Institute *for* Advancing Justice Research and Innovation

GEORGE WARREN BROWN SCHOOL OF SOCIAL WORK

Conceptual Model to Guide Practice and Research in the Development of Trauma Interventions for Men Releasing from Incarceration

Working Paper #AJI080316

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August 2016

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[2] Robert Motley receives pre-doctoral fellowship funding from the National Institute of Mental Health (T32MH019960). The content is solely the responsibility of the author and does not necessarily represent the official views of the National Institute of Mental Health or the National Institutes of Health.

Abstract

A significant treatment gap exists for incarcerated men with lifetime traumatic experiences. A small research base for trauma interventions for incarcerated women is emerging, but incarcerated men have largely been ignored. Men comprise 90% of the incarcerated population and are at the greatest risk to be re-arrested for a new crime after release. One of the most ignored, but highly influential factors in poor post-release outcomes of formerly incarcerated men are unaddressed symptoms resulting from lifetime traumatic experiences. Studies of incarcerated men report up to 98% have had at least one lifetime traumatic experiences – many have experienced multiple traumas. With nearly 600,000 men releasing from correctional facilities each year, there is an urgent need to develop targeted interventions for incarcerated men. We propose a conceptual model of a multi-phased trauma intervention to guide practice and research on adapting existing trauma treatment approaches to the special circumstances of men releasing from incarceration. We divide up key treatment ingredients to respond to the complexities and stages of reentry from incarceration back to communities. We conclude with critical next steps needed to advance the practice and research of trauma intervention implementation for incarcerated men nearing release.

Keywords: Incarceration; Trauma; Reentry; Intervention; Treatment; Prison

Men account for up to 90% of the 2.3 million individuals incarcerated in prisons and jails in America (Carson, 2015; Minton & Zeng, 2015). Unfortunately, success after incarceration is strikingly rare for these men. Nearly three-quarters of men are re-arrested for a new crime within five years of their release from prison (Carson, 2015). One of the most ignored, but highly influential factors in post-release outcomes of formerly incarcerated men are unaddressed symptoms resulting from lifetime traumatic experiences (LTEs). LTEs include direct personal experiences of victimization, threat of/serious injury/death, learning of such an event occurring to a loved one, and witnessing in person an event that involves death or serious injury/threat to another person (American Psychiatric Association, 2013).

The prevalence of LTEs among current and formerly incarcerated men is striking. Between 62% and 98% of incarcerated men (rates vary based on study methods) report at least one LTE prior to incarceration (Breslau, 2009; Pettus-Davis, 2014; Wolff, Heuning, Shi, & Frueh, 2014). Yet, only for a rare few are LTEs ever addressed. Among criminal justice involved adults, untreated symptoms of LTEs is linked to violent and non-violent criminal behaviors (Nyamathi et al., 2012), increased rates of substance abuse (Mumola & Karberg, 2006), destabilizing mental health problems (Hosser, Raddatz, & Windzio, 2007), and high program drop-out rates (Kubiak, 2004). Thus for most, the multiple challenges of stabilizing in the community after an incarceration experience combined with the potential negative impact of unaddressed LTEs create pernicious interactions that undercut post-incarceration success.

The extant evidence base on trauma interventions for adults who have experienced incarceration is feeble (Van Buren et al., 2014). Moreover, researching trauma interventions for incarcerated men has been largely ignored. A handful of small trials have been conducted with female prisoners and one comparison trial has been conducted with males (Messina, Grella, Cartier, & Torres, 2010; Wolff et al., 2015; Zlotnick, Johnson & Najavits, 2009). These trials report promising evidence, but are limited by small sample sizes, short or no follow-up data collection, and modest impact on outcomes. Moreover, although evidence-based trauma treatments exist, they were developed and tested on non-incarcerated samples. Existing treatments fall short of addressing the unique needs of men releasing from incarceration. For example, many evidence-based trauma treatments have established effectiveness with recipients who are in a relatively stable and safe environment. Men re-entering communities from incarceration rarely meet this criteria but rather are confined in volatile and hostile environment while being expected to prepare for a healthy and productive post-incarceration life (Hanney, 2002). This paper addresses the treatment gap of trauma interventions for incarcerated men (Van Buren et al., 2014).

We propose a conceptual model of a multi-phased trauma intervention to guide practice and research on adapting existing trauma treatment approaches to the special circumstances of men releasing from incarceration. We divide up key treatment ingredients to respond to the complexities and stages of reentry from incarceration back to communities. We conclude with critical next steps needed to advance the practice and research of trauma intervention implementation for incarcerated men nearing release.

Background

Prevalence of LTEs among Current and Formerly Incarcerated Men

LTEs occurring prior to incarceration for men more than doubles the rate of LTEs of males in the general population. Studies show that 58% of incarcerated men report childhood physical abuse compared to 14% of males in community based samples, and 17% of incarcerated men report sexual abuse compared to 10% of community-based men (Center for Disease Control and Prevention, 2010; Swogger, You, Cashman-Brown, & Conner, 2011; U.S. Department of Veterans Affairs, [VA], 2015). Incarcerated men and women similarly report high rates of trauma, however, the types of trauma they experience differ across the lifespan. Incarcerated men have much higher rates of witnessing extreme harm to others in childhood (30.4% vs 15.6%) and adolescence (60% vs 34.8%), and being victims of interpersonal nonsexual trauma in adolescence (63.2% vs 34.8%; Komarovskaya et al., 2011). In contrast, incarcerated females report much higher rates of interpersonal sexual trauma in childhood (31.2% vs 15.2%), adolescence (35.3% vs 6.4%), and adulthood (27.7% vs 4.8%; Komarovskaya et al., 2011). Additionally, incarcerated men are more likely to report experiencing traumatic events while incarcerated than women (Kubiak, 2004). Most research efforts to infuse trauma interventions into incarceration settings have prioritized trauma interventions for women. However, data show that although the types of LTEs differ, incarcerated men are similarly experiencing high rates of LTEs and resulting trauma symptoms can be detrimental to post-release success.

Unfortunately, exposure to LTEs continue to permeate the lives of many men during and after incarceration. The amount of violence that occurs during incarceration and who perpetrates the violence is a reflection of the unpredictable living conditions found in many incarceration settings. Studies show that incarcerated men are at risk for cumulative LTEs during incarceration (Wolff, Blitz, Shi, Siegel, & Bachman, 2007; Struckman-Johnson & Struckman-Johnson, 2000). Almost one-quarter of incarcerated men report being sexually victimized during incarceration (Struckman-Johnson & Struckman-Johnson, 2000). Counter to popular media, nearly 60% of those victimized men indicated that the sexual perpetrator was a correctional staff person. In contrast, 26% of those sexually victimized men reported another prisoner was the assailant; 15% indicated that both correctional staff and other prisoners had sexually victimized them (Struckman-Johnson & Struckman-Johnson, 2000). Further, data from 13 adult male prisons show a prevalence rate for inmate-on-inmate physical assault to be 252 per 1,000 and a rate of 292 per 1,000 for staff-on-inmate assaults (Wolff et al., 2007). Even though these rates are exceptionally high, researchers suggest that the reports of physical and sexual assaults are grossly underrepresented because of fear of retaliation and a prison code of "no-snitching" (Wolff et al., 2007). Moreover, the research base is thin on prevalence of LTEs after incarceration. However, data suggest that the violence does not cease after release from incarceration. One study found that former prisoners report experiencing up to 3 LTEs, with an average of 1.3 LTEs within the first two to three years of release (Boxer, Schappell, Middlemass, & Mercado 2011).

Impact of LTEs on Current and Formerly Incarcerated Men

LTEs among incarcerated men have implications for individual outcomes, as well as public health and public safety. For current and formerly incarcerated men, LTEs predict psychological distress (Dube, et al., 2003; Medrano, Hatch, Zule, & Desmond, 2002; Porter, 2013) and negative mental health outcomes (Hochstetler, Murphy, & Simons, 2004; Komarovskaya et al., 2011; Wolff, Shi, & Schumann, 2012). As the number of LTEs increase, the degree of mental health and psychosocial impairment requiring treatment increases (Anda et al., 2006; Hosser et al., 2007; Khoury, Tang, Bradley, Cubells, & Ressler, 2010; Messina et al., 2007; Porter, 2013) – yet receipt of effective treatment remains rare for men releasing from incarceration (Heckman, Crospey, Olds-Davis, 2007; Wallis, Connor, Das-Bralsford, 2011). Not surprisingly then, posttraumatic stress disorder (PTSD) diagnosis is higher among men with incarceration histories (21%) compared to men in the general population (4%-5%) and male veterans (7%; Breslau, 2009; VA, 2015; Wisco et al., 2014; Wolff et al., 2014). Posttraumatic stress symptoms are significantly correlated with exposure to violence prior to incarceration and prison victimization (Hochsteltler et al., 2004).

LTEs among current/formerly incarcerated men are also associated with high rates of substance use (Komarovskaya et al., 2011; Wolf & Shi, 2012; Wolff et al., 2014) and substance abuse (Fagan, 2005; Fergusson, Boden, & Horwood, 2008; Huang et al., 2011). A recent study found that among a randomly sampled group of incarcerated men with LTEs (n=163), 86% screened positive for a substance use disorder compared to 68% of those men without trauma histories (Pettus-Davis, 2014). In a national sample, male state prisoners with drug dependence were more likely to report prior sexual or physical abuse (23%) compared to non-drug dependent men (15%; Mumula & Karberg, 2006). In

another study of incarcerated men with substance use disorders, 87% reported at least one LTE and 80% of those with LTEs had experienced at least two or more LTEs (Messina et al., 2007). Incarcerated men with co-occurring substance use disorders and LTEs are substantially more likely than their counterparts to re-engage in substance abuse after release (Danielson et al., 2008; Mumola & Karberg, 2006; Schroeder, Giordano, & Cernkovich, 2007; The National Center on Addiction and Substance Abuse at Columbia University, 2010) and to be re-arrested (Hosser et al., 2007; Forsman & Långström, 2012; Mersky, Topitzes, & Reynolds, 2012; Topitzes, Mersky, & Reynolds, 2012). In addition to crime, increased prevalence of substance abuse leads to heightened risk for the spread of sexually transmitted diseases (Braithwaite, Stephens, Conerly, Jacob Arriola, & Robillard, 2004) because of risk behaviors associated with substance abuse thus further threatening public health.

Men with LTEs who have experienced incarceration are at greater risk of engaging in past or future violence (Burnette et al., 2008; Hill & Nathan, 2008; Van Buren, Stocke, Wunderlich, & Thurston-Snoha, 2014; Wolff et al., 2014). Some research suggests that the roots of violent behaviors among incarcerated men may be partially attributed to prolonged exposure to LTEs (Forsman & Långström, 2012; Nyamathi et al., 2012). In a study of 1,526 young incarcerated men, frequent victimization was associated with onset of aggression early in life (Hosser, Raddatz, & Windzio 2007). Men who are incarcerated for committing lethal violent criminal acts (i.e. murder) are more likely to have experienced victimization at an early age (Burnette et al., 2008; Hill et al., 2008; Nyamathi et al., 2012) and are 4.5 times more likely to have been physically abused than those not convicted (Christofferson, Soothill, & Francis, 2007). Violence exposure

during incarceration can trigger outward-directed trauma responses such as aggression and heightened arousal that can threaten others (Freedman & Hemenway, 2005). Violence exposure after incarceration is significantly correlated with beliefs supporting aggression, negative emotional reactivity to violence, antisocial behavior, emotional distress, and financial risk (Boxer et al., 2011).

Creating a perfect storm, men with LTEs have more difficulty with effectively reconnecting with positive social supports after incarceration who can promote behavioral health and desistance from criminal behaviors (Herman, 1992; Pettus-Davis, 2014; Van Dalen, 2001; Van Voorhees et al., 2012). That is because the primary effects of symptoms associated with LTEs not only negatively impact an individual's behavioral and psychological functioning, but also interfere with positive interpersonal relationships (Herman, 1992; Topitzes, Mersky, & Reynolds, 2012; Van Voorhees, et l., 2012). Disruption of positive relationships is problematic because positive social support is protective against the negative impact of LTEs such as psychological distress (Borja, Callahan, & Long, 2006; Haden & Scarpa, 2008; Hyman, Gold, & Cott, 2003; McLewin & Muller, 2006; Muller, et al., 2000; Rieck, et al., 2007) and violent offending (Maschi, et al., 2010; Ullrich & Coid, 2011). Moreover, positive support promotes well-being post-incarceration by reducing social isolation (Havassy, Hall, & Wasserman, 1991); buffering the impact of negative social influences (Thoits, 1986); providing essentials such as housing, clothing, food, transportation, financial assistance, and help getting a job (Naser & La Vigne, 2006; Berg & Huebner, 2010; Visher & Courtney, 2006); increasing exposure to people who can help manage stress (White, 2009); and promoting self-efficacy and treatment retention (Dobkin, Paraherakis, & gill, 2002). Therefore, a key to

successful reentry is having positive social support in the community after prison and these very relationships can be difficult to establish or maintain in the presence of cumulative and untreated symptoms associated with LTEs (Pettus-Davis, 2014).

Unique Circumstances of Incarcerated Men

Incarceration is psychologically taxing because it is an unnatural human environment (Haney, 2002). When an individual becomes incarcerated they are deprived of privacy and lose control over mundane activities (Haney, 2002). Prisoners live in small spaces with no influence over with whom they share small spaces, are subjected to a stigmatized status, and are required to adapt to a rigid institutional routine (Haney, 2002). Conditions of confinement can result in social-sensory disorientation, alienation, and institutionalized traits (e.g. paranoia and hampered decision-making; Liem & Kunst, 2013). In addition to formal rules of incarceration, a culture of informal rules and norms is also present in most settings (Haney, 2002; Listwan, 2010). This culture often discourages sharing and vulnerability and encourages choosing between isolation or violence (Haney, 2002; Listwan, 2010). Many who are incarcerated experience feelings of increased vulnerability to harm and limited ability to respond to threats (Ireland, 2011). Further, distrust and hesitation to share personal experiences is rampant among prisoners and staff (Wolff & Shi, 2009).

The psychological mechanisms it takes to adjust to incarceration may limit the ability for individuals who are incarcerated to fully benefit from traditional treatment approaches (Haney, 2002). Positive social interactions and coping behaviors are not consistently rewarded, thus potentially limiting the "uptake" of certain types of coping and cognitive-behavioral intervention targets. The unique experiences of incarceration

have led some researchers to call for *trauma-informed correctional care* wherein adaptations are made to existing "trauma-informed" approaches to respond to the context of incarceration (Miller & Najavits, 2012). For example, addressing trauma in correctional facilities requires sensitivity to the trauma triggers that occur often such as strip searches, frequent discipline, and restricted movement – all likely to increase trauma-related behaviors (Covington, 2008).

Experiences during incarceration may exacerbate the impact of LTEs on men's outcomes as they transition out of incarceration and back to the community. Adaptation to incarceration can create thinking and acting habits that are maladaptive in the community post-incarceration (Haney, 2002). Living in the threatening environment of incarceration increases psychological distress, which manifests as posttraumatic stress cognitions for some formerly incarcerated individuals (Listwan, 2010).

The transition from incarceration to the community is a period of renegotiation and can be volatile (Pettus-Davis, 2014). Men are at greatest risk of problematic behaviors and contact with the law earliest after release from incarceration (Mears, Wang, Hay, & Bales, 2008; Stabler, Mennis, Belenko, Welsh, Hiller, Zajac, 2013). That is because the early months after release are stressful for most as they re-orient to community-based living, new and old relationships, and struggle with unrealistic expectations of immediate self-sufficiency (Liem & Kunst, 2013; Arditti & Parkman, 2011). However, protective factors of stability and social support from loved ones that may have existed prior to incarceration have been disrupted. Complicating matters, men returning to communities after prison often have multifaceted and complex needs, with limited access to formal supports (Taxman, Perdoni, & Caudy, 2013) for public

assistance and behavioral or physical health (Mallik-Kane & Visher, 2008; Wheeler & Patterson, 2008; Zajac, Hutchison, & Meyer, 2014). Lack of formal supports are coupled with the fact that high unemployment and homelessness are pervasive among previously incarcerated men (Geller & Curtis, 2011; Hagan & Foster, 2012; Harley, 2014; James, 2015; LePage, Washington, Lewis, Johnson, & Garcia-Rea, 2011) making it more difficult to stabilize after release from incarceration. Based on the understanding of these unique experiences of the individual, there is an integral need for trauma interventions that respond to the multidimensional impact of the trauma exposure and preceding complexities for incarcerated men that has yet to be seen in trauma interventions.

Empirically Supported Trauma Interventions

Substantial research exists on the development of empirically supported trauma interventions for non-incarcerated populations. A growing body of work is seeking to identify effective trauma treatments for incarcerated women while trauma intervention development for incarcerated men is relatively non-existent. An important first step for research on trauma interventions with incarcerated men is to understand the common elements of existing empirically supported trauma treatments for those who are not incarcerated, as well as for incarcerated women.

Evidence-based Trauma Treatments with Non-Incarcerated Individuals

We focused on three widely used trauma treatment approaches that have undergone at least two randomized controlled trials and established effectiveness with a range of non-incarcerated populations with varied LTEs. 16 randomized controlled trials examining the effectiveness of cognitive-processing therapy have been conducted with veterans, women who have been sexually assaulted as children or as adults, and

individuals who have experienced complex traumas (Chard, 2005; Falsetti, Resick, Davis, & Gallagher, 2001; Monson et al., 2006; Resick et al., 2008). Cognitive processing therapy is effective at reducing panic attacks, PTSD, trauma symptomatology, cognitive distortions, and depression (Chard, 2005; Falsetti, Resick, Davis, & Gallagher, 2001; Monson et al., 2006; Resick et al., 2008). A second trauma intervention, Eye Movement Desensitization and Reprocessing (EMDR) has been found effective in 20 controlled trials (Bisson et al., 2007) at significantly decreasing PTSD, depression, anxiety, and subjective distress symptoms (Chen et al., 2014). EMDR's effectiveness has been established with ethnically diverse samples with mixed LTEs in treating male and female children, adolescents, and adults (Ahmad & Sundelin-Wahlsten, 2008; Bisson et al., 2007; Edmond & Lawrence, 2015; Rodenburg, Benjamin, de Roos, Meijer, & Stams, 2009). Thirdly, Skills Training in Affective and Interpersonal Regulation (STAIR) has growing empirical support for improving PTSD recovery, emotion regulation, and interpersonal relationships (Cloitre et al., 2010; Gudino, Leonard & Cliotre, 2014; Trappler & Newville, 2007). Two randomized controlled trials have been conducted with male and female adolescents and adults with single and complex trauma histories (Cloitre, Koene, Cohen, & Han, 2002; Cloitre, et al., 2010). STAIR is still under development as interventionists combine it with Narrative Therapy Storytelling (NST) as well as testing abbreviated versions of STAIR with adolescent samples (Gudino, Leonard, & Cloitre, 2016).

Promising Trauma Interventions for Incarcerated Individuals

Although an evidence base for trauma interventions for incarcerated individuals is in its infancy, an empirical base is building. Beyond Trauma (paired with a substance

abuse intervention – Helping Women Recover) has undergone one randomized control trial with 115 incarcerated women (Covington, 2008; Messina et al., 2010). Women in Beyond Trauma/Helping Women Recovery groups demonstrated improvements in psychological well-being, decreased drug use, increased likelihood of remaining in aftercare, and a decreased rate of reincarceration within 12 months after parole compared to Treatment-As-Usual control condition. In a randomized control trial with 123 female prisoners, the effectiveness of Traumatic Incident Reduction Therapy was examined (Valentine & Smith, 2001). Women who received the Traumatic Incident Reduction Therapy had significantly greater improvement in PTSD, anxiety, depression, and the expectation of success (Valentine & Smith, 2001). Seeking Safety is a group-based intervention designed for women with co-occurring PTSD and substance use disorders. A pilot randomized controlled trial (n=49) comparing Seeking Safety to Treatment As Usual (TAU; psycho educational abstinence-based substance abuse treatment) found both conditions effective in reducing PTSD and substance abuse with incarcerated women. There were no differences between groups at post-treatment or follow-up (Zlotnick, Johnson, & Najavits, 2009). Despite this limited empirical support, a survey of 41 state departments of corrections (which oversee the state prisons) indicated that of 25 states that offer any trauma intervention, Seeking Safety is by far the most common – with 60% of the states offering trauma interventions using Seeking Safety (*citation omitted for peer review*).

In the only study of its kind, researchers from New Jersey did a comparative trial of two trauma interventions originally designed for women – Seeking Safety (SS) and Trauma Recovery Empowerment Model (adapted to Men's TREM or M-TREM). In this

study of 230 male inmates, Wolff and colleagues (2015) compared PTSD, overall psychological distress, self-esteem, coping, and self-efficacy of incarcerated men who received Seeking Safety or M-TREM. Both groups demonstrated significant improvements in mental health symptoms, trauma, self-esteem, coping, and self-efficacy outcomes that endured over a six month prison-based follow-up. In regards to PTSD severity, data comparing the effectiveness of M-TREM to Seeking Safety revealed no significant differences between treatment groups six months post-intervention with PTSD declining by 19 points for incarcerated men who received Seeking Safety and 21 points for those who received M-TREM (Wolff et al., 2015). This study suggests that conducting a manualized group intervention addressing secondary outcomes from trauma exposure with incarcerated men may be feasible, although the results of the study were short-term and participation was low.

Four Common Elements of Reviewed Trauma Interventions

We identified five common elements across the trauma interventions we reviewed to target key ingredients for a multi-phased trauma intervention conceptual model for incarcerated men. The common elements were: psychoeducation; emotion regulation, coping skills, and interpersonal relationships. Psychoeducation teaches individuals with LTEs about psychological processes that may occur after experiencing a trauma and the effects these process may have on the individual (Finkelstein et al., 2004). In cognitive-processing therapy, psychoeducation is used to explain how experiencing a traumatic event alters the way one perceives oneself and others and how these perceptions modify feelings and behaviors.

Emotion regulation refers to an individual's ability to respond to the ongoing stimuli of internal and external demands using processes that initiates, inhibits, or modulates behaviors (Berking & Schwarz, 2013). Emotion regulation takes into account one's thoughts, feelings, physiological responses, and behaviors. Emotion regulation is one of the two core focus areas of STAIR. STAIR helps participants to identify at least one strategy that would increase emotional awareness and identification of at least three strategies that improve emotion regulation (Cliotre, 2014).

Coping skills are the psychological mechanisms used to manage internal and external stressors (Folkman & Lazarus, 1980). The reviewed interventions address both reactive coping skills (skills used after a stressor has occurred) and proactive coping strategies (a strategy invoked to prevent a stressor). An example of reactive coping skills can be seen in TREM/M-TREM where individuals are provided a skillset that provides new skills for problem-solving and how to manage out of control feelings. While for proactive coping strategies, an example of this can be seen in Beyond Trauma where the intervention focuses on grounding exercises, mindfulness, and the setting of personal boundaries which all could directly affect the level of stress and then one's coping behavior.

Interpersonal relationships are associations between individuals that occur in formal and informal settings that can have a positive or negative influence on persons involved in the relationship (Sroufe, Duggal, Weinfield, & Carlson, 2000). The trauma interventions reviewed acknowledge the disruption LTEs can have on interpersonal relationships and the protective factors that positive interpersonal relationships can offer for reducing trauma symptomatology. In Beyond Trauma three sessions focus on

interpersonal relationships and the establishment of healthy boundaries and interpersonal dynamics. STAIR emphasizes the formulation of healthy interpersonal schemas; identification and removal of negative relationships is also encouraged.

Table 1

Common Elements of Trauma Interventions

Common Element	**Definition**	**Interventions that Address the Common Element**
Psychoeducation	Education of psychological processes that may occur after experiencing a trauma and the effects these process may have on the individual	Cognitive Processing Therapy Skills Training in Affect and Interpersonal Regulation Beyond Trauma Trauma Recovery and Empowerment Model
Emotion Regulation	An individual's ability to respond to the ongoing stimuli of internal and external demands using processes that initiates, inhibits, or modulates behaviors	Cognitive Processing Therapy Eye Movement Desensitization and Reprocessing Skills Training in Affect and Interpersonal Regulation Beyond Trauma Seeking Safety Trauma Recovery and Empowerment Model
Coping Skills	Psychological mechanisms used to manage internal and external stressors	Beyond Trauma Seeking Safety Trauma Recovery and Empowerment Model
Interpersonal Relationships	Associations between individuals that occur in formal and informal settings that can have a positive or negative influence on persons involved in the relationship	Beyond Trauma Seeking Safety Skills Training in Affect and Interpersonal Regulation Trauma Recovery and Empowerment Model

Conceptual Model of a Phased Trauma Intervention for Men Who Will Release from Incarceration

Overview

Extant trauma interventions offer a myriad of options for treating trauma among incarcerated men who will release from prison. We propose a conceptual model to guide the selection and adaptation of trauma interventions to be delivered to incarcerated men. We hypothesize that adapting existing trauma treatment approaches by using this conceptual model as a guide will increase the feasibility and acceptability of the trauma treatment for both practitioners and recipients. In turn, we expect future research to demonstrate improved psychosocial and criminal justice outcomes for soon-to-release incarcerated men who receive the adapted treatments.

Four theoretical perspectives informed the development of our conceptual model of a *multi-phased trauma intervention for men releasing from incarceration.* The theoretical perspectives included the transactional model of stress and coping (Lazarus & Cohen, 1977), social support stress buffering theory (Cohen & Willis, 1985), relational theory (Miller, 1984), and trauma theory (Bloom, 1999). Theory, practice experience, and empirical data on the experience of incarceration guided the timing and focus of key ingredients of a trauma intervention that is responsive to the prisoner reentry context. We define the prisoner reentry context as the transitional period that begins approximately 6 months prior to release from incarceration and continues for the first 12 months after release from incarceration.

We propose a multi-phased trauma intervention conceptual model for incarcerated men because of the transitional nature of prisoner reentry. Individuals' transition from

incarceration to the community is best understood longitudinally, taking into account immediate and long-term situational circumstances (Visher & Travis, 2003). Phase 1 (during incarceration) includes psychoeducation and an introduction to emotion regulation and coping skills. Phase 1 begins three to four months prior to an individual's release from incarceration. Phase 2 (reentry) represents the initial days and weeks of reentry from incarceration to the community. This re-orientation phase spans the first three to four months after release. Key intervention ingredients during phase two involve practicing and refining coping skills and emotion regulation. Phase 3 (post-incarceration) is the community stabilization period that begins around month five or six after release from incarceration. During Phase 3, trauma intervention components will intensify for those with trauma-related impairments to treat trauma symptomatology by using approaches such as cognitive processing or narrative therapy storytelling. At the same time a focused effort on interpersonal relationships will aim to build healthy relationships and strong support networks that will reinforce progress in treatment during and after treatment has ceased.

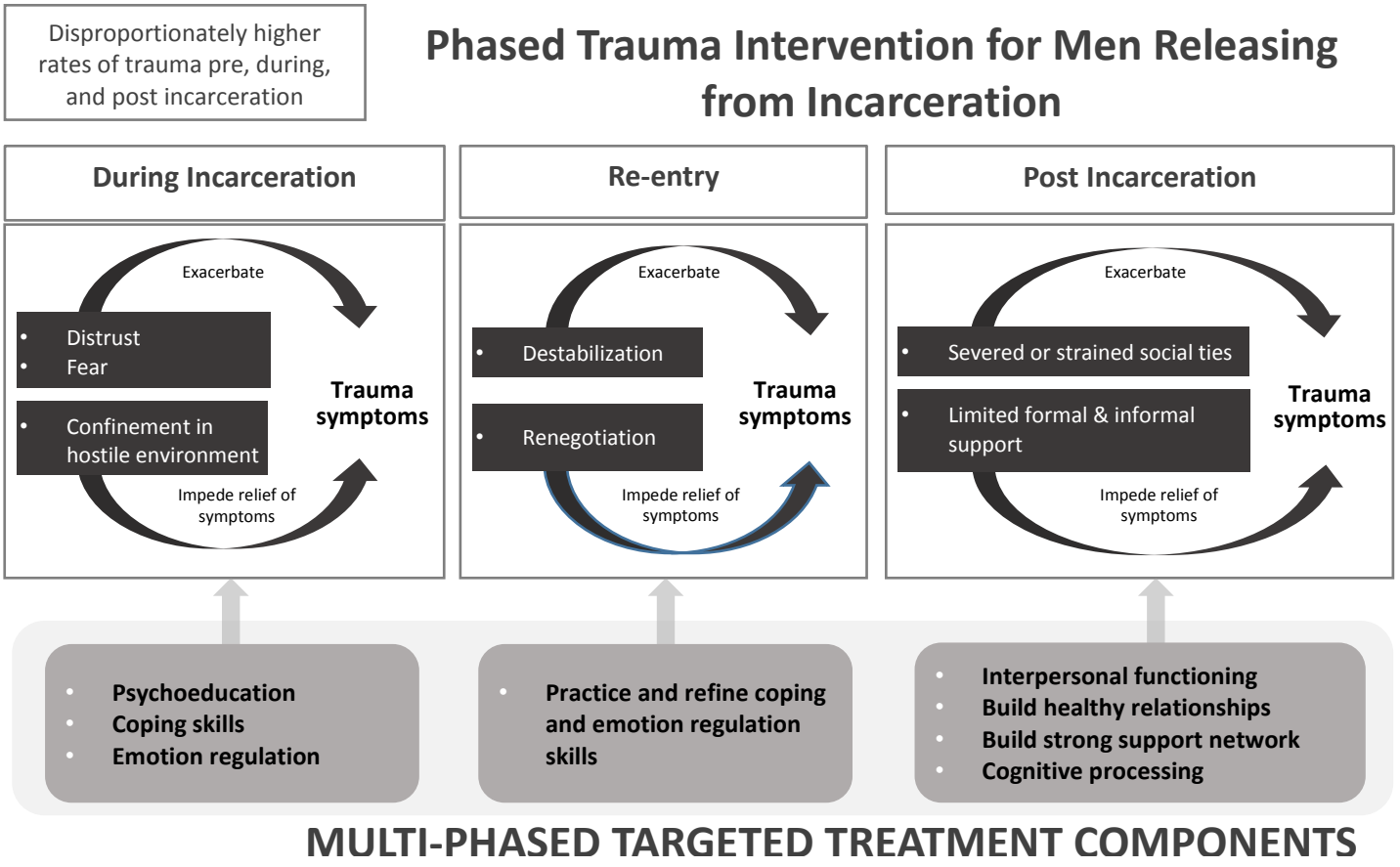

Figure 1. Conceptual Model: Trauma Intervention for Incarcerated Men.

Key Ingredients by Intervention Phase

Phase 1: During Incarceration (3-4 months prior to release)

Confinement in the hostile environment of incarceration can impede the relief of trauma symptoms; distrust and fear of staff, treatment providers, and other prisoners may exacerbate symptoms. The transactional model of stress and coping posits that when faced with a stressful situation, an individual assesses potential threats (primary appraisal), as well as their ability to modify the situation and handle negative emotional reactions (secondary appraisal). The impact of external stressors are then mediated by the resources at one's disposal (Glanz et al., 2008; Lazarus & Cohen, 1977). Stressors,

the demands made by the internal and external environment that disrupt balance, effect the well-being of the individual and necessitating action to reestablish balance (Lazarus & Cohen, 1977).

Incarceration settings are unpredictable and stress-provoking due to rapidly changing social composition (new prisoners entering and releasing from the facility daily; high staff turnover; prevalence of violence) and the nearly total lack of control of one's surroundings and well-being (Bonta & Gendreau, 1990; Picken, 2012; Wolff & Shi, 2009). In order to begin to increase internal resources of incarcerated men for responding to stressors, the first phase of the trauma intervention acknowledges the current context. The focus of this phase is on trauma psychoeducation and the initial development of emotion regulation and coping skills. A primary emphasis on psychoeducation reduces the need to disclose specifics of LTEs and thus does not require men to ignore distrust or fear engendered in an incarceration environment. Coping skills and emotion regulation strategies effective during incarceration may need to be adjusted after release as new and different stressors surface. Therefore, Phase 1 will develop the building blocks for emotion regulation and coping skills that are adaptive enough to be applied during and after incarceration while recognizing that new strategies may need to be adopted post-release. Phase 1 can address LTEs directly and begin to build safe coping skills without asking the recipient to delve into distressing memories; targeting LTEs and related impact in a present-focused way may be the best suited approach for incarceration settings (Miller & Navajits, 2012).

Phase 2: Reentry (3-4 months after release)

According to relational theory, individuals view "self" as a fluid entity that shifts in the contexts of relationships and disruption in relationships is a source of psychological problems (Miller, 1984). The context of men releasing from incarceration is complex and wrought with conflicting messages of who "self" should be. During incarceration, "self" should be tough and respectable and at the same time viewed as a "flawed" offender/convict/felon in need of correction. By removal from community to confinement, incarceration disrupts relationships leaving any positive influences remaining in the community in need of being renegotiated upon reentry. Renegotiation of relationships (both old and new) can be destabilizing to perception of self and relationship of self to the environment. The psychological disorientation of incarceration and the need for renegotiation of the post-release environment heightens stress (potentially exacerbating trauma symptoms) and threatens the ability to establish connection and authenticity in positive post-release relationships by impeding the ability to cope with stress or emotions (Miller, 1984; Scheyett et al., 2010). Therefore, Phase 2 emphasizes developing, practicing, and refining coping and emotion regulation skills to help recently released men navigate an early and uncertain post-release environment.

Phase 3: Post-Incarceration (begins 5-6 months after release)

As men adjust to post-incarceration and refine coping and emotion regulation skills, intervention focus will shift to enhancing interpersonal relationships. A wealth of research has established that how well men do after they release from prison is largely influenced by the quality of their interactions with others (see Pettus-Davis et al, 2011 for review). The stress buffering model of the social support perspective explains the connection between relationships and post-incarceration outcomes. According to the

stress buffering model, social support operates by reducing maladaptive psychological and behavioral responses to stressful or major life transitions such as reentry from prison. Yet, how well individuals are able to engage with and benefit from positive social supports is dependent on their relational capacity. LTEs, cultural norms of male independence, and the inherent dependence on others after release from prison collide to create substantial relational challenges.

From a relational theory perspective then, Phase 3 aims to facilitate authentic connection to others (Miller, 1984). With authentic connection men will have the capacity to fully represent oneself in relationships that are characterized by mutual respect (Miller, 1984). Authentic connection can occur in relationship with loved ones and in more formal relationships such as at the workplace. This final phase of the intervention will emphasize building healthy relationships and a strong support network. In doing so, intervention components will need to respond to negative relational images – ideas about relationships that have formed through one's experiences and used to make assumptions about current and future relationships – that are products of histories of LTEs. Once healthy relationships are beginning to develop or flourish, men will be ready to enter the final components of the intervention that focus on the cognitive processing or narrative therapy storytelling of LTEs more directly.

Trauma theory suggests that treatment needs during this phase may be highly individualized because each individual's response to LTEs is unique and may vary in the extent to which persistent impairment is present (Bloom, 1999). However, given the rates of cumulative experiences of LTEs among men releasing from incarceration and that incarceration in itself is a traumatic experience, the need for more in depth treatment

is probable. That is because, according to trauma theory, when individuals are in perceived danger they experience a fight-or-flight response. With each experience of danger connects to a future experience of danger and the more danger one is exposed to, the more perceived danger (Bloom, 1999). In turn, with every fight-or-flight response a network of mental connections get triggered. Despite the volatility or stability of a given man's post-release environment, the hostile environment of incarceration is likely to have generated multiple fight-or-flight episodes escalating levels of arousal to perceived threat. Even with enhanced coping skills, trauma theory suggests that untreated trauma can lead to difficulties to thinking, remembering, and implementing skills when under stress or emotional numbing (Bloom, 1999). Cognitive processing or narrative therapy storytelling will be applied during this phase to help men to give language to their experiences and receive help on overcoming them in a way that promotes healing and growth. Cognitive processing therapy helps individuals to (1) learn about their specific trauma symptoms; (2) become aware of thoughts and feelings related to those symptoms; (3) learn skills to counter maladaptive thoughts and feelings; and (4) develop ability to change beliefs that better balance beliefs developed as a result of LTEs and those beliefs that occur in the context of healthy life experiences (Resick, Monson, & Chard, 2006).

In sum, a wealth of theoretical and empirical literature supports the need for multi-phased trauma interventions for men releasing from incarceration. LTEs combined with an incarceration experience place formerly incarcerated men at risk for poor post-release outcomes such as exacerbated trauma symptoms, substance abuse, high psychological distress, poor social support, problematic coping, re-engagement in criminal behaviors, and re-arrest and reincarceration. Our integrated conceptual model

posits that by implementing trauma psychoeducation, improving coping and emotion regulation skills, enhancing healthy interpersonal relationships and social networks, and processing trauma in a context-specific staged approach, formerly incarcerated men will experience improved post-release outcomes and well-being.

Next Steps to Advance Practice and Research

Targeted trauma interventions for incarcerated men are urgently needed. Unprecedented rates of men experience and release from incarceration – nearly 11 million men cycle out of jails and prisons annually in the United States. Incarcerated men cannot be viewed as similar to others who receive trauma interventions. Incarcerated men experience LTEs at dramatically higher rates than the general population and they are housed in a hostile environment as they prepare for release from prison. Practitioners and researchers must collaborate to identify how trauma interventions need to be adapted for men releasing from incarceration. We hope to move the field closer to developing and implementing targeted interventions by offering a guiding conceptual model. We conclude by suggesting practice-based factors that need additional consideration. We propose a future research agenda to further aid trauma intervention development and dissemination.

It is clear that most practitioners may never be able to fully understand the experience of incarceration and the disorientation of release from incarceration. As the field moves toward the development of trauma interventions for incarcerated men, it will be important to recognize and monitor those treatment components that are traditionally viewed as critical for progress may also conflict with survival tactics that are needed during incarceration. Hypermasculinity, domination, and the need to avoid displaying

vulnerability while incarcerated may require the tailoring of certain treatment components for incarceration and reentry phases.

Incarceration releases are highly concentrated in a few urban areas around the country (Sampson & Loeffler, 2010). For those releasing to areas of high concentration of formerly incarcerated individuals, the survival techniques needed during incarceration may still be required once an individual is released. This is because informal social control is disrupted in communities that have high incarceration rates of residents (Clear, 2008) and the tendency for these communities to also have high violence (Blumstein & Beck, 1999; Fagan, West, & Holland, 2003). Thus for some, violence may have positive appraisal both in incarceration settings and in post-release neighborhoods (Sampson, 2015). When positive appraisals are too fully embraced, barriers to interpersonal relationships and help-seeking could be substantial (Haney, 2002). How can positive appraisal of, or non-reactivity to, violence be addressed with some men releasing from incarceration?

While incarcerated men have experienced high rates of LTEs, there is not a clear line between their own victimization and the victimization they have imposed on others (Sampson, 2015). Delivering trauma interventions may require practitioners to use different therapeutic techniques to help recipients recognize the impact of LTEs on their perceptions and actions while at the same time recipients grapple with the LTEs they may have imposed on others. What lessons can be learned from interventions with other groups where high rates of victimization overlap, such as sex offenders, to help practitioners and criminal justice-involved recipients navigate the grey area of being both victim and offender?

Achieving therapeutic alliance and trust between providers and incarcerated men occur differently than in other contexts. In addition to releasing from a culture of distrust, previous failed treatments for substance use and other interventions is not uncommon for incarcerated men. One issue the field must seek to identify is *who is* the appropriate treatment provider to deliver trauma interventions during and post-incarceration. Contracted mental health staff that work full time in correctional settings may not be the most appropriate because of their perceived role as being a corrections employee. Is it feasible for community-based practitioners to deliver Phase 1 of a trauma intervention prior to men's release and continue treatment in the community? Although the feasibility of continuity of care for a multi-phased trauma intervention will be challenging to figure out, it is an important topic to address. Research on non-trauma specific rehabilitative interventions that occur during incarceration (e.g., substance abuse treatment) without follow up aftercare in the community have limited or no effects on positive post-release outcomes (Wilson & Davis, 2006). The few studies that have been conducted on trauma interventions with incarcerated individuals have not yet established differential impacts on post-release success by timing of the intervention delivery (e.g., pre-release only versus post-release only versus both pre and post-release intervention).

A series of feasibility, acceptability, and pilot trials is an important next step for determining the appropriate adaptations needed, and intervention development targets, for incarcerated men. For example, there are likely to be differential responses to trauma interventions by gender. Miller & Najavitz (2012) offer that trauma treatment for incarcerated men should emphasize feelings, relationships, and empathy while treatment for women should address empowerment, emotional regulation, and safety. In addition to

treatment components, gender differences with treatment engagement should be assessed – do dominate masculine norms influence treatment engagement?

Other characteristics that may influence the efficacy of trauma interventions may be the length of time incarcerated, the type of neighborhood one returns to, or cultural norms as it relates to help-seeking by race/ethnicity. For those who have been incarcerated for longer periods of time, are sessions needed in the intervention that entail basic re-orientation to pro-social norms? How does violence appraisal impact treatment engagement and responsiveness (Boxer et al., 2011)? Are there lessons that can be learned from trauma intervention approaches that have been delivered in combat war zones to assist with tailoring interventions to those who will release to neighborhoods with high crime and violence?

Incarcerated men have family members that may have also been exposed to disproportionate amounts of LTEs (Fagan, West, & Holland, 2003). The field needs to identify the role of loved ones in trauma interventions post-release. How are loved ones engaged if they have challenges with interpersonal relationships as a result of their own LTEs that may have led to disruptive trauma symptoms? Is development of targeted trauma interventions for loved ones of formerly incarcerated individuals warranted?

A staged intervention research approach is needed with practitioners and incarcerated men to help begin to answer these questions. We suggest using Onken and colleagues' (1997) staged model of behavioral therapies research. Staged model of research is important for filling treatment gaps because it represents an ordered progression from intervention development to establishing feasibility and assessing efficacy of interventions before ultimately evaluating the intervention's transportability.

During Stage 1, interventions are developed or adapted based on empirical and theoretical evidence, treatment manuals are created, and the intervention is pilot tested. A major goal of pilot testing is to establish feasibility and acceptability of the intervention from the perspectives of intended recipients and practitioners. Acceptability studies of emerging interventions expedite assessment and adaptation of key intervention ingredients (Onken, Blaine, & Battjers, 1997; Rounsaville, Carroll, & Onken, 2001).

Practitioners can provide tremendous insight to feasibility of trauma intervention adaptations. Process evaluations and pilot trails will allow for men's reactions to trauma interventions to incorporated in the refinement of intervention models. Assessing the suitability of an intervention as perceived by practitioners who deliver the intervention and those who receive the intervention also helps to determined whether the intervention approach is appropriate for further testing or if additional modifications are needed before widespread adoption (Bowen et al., 2009). Pilot trials assess potential variations needed by presenting characteristic categories of the incarcerated men (e.g., long incarcerations, younger men, men with substance use disorders) prior to larger efficacy trials that can examine more closely key mechanisms of action. Stage 2 tests the intervention as revised and refined during Stage 1. Interventions are not considered efficacious until they have undergone at least two randomized controlled trials with samples of sufficient size to achieve adequate statistical power. Stage 3 focuses on transportability issues related to whether the findings can be generalized to other subgroups of recipients, cost-effectiveness of the treatment, and marketing or disseminating the intervention (Rounsaville et al., 2001).

The proposed conceptual model responds to the trauma treatment gap for record-breaking numbers of men releasing from incarceration. The high rate of re-arrest of these men underscores the need for effective interventions tailored to the needs of releasing prisoners. Interventions designed for this population not only promote increased well-being of formerly incarcerated men, but improve public safety and increase community health. With growing efforts to reduce high rates of incarceration in the U.S., the time for the field to close this treatment gap is now.

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