Intervention Response to the Trauma-Exposed, Female Juvenile Offender:

A Review of Effectiveness in Reducing Recidivism

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Abstract

When analyzed by established factors of general effectiveness (Lipsey, 2009) and concepts of gender-responsivity (Day, Zahn, & Tichavsky, 2015) that target the needs of female, juvenile-justice involved youth, reviewed studies show the concomitant need to address traumabased mental health concerns with attention to the quality of implementation and appropriateness of the setting in which intervention is effectuated. Findings show effective intervention for this population aims to target the youth's negative internal mechanisms related to trauma-subsequent psychosocial problems. These studies further suggest that trauma-sensitive modalities have the potential to mitigate further risk of problematic external behaviors. The position of this review is ultimately that while effectiveness of intervention is predicated on trauma-informed care and responsiveness to population characteristics, attention to internalized trauma-based mental health needs along with intervention quality and appropriateness of setting are key components to moving the needle when it comes to intervention for these young women.

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In the United States, confining a juvenile offender is a costly expense averaging \$241 per day per individual. Such expense heightens interest in addressing recidivism rates associated with juvenile corrections (Abrams, Mizel, Nguyen, & Shlonsky, 2014). Over the course of the past decade, females have grown to become the fastest growing cohort in the U.S. juvenile justice system with girls accounting for a third of juvenile arrests (Kerig, 2018). Empirical studies show these detained female adolescents have consistently shown a very high prevalence of traumatic exposure, with 84–95% having experienced at least one traumatic event (Van Damme, Fortune, Vandevelde, & Vanderplasschen, 2017). Research indicates these girls often face arrest for offenses of interpersonal aggression with analyses acknowledging this is also associated with disproportionately harsh justice system response to their unique problems. At the nexus of these trends, female juvenile offender care presents a challenge to the criminal justice system. With only 4% of the available programs exclusively serving female juveniles and 87% serving all or mostly males, serious attention is needed to address the growing population on female juvenile offenders (Anderson et al., 2019). Given the lack of attention to gender across all areas of juvenile justice research, this research aims to evaluate the state of the trauma-exposed, female juvenile offenders within the criminal justice system and the effectiveness of interventions in reducing their recidivism. This research would provide a better working knowledge of effective intervention for trauma-exposed, female juvenile offenders and how the field can expand from what is known.

Question and Purpose

This research will systematically review the current state of literature regarding female juvenile offenders with a history of trauma and investigate the effectiveness of current interventions in reducing recidivism for this specific population. In so, research will explore the relationship between gender, trauma, intervention and recidivism to uncover the targeted needs of trauma-exposed, female juvenile offenders. This proposal inquires as to which current means of intervention will have the most influence in decreasing the likelihood of recidivism for this population. With the aim of decreasing recidivism and cost, this research would provide an informed guide for correctional institutions by directly informing intervention practice and improving recidivism rates (Abrams et al., 2014). Through the following review of literature, this proposal investigates and evaluates research focused specifically on trauma-exposed female juvenile offenders and intervention with recidivism reduction-potential.

Literature Review

Much of the prior research on juvenile offenders focuses on males offending and in such, relies on research data for the juvenile male population. This becomes problematic given that females now consist of almost 30% of the juvenile court population. To appropriately address the female population, particularly those with trauma features, circumstances require research to determine appropriately responsive policy, practice reforms, and the implementation of evidence-based practice in juvenile justice settings (Anderson et al., 2019). In so, this review encompasses the dimensions of the population characteristics, current intervention, policy, and principles of effectiveness in intervention as these relate to juvenile female involvement with the criminal justice system.

Population Characteristics

While OJJD statistics regard juveniles as those age 0-17 years old ("Overview," n.d.), literature in this field and for the purposes of this review regard a juvenile as aged 12–21 receiving an intervention intended to have positive effect on his or her subsequent delinquency (Lipsey, 2009). Research shows early puberty paired with family conflict and neighborhoods characterized by poverty, unemployment, and single parent families are unique characteristics for females with juvenile-justice involvement (Barrett, Ju, Katsiyannis, & Zhang, 2015; Zahn et al. 2010). Consequently, female youth involvement in the juvenile justice system is often intimately connected to victimization characterized by abusive homes, life on the streets, or being forced by their abusers to engage in commercial sexual activity (Kerig, 2018). In many ways, the literature struggles to capture demographics of the female juvenile-justice involved population and rather defines them in terms of risk factors, criminogenic need, and victimization.

Although attention to girls in the U.S. juvenile justice system is on the rise, this population constitutes a highly vulnerable and challenging, yet understudied, minority within the criminal justice system in many ways (Sheahan, 2014; Van Damme et al., 2017). Sufficient recognition that these youth are highly disproportionately African American and Latina is notably lacking. One author proposes a hypothesis regarding the ways in which culture, racism, victimization, and gendered socialization intertwine to "prime" girls of color in ways that enhance their risks of justice involvement (Kerig, 2018; Morris, 2016), which is crucial in appreciating in the context current literature.

Victimization is a commonality for the juvenile offender population. Research studies are consistent in finding that boys and girls in the criminal justice system have been exposed to multiple forms of victimization far exceeding the rates found in community samples (Kerig,

2018). Research finds juvenile offending youth have exceedingly high rates of traumatic experiences, generally between 70 and 90%, with males more likely to have witnessed a violent event and females more likely to have been the victim of violence (Espinosa, Sorensen, & Lopez, 2013). Trauma can impact adolescent brain development, neuroendocrinology, and psychosocial features (Layne et al., 2014). Literature emphasizes the importance of understanding psychophysiological systems underlying the trauma response and acknowledging that psychophysiological responding may represent a source of risk as well as protection (Kerig, 2018). Further research suggests that PTSD from repeat trauma exposure mediates the relationship between trauma and psychiatric concerns among young offenders. These psychiatric concerns include externalizing symptoms, antisocial behavior, suicidal tendency, self-harm, and depression (Moore, Gaskin, & Indig, 2013).

Longitudinal research shows exposure to such cumulative trauma earlier in life is a powerful predictor of justice involvement for those boys and girls (Horan & Widom, 2014; see reviews in Kerig & Becker, 2015; Kerig, 2018; Malvaso, Delfabbro, & Day, 2016). Additionally, recent study of a large sample of juvenile offenders used cumulative trauma exposure measured with ACEs to show the relatively robust relationship between ACEs and recidivism (Wolff, Baglivio, & Piquero, 2017). In confirming this connection between trauma and juvenile justice consequence, it is critical to understand trauma relative to the juvenile offender population.

As paths to delinquency are different for boys and girls, the needs of girls are different when it comes to prevention, treatment, and aftercare (Barrett et al., 2015). Detained female adolescents have been shown to grow up under more adverse living conditions and to experience a broader range of persisting mental health and adjustment problems making them particularly vulnerable to social disadvantage and exclusion (Van Damme et al., 2017). Studies show the role

of early family disruption, and in particular removal from the home, in female delinquency (Barrett et al., 2015). Female delinquency follows specific patterns relating to age and context. Stressors involving family conflict and neighborhoods characterized by poverty, unemployment, and single parent families are unique risk factors (Barrett et al., 2015). Comparison of non-delinquent females and delinquent females shows delinquent females were more likely to be eligible for free or reduced lunch, as well as more likely to have contact with foster care or child protective services (Barrett et al., 2015).

Female offenders are highly susceptible to emotional, physical, or sexual abuse (Barrett et al., 2015). Survival analysis research from a sample of adjudicated girls indicates that peak periods of polyvictimization risk included caregiver violence in early childhood and sexual violence in adolescence (Kerig, 2018). Feminist pathways literature on female juvenile offending highlights the link between such early victimization or trauma and justice involvement. An earlier study by Cauffman et al. (1998) study estimated that up to 60% of girls in a high-security facility had been previously raped or nearly raped with approximately 60% of these girls having experienced PTSD symptoms in the past, and nearly half are currently experiencing PTSD symptoms (Walker, Muno, & Sullivan-Colglazier, 2015). Research also finds that female juvenile offenders who experience sexual abuse trauma have poorer over all mental health, increased substance use, risky sexual behavior, and delinquent behavior (Espinosa et al., 2013). Much research literature suggests that interventions need to be sensitive to differences in these groups, particularly in regard to the probability of previous trauma due to sexual victimization (Walker et al., 2015).

The unique dynamics surrounding the female juvenile offender are highly predicated on the trauma features the offending individual has experienced in her lifetime. Female adolescents within the criminal justice system often display high levels of trauma exposure along with low self-esteem, and co-morbid, persistent psychiatric disorders along with other antisocial behaviors (Van Damme et al., 2017). When compared to male counterparts, female juvenile offenders report significantly lower levels of global self-worth and self-esteem within the domains of athletic competence, physical appearance, scholastic competence and behavioral conduct (Van Damme et al., 2017). These factors make trauma-exposed female juvenile offenders an increasingly vulnerable and challenging population.

Intervention

The juvenile justice system maintains a range of programming including community-based diversion projects, detention centers, probation services, educational classes, residential treatment, foster care, and other types of services (Anderson et al., 2019). The interventions that help adolescent girls learn how to manage their risk (e.g., effectively confronting trauma exposure) is an important part of the delinquency prevention field. Ideally, interventions for this population should focus on the protective factors that mitigate such risk (Barrett et al., 2015).

A major challenge for clinicians working with female juvenile offenders is engaging them in treatment. This population often displays low levels of treatment engagement, which is likely to be explained by the overall coercive nature of juvenile detention and the problem-oriented risk management approach to treatment used (Van Damme et al., 2017). Also a hindrance, females offenders are less likely to receive treatment, encounter more mental health obstacles, and are more likely to abandon treatment when compared to male counterparts (Barrett et al., 2015). Recent research lends support to programming designed to address traditional barriers such as limited mental health staff training on programs and misconceptions that addressing trauma will lead to behavior management problems (Moore et al., 2013).

Unfortunately, juvenile justice programming suffers from an overall lack of empiricallysupported gender specific programs to address these treatment-related challenges.

Literature shows research is needed to determine the most effective and easily administered interventions for the female juvenile population. An important factor to recognize is that a female juvenile offender is often detained for short periods and moves locations frequently (Moore et al., 2013). Improved screening approaches could ensure trauma experiences are carefully reviewed and appropriate measures are put in place to support trauma-exposed individuals at each stage of their incarceration going beyond the point of admission, which is often the main focus (Moore et al., 2013). Given a significant majority of the young people coming into custody have been trauma-exposed throughout childhood, it is appropriate that institutions caring for them emphasize trauma-informed care and partner with health agencies to develop short and longer-term interventions which specifically address trauma-associated mental health concerns (Moore et al., 2013). An intervention approach that acknowledges trauma in this way is likely to improve offender functioning and reduce distress, as wells as have a significantly positive impact on the offender's future potential for substance use, violence, and aggression, which can contribute to recidivism (Moore et al., 2013).

The need for empirically-supported gender specific intervention is evident and increasingly necessary as the population of trauma-exposed female juvenile offenders expands. While the evidence-based practice agenda struggles to meet this need, the practice-based evidence approach can be a complement to rigorous evaluation in asserting innovative and effective treatments through the laboratory of actual practice. Practitioners' knowledge and wisdom of trauma-informed care can guide program development and quality improvement.

With identification and acknowledgement, these practice-based themes can then give rise to more usual modes of research-based validation. (Walker et al., 2015)

Aftercare, supervision, and reentry can be crucial intervention points when the goals are to prevent recidivism among offenders and to help them transition from the detention setting to the community setting. However, research is limited as to the efficacy of reentry and aftercare programs in curbing recidivism among juvenile offenders. One meta-analysis found that reentry and aftercare programs have the potential to be moderately effective in reducing recidivism when implemented with fidelity and oriented to older, higher risk youth. However, due to the absence of rigorous and systematic evaluation, the efficacy of specific types of reentry and aftercare programs, such as case management, mentoring, or family-focused interventions remain largely unverified (Abrams et al., 2014).

Aftercare programs include supervision in addition to any service deemed appropriate to assist the successful transition and reintegration of detainees from custody to the community (Bouchard & Wong, 2018). Intensive supervision programs (ISP) programs can be highly diverse in design and overall goals. Sometimes seen as a "tough" community alternative, these types of heightened programing highlight increased intensity, control, and supervision in comparison with traditional probation. ISP programs are diverse with three primary features: small caseloads, intensive surveillance, and strict conditions of compliance (Bouchard & Wong, 2018). Intensive supervision is typically accompanied by strict conditions and strict enforcement with intense monitoring. Research shows associated supervision vigilance related to strict conditions may lead to more technical violations or detection of deviant/criminal behavior that would have otherwise gone unnoticed (Bouchard & Wong, 2018). Hence, the main criticism of ISP is that it only increases the likelihood of detection, not inhibition, of criminal behavior which leads to

greater contact with the criminal justice system for those offenders assigned to ISP instead of standard supervision. Within this ISP literature, there is no particular findings to suggest that youth participating in ISP are significantly more likely to engage in criminal activity, however, the findings do suggest that more supervision and strict conditions of compliance are not any more definitive in the effectiveness of reducing recidivism for juvenile offenders compared with traditional and less restrictive forms of supervision. (Bouchard & Wong, 2018).

Juvenile justice uses community-based mentoring as an intervention to provide juvenile offenders with a personal connection, guidance, skill-training, networking, and support. Mentors typically provide exposure to positive values, a sense of self-worth, goals, and hope for the future (Abrams et al., 2014). Mentoring programs pair young offenders with supportive adults in the community who act as positive role models and have the capacity to provide encouragement and support as the youth encounters challenges. The goal of this intervention is to reduce risk factors, like antisocial behavior, alienation, family problems, and school underachievement through the augmentation of protective factors, promotion of community involvement, and reinforcement of positive behavior (Abrams et al., 2014).

Intensive case management is also a feature of community-based intervention for juvenile offenders. Specifically oriented to female offenders, Honolulu's Girls' Court implements gender-focused programming as part of its case management. Evaluation of this programming revealed the core gender-responsive elements of intensive case management focusing on building healthy relationships and individualizing therapy to address trauma exposure significantly decreased recidivism. The review also found a decrease in days spent on the run during the 1- to 5-year follow-up periods with regard to girls who received the program (Anderson et al., 2019).

Restorative justice is another growing alternative intervention available within the juvenile justice system with a number of studies demonstrating recidivism reduction. These programs are primarily based on a non-adversarial interaction between victims, offenders, and other individuals impacted by the criminal act with the objective to repair the damage caused by the crime and to encourage offender accountability (Bouffard, Cooper, & Bergseth, 2017).

Restorative justice programs aim to restore the victim (in terms of the harms caused by the criminal act) as well as the restoration of the community at large. Additionally, such programs aim to diminish the likelihood of continued offending through the identification and resolution of precipitating the offender's initial criminal behavior (Bouffard et al., 2017).

A Bouffard et al. (2017) study focused on the effect of four variations of a restorative justice program on recidivism outcomes, including direct and indirect victim-offender mediation, community panels, and minimal restorative justice education. This research is important because it ventures into a shifting paradigm with its exploration of an alternative to traditional, punitive justice. The outcome suggested that for certain types of offenders (e.g., female offenders) program administrators should account for and model responses toward the needs of those individuals for them to benefit from restorative justice interventions (Bouffard et al., 2017).

As an alternative to community-based services, female juvenile offenders may benefit from interventions available through out-of-home care. Group homes provide juvenile offenders with a safe and controlled setting that is less restrictive than an inpatient or lock-down residential facility. Additionally, girls' group homes are often able to offer services that address gender-sensitive life experiences of female youth, which are often connected to trauma and criminogenic behavior. A group home's ability to provide girls with a safe environment that addressed their criminogenic risks and needs with gender-responsive components has the potential to lower their

recidivism rates compared to girls who did not having receiving group home placement (Anderson et al., 2019).

Residential treatment programs are a more intensive option. A study completed by the Department of Juvenile Services revealed that of the 427 female youth released from residential facility programming, 58.1% were rearrested and 18% of girls were reconvicted 1 year following release (Anderson et al., 2019). Typically for offenders between the ages of 12 and 17 years, these programs aim to meet the needs of female juveniles by emphasizing gender-responsive services and incorporating therapy, substance-abuse treatment, skill training, trauma-informed care, pregnancy planning, and transitional support.

The availability of juvenile mental health courts can be another significant intervention for trauma-exposed female juvenile offenders. Juvenile mental health courts (JMHC) operate on tenets of gender-responsive programming by addressing more specific needs leading to a reduction in recidivism (Behnken, Bort, & Borbon, 2017). JMHC practices include the use of multidisciplinary, collaborative, and problem-solving approaches that consider the offender's mental health, developmental stage, emotional needs, and community safety. As researchers have acknowledged and identified gender-specific differences in recidivism risk factors among juvenile offenders. For example, they have found females with co-morbid substance use and mood disorders are 7 times more likely to reoffend than their male counterparts with similar diagnoses. Furthermore, the research identifies a history of childhood sexual abuse trauma as one of the strongest predictors for female juvenile recidivism (Behnken et al., 2017). The value in this identification of a specific need enhances JMHC the ability to focus programming intervention to meet that particular need.

Principles of Effective Intervention

Literature regarding effectiveness of juvenile justice interventions has increased in the past decade. Within the context of evolving policy, this review found three core vehicles to evaluate effectiveness of intervention with regard to female juvenile offenders. Here, the review finds Lipsey's factors of effectiveness, the Andrew's risk-need-responsivity (RNR) model, and gender-responsivity principles as a means of establishing effective intervention for trauma-exposed, female juvenile offenders (Lipsey, 2009; Van Damme et al., 2017).

The Lipsey factors of effectiveness study derives its findings from intense meta-analysis on all available research at the time of publication and sorts it according to the types of interventions found to investigate certain important issues that are knowingly difficult to address (Lipsey, 2009). This research brought to light a number of program types that were unlikely to receive scrutiny by conventional review given much of the delinquency intervention involves "rather generic" programs not likely to receive review-worthy attention. Lipsey posits that the most useful guidance for practitioners and the most informative perspective for program developers and researchers will come from identification of the factors that characterize the most effective programs and the general principles that characterize "what works" to reduce the recidivism of juvenile offenders (Lipsey, 2009).

The Lipsey analysis examined RNR principles that focused on identifying the characterization of effective intervention for offenders to address criminogenic need (risk factors) and treatment capable of altering those needs. The study reiterated findings suggesting the higher the risk, the greater the need for treatment and room for improvement. With other variables statistically controlled, relatively few differences were found in the effectiveness of different types of therapeutic interventions (Lipsey, 2009).

The study substantiated findings that methodological and substantive factors are often confounded in ways that make it difficult to disentangle actual program effects from methodological artifacts. The three categories of substantive factors most strongly associated with intervention effects are: (1) the intervention approach and modality (type of treatment), (2) the quantity and quality of treatment provided, and (3) the characteristics of the juveniles receiving that treatment. Lipsey's analysis investigates these factors with a single integrated approach that adopts a consistent analytic framework oriented toward two objectives: (1) using those descriptive principles that characterize effective programs for juvenile offenders; and (2) providing a balanced, adequately controlled comparative analysis of the differential effectiveness of different intervention modalities (Lipsey, 2009).

Consistent with the RNR framework, the meta-analytic investigations found relatively large positive effects associated with cognitive-behavioral and skill building programs, however it sometimes found comparable effects from different approaches (e.g., general counseling). Counseling interventions had the largest effects on recidivism followed by multiple services, skill building, restorative programs, surveillance, deterrence, and discipline. Further indication of the different nature of control and treatment appeared in the finding that interventions such as counseling and skills training, were more effective than of strategies of control or coercion—surveillance, deterrence, and discipline (Lipsey, 2009). Other types of interventions also ranked near the top in effectiveness, notably mentoring and group counseling (Lipsey, 2009).

Additionally, there are findings to suggest the quality with which the intervention is implemented strongly relates to recidivism effects as to the type of program. This suggests that a well-implemented intervention of an inherently less efficacious type could outperform a more efficacious one that is poorly implemented (Lipsey, 2009). Nonetheless, findings presented

indicate the average program of a variable generic nature can be effective if implemented well, especially when targeted to high risk factor offenders. Lipsey concludes that "it does not take a magic bullet program to impact recidivism, only one that is well made and well-aimed" (Lipsey, 2009).

For reference, the RNR model consists of three main principles: a risk principle, need principle, and responsivity principle. For the risk principle, this model states that intervention should be matched to the level of an offender's risk (e.g., longer and more intensive treatment for high risk offenders and no or minimum treatment for low risk offenders). Next, the need principle states that dynamic risk factors (i.e., criminogenic needs, such as antisocial peers or substance use) should be the target of treatment because they are changeable and associated with reduced recidivism rates. Last, the responsivity principle states evidence-based treatment should be delivered (specifically, cognitive behavioral interventions), and treatment should correspond to the offender's characteristics, such as gender, learning style, developmental stage and level of motivation (Van Damme et al., 2017). The RNR model is relevant from a risk management perspective because it allows clinicians an effective tool to develop and provide interventions oriented towards solving problems and reducing dynamic risk factors, despite some significant ethical, etiological, and clinical limitations (Van Damme et al., 2017).

In a research study on serious female juvenile offenders using RNR principles, Welch-Brewer found four distinct groups/profiles with varying levels of risk-needs—Aggression Only (51%), Alcohol and Drug Use (19%), Socioemotional and Family Relationship Problems (24%), and Severe Alcohol and Drug Use (6%)— all warranting a need for varying levels of treatment intensity and different treatment components across subgroups, ranging from less to more extensive (Collins, Murphy, & Bierman, 2004; Welch-Brewer, 2018). These findings show the

variation in risk-need profiles across classes indicates heterogeneity within the sample of female offenders. Heterogeneity thus indicates to service providers the needs of female juvenile offenders may not be met optimally using fixed interventions across the board. Of particular interest, the study suggested trauma-exposed, female juvenile offenders within the Aggression and Drug Use class, may benefit from cognitive behavioral therapy with a relational approach to better respond to their history of trauma and victimization (Welch-Brewer, 2018).

For female offenders, common risk-needs include aggression and association with deviant peers indicating that all girls in the sample would benefit from a core set of cognitive behavioral interventions that incorporate social skills training, behavioral management, and self-regulation skills to increase their social and cognitive skills and decrease their aggressive and delinquent behavior (Welch-Brewer, 2018). Findings continue to show risk-needs and the level of severity differ across subgroups of female juvenile offenders proving a warranted need for varying levels of treatment intensity and different treatment components across subgroups (Welch-Brewer, 2018).

During the last three decades, there has been a growing awareness that change is needed within the criminal justice system with regard to the female juvenile offender population. With the 1992 reauthorization of the Juvenile Justice and Delinquency Prevention Act (JJDPA), the federal government introduced an amendment that requires all states applying for federal funding to examine their systems for potential gender bias and provide appropriate services for females. This amendment specifies the inclusion of physical health services, mental health services, treatment for trauma/abuse, self-defense, and education (Walker et al., 2015). In 1998, The Office of Juvenile Justice and Delinquency Prevention (OJJDP) reissued these recommendations to provide federal funding for more effective, gender-responsive interventions. A few years later

in 2001, the American Bar Association and the National Bar Association published a review of gender bias in the juvenile system calling attention to the need for equity in treatment as it relates to female offenders. Since then, there have been a number of state actions, including convened committees and task forces, to address gender-specific service needs, policies, and programs based on gender-responsive principles (Walker et al., 2015).

Anderson et al. (2019) acknowledges more research is needed in discerning the effectiveness of gender-responsive intervention and the ways in which gender responsivity varies from quality services offered to all youth in the juvenile justice system. With a stark absence of evaluation evidence for the support of gender-responsive services to reduce recidivism (Anderson et al., 2019), some researchers suggest qualitative evidence may provide further insight. Relevant research uses offender input in decisions about service delivery in addition to training staff about gender-specific programming (Garcia & Lane, 2013).

Garcia & Lane (2013) sought qualitative responses to improving effectiveness through female offenders what they thought worked and what they needed. The most common types of programming mentioned by offenders were counseling (63%), anger management (34%), drug treatment (24%), Thinking for a Change (20%, cognitive self-change program), sexual abuse treatment (15%), parenting and life skills classes (10% and 13%, respectively) (Garcia & Lane, 2013). The female offenders espoused wanting a voice in their proceedings; to participate in programming headed by caring, respectful staff; and to learn practical, well-translated life skills which would help them support themselves. Participants also cited wanting additional programming to cope with abuse histories, expressed needing to understand the justice process and needing to experience incremental consequences rather than face incarceration after receiving many chances (Garcia & Lane, 2013). With this research holding strong consensus

among the girls in the study, as well as other studies, present literature could conclude that what girls want is in fact what they need (Garcia & Lane, 2013).

Compared to traditional intervention, research suggests programming with gender responsive features is associated with a lower risk of recidivism for girls specifically with gender-sensitive risk factors (e.g., trauma), but a higher risk of recidivism among girls who do not display these risk factors (Day et al., 2015). Accordingly, results indicating girls in secure detention require different approaches depending on their histories of trauma and associated mental and physical health issues (Day et al., 2015). Gender responsive principles focus on physical and emotional safety to counteract the feelings of fear engendered by past abuse, emphasize healthy, positive relationships to family, and promote self-esteem building to more effectively counteract negative influences (Day et al., 2015). As of current, use of gender responsive principles has increased largely in the absence of rigorous evidence supporting their effectiveness at reducing recidivism, and practitioners have had to rely on theoretical assumptions regarding the link between program components that target the specific intervention needs of female juvenile offenders and subsequent offending.

Findings propose proper assessment and placement of girls into gender-responsive programming are important for reducing the recidivism of girls, which is not surprising to feminist scholars who have long argued girls have unique pathways to offending (Day et al., 2015). Gender responsive principles allow for development of trust between trauma-exposed female offenders, program staff, and their peers allowing them to openly express their problems within the confines of a safe environment (Day et al., 2015). Research reveals four protective factors with salience for justice-involved girls: presence of a caring adult, school connectedness, academic success, and spiritual beliefs. With this identification, using gender responsive

principles in juvenile justice systems proposes female-specific considerations including prioritizing physical and psychological safety, leveraging the importance of close relationships with female mentors and peers, providing opportunities for agency and empowerment to mitigate experiences of betrayal and victimization, and attending to girls' sexual health and the needs of those who are pregnant or rearing children (Kerig, 2018).

Day et al. (2015) findings point that while gender-responsive principles have positive effects on recidivism for girls who relate to a gender-specific pattern of trauma exposure, effects of the programming on girls who did not demonstrate these gendered risks are deleterious. Female juvenile offenders are diverse and in so, feature different pathways into the justice system. Consequently, effective intervention needs to be guided with the understanding of gender commonalities as well as gender differences (Kerig, 2018).

Review of literature finds few specific model programs targeted toward female juvenile offenders. However, the model programs currently in use include anger management focused intervention, CBT programming, and interventions with behavioral modification features. While different, each intervention model approaches the female juvenile population where their unique needs present themselves.

Trauma-focused cognitive-behavioral intervention has been effective in reducing negative mental health outcomes in abuse victims and in such, may be an effective approach for females involved with the juvenile justice system. (Buttar, Clements-Nolle, Haas, & Reese, 2013). Gender-specific data on the prevalence of anger and aggression among juvenile offenders revealed that 54% of girls in a juvenile justice sample reported substantial problems with anger. Further, a significant proportion of female youth offenses are associated with anger and anger-related behaviors. Because of these aggression issues, juvenile offenders are frequently court-

mandated to complete anger management treatment. Unfortunately, despite the clinical and legal need for effective anger management treatment, few empirically supported treatments exist for juvenile offenders (Goldstein et al., 2013).

One model that does exist is Juvenile Justice Anger Management (JJAM). JJAM draws from traditional cognitive-behavioral therapy (CBT) approaches with techniques like cognitive restructuring and problem solving as part of its process. JJAM emphasizes reduction of negative approaches to emotion regulation (e.g., catastrophizing, self-blame) and de-emphasizes positive emotional appraisals (e.g., positive refocusing) (Goldstein et al., 2013). The JJAM approach highlights the need for prioritization of accurate appraisals in the cognitive restructuring and social problem-solving processes with regard to trauma-exposed female offenders. Because of the high prevalence of traumatic histories, delinquent girls' accurate appraisal processes need to reflect their difficult and painful realities (Goldstein et al., 2013).

The Good Lives Model (GLM) adaptation for female juvenile offenders offers an alternative approach to the rehabilitation of detained female adolescents, by adopting a dual focus of fulfilling the individuals' basic human needs and reducing her risk of reoffending (Van Damme et al., 2017). Researchers the GLM may supplement the risk, need, and responsivity model, discussed subsequently in this review, as it helps to overcome its ethical, etiological and clinical limitations, thereby making the GLM and the RNR complementary rather than mutually exclusive, rehabilitation frameworks (Van Damme et al., 2017). The GLM is 'strength-based' in its effort to address capabilities, values and aspirations, beyond the common assessment of risks, deficits and problems. In GLM context, the term 'empowering' refers the GLM aims of increasing individuals' agency to enable personal action to improve quality of life. The GLM

promotes the commonality concept in which humans strive to fulfil a range of primary goods, defined as valued states of mind or characteristics (Van Damme et al., 2017).

The GLM actively disputes processes of 'othering' and dismisses the distinction between 'us' (i.e., non-offenders) and 'them' (i.e., offenders), including the rejection of dehumanizing terms to depict offenders. The GLM offers a holistic view of human beings and challenges the individualization of problems and considers individuals as social beings, highlighting that both individual and environmental capacities and obstacles can enhance or impede the realization of their valued primary goods (Van Damme et al., 2017).

The literature also includes references to Functional Family Therapy (FFT) versus Multisystemic Therapy (MST) for juvenile offenders (Baglivio, Jackowski, Greenwald, & Wolff, 2014). In this particular study, research finds "what we may not need more of is whether 'model' programs beat 'treatment as usual,' but rather we need quality studies comparing two 'model' programs in hopes to guide practitioner referral decisions toward which service is best for which youth based on a youth's unique constellation of risk and need actors" (Baglivio et al., 2014). The finding reported lower arrests/violations during FFT intervention for female youth and recognized that examination at the level of specific risk and needs addressed by the modalities may assist with uncovering the reasons behind the gender differences in effectiveness. Most notably, the study confirmed female youth have specific risks/needs that are better addressed by FFT than MST (Baglivio et al., 2014).

Method

This review will use the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) method detailed at www.prisma-statement.org to assess quantitative and qualitative literature on effective interventions for female, juvenile offenders with histories of trauma("PRISMA," n.d.). As the title indicates, PRISMA is an evidence-based minimum set of items reporting systematic reviews and meta-analyses. It is often used in evaluating randomized trials, but can also be utilized for reporting systematic reviews of other research, notable evaluations of interventions (Liberati et al., 2009; Maher, n.d.(Maher, n.d.). The review will employ the checklist and flow chart protocol accessible via the PRISMA website. In executing this review, the author will examine specific article characteristics (e.g., setting, sample, intervention) and report characteristics (e.g., year considered, publication type) used as criteria for eligibility.

Information sources for this search included applicable databases and the date last searched was May 23, 2019. Review began with a comprehensive search, at minimum, of the databases: Academic Search Complete and Criminal Justice Database. The author searched titles, abstracts, and subject headings within these databases and used a key search terms to yield the article sample. The search terms included (1) intervention or treatment or therapy or program or strategy, (2) trauma*, (3) female* or girl*, (4) juvenile delinquency or juvenile offenders or youth offenders, and (5) recidivism or re-offending or repeat offenders. Date limits from 2009-2019 were applied, as was a limit for retrieving peer-reviewed articles only.

Articles were selected via adherence to inclusion and exclusion criteria (Liberati et al., 2009). The study selection sample has explicit criteria first exclude based on formula criteria then include correlated studies. The formula excludes any male-inclusive studies, any adult-inclusive studies, and any offender studies had those been present. The strategy was to identify relevant studies including quantitative and qualitative literature through the screening of titles and abstracts. Then, the task is to evaluate each source to ensure it met this review's eligibility criteria with a full text screen to only include those studies having intervention criteria. The

author extracted and organize all reliable studies to assess applicability and documented study inclusion decisions. A discussion assessing risk of bias and consideration of any impacts is needed. For each study, data was extracted for the same set of characteristics: type of intervention, sample, design, duration, quality in the provision of the intervention, quantity of services, gender responsive features, measurements, outcomes, and limitations, as well as characteristics of the population to ensure the trauma history component was present in the evolution of the examined study. See Appendix B.

This review analyzes the resulting sample by describing in narrative key features of the included articles with the aim of critically appraising their qualities then interprets and presents the results (Thyer, 2010). Such analysis is pursuant to an evaluation of the sample's substantive characteristics most strongly associated with intervention effectiveness including: (1) the intervention approach and modality (type of treatment), (2) the quantity and quality of treatment provided, and (3) the characteristics of the juveniles receiving that treatment. Lipsey concepts provide an overlay to the investigation of these factors in a single integrated approach that adopts a consistent analytic framework oriented toward two objectives: (1) using those descriptive principles to characterize effective programs for trauma-exposed, females with justice involvement; and (2) providing a balanced, adequately controlled comparative analysis of the effectiveness of the presenting intervention modalities (Lipsey, 2009).

Findings

Study selection began with the screening of 520 database-identified articles for duplicates and ineligible records. Six articles were removed as duplicates and two additional records were excluded as oral presentation records. Following this screen, see Appendix A, 512 articles were then assessed for eligibility for inclusion in this review. Initial exclusion examined titles and

abstract for articles employing the term "male, man, men, or boy." This criteria eliminated 441 articles of the 512 articles leaving 71 articles to review. The 71 articles were then reduced to 18 after exclusion of non-juvenile oriented articles. The remaining 18 articles were given a full-text screen to assess whether there was an intervention examined in the article, and in so, only five articles were eligible. Finally, after excluding male, adult, and non-interventions, the screen revealed one of the five article interventions did not involve female youth with criminal justice involvement, rather the intervention was aimed at examining detention staff. Of the 520 articles, four articles meet eligibility criteria for inclusion in the findings of this systematic review.

The four articles identified were the Roberts-Lewis, Welch-Brewer, Jackson, Pharr, & Parker (2010) study featuring a multi-component substance abuse protocol, the Harold et al. (2013) study using multi-dimensional treatment in foster care (MTFC), the Banks, Kuhn, & Blackford (2015) study exploring a modified dialectical behavior therapy, and the Crosby et al. (2017) study employing trauma-informed teaching as an intervention. The results of the data collected are best presented by defining categories of intervention and location, sample characteristics, duration and design, quality, outcomes, and limitations. The following data is represented in Appendix C.

The Roberts-Lewis study occurred in a detention setting employing Holistic Enrichment for At-Risk Teens, a gender-specific substance abuse treatment including several components. Through, five treatment stages, Orientation, Adjustment, Transition, Honors, and Community, participants develop new behaviors at each stage through written goals, activities, and expectations. Female youth currently in detention compromised the 30-girl, single sample with no control group. The intervention targets females between the ages of 12-18 with a diagnosed substance use disorder with aim to change behaviors, chiefly abstinence from drugs and

minimization of delinquency involvement. The study had single-group sample with a multiple repeated measures design using Pretest-Posttest along with the Problem Oriented Screening Instrument for Teens (POSIT). Participants were not randomly assigned rather there was an application and selection process to enter the program and thus the study. With this intervention, strategies focused on the needs of girls and their development with consideration of influences and importance of relationships, power, and disempowering messages sent to females via family, media, and peers. The HEART interventions services were facilitated by Youth Development Center staff for which training or credentials were not made known. These services included a therapeutic community modality featuring cognitive behavioral therapy, principles and strategies of gender specific services, group psychotherapy, female process groups, psychoeducational groups, psychopharmacotherapy, and 12-step programs.

Roberts-Lewis et al. specifically examined the reduction of psychosocial problems associated with substance abuse and delinquency behaviors and whether Holistic Enrichment for At-Risk Teens (HEART) improved psychosocial functioning. Participants in this study displayed significant improvement in eight of ten areas of psychosocial functioning. These included mental health, family relation, peer relations, educational status, vocational, leisure and recreational skill. Participants also saw decreases in aggressive behaviors. Multiple repeated measures show significant changes in each of the eight domains: mental health, family relationship, peer relationship, educational status, and vocational status; also shown were significantly lower social skill, leisure/recreation and aggressive behavior/delinquency risk. Of the aforementioned, substance use scales showed 43% of participants at high-risk scores pretest with posttest showing a decrease to 23% posttest, and physical health scales showed 43% high-risk scores pretest to 33% posttest. Most notably, 40% had high-risk scores for mental health that decreased to 17%

having high risk scores and 40% had high risk scores for family relationships that decreased to 13% posttest. Twenty-seven-percent of participants had high-risk scores on the aggressive behavior/delinquency subscale pretest which then lowered to 17% posttest. Random assignment would strengthen the Roberts-Lewis study along with increasing the small sample size. The intervention program was voluntary lending to self-selection bias. The program sample was primarily Caucasian when larger facility population was African American leaving generalization to broader population limited. There was also the limitation of a low follow-up rate with unknown long-term treatment outcomes.

Under similar detention circumstance, Banks et al. utilized modified Dialectical Behavior Therapy (DBT) in the form of a DBT skills-training group. This use of DBT focused on five main skill areas consisting of an introduction, mindfulness, emotional regulation, interpersonal effectiveness, and distress tolerance (Linehan, 1993; Banks et al., 2015). The study hosted a sample of 12 girls with 22% participating against their will. Participants exhibited mental and emotional problems along with symptoms related to self-harm, affective dysregulation, poor interpersonal skill, and/or internalizing or self-destructive behaviors. Intervention protocol lasted 12 weeks with one 90 minute session and utilized pretest, posttest measures from the Ohio Youth Scales for Problems, Functioning, and Satisfaction – self-report assessment (Turchik, J., Karpenkov, V. V., & Ogles, B. M, 2007); Problem subscales with internalizing (seven items) and externalizing subscales (nine items); and Becks Depression Inventory – II (BDI-II), another measure for internalizing behavior. Modifications were made the tradition DBT format based on needs of the population in addressing the types of cognitive and behavioral processes that are common to girls. The program was highly manualized with less intensive training for the internfacilitators. Clinicians and interns were present at facility to collaborate with administrators;

however, group leaders had no formal training in DBT, but they did received weekly supervision from an on-site licensed professional counselor with formal DBT training. Barriers included feasibility to host evidence-based treatment in the setting, incongruence between values, and interests of setting stakeholders, and maintaining funding. The combination of intervention services included the teaching of DBT skills, references to a published self-help manual, *Don't Let Emotions Run Your Life*, and provision of activities based on DBT skills with daily diary cards.

The main concerns of the Banks et. al. study were implementation and outcomes with respect to impact on internalizing and externalizing behaviors through this modified use of DBT, specifically in a correctional facility for adolescent females. Treatment proved effective in reducing behavioral and emotional problems commonly experienced by this particular population. The researchers found decreased internalizing symptoms associated with PTSD, depression, and anxiety. Treatment satisfaction scores increased – rating "moderately satisfied" to "quite a bit satisfied." Functioning scale scores increased – "some trouble" to "ok" (approached significance). Problems scale for internalizing behaviors significantly decreased – "several times" to "once/twice per month"; scores for depression dropped 50% - rate "severe" to "mild." However, externalizing behaviors saw no significant change. The study saw limitation in a very small sample size, as well as its absence of a control group for comparison measures. Researchers noted the Ohio Scale may not have been best suited due to participant lack of access to many items. Group plan and structure's quality assurance was not directly measured, and the study was impacted by dimensions of sustainability and stability of the setting (turnover, politics, funding).

In the context of a public charter school exclusive to female court-involved students, Crosby et. al used trauma-informed teaching intervention to examine school attachment and trauma symptoms. As staff interact in the classroom they illustrated appropriate boundaries, conflict resolution, and coping skills to counteract the maladaptive behaviors of traumatized students. This allowed students to learn new ways to socialize and manage stress. The intervention had a two-prong approach using 1) trauma-informed staff training including Theraplay plus 2) a Monarch Room, which is a non-punitive alternative to traditional discipline allowing staff to help students de-escalate when emotional states or behaviors interfere with learning. The study sample was comprised of 141 female, residential placement students with 56% of participants subject of abuse and neglect petitions and 44% of participant required by court due to delinquency. Participants has high trauma symptomology, lower socio-economic status, as well as history of neglect and abuse. This study occurred over the course of the schoolcalendar year in 2013-2014 featuring a cross sectional research design using hierarchical multiple regression. Survey questionnaires comprised of standardized measures were administered by school personnel at the end of the school year. Measurement instruments included the Employed Child Report of Post-traumatic Symptoms (CROPS) for trauma, Somers and Gizzi ten item scale for level of school attachment, Somers and Gizzi (2001) five item scale for level of school involvement, and Child and Adolescent Social Support Scale (CASSS) for social support. Program services included school staff supports plus utilization of the Monarch Room, specific trauma informed training, curriculum, attachment-driven, trauma-sensitive teaching strategies and disciplinary methods. Procedure was monitored under the supervision of members of the research team, and staff was trained in curriculum on childhood trauma and its impact on student functioning. Eight professional development sessions over the course of the

year were facilitated by a master's level social worker and two certified occupational therapists.

These trainers provided in class observation, as well as individual coaching sessions to assist teachers.

Crosby et. al. primarily examines the relationship between school attachment/involvement, school social support, and trauma symptomology among students exposed to trauma-informed teaching intervention. After hypothesizing whether higher school attachment would be associated with lower trauma symptomology, findings demonstrated that students exposed to the intervention had who experienced high trauma exposure had unexpectedly elevated school attachment. Higher school attachment was thus associated with lower trauma symptoms. Participants reported: high levels of trauma symptomology, moderate to high school attachment, involvement, and teacher support, moderate levels of support from general people, which were all statistically significant. For each unit increase in attachment and social support, trauma symptomology decreases by 0.32. Limitation considerations noted that research was cross-sectional in nature and longitudinal research design would be needed to tease out causal relationships. Other limitation includes concern of how other factors may have impacted student perceptions/responses.

Harold et al. also chose to study an intervention outside the detention environment when it examined Multi-dimensional Treatment Foster Care (MTFC) within a community based out-of-home care setting. With MTFC being a family-based behavioral intervention demonstrated to reduce delinquency, this particular research sought to utilize MTFC as an individualized intervention to improve participant functioning, while including all basic MTFC components. The Harold et. al. study examined a sample of 166 girls with 81 receiving the MTFC intervention and the other 85 control group receiving group care (GC) service-as-usual. The common sample

characteristic was delinquency with mental health impacts caused by maltreatment. The sample was subject to randomized assignment. MTFC utilizes BSI Depression Subscale to screen for psychological problems and measure treatment progress computed as the mean of six items rated on a 5-point Likert-type scale. This instrument examines the trajectory of depressive symptoms in girls with justice involvement referred to out of home care who receive MTFC, and researchers then used hierarchical linear growth models to assess patterns. With the study taking place over a two year period with five waves of data at six month intervals, average treatment was approximately six months with assessment at five time points over 24 months. Experienced program supervisors with small caseloads oversaw provision of services, while participants had the support of highly trained and supervised homes with state-certified foster parents. Intervention included daily telephone contact with foster parents, weekly group supervision, foster parent support meetings, in-home point-and-level program for girls, and individual therapy for girls. Additional services provided include weekly behavioral support meetings with specialist, family therapy for aftercare placement family, monitoring of school responsibilities, and case management of interventions, 24hr on-call staff support, and psychiatric consultation.

In addition to testing depression trajectories, Harold et. al. examined maltreatment history, delinquency, and depression levels as predictors of depression trajectories and as potential moderators of intervention effectiveness. More specifically, they looked at the impact of risk factors like delinquency and childhood abuse on depression and whether they impact intervention effects such that MTFC would benefit those of higher risk. The results showed that chronically delinquent girls in MTFC experience greater decreases in depressive symptoms across 2 years. The MTFC intervention was associated with a 43% reduction in clinical depression relative to the control condition and showed significantly greater rates of deceleration

for girls in MTFC versus GC for depressive symptoms. Girls with highest risk level factors were associated with higher levels of depressive symptoms and benefited more than girls with lower levels of depressive symptoms. Overall, MTFC showed greater benefit for girls with higher levels of initial depressive symptoms. Researchers were presented with several setting-specific limitations. Girls often changed placement following random assignment and findings might not generalize to girls with more severe symptoms or mood disorder. Other limits include the reliability of measurement based on self-report instrument and the concern that lack of ethnic and racial diversity would not generalize to a more urban setting.

Discussion

All four studies support the correlation of trauma to cognitive, mental health impacts in young women with criminal justice involvement. Outcomes for girls with trauma-related mental health symptoms are often compounded by co-occurring delinquency with evidence suggesting a closer link between co-occurring delinquency and depression for girls than boys (Harold et al., 2013). Substance use disorders among incarcerated girls also often co-occurs with other mental health disorders like depression and anxiety (Goldstein, et al., 2003; Roberts-Lewis et al., 2010). Through this identification of trauma symptoms and the use of tailored intervention, these studies show mitigating such trauma symptoms requires employing targeted gender-responsive interventions that improve internal mechanisms (mental health). Given the positive impact on trauma-related mental health symptoms, these studies further a link between mental health and their intervention effectiveness. Knowing female youth with justice-involvement are at risk for depression (Harold et al., 2013), poor attachment (Crosby et al., 2017), poor or damaged self-image, social maladjustment and anxiety (Banks et al., 2015; Hubbard & Pratt, 2002; Roberts-Lewis et al., 2010), any effective intervention must meet these consequent mental health needs.

Further, the common thread of these findings support the concept that mitigating traumasymptoms with effective intervention mitigates the various risks. These studies show mitigating risks serves to subsequently reduce of continued mental health problems, substance use, and delinquency.

The majority of the studies also link the mental health inquiry with other important consideration such as parent-child relationships, parenting, peer association, academics, social support, external behavior (Banks et al., 2015; Roberts-Lewis et al., 2010) and school attachment (Crosby et al., 2017). The Harold (2013) study makes an important point in illustrating how context-directed approaches with supports and monitoring can have potential because a youth's internal mechanisms of change may not be powerful enough to overcome influences of chaotic, abusive, or non-contingent environments in which the youth has been accustomed (Harold et al., 2013). The trauma from their previous environments that increases the risk of negative outcomes for court-involved youth, including higher occurrences of delinquency and recidivism (Bruce and Waelde, 2008; Crosby et al., 2017; Day et. al., 2013; Lawrence and Hesse, 2010). And as the cycle continues, this delinquency interferes with social development as it causes rejection by social supports, and leads to negative mood states (Harold et al., 2013). Consequently, findings establish the need for symptom-improving interventions in order to be effective in halting the cycle.

Through the findings in each study, the research shows effective intervention for girls with criminal justice involvement should aim to target their negative internal mechanisms related to their trauma-subsequent psychosocial problems. As these studies employ trauma-sensitive modalities, they show potential to mitigate further risk of problematic external behaviors. The position of this review is ultimately that while effectiveness of intervention is predicated on

trauma-informed care and responsiveness to population characteristic, the attention to internalized trauma-based mental health needs requires coupling intervention quality and appropriateness of setting to further adequate intervention for these young women. In so, it is important to discuss how employing these concepts in tandem can bring forth positive change for these traumatized young women, how these changes can evolve our punitive practices to restorative ones, and how further research should carefully consider intervention settings to promote best practices.

Contextualized Findings

Understanding the correlation between female youth justice-involvement and trauma has helped effective intervention take form with these studies proving successful in predicating their intervention on this critical relationship. Effective intervention thus draws upon therapeutic modalities and cognitive-behavioral (Roberts-Lewis et al., 2010) concepts to address internal mechanisms and external behaviors related to trauma. Trauma-sensitive interventions possess the necessary parameters to address the unique needs of these young women. These parameters include targeting trauma-related risk factors with holistic intervention and treatment strategies that address the many, interconnected factors that prevent these young women from developing adaptive social skill, coping strategies, and prosocial behaviors (Roberts-Lewis et al., 2010). Findings support the potential for cognitive-behavioral efforts to promote protective factors and inhibit recidivism (Banks et al., 2015). Herein, effective intervention takes shape in better-informed treatment that recognizes the critical relationship between this specific population and their trauma.

The review findings build on the Harold et al. (2013) evidence base and offer significant prospect that long-term outcomes of delinquent girls with maltreatment history can be improved

through addressing mental health concerns. Findings show that interventions preventing the development of mental health disorders in girls with justice-involvement may impact their long-term well-being and help reduce the societal cost (Harold et al., 2013). In so, effective intervention that prioritizes mental health reduces short-term, negative consequences and reduces risk for longer-term developmental failures. When intervention mitigates mental health problems, it is effective in mitigating risk of adverse outcomes. If an intervention can mitigate risk, it has the potential to effect recidivism. With mental health deficits and co-occuring substance use having significant links to recidivism among girls with offending history (Roberts-Lewis et al., 2010; Stoolmiller & Blechman, 2005), the findings here develop a presumption that addressing trauma-induced mental health concerns specific to this population extend beyond mitigating symptoms to mitigating risks that impact recidivism potential.

In addition to being properly targeted to the impact of trauma and need to address mental health, analysis reveals effective interventions are effective to the extent they provide quality implementation and are offered in an optimal setting. Intervention quality, as in the Lipsey (2009) review, relates to the involvement of research experts and brings into question the qualifications of those charged with implementing the study. With research team involvement (Crosby et al., 2017) and experienced supervisors (Harold et al., 2013), interventions having quality implementation offer effective intervention. Quality implementation confers quality in procedure monitoring, training, education, and experience. The Banks (2015) study outcome, however, suggests that quality implementation does not necessarily require research involvement or experienced facilitators, rather highly manualized programming has the potential to offer effective intervention as well. Also of note, quantity of services and duration varied from study to study without apparent impact on effectiveness. The critical take-away remains that an

effective intervention requires a degree of quality implementation regardless of intervention service components.

Implications for Practice

The main criminal-justice policy implication of this review is the potential to evolve our perspective as it relates to trauma-exposed, young women with justice-involvement. The dialogue then becomes about their criminal justice needs not their criminal justice problems. The import here is shifting the paradigm from youth with justice-involvement to survivor of trauma where the need is restorative (e.g. therapies, medicine) not punitive. Effective intervention as described in this review lies squarely within this concept thus highlighting the critical need for juvenile facilities to more resemble treatment sites wherein girls receive interventions to avert them from further involvement in delinquent behavior (Roberts-Lewis et al., 2010). Effective intervention thus means programs should be offered in safe, nurturing environments that use culturally competent treatment models, offer dignity and respect to clients, and allow for bonds to be established between treatment staff and the girls involved (Bloom et al., 2003). Moreover, programs will need to address abandonment, neglect, and abuse issues with an emphasis in building trusting, healthy relationships with intervention facilitators and others (Belknap, Dunn, & Holsinger, 1997b; Bloom et al., 2003; Valentine Foundation, 1990). This environment combats the myriad of resulting psychological problems as experienced by trauma-exposed young women in the justice system (Belknap & Holsinger, 1998, Garcia & Lane, 2013). Juvenile criminal justice policy and procedure would benefit from regulating female juvenile involvement accordingly.

Evaluation of the study characteristics further revealed notable features as to impact of location in which participants received the intervention. In looking at the detention setting

studies, the samples were ultimately limited by the setting circumstances. Given that research shows long-term juvenile incarceration does not decrease reoffending, and may actually increase recidivism rates for lower-level youth offenders ("Study," n.d.), participant's ideally should not remain in detention. Thus, administering effective intervention targeted to specific mental health concerns that require sufficient time and resource is not congruent with what this review shows an intervention needs to be effective. Additionally, high turnover in both participants and staff fail to offer prime conditions to build stable therapeutic relationships. Further, the big-picture concern becomes whether resources are being diminished with no appreciable return from the intervention. With the understanding that quality implementation and stability of setting can be substantial barriers to delivering appropriate intervention, selecting the proper venue and facilitator remains as critical as the content of the intervention itself.

The relevance of this systematic review is far reaching in relation to key groups of stakeholders. Parents, foster parents, and guardians of girls with justice-involvement can benefit from the perspective of understanding and advocating for their child's needs. Teachers can benefit from having more-informed practices to improve student performance and promote healthier classroom environments. Intervention providers can use this information to improve best-practices, while the justice-system will hopefully benefit with a decreased burden due to lowered recidivism rates. Lastly, tax-payers and local governments will be able to divert spending to other needs as detention expenses decline with recidivism rates.

Implications for Research

Further research could substantiate findings beyond noted limitations. Adding to our understanding of effectiveness in intervention has the potential to promote significant change in how the criminal justice system responds to female youth with justice-involvement as well as

make a restorative impact on the lives of this population of young women by helping them avoid further justice involvement. Given the limitations present in the studies facilitated in a detention settings, further research should critically question whether detention is an appropriate place for intervention. Limited sample sizes, follow-up, duration is an understandable consequence when juvenile detention is not theoretically intended to house offending youth any longer than necessary. Future research should explore with dimensions of sustainability and achieving stability of setting with and focus on evaluating more studies in community-settings.

Beyond limited sample sizes in detention settings, all four studies contended with samples that may not generalize to a broader population. All but one study recognized the unpredictability of participant location changes, while only the Harold et al. (2013) study had a control group for standard comparison. All studies cited contended with low-follow up rates with unknown long term outcomes with need for more longitudinal research identify causal relationships (Crosby et al., 2017). Understanding the roles and complications of turnover, politics and funding will be critical to future study (Banks et al., 2015). Reporting bias on the review-level requires notation as well.

Conclusion

Intervention efforts for trauma-exposed young women with criminal justice involvement require contemplating the presence and gravity of the population's specific needs. Analysis of this review shows that recognition and treatment of mental health needs is a key component of effective intervention with the potential to impact long-term risk. Using a construct to target trauma-psychosocial problems via trauma-sensitive modalities focus shifts away from punitive inquiry to restorative mental health, which can potentially mitigate further risk of problematic external behaviors that lead to recidivism. In so, effective intervention comes to mean providing

appropriate care in the proper context with the aim of mitigating mental health symptoms to mitigate further risk of criminal behaviors. In all, these studies reveal a path forward that maintains notions of justice, and allows trauma-exposed young women with criminal-justice involvement the opportunity to constructively restore their lives and decrease future justice involvement.

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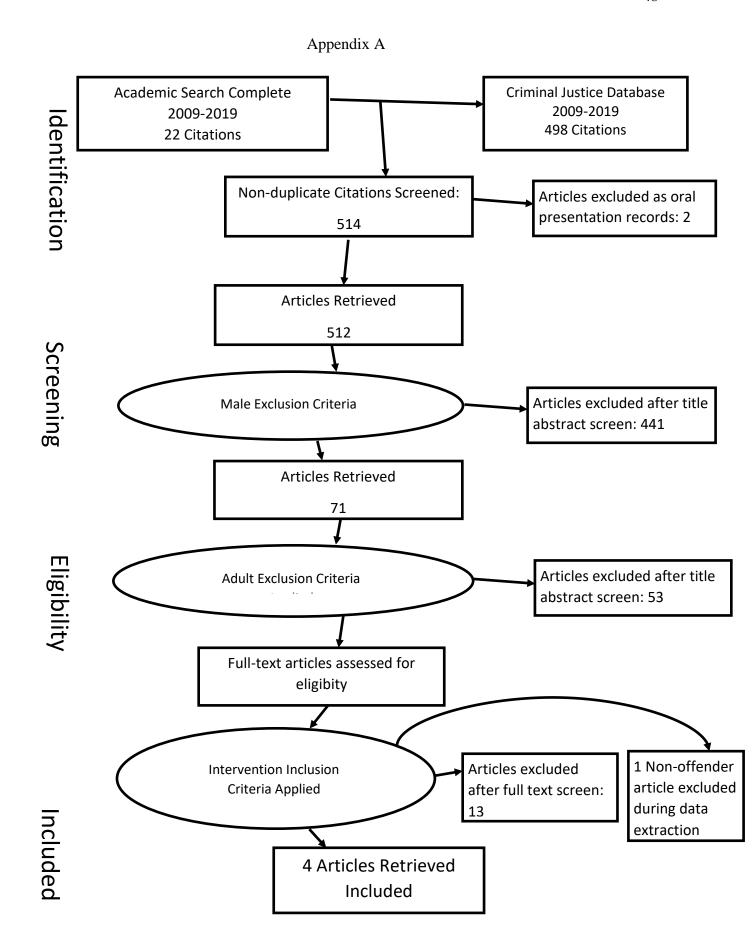
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Appendix B

Data Extraction Form

- Reference (First Author/Year/Journal Citation)
- Location (detention, residential care)
- Sample (Intervention sample, control sample)
- Design (randomized, quasi-experimental lacking random assignment, time-series pre-post)
- Duration
- Intervention
- Gender Responsive Features
- Quality
- Quantity
- Outcome Measures
- Limitation

Appendix C

| Study | Intervention | Intervention | Sample | Design | | Gender Responsivity | Quality | Quantity | Outcome | Findings | Limitation |
|-----------------------------|-------------------------------------|--|---------------------------|---|---|---|---|--|---|--|---|
| Banks (2015) | DBT Skills- training Group | Facility | 22% non- voluntary | Pretest/ Posttest; Ohio Youth Scales/ BDI- II; Pilot | 12 weeks; One 90 min. session per week | Modification based on cognitive and behavioral processes common to girls | Clinicians present with intern facilitation; Highly manualized, no formal training | DBT skills w/ activities; Self- help manual; Daily diary cards | Impact on internalizing and externalizing behaviors through this modified use of DBT | Internalizing behaviors significantly decreased | Small sample; No control group; Lack stability of setting |
| Crosby (2017) | Trauma- informed Teaching | exclusive to female youth | | Cross- sectional with hierarchical regression; CROPS, CASSS | 2013- 2014 School Year | Specific training and curriculum; Attachment- driven, trauma- sensitive | Monitored by research team; Facilitated by MSW- trained staff | Staff support; Monarch Room | Relationship between school attachment/ support and trauma symptomology | Higher school attachment and lower trauma symptoms | Longitudinal research needed; No address of factors impacting perceptions |
| Harold (2013) | MTFC | Community- based, out- of-home care | | , | 2 years; 5 waves at 6 mo. intervals | Context- directed, engaging external supports to overcome internal mechanisms | | Support | Maltreatment history, delinquency, and depression levels as moderators of intervention effectiveness | MTFC greater decrease in depression than GC; The more severe the greater decrease | Change in placement following random assignment; Representation may not generalize |
| Roberts- Lewis (2010) | H.E.A.R.T. | Detention Facility | 30 girls; single group | Pretest (intake)/ Posttest (discharge); POSIT; No random assignment; Pilot | 4.5 years | Focus on needs of girls; considers influences of relationships , power, and messages to females | Facility staff, no specific training noted | CBT; Gender specific services; Group therapy; Process goups; Education; Pharamaco- therapy; 12- step program | Reduction of psychosocial problems associated with substance abuse and delinquency behaviors | Improved mental health, relationships education vocation; Lower delinquency risk | Small sample; Lending to self- selection bias; Representation may not generalize |