse (2012) social coping skills had a significant effect on recidivism, but results varied by both offense and race, suggesting the need for a more intensive inquiry to help guide the allocation of resources among possible coping strategies and programs.

Literature that focused on religious coping strategies describes a distinction between positive versus negative coping. Krause (2009) examined whether religious coping, specifically prayer, helps older people cope more effectively with the negative impact of lifetime trauma. The data came from the third wave of an ongoing nationwide survey of Whites and African Americans. A total of 969 adults completed a survey instrument which included a checklist of 25 traumatic life events and questions pertaining to prayer. Prayer was measured by (a) how often people pray in private and (b) what their prayer beliefs are. Participants were asked about the importance of waiting for God's answers to prayers and whether they believe that God gives people what is best for them. The findings suggest that prayer helps older individuals cope more effectively with traumatic events that have arisen across the life course. Further, trust-based prayer beliefs are more likely to offset the effects of childhood trauma than frequency of private prayer.

Research on older incarcerated adults by Allen et al. (2013) found those who reported greater levels of positive religious coping reported fewer symptoms of depression, whereas those who reported greater levels of negative religious coping (feelings of abandonment by God) endorsed more symptoms of depression and a greater desire for hastened death. The research also examined the impact of physical functioning on inmates' desire for a hastened death and found that higher levels of negative religious coping moderated this association.

In a review conducted by Eytan (2011), 12 empirical studies (totaling 4,823 individuals) of religious coping were examined. Religiosity/Spirituality (RS) was shown to improve coping and reduce depressive symptomotology or self-harm in five studies. In six of the studies, RS had a positive impact on inmates' behavior by reducing arguments, violence and disciplinary sanctions. The strongest reported effect of RS on prison life was a reduction of incidents and disciplinary sanctions. Allen and colleagues (2008) also reported beneficial effects of religious coping; a greater number of daily spiritual experiences and not feeling abandoned by God were associated with better emotional health. For 25 first-time elderly offenders, religion (reading scripture and informal prayer) was described as the most important means of coping (Aday, 1994).

Some studies have examined maladaptive coping among people in prison. In a study of 59 incarcerated women, maladaptive strategies for coping include dissociating, denial, self-blame, emotion dysregulation, and symptoms of untreated posttraumatic stress disorder (PTSD) and depression, substance abuse and self-harming (Lynch et al., 2012; Kubiak, Hanna, & Balton, 2005). Grella and

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colleagues (2013) found that incarcerated women are at high risk for PTSD given their high rates of trauma history and lack of appropriate coping mechanisms.

Theoretical Models

Several theories that integrate trauma, stress, and coping have been or can be applied to older adults in prison. Theories about stress and coping have commonly been explored from the perspective of physiology and psychobiology (Selye, 1976) and from a sociological or cognitive psychological perspective (Lazarus, 1991; Pearlin & Skaff, 1996). These perspectives may help explain the biological, cognitive, emotional, psychological, social, and spiritual effects of traumatic stress in prison and that factors that foster coping resilience.

The *general adaptation syndrome* may be applied to the experiences of people managing chronic stress in prison. Hans Selye (1976), an endocrinologist, described a common effect of stimulus events applied intensely and over time to animals. The relationship between the laws of nature and the activities of human beings is also discussed (Selye, 1976). According to Selye, a response pattern to chronic stress proceeds in three stages. First, the individual has an *alarm reaction*, which is an adrenaline discharge response to the shock of one or more events. For older adults in prison, this can be the initial shock of first being incarcerated or being a victim of, or witness to, prison violence by guards or other inmates. A subsequent countershock is characterized by increased adrenocortical activity. If the intolerable stimulus continues, such as serving a long-term prison sentence or being subject to daily prison violence, the individual enters a second stage of resistance wherein the alarm reaction disappears. Although the resistance to the original stressor appears to increase, capacity to tolerate other stressors, such as separation from family, decreases. If the stimulus continues, resistance gives way to exhaustion. Irreversible tissue damage is the result, and if the stimulus remains unabated, the individual dies (Krohne, 2002). This theory suggests that the stress of incarceration may have an adverse influence on health and well-being or exacerbate chronic or serious illnesses among incarcerated people. Among older adults, trauma and stress may have a more dramatic adverse effect by accelerating the aging process.

Building on Selye's work on the effects of physiological stress on animals, subsequent research by Lazarus (1966) examined stress experienced by humans, which is typically the result of cognitive mediation and is viewed as a relationship between individuals and their environment. A great deal of coping research, including prison studies, uses Folkman and Lazarus's definition of coping as "the cognitive and behavioral efforts to master, tolerate or reduce external and internal demands and conflicts among them" (Folkman & Lazarus, 1980, p. 223). Using this framework, coping actions are classified according to the characteristics of the coping process. Utilizing *problem-focused coping*, an individual attempts to change the person-environment realities that underlie negative emotions or stress; *emotion-focused coping* is a process whereby the individual attempts to change the appraisal of the stressful situation. *Stress appraisal* theory describes the specific pattern of an individual's appraisal. Applying this theory to older adults in prison suggests that individuals, even under extreme environmental stress, may choose to use adaptive or maladaptive forms of problem or emotion focused coping.

Hobfoll and colleagues (1996) advanced a *conservation of resources* theory of stress. This theory classifies the occurrence of stress in three contexts: when individuals lose resources, when resources are threatened, or when resources are invested without any gain. Resources can be physical (possessions), life circumstances (employment, personal relationships), self-efficacy, or personal capacities (education, wealth, etc. that are a means to increasing resources). This theory considers the role of resource fulfillment in relation to stress. It posits that (a) loss of resources is the primary source of stress, (b) resources act to preserve and protect other resources, and (c) a depletion of resources has a downward spiraling effect whereby individuals become less able to combat additional stress. Prison separates individuals from society and resources are minimal; this may cause psychological, emotional, and/or physical distress, particularly among older adults in prison.

According to stress process theory, individuals who have relatively stable life experiences, free of significant trauma and stress, generally develop relatively stable life course trajectories, including stable mental well-being (Pearlin & Skaff, 1996; Pearlin et al., 2005). On the other hand, those who experience one or more difficult periods of chaos or change in their lives, such as being exposed to childhood physical and sexual victimization, the unexpected death of a loved one, being diagnosed with a serious illness, combat, natural, and manmade disasters, and financial stress or poverty, and who subsequently experience the stressful conditions of institutional confinement, are at a heightened risk of adverse mental well-being (Maschi & Aday, 2014). This is especially important to consider for vulnerable populations, such as older adults in prison who may experience a lifetime of cumulative trauma and stress, not only while incarcerated but after their release (Maschi, Viola, Morgen, Harrison, Harrison, & Koskinen, 2014). The adaptive use of internal and external coping resources may help foster a resilient response or "protective advantages." Having endured prior adverse life experiences can sometimes help older adults to better manage the prison experience (Maschi, Viola, & Morgen, 2014). The adoption of internal coping resources (e.g., cognitive, emotional, physical, and spiritual) and external coping resources (e.g., social support) can help explain why some older adults in prison with histories of trauma may experience decreased mental well-being whereas others remain resilient.

Some perspectives, such as *stress process* and *stress resource theories* focus on that which preserves well-being in the midst of traumatic and stressful experiences. Coping types of resources include social support (Schwarzer & Leppin, 1991), self-efficacy (Bandura, 1977) or optimism (Scheier & Carver, 1992). Kobasa (1979) described a "hardiness" approach to dealing with stressful events by maintaining a conviction of internal control, commitment and sense of challenge. These strategies are protective and foster resilience despite the stressful conditions of confinement and may help illuminate how older people cope with the prison experience.

Summary and Purpose of Study

In summary, a review of the literature provides some empirical and theoretical understanding of incarcerated adults' experiences of trauma, stress, and coping in prison. The social environmental conditions of prison may have a negative physical and mental

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health effect on people in prison and possibly more so for older adults due to age-related physical and mental health decline. However, despite the potential adverse effects, the literature suggests potential areas of coping domains that might foster resilient coping. Although there is a growing body of research on older adults and coping in prison, many areas of inquiry remained unanswered. Specifically, (a) What are the primary traumatic and stressful life experiences found among older adults in prison, and (b) How do they cope or manage these traumatic or stressful experiences? This study attempts to fill that gap by exploring the current experiences of stress and coping of a subsample of 677 adults aged 50 and older in a northeastern U.S. prison system. The information garnered from this study can be used to identify other possible sources of stress and resilient coping that are related to maintaining well-being even under the duress of incarceration. This information can be used to reveal existing sources of trauma in prison, such as rape and elder abuse, as well as to make more informed decisions about the allocation of resources for programs that mediate the potential adverse effects of trauma and stress on health and well-being and facilitate healthier reentry to communities.

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Method

Research Design

This cross-sectional mixed methods study was conducted in September 2010 in the New Jersey Department of Corrections (NJ DOC). The project was part of the first author's Geriatric Social Work Faculty Scholars Award for a research project on trauma, coping, and well-being among older adults in prison and was funded by the Gerontological Society of America and the John A. Hartford Foundation. The survey sample consisted of 677 English speaking incarcerated persons aged 50 and older. Of the approximately 25,000 adults housed in the NJ DOC in January 2010, 7% (n = 1,750) were aged 50 and older. The NJ DOC generated the sampling frame for the study with a list of names, so that invitations and anonymous questionnaires could be mailed to potential participants and return correspondence could be received. The Dillman, Smyth, and Christian (2009) method for mailed surveys was used to maximize response rates. A total of 677 questionnaires were returned for an approximate 40% response rate. This estimate falls within the higher range of expected mail response rates, which are 20% to 40% for prison populations (Hochstetler, Murphy, & Simons, 2004).

Data Collection Procedures

The Dillman et al. (2009) four step method for self-administered mailed surveys was used to gather data from a sample of older adults in prison. Specifically, potential participants received: (a) a letter of invitation; (b) a packet with a cover letter, consent form, survey, and a self-addressed electronically stamped envelope (SASE) seven days later; and (c) two thank you cards and reminders sent seven days apart that included an enclosed self-addressed envelope for participants to request a survey replacement.

Data Sources

The data sources for Trauma, Stress, and Coping were gathered from the Life Stressors Checklist-Revised (LSC-R; Wolfe, Kimerling, Brown, Chrestman, & Levin, 1996) and the Prison Stress and Coping Scale-Short (PSCS-S, Maschi, 2010a). The LSC-R is a 31-item scale that measures frequencies of objective occurrences of lifetime and current traumatic events. It also accounts for stressful life events, such as losing a loved one, health problems, divorce, financial problems, and institutional stress and abuse. Past year subjective distress is measured by the extent to which participants report how much they were bothered (not at all to extremely bothered) by each event in the past year. The LSC-R has sound psychometric properties, including use with diverse age groups and criminal justice populations (e.g., Wolfe & Kimerling, 1997). Researchers have reported that the LSC-R demonstrates good criterion-related validity among criminal justice populations, including test—retest Kappas of 0.70 (McHugo et al., 2005). For the purposes of this study, only one item addressed the experience of trauma and stress in prison. This question asked *Have you ever experienced stress or abuse in prison?* Participants could respond whether or not these experiences occurred (yes or no) and their subjective response then (feeling horror or threatened at the time; yes or no), and how much the experience affected them in the past year (not at all to extremely affected) and was completed by the entire sample (n = 677). About 201 participants also provided a response to the open-ended portion of the question (if yes, what was the event).

The Prison Stress and Coping Scale-Short (PSCS-S; Maschi, 2010a) was also used to gather data about the experiences of trauma, stress, and coping in prison. The PSCS-S consists of two open ended questions *What are the types of things that caused you stress while in prison in the past month?* and *What kind of things did you do in the past month, if anything at all, to help with your stress?*

The Culturally Responsive Sociodemographic Questionnaire-Prison (CRSQ-P; Maschi, 2010b) was used to gather self-report background information from participants, which included age, race/ethnicity, gender, marital status, educational status, number of children, physical and mental health status, amount of time served, legal history, and expected release date.

Data Analysis

Using SPSS 20.0, univariate descriptive analysis was used to calculate frequencies and percentages for sociodemographic characteristics and one item from the LSC-R in which participants reported whether they experienced prison related stress and abuse (yes or no). The results of the analyses which describe the sample characteristics can be found in Tables 2, 3 and 4. Content analysis strategies as outlined by Krippendorff (2004) and Neuendorf (2002) were used to analyze the data responses to the open-ended questions about trauma, stress, and coping in prison. Content analysis is a systematic procedure that codes and analyzes qualitative data, such as qualitative survey data, and a combination of deductive and inductive approaches can be used (Bernard & Ryan, 2010). For example, the current study used deductive analysis, which consisted of preexisting categories for coping resources (physical, cognitive, emotional, social, and spiritual, and other) to extract the data and conduct frequency counts of the data (Krippendorff, 2004). Counts of textual variables were then calculated to identify frequencies and percentages using the descriptive statistics function of SPSS 20.0.

Table 2
Sociodemographic Characteristics (n = 677)

Characteristic	%	*n*
Chronological age		
Young old (aged 50–54)	45.0	288
Middle old (aged 55–64)	44.0	284
Oldest old (aged 65–100)	9.0	60
Race/ethnicity		
White	35.0	227
African American	45.0	291
Hispanic/Latino	11.0	71
Other	9.0	59
Gender		
Male	96.0	626
Female	4.0	26
Education		
No high school diploma	10.0	65
HS diploma	74.0	481
College degree or above	16.0	101
Religion		
Christian	62.0	335
Islamic/Muslim	13.0	71
Atheist/agnostic	13.0	71
Other	12.0	62
Military history	30.0	196
Marital status		
Never married	29.0	182
Married	14.0	91
Partnered–not married	11.0	69
Divorced	30.0	187
Separated	7.0	46
Widowed	8.0	50
Other	2.0	11
Family		
One or more children	80.0	504
One or more children < 18	23.0	129
One or more grandchildren	61.0	365
One or more grandchildren < 18	56.0	324
Incarcerated family member	48.0	306
Offense history		
Delinquent offense	36.0	226
Violent offense	64.0	413
Sex offense	25.0	163
Drug offense	46.0	294
Violation of probation	42.0	285
Parole violation	42.0	271
Expected release date		
0–1 year	22.0	145
2–5 years	37.0	245
6–10 years	13.0	84
11–50 years	12.0	82
51 years to life	5.0	30
Mental health or substance use history		
Mental health diagnosis	28.0	183
Alcohol problem	25.0	165
Drug problem	44.0	283
Prison mental health treatment	33.0	212
Prison religious participation	72.0	463

The data for trauma and stress also were analyzed inductively using Tutty and colleagues (1996) four-step qualitative data analysis strategies. Step one involved identifying 'meaning units' (or in vivo codes) from the data. For example, the assignment of 'meaning units' included assigning codes to reflect the types of trauma and stress in prison identified by participants. In step two, second level coding and first level 'meaning units' were sorted and placed in their emergent categories (e.g., interpersonal, social, cultural, structural, and internalized). Meaning unit codes were arranged by clustering similar codes into a category or theme and separating dissimilar codes to create distinct categories. The categories were then analyzed for themes and patterns or for the relationship between them. In step three, the categories were examined for meaning and interpretation. In step four, a conceptually clustered matrix was constructed to illustrate the patterns and themes found in the data (see Table 4 for coping resources; Miles & Huberman, 1994).

To enhance trustworthiness, strategies for rigor were used that included an audit trail and peer debriefing. The use of an audit trail resulted in a document detailing the decision-making for each step taken in coding, data analysis, and interpretation. The research team maintained detailed analytic and self-reflective memos to document their process and progress. These strategies increased the dependability of the findings because it used a systematic approach to documentation. It also assured confirmability since the findings were firmly linked to the data and corroborated in peer debriefing sessions.

Sample Description

Descriptive results are reported for the entire sample. As indicated in Table 2, on average, participants were 61 years old (SD = 5.43), although the group was evenly distributed between young-old (50–54; 45%) and middle old (55–64; 44%). The majority of participants were either African American (45%) or white (35%), and male (96%). Approximately nine out of 10 (90%) had received at least their high school diploma. As for self-reported religious affiliation, 60% identified as Christian. Approximately 33% reported a history of being in the military.

Almost one quarter (24%) of participants reported currently being married or partnered. Most participants reported having

Table 3
Descriptive Statistics for Physical and Mental Health Issues (n = 677)

Health issue	%	*n*
Physical health		
Arthritis/rheumatism	17.0	112
Hypertension	15.0	101
Walking problem	11.0	72
Fractures, bone/joint injury	11.0	71
Heart problem	10.0	65
Diabetes	10.0	63
Stroke	2.0	10
HIV/AIDS	4.0	28
Cancer	3.0	16
Eye/vision problem	20.0	132
Back or neck problem	20.0	130
Lung/breathing problem	10.0	63
Hearing problem	5.0	33
Other impairment	8.0	53
Mental health (most serious diagnosis)		
Depression	8.0	56
Bipolar disorder	5.0	30
Posttraumatic stress disorder	3.0	18
Schizophrenia or schizoaffective disorder	2.0	15
Other	4.0	26

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Table 4
Sources of Coping Resources and Activities (n = 201)

Coping domains	Description	Sample quotes
Root (12%, $n = 24$)	Basic needs/foundation: food, clothing, safety, grounded in love and family	"I try to be secure in myself," "I feel safer at the minimum security prison compared to a maximum one"
Physical (33%, $n = 66$)	Exercise (yard, run/walk, sports), medication	"I became a jogger and sprinter at 56 years old. I run 5 miles per day and sprint 105 yd sprints every other day"
Cognitive (35%, $n = 70$)	Find peace within, think positive, making healthy choices, puzzles, read	"I try to think positive and try to meditate and read a great deal to take my mind off worries"
Emotional (23%, $n = 46$)	Supportive emotional counseling, anger and stress management, music (listening)	"I participate every Monday in group therapy. Cage Your Rage program 10 weeks"
Social (54%, $n = 108$)	Interaction with family, friends, or peers in prison, program participation	"I keep in touch with family members"
Spiritual (37%, $n = 34$)	Church, God, pray, service to others	"Pray to God and go to church regularly here"
Participatory (13%, $n = 26$)	Leadership, taking classes or vocational training for personal advancement, teaching, leading a book club, advocacy	"I lead a bereavement group for other inmates." "I am a paralegal and seek justice for people in prison"
Multi-dimensional (7%, $n = 14$)	Art-making, music-making, yoga	"I do yoga, doctor, I do yoga."

children (80%) and grandchildren (58%). One-fifth of participants (20%) reported having at least one other incarcerated family member.

Sixty-two percent of participants reported having a violent offense history and 10% were sentenced to life in prison. The length of prison term varied from 4 months to 42 years served; the average was 13 years served. Thirty-eight percent reported eligibility for parole within one year and 26% reported they were eligible in 2 to 5 years.

Twenty-eight percent of participants reported a history of mental health problems; another quarter reported a history of alcohol use and 44% reported a history of drug use. Participants reported a lower frequency of participation in mental health treatment (33%) compared to participation in religious services (72%).

Table 2 presents detailed findings on self-reported chronic health problems, such as arthritis (17%), hypertension, (15%), heart problems or cardiovascular disease (10%), diabetes (9%), HIV/AIDS (4%), and cancer (3%). Additional health issues that may suggest disability include vision problems (20%), problems pertaining to the back or neck (20%), walking difficulties (11%), lung and breathing issues (10%), and hearing impairments (5%). Each of these may pose difficulties for individuals endeavoring to keep up with the pace of the prison regimen or to participate in programs or activities that could foster resilience. Two of three participants reported a history of some type of serious mental illness, such as major depression (8%) or bipolar disorder (5%).

Although this current study focuses on current trauma and stress in prison, it is important to note that participants also reported earlier life experiences of trauma and stress prior to their current prison sentence. The majority reported experiencing some type of earlier life trauma, grief, loss or separation experience, such as being a victim of violence (24%), witness to violence (48%), or combat or war (15%). Many participants also reported experiencing other earlier life stressors, such as the unexpected or expected death of a loved one (70%), financial stress (53%), family caregiving stress (25%), prior jail or prison term (54%), or having an incarcerated family member (60%). Some of these experiences, such as witnessing violence may have been a result of committing a crime but this is not verifiable in the quantitative data findings. See Maschi, Viola, & Morgen, 2014 for more details of cumulative trauma experiences of this population.

Content Analysis Findings: Trauma, Stress, and Coping in Prison

As noted above, our analysis focuses on the current experiences of prison trauma, stress, and coping among older adults in prison. For the purposes of this study we used the data from the following LSC-R items: *Have you ever experienced abuse or other stress while in prison (yes or no)?* and *If yes, what was the event?*

More than half (53%) of the entire sample ($n = 677$) reported on the LSC-R experiencing current abuse and stress in prison and among those, 86% felt moderately to extremely affected by it in the past year. We relied upon qualitative data from open-ended questions on two items on the PSCS-S: *What are the types of things that caused you stress while in prison in the past month?* and *What kind of things did you do in the past month, if anything at all, to help with your stress?* A subsample of 201 participants provided a first-hand, detailed description of current experiences of prison trauma, stress, and coping (during the past month) that influenced their sense of safety and feelings of well-being. A conceptual model of the study findings can be found in Figure 1.

The most prominent descriptions of current prison trauma and stress were categorized as either external, for example, *interpersonal*, *social, cultural*, and *structural*, *trauma and stress*, or internal, for example, *internalized negative self-talk*. Identified coping practices or resources that participants currently reported engaging in to cope with trauma and stress of incarceration that helped improve their sense of well-being were categorized as: root (basic needs), physical, cognitive, emotional, social, spiritual, participatory, and multidimensional.

Interpersonal Trauma and Stress

Based on the narratives, we describe *interpersonal* trauma and oppression as 'one on one' interpersonal abuse, neglect, bullying, or harassment. About one third of participants reported experiencing interpersonal oppression from correctional or medical staff or

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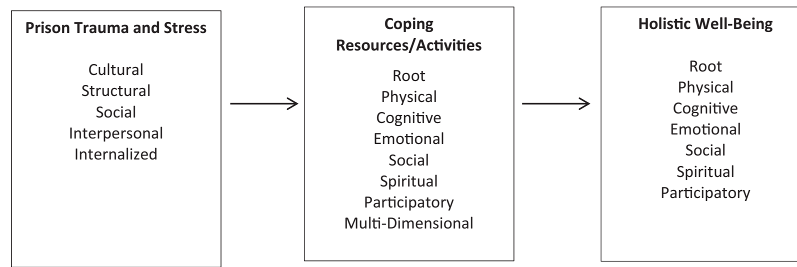

Figure 1. This conceptual model depicts prison trauma and stress, coping resources/activities, and holistic well-being among older adults in prison. As the study findings suggest, older people in prison reported tapping coping resources (i.e., root, physical, cognitive, emotional, social, spiritual, and participatory or leadership activities), with prison trauma and stress at the cultural, structural, social, interpersonal, and internalized levels. For those participants who reported engaging in coping activities, they also reported feeling a subjective or internal sense of well-being associated with these activities. These domains of holistic well-being included roots (e.g., sense of safety and security), physical, cognitive, emotional, social, spiritual, and participatory (e.g., feeling empowered and sense of purpose).

other inmates which included demeaning attitudes and unjust actions. Of the 31% of participants who reported interpersonal trauma, 43% reported that these experiences occurred with staff, 18% with other incarcerated persons, and 15% reported experiencing oppressive attitudes, beliefs, and practices in their interactions with both staff and other incarcerated persons.

The first-hand accounts of participants shed light on the harsh reality of the life of an incarcerated older adult which ranged from being a victim of or witnessing minor to severe trauma, abuse, and violence. Some participants described others' condescending attitudes, "bias from guards/security officers," and "harassment from officers." Others reported "being picked on for petty things," "constant shakedowns," and "canceled recreation." Participants reported a high level of stress living with the reality that "you could be set up by an officer at any given time, just because they don't like you," or "being punished for other people's actions"; or "being accused of things you didn't do and your job taken away." Significant distress was associated with "male guard feeling on my body." One participant reported witnessing "corrections officers stomping inmates into comas."

Participants also shared feelings of distress associated with interactions with other incarcerated people. Some examples of this source of peer to peer stress included "ignorance of inmates," "immature inmates, arguments," "being among fellow prisoners who have no honor, little integrity, and who revel in depravity (just like the guards)," "bias from gang members," "aggression from other inmates," "getting into fights with other inmates" and "being robbed." One older participant feared for his safety and said, "I am 72 years old and I am afraid of getting raped again."

Social Trauma and Stress

Almost half (45%) of the participants reported *social* trauma and stress, predominantly separation from family and the community. One man said, "I am confined like an animal and kept away from family." Others reported feeling stressed about, "being here away from my family and not having freedoms," "being transferred to a prison where my loved ones couldn't visit because of the distance," or lack of contact, "I cannot contact family, I think about my children, grandkids, children in DYFS." One respondent noted: "It is hard for me 'cause my son's mother ain't with me now. She's on my mind and I think about my kids and new granddaughter." Poor mail delivery, lack of phones, and families often stressed because of lack of resources or other members incarcerated were common complaints.

Cultural Trauma and Stress

About 15% reported that *cultural* or societal attitudes toward incarcerated people and reenacted by staff and other incarcerated people caused them stress. In particular, the prison culture fosters the "subhuman status of being labeled prisoners"' conveyed by prison staff and from society in general. The stigma of incarceration and the loss of identity is communicated by responses such as, "you're identified as a number, and not as a human being," and "as long as you're in khaki, you are considered nonhuman." One participant noted, "you can't get an answer from Department of Corrections or from social workers" and "corrections officers disrespect inmates and beat them up."

Structural Trauma and Stress

Roughly one of three participants (29%) reported *structural* trauma and stress. Almost two thirds of these participants reported that the sources of trauma and stress were attributed to laws, policies, and institutional regulations. Several participants reported that staff often created and enforced their own informal rules, while failing to enforce existing institutional policies, such as responding to prison abuse. One participant made the following observation about correctional officers: "they seem to lack a 'higher power' to address prison abuse and neglect."

Participants described feelings of powerlessness and stress as well, particularly in response to unjust laws and policies and lack of family support as they attempted to navigate the legal process: "my family is not downloading the files from the Internet to help me with my appeal."

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One-third of participants reported trauma and stress related to poor nutrition and inadequate health care within the prison. One respondent wrote, "food nutrition poor; variety-poor-balance-none-lack of use of utilities-water-no water to drink for 2 days, food, meat not cooked, not getting out to yard enough," and "everyone chain smokes around me all the time." Other responses often referred to medical neglect; these included the following: "there is indifference to my need for medical care"; "medical department ignoring medical complaints"; "there's a failure of medical personnel, malpractice, a failure to treat, negligence, abuse, denial of vital medication, heart meds"; "a failure to follow specialists' recommendations for treatment of hypertension and pain"; "there's mismanagement of prison and neglect of serious health issues"; "I have constant back pain, scoliosis, lumbar/thoracic spine," and "I get no medical attention when my tooth throbs." Female participants shared that health care services were inadequate for the special needs of older women. One participant lamented: "I would not wish this place on my worst enemy."

Administrative and staff's acceptance of abusive and neglectful practices included extreme forms of confinement and isolation, such as: "prison officers confine inmates in 2 cages 15–20 Minutes 25 at Times 3 meals 7 days a week"; "I've been locked up in a room for 23 hours a day for the past four months without an explanation from administration"; "locked up in a cell 22 hours a day and not enough recreation time"; "there's a lack of programs to keep the mind active"; and "there are searches where property becomes destroyed or stolen." Others described stress as a result of living with "constant noise" and cells that are "constantly lit up" and feelings of despondency associated with "having to wait 2 to 4 years to participate in a prison program." One older participant noted age biases with the structure of prison: "prisons are designed for young people. Us older folks find it hard to get a job or education here."

Internalized: "Negative Self Talk"

In response to the trauma and stress of confinement, some participants reported adverse psychological and emotional responses to the trauma and stress of incarceration. These responses were identified as *negative self-talk* in which participants have internal narratives that caused them psychological and emotional distress. Negative thoughts or emotions included anxiety, fear, worry, depression, insecurity, feelings of loneliness and defeat, hopelessness, apathy, grief, anger, guilt, and shame. Some participants reported feeling anxiety about their personal health and safety, being separated from children and other family members, the physical and emotional heath of their children, and the uncertainty of their futures. Several participants who were close to being released from prison described their bleak options for future employment and economic earning power. Participants shared: "I worry about when I get out-getting kids a place to live"; "keeping a job to make ends meet"; "I am scared about job opportunities upon my release, rebuilding relationships with my children" and "not being able to support them." One respondent wrote: "I believe the intent is for us to die in here."

Some participants described feeling tormented as they grappled with the implications of their crime. One participant described fearing that "others will learn the details of my crime." Other participants thought about how their crime affected others. They shared, "I constantly relive the decision which put me back in prison and caused me to lose everything, my wife, kids, car, all money, and possessions." "I feel guilt- my family was harmed by my actions . . . how will I face my family?"

Coping Resources

Despite the trauma and stress of incarceration, many participants reported adaptive responses to managing the prison experience and overall well-being, such as having a positive outlook. In comparison with pharmaceutical interventions, these self care activities offer low cost solutions to fostering health and well-being, including for older people in prison. Our content analysis results revealed that the variety of coping resources or practices reported by older adults in prison were categorized as: root (foundational needs), physical, cognitive, emotional, social, spiritual, participatory and multidimensional. As shown in Table 4, the majority of participants (54%) relied upon social coping strategies to deal with the stressors of confinement, followed by spiritual (37%), cognitive (35%), and physical (33%). Almost two thirds (63%) of participants reported participating in two activities of coping; nearly one-quarter (23%) indicated that they participated in as many as nine activities. Some individuals indicated that they participated in no activities by choice, which could be related to their physical health, or because there were no activities available to them. A promising finding is the effective use of participatory or empowerment practices in which participants are able to demonstrate leadership and engage in personal advancement or advocacy (see Table 4). For example, one participant noted: "I have been facilitating a grief bereavement program once a week for 12 years and another Group 3 times a year for the past 17 years." These coping resources or practices have promise for fostering resilience and well-being among older people, despite even the traumatic and stressful conditions of confinement.

Discussion

This study sought to explore the experiences of stress and coping among older adults in prison. It is important to note that although age discrimination may have been a factor in the treatment of older people in prison, participants did not identify it as a source of prison trauma and stress. The sources of prison trauma and stress were social (45%), interpersonal (31%), cultural (15%), and structural (29%). Almost half of the participants responded with specificity that separation from family and community was a source of trauma and stress; references to concerns for family were categorized as interpersonal or institutional (e.g., being denied phone privileges; stigma of incarceration; not being able to support children) and suggest that the vulnerability and conflict over this separation is pervasive. This finding is not surprising considering that most participants are parents (80%) and/or grandparents (58%) and, at the time of the survey, still had more than two years of prison time remaining (62%). Our findings support the need for programs that provide links to family, in a safe and supportive prison environment, to encourage hope and optimism and feelings of connectedness and community. These social programs might include family and volunteer prison visiting and service programs, pen pal programs, intergenerational caregiver support services, and intergenerational supportive televisiting services.

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Participants reported that prison experiences, such as victimization, witnessing violence and abuse, medical neglect, lack of rehabilitation services, and discharge planning, exacerbate physical and mental illnesses and can be conceptualized as a violation of human rights (ACLU, 2012; HRW, 2012). Many reported witnessing violence and abuse. Others have direct experience, such as "being 72 and being raped again in prison" which is emblematic of the type of elder abuse and neglect that is pervasive in prison. The World Health Organization (2012) defines elder abuse as a "a single, or repeated act, or lack of appropriate action, occurring within any relationship where there is an expectation of trust which causes harm or distress to an older person" (p. 1). Elder abuse may take many forms and consists of physical, sexual, psychological, emotional, financial exploitation, and intentional or unintentional neglect, including medical neglect (United Nations, 2012; Stojkovic, 2007). The current findings suggest that witnessing violence is not only a type of trauma but also falls within the definition of elder abuse. Human rights and social protections from 'cruel and unusual punishment' should be extended to include older adults in prison.

A model of coping that can help older adults manage the prison experience emerges from this study. Providing human rights training in prison can assist staff and prisoners in recognizing the human rights implications of their actions and inactions toward one another, including inmate on inmate abuse and neglect and officer on inmate neglect and abuse. A human rights approach should incorporate trauma-informed care principles and practices to address past trauma along with the often subhuman conditions of confinement (Maschi, Viola, & Sun, 2013). Integrating trauma informed care into the policies, procedures, and care practices in correctional settings may mitigate the experiences of current prison trauma and stress as well as address undetected and untreated earlier life trauma, including the processing of earlier life criminal behavior. The Substance Abuse and Mental Health Services Administration has recommended 11 key guidelines for incorporating trauma informed care that can be used in correctional settings. These guidelines address multilevel trauma and intersectoral collaboration and are as follows: (a) providing governance and leadership within the organization to lead and oversee a trauma informed care model; (b) having a written policy that establishes a trauma-informed approach as central to an organization's mission; (c) actively involving all trauma survivors, consumers, and family members in organizational decision-making; (d) bridging child and adults systems of care, such as child welfare, juvenile justice and criminal justice systems and other community service providers; (e) using culturally responsive evidence-based assessment, intervention, and referral systems for individuals and families; (f) providing trauma training and workforce development, including training on vicarious and secondary trauma among staff; (g) using trauma informed principles that guide organizational procedures and community cross agency protocols; (h) conducting ongoing quality assurance of evidence-based trauma treatment interventions; (i) using financing structures designed to support a trauma informed approach; (j) using a trauma informed evaluation component; and (k) providing a physical environment where program participants feel safe (Substance Abuse and Mental Health Services Administration, 2013). Many of these same guidelines are applicable for not only for trauma informed correctional settings but also in community corrections. Establishing interagency collaboration with health, mental health, substance abuse, housing, and social welfare organizations will assist with reducing the stress associated with the uncertainty many older adults experience transitioning to the community from prison.

It also is important to acknowledge the strengths and resilience of elders in prison. There is a growing body of evidence that examines sources of resilience, or 'protective advantages,' such as cognitive, physical, emotional, spiritual, and social coping resources used by the incarcerated, that suggests there are low cost, effective means of building capacity and promoting health and well-being and positive human development to foster offender rehabilitation (Aday, 2005–2006). Participants in our study reported coping with the stress of incarceration principally through the use of social resources (e.g., family and peer interaction). Physical, cognitive, emotional, and spiritual well-being were improved with physical exercise (jogging), yoga, meditation, and prayer. Their narratives indicate that they are attempting to preserve their well-being through a classic *resource approach* to stress (e.g., *I try to be secure in myself* or *I think positive*). As our literature review and findings also revealed, religion and spirituality are significant coping resources among the older, incarcerated population. The majority of our participants (72%) participated in religious practices or services whether they were currently experiencing stress or not.

Among geriatric specific programs currently in place, the *True Grit* program based in Nevada represents a leap forward toward addressing trauma and stress in prison, (Harrison, 2006). The program builds bridges for incarcerated adults helping them to connect with community services. Innovative programs such as these honor the dignity and worth of the person, foster human agency and autonomy and promote holistic well-being. *True Grit* has components that reduce stress and increase family involvement, including intergenerational family visiting, spiritual counseling, exercise and creative arts programs, along with employment, housing, and retirement counseling. Program specific aspects include age and 'cognitive capacity' sensitive environmental modifications (including segregated units), interdisciplinary staff and volunteers trained in geriatric specific correctional care, complimentary medicine, specialized case coordination, the use of family and inmate peer supports and volunteers, mentoring, pro-bono legal services, and self-help advocacy group efforts.

Based in New York City, *GrandConnections* is an innovative televisiting program staffed with an interdisciplinary team of psychologists, social workers, and formerly incarcerated older adults from the Social Service Board of the New York State Society for Ethical Culture. The program provides supportive televisiting services including recruiting, intake, preparation, supervision, and debriefing for intergenerational, or family, televisits. These 'visits' are live, real-time, interactive audio and video visits between a child and his or her incarcerated parents or grandparents. Intergenerational families have access to a resource hotline and supportive community-based activities. In addition, formerly incarcerated peers provide guidance and mutual support (Maschi, Viola, & Morgen, 2014).

Applying a human rights framework to older prisoner rights poses ethical dilemmas and debate that have become part of local, state, and national conversations on the use of punitive versus compassionate approaches to criminal justice matters (Chiu, 2010). For example, in a recent article, Veronese (2012) ques-

tioned the availability of expensive Hepatitis C treatment made available to the incarcerated population that is draining state budgets. Veronese's argument is that prisoners already have higher quality residences and better health care than nonincarcerated older adults living in retirement homes (Veronese, 2012). A human rights perspective is predicated on an underlying philosophical principle that individuals in society have a duty to others. Community conversations may include deliberations on questions such as (a) *To what extent should society address offender rehabilitation?* (b) *To what extent does society have a responsibility for the children and grandchildren of incarcerated people?* (c) *What are the strengths and limitations of alternatives to incarcerating offenders?* and (d) *What are the hidden costs to society for ignoring the aging in prison crisis, especially in the United States?*

Research Limitations and Future Directions

This research study has limitations that warrant discussion. The qualitative data was collection from a group of incarcerated adults aged 50 and older from one Northeastern prison system and cannot be generalized to other geographic locations in the United States or abroad. Although the data were analyzed from more than 201 participants to the point of saturation, it is quite possible that not all accounts of trauma and stress in prison among older adults were captured in this study. Because this qualitative study focused specifically on prison trauma, stress, and coping experiences, questions did not fully explore how participants created meaning from their past and current experiences.

This study did not compare younger with older prisoners so it cannot be fully determined whether older prisoners may or may not be qualitatively different because of the aging process nor the extent to which reported experiences and responses may be applicable to other age groups. Additionally, age discrimination may have been a factor in the treatment of older people in prison but not identified as such by participants and thus not reported. Because this is a cross-sectional look, we cannot prove that the participants' use of coping activities actually improves health and well-being beyond the participants subjective reporting that it does.

Despite these limitations, the current study lays a foundation for future research on trauma, stress, and coping experiences among older adults, especially those in secure care settings, such as prisons. Future research should include mixed methods designs and should examine how past and current life events and coping experiences shape health, well-being, and criminogenic thinking and behavior over time. Additionally, teasing out the role of age differences and age discrimination is an important area to pursue using age cohorts and quantitative and qualitative measures that assess age and other forms of discrimination and can assess for age related differences in trauma and stress experiences.

Future research should explore interventions that incorporate multimodal coping resources (e.g., root, physical, cognitive, emotional, social, spiritual, and participatory) that can be developed and tested for their impact on trauma and stress symptomatology among older adults in prison. Given the importance of medical neglect and social trauma in the current findings, future research should more fully explore these sources of trauma and stress as a form of elder abuse, mistreatment, and neglect, including social exclusion and isolation. Future research should also build awareness and include an advocacy component for the public to make informed decisions about how to address trauma, aging, and well-being for all groups. Continued human rights advocacy is urgently needed to address the grave injustices of the consequences of the *get tough on crime* era, especially in the United States. Consistent with United Nations recommendations as well as those of Attorney General Holder (2013), grassroots advocacy for sentencing and parole reform and development and implementation of geriatric and release laws are needed at the state and federal level (Chiu, 2010).

Conclusion

It is imperative that we adopt an approach to criminal justice that is both humane and cost-effective. Helping incarcerated older adults connect with the community in a healthy way is beneficial to them and to their families. The narratives analyzed for this study suggest that interpersonal and institutional stressors compound the impact of social trauma; but these interrelationships need to be studied further. For example, how might the support of family members and the community contribute to increased resilience among incarcerated adults and can it ameliorate symptoms of stress and trauma caused by the overall structural (e.g., interpersonal, institutional) violence they are subjected to? How might families and communities become advocates for incarcerated older adults by promoting safer, healthier and more secure prison environments that respect human rights? Allocating resources to programs that reestablish family and community relationships could be an important step toward improving the overall well-being of those we incarcerate, the prisons we confine them to, and the communities they reenter.

References

Aday, R. H. (1994). Aging in prison: A case study of new elderly offenders. *International Journal of Offender Therapy and Comparative Criminology, 38,* 79–91. http://dx.doi.org/10.1177/0306624X9403800108

Aday, R. H. (2005–2006). Aging prisoners' concerns toward dying in prison. *Omega: Journal of Death and Dying, 52,* 199–216. http://dx.doi.org/10.2190/CHTD-YL7T-R1RR-LHMN

Allen, R. S., Harris, G. M., Crowther, M. R., Oliver, J. S., Cavanaugh, R., & Phillips, L. L. (2013). Does religiousness and spirituality moderate the relations between physical and mental health among aging prisoners? *International Journal of Geriatric Psychiatry, 28,* 710–717. http://dx.doi.org/10.1002/gps.3874

Allen, R. S., Phillips, L. L., Roff, L. L., Cavanaugh, R., & Day, L. (2008). Religiousness/spirituality and mental health among older male inmates. *The Gerontologist, 48,* 692–697. http://dx.doi.org/10.1093/geront/48.5.692

American Civil Liberties Union. (2012). *The mass incarceration of the elderly*. Retrieved from http://www.aclu.org/files/assets/elderlyprisonreport_20120613_1.pdf

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84,* 191–215. http://dx.doi.org/10.1037/0033-295X.84.2.191

Bernard, H. R., & Ryan, G. W. (2010). *Analyzing qualitative data: Systematic approaches*. Thousand Oaks, CA: Sage.

Brown, S. L., & Ireland, C. A. (2006). Coping style and distress in newly incarcerated male adolescents. *Journal of Adolescent Health, 38,* 656–661. http://dx.doi.org/10.1016/j.jadohealth.2005.09.005

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Chiu, T. (2010). *It's about time: Aging prisoners, increasing costs, and geriatric release*. New York, NY: Vera Institute of Justice.

Dillman, D. A., Smyth, J. D., & Christian, L. M. (2009). *Internet, mail, and mixed-mode surveys: The tailored design method* (3rd ed.). Hoboken, NJ: Wiley.

Eytan, A. (2011). Religion and mental health during incarceration: A systematic literature review. *Psychiatric Quarterly, 82,* 287–295. http://dx.doi.org/10.1007/s11126-011-9170-6

Folkman, S., & Lazarus, R. S. (1980). An analysis of coping in a middle-aged community sample. *Journal of Health and Social Behavior, 21,* 219–239. http://dx.doi.org/10.2307/2136617

Grella, C., Lovinger, K., & Warda, U. (2013). Relationships among trauma exposure, familial characteristics and PTSD: A case study of women in prison and in the general population. *Women & Criminal Justice, 23,* 63–79. http://dx.doi.org/10.1080/08974454.2013.743376

Harrison, M. T. (2006). True Grit: An innovative structured living program for elderly inmates. *Corrections Today, 68,* 46–49.

Hobfoll, S., Freedy, J., Green, B., & Solomon, S. (1996). Coping reactions to extreme stress: The roles of resource loss and resource availability. In M. Zeidner & N. S. Endler (Eds.), *Handbook of coping: Theory, Research, Applications* (pp. 322–349). New York, NY: Wiley.

Hochstetler, A., Murphy, D. S., & Simons, R. L. (2004). Damaged goods: Exploring predictors of distress in prison inmates. *Crime & Delinquency, 50,* 436–457. http://dx.doi.org/10.1177/0011128703257198

Holder, E. (2013). *Text of Holder speech*. Retrieved January 2, 2014 from http://blogs.wsj.com/washwire/2013/08/12/text-of-holder-speech/

Human Rights Watch [HRW]. (2012). *Old behind bars: The aging prison population in the United States*. Retrieved from http://www.hrw.org/reports/2012/01/27/old-behind-bars

James, D. J., & Glaze, L. E. (2006). *Mental health problems of prison and jail inmates*. (NCJ Publication No. 213600). Rockville, MD: U.S. Department of Justice.

Johnson, K., & Lynch, S. (2013). Predictors of maladaptive coping in incarcerated women who are survivors of childhood sexual abuse. *Journal of Family Violence, 28,* 43–52. http://dx.doi.org/10.1007/s10896-012-9488-3

Kobasa, S. C. (1979). Stressful life events, personality, and health: An inquiry into hardiness. *Journal of Personality and Social Psychology, 37,* 1–11. http://dx.doi.org/10.1037/0022-3514.37.1.1

Kopera-Frye, K., Harrison, M. T., Iribarne, J., Dampsey, E., Adams, M., Grabreck, T., . . . Harrison, W. O. (2013). Veterans aging in place behind bars: A structured living program that works. *Psychological Services [Special issue: Correctional and Criminal Justice Psychology], 10,* 79–86. http://dx.doi.org/10.1037/a0031269

Krause, N. (2009). Lifetime trauma, prayer, and psychological distress in late life. *International Journal for the Psychology of Religion, 19,* 55–72. http://dx.doi.org/10.1080/10508610802471112

Krippendorff, K. (2004). *Content analysis: An introduction to its methodology* (2nd ed.). Thousand Oaks, CA: Sage.

Krohne, H. (2002). *Stress and coping theories*. http://userpage.fu-berlin.de/~schuez/folien/Krohne_Stress.pdf

Kubiak, S. P., Hanna, J., & Balton, M. (2005). I came to prison to do my time- not to get raped: Coping within an institutional setting. *Stress, Trauma and Crisis, 8,* 157–177. http://dx.doi.org/10.1080/15434610590956921

Lazarus, R. S. (1966). *Psychological stress and the coping process*. New York, NY: McGraw-Hill.

Lazarus, R. S. (1991). *Emotion and adaption*. New York, NY: Oxford University Press.

Lynch, S. M., Heath, N. M., Mathews, K. C., & Cepeda, G. J. (2012). Seeking safety: An intervention for trauma-exposed incarcerated women? *Journal of Trauma & Dissociation, 13,* 88–101. http://dx.doi.org/10.1080/15299732.2011.608780

Maschi, T. (2010a). *The prison stress and coping scale-short*. New York, NY: Be the Evidence Press, Fordham University.

Maschi, T. (2010b). *The culturally responsive questionnaire (prison)*. New York, NY: Be the Evidence Press, Fordham University.

Maschi, T. & Aday, R. (2014). The social determinants of health and justice and the aging in prison crisis: A call to action. *International Journal of Social Work, 1*(1), 1–15.

Maschi, T., Dennis, K., Gibson, S., MacMillan, T., Sternberg, S., & Hom, M. (2011). Trauma and stress among older adults in the criminal justice system: A review of the literature with implications for social work. *Journal of Gerontological Social Work, 54,* 347–360.

Maschi, T., Morgen, K., Zgoba, K., Courtney, D., & Ristow, J. (2011). Trauma, stressful life events, and post traumatic stress symptoms: Do subjective experiences matter? *Gerontologist, 51*(5), 675–686. http://dx.doi.org/10.1093/geront/gnr074

Maschi, T., Viola, D., & Morgen, K. (2014). Unraveling trauma and stress, coping resources, and mental well-being among older adults in prison: Empirical evidence linking theory and practice. *Gerontologist, 54*(5), 857–867. http://dx.doi.org/10.1093/geront/gnt069

Maschi, T., Viola, D., Morgen, K., Harrison, M. T., Harrison, W., & Koskinen, L. (2014). Bridging community and prison for older adults and their families: Invoking human rights and intergenerational family justice. *International Journal of Prisoner Health, 19*(1), 1–19.

Maschi, T., Viola, D., Morgen, K., & Koskinen, L. (2015). Trauma, stress, grief, loss, and separation among older adults in prison: The protective role of coping resources on physical and mental well-being. *Journal of Crime and Justice, 38*(1), 113–136. http://dx.doi.org/10.1080/0735648X.2013.808853

Maschi, T., Viola, D., & Sun, F. (2013). The high cost of the international aging prisoner crisis: Well-being as the common denominator for action. *The Gerontologist, 53*(4), 543–554. http://dx.doi.org/10.1093/geront/gns125

McHugo, G. J., Caspi, Y., Kammerer, N., Mazelis, R., Jackson, E. W., Russell, L., . . . Kimerling, R. (2005). The assessment of trauma history in women with co-occurring substance abuse and mental disorders and a history of interpersonal violence. *The Journal of Behavioral Health Services & Research, 32,* 113–127. http://dx.doi.org/10.1007/BF02287261

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis*. Thousand Oaks, CA: Sage.

Morgen, K., Maschi, T., Viola, D., & Zgoba, K. (2013). Substance use disorder and the older offender. *Vistas Online: A Publication of the American Counseling Association, 97,* 1–10.

Neuendorf, K. A. (2002). *The content analysis guidebook*. Thousand Oaks, CA: Sage.

Nieland, M., McCluskie, C., & Tait, E. (2001). Prediction of psychological distress in young offenders. *Legal and Criminological Psychology, 6,* 29–47. http://dx.doi.org/10.1348/135532501168181

Pearlin, L. I., Schieman, S., Fazio, E. M., & Meersman, S. C. (2005). Stress, health, and the life course: Some conceptual perspectives. *Journal of Health and Social Behavior, 46,* 205–219. http://dx.doi.org/10.1177/002214650504600206

Pearlin, L. I., & Skaff, M. M. (1996). Stress and the life course: A paradigmatic alliance. *The Gerontologist, 36,* 239–247. http://dx.doi.org/10.1093/geront/36.2.239

Pew Charitable Trusts. (2008). *One in 100: Behind bars in America 2008*. Washington, DC: Author.

Pew Charitable Trusts. (2014). *For aging inmates care outside walls*. Washington, DC: Author.

Picken, J. (2012). The coping strategies adjustment and well-being of male inmates in the prison environments. *Internet Journal of Criminology*. ISSN 2045–6743 (Online).

Scheier, M. F., & Carver, C. S. (1992). Effects of optimism on psychological and physical well-being: Theoretical overview and empirical

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update. *Cognitive Therapy and Research, 16,* 201–228. http://dx.doi.org/10.1007/BF01173489

Schwarzer, R., & Leppin, A. (1991). Social support and health: A theoretical and empirical overview. *Journal of Social and Personal Relationships, 8,* 99–127. http://dx.doi.org/10.1177/0265407591081005

Sealock, M., & Manasse, M. (2012). An uneven playing field: The impact of strain and coping skills on treatment outcomes for juvenile offenders. *Journal of Criminal Justice, 40,* 238–248. http://dx.doi.org/10.1016/j.jcrimjus.2012.02.002

Selye, H. (1976). *The stress of life*. New York, NY: McGraw-Hill.

Shulman, E. P., & Cauffman, E. (2011). Coping while incarcerated: A study of male juvenile offenders. *Journal of Research on Adolescence, 21,* 818–826. http://dx.doi.org/10.1111/j.1532-7795.2011.00740.x

Stojkovic, S. (2007). Elderly prisoners: A growing and forgotten group within correctional systems vulnerable to elder abuse. *Journal of Elder Abuse and Neglect, 19,* 97–117.

Substance Abuse and Mental Health Services Administration. (2013). *Guidelines for a trauma informed approach*. Retrieved from http://beta.samhsa.gov/nctic/trauma-interventions

Tutty, L. M., Rothery, M., & Grinnell, R. M. (1996). *Qualitative Research for Social Workers*. Needham Heights, MA: Allyn and Bacon.

United Nations. (1948). *The universal declaration of human rights*. Retrieved from http://www.un.org/en/documents/udhr/

United Nations. (2012). *Report of the United Nations High Commissioner for Human Right*. Substantive session, 23–27 July, 2012, Geneva.

Veronese, K. (2012, May 25). *If you are elderly and poor, prison is better than a retirement home*. Retrieved August 20, 2014 from http://io9.com/5912064/if-you-are-elderly-and-poor-prison-is-better-than-a-retirement-home

WHO. (2012). *Ageing and life course*. Retrieved January 6, 2013, from http://www.who.int/ageing/projects/elder_abuse/en/

Wolfe, J., & Kimerling, R. (1997). Gender issues in the assessment of posttraumatic stress disorder. In J. P. Wilson & T. M. Keane (Eds.), *Assessing psychological trauma and PTSD* (pp. 192–238). New York, NY: Guilford Press.

Wolfe, J., Kimerling, R., Brown, P. J., Chrestman, K. R., & Levin, K. (1996). The life stressor checklist-revised. In B. H. Stamm (Ed.), *Instrumentation in stress, trauma, and adaptation* (pp. 198–200). Northbrook, IL: Sidran Press.

Zamble, E., & Porporino, F. (1990). Coping, imprisonment, and rehabilitation: Some data and their implications. *Criminal Justice and Behavior, 17,* 53–70. http://dx.doi.org/10.1177/0093854890017001005

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