Words Behind Walls:
Exploring the Merits of Literacy Programs for Incarcerated Women

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Abstract of Thesis

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In the wake of privatization and profit-driven practices, mass incarceration in the US is a pressing issue with far-reaching consequences for families nationwide, imposing enduring psychological and physiological trauma on individuals. While various aids exist for reentry into society, insufficient attention has been devoted to exploring programs within prison walls, specifically those that operate with a gendered focus. Contemporary scholars dub this approach "gender-responsive programming," in which interventions seek to address the intersection of criminality and gender, or how criminality uniquely impacts women. This research zeroes in on female prison populations and the post-incarceration impact of gender-responsive programming. While substantial literature exists on these individual subjects, this study aims to explore the intersection of these two fields to determine whether and how gender-responsive programming uniquely benefits incarcerated women, specifically considering recidivism rates. By conducting quantitative analyses on data describing the re-entry experiences of incarcerated women from Pennsylvania prisons, it is hypothesized that increased participation in gender-responsive prison programming will reduce recidivism rates for mothers upon reentry; if so, there may be great value in implementing such programming on a larger scale to reduce recidivism rates for mothers who might not benefit from traditional programming.

Keywords: Incarceration, gender-responsive prison programming, incarcerated women, matricentric incarceration, maternal incarceration, recidivism, correctional education

Table of Contents

Acknowledgments ..... **iii**

Abstract of Thesis ..... **iv**

List of Tables ..... **vi**

Chapter 1: Introduction 1

Chapter 2: Literature Review 5

Chapter 3: Methodology 22

Chapter 4: Results 28

Chapter 5: Discussion, Conclusion, & Limitations 33

References **40**

List of Tables

Table 1. Omnibus Tests of Model Coefficients.....28

Table 2. Probability of Recidivism.....28

Table 3. Omnibus Tests of Model Coefficients, Accounting for Interaction Effects.....31

Table 4. Probability of Recidivism with Interaction Effects.....31

Chapter 1: Introduction

With its privatization and profit-driven practices in the past century, mass incarceration in the United States (U.S.) has become an increasingly alarming issue, affecting a growing number of families nationwide. As criminologists have argued for decades, incarceration can have serious and long-lasting impacts on individuals, ranging from psychological to physiological trauma (Fahmy & Wallace, 2018). While several rehabilitative aids exist for those experiencing reentry following incarceration, less emphasis is placed on exploring programs within prison walls, particularly those that address the unique needs of incarcerated women (Miller, 2021).

Despite a 525% increase in size between 1980 and 2021, the female prison population is one of the most understudied in criminology (Monazzam & Budd, 2023). In the 1980s scholars began to consider the role of gender in criminology, yet only as a control rather than a dependent variable (Sharp & Hefley, 2007). Even a decade later in the 1990s, significant changes had not yet been made; while feminist sociologists critiqued traditional criminology theory, Cook (2016) highlights that scholars only recently and slowly departed from an androcentric focus with the creation of intersectional schools of thought and the development of gendered pathways theory which emphasizes the role of gendered socialization, relationships, and life experiences in shaping women's pathways to crime. However, Cook (2016) simultaneously highlights that the majority of criminologists are White men (349). This relative scarcity of information surrounding incarcerated women and the intersectionality they experience is ultimately detrimental to the study of criminology, perpetuating a criminal justice system based primarily on male needs.

Given the significant rise of female incarceration and contemporary endeavors to understand the role of gender in offending, it is surprising that "a corresponding increase in programming has not materialized" (Miller, 2021). Despite this shortcoming, the U.S. has allocated greater resources towards initiatives that promote correctional education and literacy. As of 2013, approximately 21% of adults in the U.S. exhibit less than basic functional illiteracy according to the Program for the International Assessment of Adult Competencies (PIAAC), demonstrating difficulty in completing "tasks that require comparing and contrasting information, paraphrasing, or making low-level inferences" (OECD, 2013). For adults in prison, this statistic is significantly higher with roughly 78% of incarcerated individuals being functionally illiterate (Michon, 2016). Consequently, the Federal Bureau of Prisons (BOP) requires institutions to offer a variety of programs that promote educational and marketable skills per (Federal Bureau of Prisons [BOP], n.d.). In fact, incarcerated individuals struggling with literacy or the acquisition of a formal secondary education are required to partake in said programs for a minimum of 240 hours (BOP, n.d.).

Despite broad efforts to increase the accessibility of such initiatives, prison programming has historically been challenging to develop and implement for all incarcerated individuals. Budget constraints and policy shifts in the 1990s were especially impactful; the 1992 Amendment to the Higher Education Act eliminated Pell Grant eligibility for incarcerated individuals, leading to a sharp decline in post-secondary educational opportunities within prisons (Tewksbury & Taylor, 1996). Additionally, the 1994 Violent Crime Control and Law Enforcement Act further emphasized punitive measures over rehabilitative efforts, leading to increased

incarceration rates and directing funds towards expanding prison infrastructure rather than rehabilitation programs—for instance, in order for states to obtain any federal funding, it required that "truth in sentencing" policies be adopted, ensuring that all offenders served a substantial portion of their sentence (Palmiotto, 1998). Recent developments, such as the Second Chance Pell Experiment, reflect a growing recognition of the importance of rehabilitation and education in improving outcomes for formerly incarcerated individuals by providing the opportunity to pursue higher education to earn livable wages upon release (BOP, 2023). However, overcoming the impact of past budget constraints remains an ongoing challenge (BOP, 2023). While these efforts were undeniably a step in the right direction, it is also critical to underscore that such programs were designed to address the majority of incarcerated individuals, most of which are men. Thus, women's prison programming continues to suffer disproportionately in the quality and breadth of its offerings.

Despite existing literature on incarcerated women, prison programs, and prison literacy initiatives independently of one another, this thesis aims to fill a gap in existing scholarship by examining the unique benefits of prison literacy programs for incarcerated women in the U.S. To accomplish these objectives, I explore literature on the challenges of incarcerated women, the use of gender-responsive programming, and the gendered benefits of prison and literacy programs. By engaging these fields of research, I synthesize the connections between challenges faced by incarcerated women and the potential for prison literacy initiatives to ameliorate these concerns. To explore if and how gender-responsive literacy programming can mitigate the challenges of female incarceration , I draw on *The Women's Prison Inmate Networks Study (WO-*

PINS), focusing on variables related to prison programming and subsequent recidivism rates. I present my findings, followed by an extensive discussion on the implications of prison programming for incarcerated women. I conclude this thesis offering recommendations for future research in related fields, and briefly considering challenges to implementing gender-responsive programming.

Chapter 2: Literature Review

Examining the Unique Challenges of Incarcerated Women

To best develop effective interventions that account for the role of gender in incarceration, it is imperative to address the distinct needs of women, whose experiences within the carceral system are unique and multifaceted. From reproductive rights to maternal responsibilities, women encounter challenges that require a nuanced understanding and tailored interventions to ensure an equitable criminal justice system.

Women in the criminal justice system face incredibly unique issues: Morash et al. (1994) highlighted that 41% of incarcerated women experience sexual abuse, 66% have children under the age of 18, and less than 50% were employed in the month prior to arrest. These authors also emphasize the insufficient care women receive in relation to these obstacles, particularly from a legal and medical perspective. Many incarcerated women do not have access to adequate legal aid when preparing for the appeals process or when trying to attain parental rights (Morash et al., 1994). Furthermore, although incarcerated women often demonstrate a greater need than men for medical attention due to histories of substance abuse, they do not receive proportionate care from prisons (Morash et al., 1994). Given the prevalence of conditions like addiction, prioritizing psychiatric care that can be used to mitigate any harmful effects may be crucial in addressing criminal behavior in women.

Karatzias et al. (2017) examined the complex relationship between trauma, post-traumatic stress disorder (PTSD), emotional dysregulation, and criminal behavior among incarcerated women. Their study, involving 100 participants, unveiled a widespread history of psychological trauma such as PTSD, particularly highlighting

childhood neglect as a significant trauma (Karatzias et al., 2017). The research identified adult psychological trauma as the primary mediator between childhood trauma and subsequent criminal behavior (Karatzias et al., 2017). Importantly, individuals with multiple traumatic experiences were associated with more severe recent offenses, suggesting that while trauma may not directly cause criminal behavior, it is associated with an increase in the seriousness of offenses committed (Karatzias et al., 2017). Their study underscores the importance of tailored interventions addressing the specific trauma-related needs of incarcerated women.

Bartlett and Hollins (2018) also explored the importance of psychiatric care in women's prisons while simultaneously recognizing the effects of isolation from family and lack of maternal care while incarcerated. The authors maintain there is a growing international awareness of the vulnerability and trauma experienced by incarcerated women, leading to calls for alternatives to imprisonment). Despite government commitments to improving prison conditions, doubts persist about the effectiveness of these efforts (Bartlett & Hollins, 2018, p. 134). The authors emphasize the importance of considering incarcerated women's socialization and redefining approaches to mental health, promoting early intervention, maternal mental healthcare, and alternatives to imprisonment to effectively support incarcerated women with complex needs (Bartlett & Hollins, 2018,).

While Bartlett and Hollins (2018) discussed government efforts to improve carceral conditions, it should be noted that the U.S. has experienced a shift in the opposite direction. This regression has made the rehabilitation of incarcerated women particularly difficult in the current political climate. Recognized as "the mother of feminist

criminology," Chesney-Lind (2020) contends that there has been a recent uptick in efforts to criminalize women's bodies, particularly following the presidential election of Donald Trump and the conservative movement to restrict reproductive rights. Given this constraint, it may be more likely for women to encounter the justice system, including prison, as a result of efforts to obtain an abortion. For example, one woman was recently charged with "abuse of a corpse" after suffering a miscarriage 21 weeks into her pregnancy (Associated Press, 2023). This underscores the necessity for maternal care for incarcerated women and access to resources for addressing the psychological needs caused by such events. Hence, the value of gender-responsive treatment and approaches in U.S. prisons today is important now more than ever.

Gender Disparities in Prison Programming

To adequately address the consequences of incarceration and the risk factors that may subsequently influence criminality, many prisons have turned to providing a variety of rehabilitative programs for both men and women. Yet, as Morash et al. (1994) explain, prison programming "does little to overcome marginalization from the workforce and leaves many who have a history of drug abuse, or who are parents, untouched by relevant programming" (p. 197). However, scholars still agree that men benefit more than women from prison programming.

Sokoloff and Schenck-Fontaine (2016) find that most emerging higher education programs are offered solely in men's prisons and wards. Furthermore, incarcerated men who earn an Associate's degree are 62% less likely to return to prison, and those who enroll in vocational programs are often paid more and receive more employment

opportunities (Morash et al., 1994). Incarcerated men also benefit from psychiatric care in more meaningful ways than women. In their analysis of 16 prison-based therapeutic communities for psychiatric care, Messina et al. (2006) found that aftercare following initial treatment is most beneficial for incarcerated men, particularly if they are employed, which is more likely given their access to vocational training.

Despite the clear advantages of prison programming for incarcerated men, women's prisons seldom receive such attention, and consequently women are less likely to pursue higher education while incarcerated (Sokoloff & Schenck-Fontaine, 2016). Moreover incarcerated women with children are often faced with "mothering from the inside," or trying to fulfill their parental responsibilities from within prison walls without adequate parental programming that ensures they do not lose custody of their children (Sokoloff & Schenck-Fontaine, 2016, p. 104). As such, these women often face increased levels of stress, a risk factor for recidivism (Sokoloff & Schenck-Fontaine, 2016).

Gender-Responsive Programming in Prisons

Following popularization of the term "intersectionality" by Kimberlé Crenshaw (2019), contemporary sociological scholarship has increasingly embraced efforts to mitigate the discrimination and oppression that often accompanies the overlap of multiple identities. Specifically, scholars such as Chesney-Lind (2013; 2020) have illuminated the need for feminist criminology research that reveals the gendered dynamics in the criminal justice system and further contributes to the marginalization of women. This is especially important given the documented inattention to this population in mainstream research. Specifically, feminist criminology and the lens of intersectionality have significantly

enriched contemporary understanding of gender dynamics within the criminal justice system. By applying feminist perspectives, scholars have highlighted the biases and inequalities embedded within the system, shedding light on how gender intersects with other social identities such as race, class, sexuality, and ability (Chesney-Lind, 2006). This approach recognizes that experiences of criminal justice involvement are not uniform across all individuals but are influenced by intersecting systems of oppression. Feminist criminologists such as Marganski (2019) have critiqued traditional notions of crime and victimization, emphasizing the importance of recognizing and addressing forms of gender-based violence, such as "revenge pornography" and sexual assault, which have historically been trivialized within legal frameworks.

With growing disapproval surrounding the historic androcentric bias in criminology, there have been notable strides towards implementing gender-responsive programming in U.S. prisons, reflecting a shift towards more inclusive and equitable approaches. Demonstrative of a shift in rehabilitation efforts, gender-responsive programming seeks to offer interventions that address the convergence of criminality and gender (Stuart & McCoy, 2023). Gender-responsive programming also accounts for gender-specific variables that may influence incarcerated women's cause for offending and/or recidivism such as parent-child relationships, substance abuse, and mental health concerns (Miller, 2021).

While gender-responsive programming individually calculates the likeliness of recidivism and responsivity to treatment, most existing risk assessment tools used in these programs were designed with only men's prisons in mind and therefore may not be as applicable or valid for women (Miller, 2021). Women-specific classification

instruments like the Women's Risk and Needs Assessment (WRNA) aim to address this gap, with the WRNA being the only validated, peer-reviewed risk/needs assessment for incarcerated women (Miller, 2021). Unlike other classification instruments and risk assessment tools, the WRNA considers a variety of factors that influence the life experiences of women, such as viewing full-time child-rearing responsibilities as indicative of employment rather than unemployment (The University of Utah, n.d.). For justice-involved women, acknowledging these variables highlights the importance of experiences such as maintaining contact with children during incarceration, as critical to the rehabilitation process for women (The University of Utah, n.d.).

Gender-Responsive Programming and Literacy

Given its recent emergence in implementation, further research is required to understand the long-term impact of gender-responsive programming over the life course (Stuart & McCoy, 2023). Amidst these potential avenues for exploration lies the lack of research examining the intersection between gender-responsive programming and correctional education, despite the urgent need for such programming in the U.S., and the use of correctional education as a primary form of programmatic intervention. This gap is even more alarming when recognizing that approximately "48% of women in federal prisons have less than a 10th-grade education" (White, 2012, p. 286).

Few studies exist that analyze gender-responsive programs in the U.S., and the merits of literacy programs for incarcerated women (White, 2012; Terry & Miller, 2021). Terry and Miller (2021) examined the outcome of implementing a read-aloud literacy program in prisons. They hypothesized that the literacy program could enhance

a (grand)mother's motivation to read and improve confidence in parenting while incarcerated. Their study acknowledges the scarcity of research regarding literacy as a tool for fostering connections between incarcerated women and their family members (Terry & Miller, 2021). Moreover, the study lacked explicit references to literacy and motherhood, prompting them to navigate the relatively uncharted territory of merging findings on gendered or matricentric incarceration with literacy (Terry & Miller, 2021).

Their study's findings did not reveal any significance between pre- and post-test results following engagement with the program. Additionally, participants were selected due to successful completion of a similar program, so many women already felt competent in their literacy skills before the program and likely had pre-existing interests in prosocial hobbies like reading. Despite the study's limitations, future research could confirm the findings and provide a justification for gender-responsive programming efforts in prison literacy initiatives. Given the limited research on the intersection of gender-responsive programming and correctional education, it is crucial to consider the unique and distinct needs of women in the carceral system. Existing studies, such as Terry and Miller's (2021) exploration of literacy programs, only highlight the gaps in understanding the impact of such initiatives on incarcerated women, particularly those who have never been exposed to literacy initiatives in prisons, emphasizing the necessity for more nuanced research.

Illuminating the Merits of Literacy Programs for Incarcerated Individuals

While the success of prison programming seems to vary based on gender (Morash et al., 1994; Karatzias et al., 2017), one type of initiative consistently beneficial for

incarcerated individuals is prison literacy programs. While varying from state-to-state in quality and availability, prison literacy or correctional education programs programs are intended to be accessible for most incarcerated individuals; according to the BOP, "All institutions offer literacy classes, English as a Second Language…wellness education, adult continuing education, library services, and instruction in leisure-time activities" (BOP, n.d.). However, this is not always the reality for incarcerated people in every institution, as limited funding, technology, and information for higher education programs in prisons can severely restrict access to these services (Jack, 2024).

Due to their historic availability in many federal prisons however, the impact of literacy programs in mixed-gender studies is incredibly well-documented. In a meta-analysis exploring the impact of prison education on recidivism, Espirian (2010) found that incarcerated people demonstrated significantly lower recidivism rates when participating in correctional education, ranging from a 50% to 70% reduction in recidivism. Bozick et al. (2018) corroborated Espirian's (2010) research on lower recidivism rates, but determined that correctional education has no significant impact on employment following release, with only about a 12% increased chance of obtaining employment after participation in a literacy program. Bozick et al. (2018) also suggest the need for further research to determine how much exposure to higher education is needed to demonstrate more positive results. Additional research has been conducted on the link between access to programming and greater educational attainment post-release. According to Duwe (2018) however, the association is unclear.

Until 2023, government support for post-secondary education financial aid was extremely limited (Duwe, 2018). In 1994, the U.S. Department of Education halted a

pilot program to provide incarcerated individuals with federal funding to pursue post-secondary education (Duwe, 2018). Congress has recently reinstated Pell Grant eligibility for incarcerated individuals via the Second Chance Pell Grant program (BOP, 2023). Accordingly, the BOP stated the following in July 2023: “the Pell Grant is now available to all qualified incarcerated people to further pursue post-secondary education for jobs with livable wages.” Though at the time of publication, the Second Chance Pell Grant program has yet to reach its one-year anniversary of instatement, sociologists and criminologists alike may find utility in studying the long-term effects of such initiatives in the 21st century.

Can Literacy Programs Mitigate the Challenges of Incarcerated Women?

In reviewing the published literature, several salient points emerge regarding the carceral experiences of incarcerated individuals. Firstly, incarcerated women confront distinctive challenges within prison settings attributable to their gender, a factor often overlooked in traditional carceral frameworks (Morash et al., 1994; Karatzias et al., 2017). Secondly, disparities in access to prison programming initiatives between genders contribute to divergent outcomes, highlighting the need for gender-responsive approaches to carceral interventions (Sokoloff and Schenck-Fontaine, 2016; Messina et al., 2006). Finally, extensive research on mixed-gender studies consistently demonstrates the efficacy of prison literacy programs in reducing recidivism rates (Morash et al., 1994; Schenck-Fontaine, 2016; Messina et al., 2006)

To examine how prison literacy programs might mitigate the gendered challenges of incarcerated women, it is critical to first synthesize research that establishes gender-responsive programming as a viable solution to the issues of women in prison. In doing so, it then becomes possible to deduce the ways in which literacy programs, if adopting gender-sensitive practices, might be effective tools in mitigating the specific harms of incarcerated women mentioned in prior literature. Incarcerated women face a plethora of obstacles to their well-being while incarcerated (Karatzias et al., 2017; Morash et al., 1994; Chesney-Lind, 2020). Research suggests that women in prison need support in the following domains: PTSD/trauma intervention, mental health and psychiatric care, parenting resources, alternatives to imprisonment, and reproductive rights. Existing research suggests that gender-responsive programming can be employed to mitigate the challenges experienced by incarcerated women.

For instance, Karatzias et al. (2017), found that nearly all incarcerated women in their study experienced trauma, leading over 50% to develop PTSD. Trauma and PTSD are complex mental health concerns that require a sensitive approach to treatment that can be achieved through gender-responsive programming. It can include training staff, including officers and mental health professionals, on trauma sensitivity to create an environment that minimizes triggers and promotes healing. According to Morash et al. (1994), 41% of incarcerated women experience sexual abuse, thus all-female correctional staffing could be conducive to minimizing triggers and providing the women with a feeling of safety they may not otherwise experience with male personnel. Furthermore, gender-responsive programming may also entail the use of individualized treatment plans, in which gender-specific assessments such as the Women's Risk and Needs Assessment (WRNA) can be used to address the intersection between gender, specific triggers, and coping mechanisms of incarcerated women.

The responsibility of parenting also presents strongly when examining populations of incarcerated women. Sokoloff and Schenck-Fontaine (2016) highlight that women, incarcerated or not, tend to be the primary and often sole caretaker of their children and consequently often exhibit increased levels of stress, a characteristic that is exacerbated upon being incarcerated. Morash, Haarr, and Rucker (1994) corroborate this finding and suggest that prison programs do not adequately support the needs of parents, particularly mothers. Accordingly, gender-responsive programming may alleviate these challenges. These programs may be curated to include education programs that provide incarcerated mothers with information on child development and strategies for maintaining a strong parent-child bond during and after incarceration. They might also

establish child-parent visitation programs that allow incarcerated mothers to maintain meaningful contact with their children, perhaps through the creation of child-friendly spaces within prisons and providing resources for age-appropriate activities during visits. Finally, it could also be useful to offer family-centered therapeutic interventions, in which both incarcerated mothers and their children could receive counseling independently and in groups to address the emotional impact of separation and work towards rebuilding relationships. As of 2024, Pendleton et al. (2020) recount similar programs such as the Minnesota Prison Doula Program that provide one-on-one support to incarcerated mothers who may have to give birth separated from their families, however such initiatives are not widespread and have only recently emerged.

Chesney-Lind (2020) and Morash et al. (1994) recount the legal concerns many incarcerated women face, particularly in regard to parental custody and reproductive rights. If gender-responsive programming were to be implemented, a variety of interventions could be possible. Programs could provide on-site legal support to incarcerated mothers navigating custody matters; this could involve partnerships with legal aid organizations to ensure that mothers have adequate representation in family court. For women who prefer to exercise greater autonomy over these processes, such gender-responsive programs might also include regular workshops within prisons to educate incarcerated women about their legal rights regarding parental custody and reproductive health. Finally, to ensure these interventions are most effective, it would be critical to extend legal support beyond incarceration by establishing post-release legal assistance programs; this ultimately ensures the continuity of support as women experience reentry, addressing any legal concerns that may arise. Shlafer et al. (2021)

shed light on the Justice for Incarcerated Moms Act that provides many of these services, however it has yet to expand beyond its pilot program which only includes six facilities to date of publication.

A gender-responsive, holistic approach to prison programming would not be complete without the recognition of alternatives to imprisonment that could mitigate the harms of incarceration entirely. Such interventions could include community-based sentencing programs for non-violent, low-risk individuals, in which women may be closer to their children and support systems while still serving their sentences. In 2021, Minnesota established the Healthy Start Act, allowing for incarcerated mothers to engage in community-based alternatives to incarceration for this very reason (Schlafer et al., 2021). Restorative justice practices could also be effective for similar cases, in which emphasis is placed on repairing harm and fostering reconciliation between offenders and victims. Finally, the implementation of specialized courts, such as those for substance abuse or mental-health-related offenses, could divert women from the traditional path to incarceration. As previous scholars recognized, many incarcerated women struggle with substance abuse and mental health concerns; with this intervention, incarceration could once again be avoided entirely if special consideration is given to the circumstances and types of offenses committed, particularly if prompted by gendered challenges women often face.

It is evident that gender-responsive programming, while not a one-size-fits-all solution, can effectively address the distinct challenges of incarcerated women by providing interventions that deviate from the traditional carceral experience (Schlafer et al., 2021; Pendleton et al., 2020). Accordingly, I argue that prison literacy and education

programs utilizing a gender-sensitive approach may be capable of adopting many of these strategies, thereby serving as a practical tool to minimize the harms of incarceration for women. As established, prison literacy programs are very effective in mixed-gender studies, proven to significantly reduce recidivism for both men and women. While they demonstrate minimal impact on employment outcomes following release, existing research has yet to determine the impact of prison literacy initiatives on post-release educational attainment.

Despite these limitations in research that fail to address the use of literacy programs in treating the challenges faced by incarceration for women, I contend that women could uniquely benefit from prison literacy in the realms of community support, basic and legal education, and alternatives to imprisonment. For the purposes of my research, community support refers to the collective network of resources and relationships in a given area; it often includes collaborative efforts from community members and organizations to provide assistance, encouragement, and solutions to evoke a sense of belonging, good health, and social well-being within the community. Notably, community support is imperative when considering the issue of parental incarceration. In addition to my suggestions for gender-responsive programming related to the incarceration of mothers, community support could also be offered through after-school programs where children of incarcerated mothers might meet with community leaders and similar role models.

Prison literacy programs might also have merits in providing incarcerated women with access to basic and legal education, therefore enabling individuals to equip themselves with the knowledge and skills to perform a variety of tasks. For example,

incarcerated mothers could benefit from literacy programs that address the topics of child development, therefore reducing some stress associated with “mothering” from prison walls. This type of curriculum could enhance parenting skills while also providing mothers with valuable insights into the cognitive and emotional needs of their children. By focusing on child development topics, these programs could empower mothers with knowledge and confidence in their parenting abilities, fostering a sense of connection and bonding even with the constraints of incarceration. Furthermore, literacy programs catered towards child development equips mothers with the skills needed to support their children's educational and emotional well-being post-release. The positive impact extends beyond the incarcerated parent, influencing the cognitive and emotional outcomes of their children, and contributing to the reduction of recidivism rates.

However, perhaps most evidently, access to specifically legal education through literacy programs can enable women to understand their reproductive and parental rights. Legal education could cover topics such as family law, custody proceedings, and reproductive health rights, providing incarcerated women with the tools to engage more effectively with the legal system. Understanding these rights is not only crucial for compliance with legal requirements but also empowers women to actively participate in decisions affecting their lives and family. The incorporation of regular workshops within prisons as part of gender-responsive literacy programming could further amplify the impact of legal education on reproductive and parental rights. Workshops offer a dynamic and interactive space where women can explore nuanced topics, seek clarifications, and engage in discussions facilitated by legal experts, advocates, or professionals specializing in family law and reproductive rights. This interactive format

not only enhances the learning experience but also creates a supportive environment where women can feel safe to openly voice their concerns and seek guidance.

Finally, literacy programs operating with gender-responsive standards may also offer avenues to explore alternatives to imprisonment. Through general literature on carceral alternatives, it is evident that many of these options require both a high degree of trust and for an incarcerated person to be relatively "low-risk." However, to allow individuals to meet the first qualification, gender-sensitive literacy programs could encourage individuals to meet this level of trust if incarcerated women are required to obtain a certain level of education prior to participation in such alternatives. Should incarcerated women be required to hold a GED to participate in these alternatives, for example, they may be more inclined to obtain further education. In addition, this continued education inadvertently has been proven to demonstrate a reduction in recidivism (Baranger et al., 2018). With a reduced chance of reoffending and a higher level of education, incarcerated women may effectively give actors in the criminal justice system reasonable belief to permit participation in prison alternatives, thus reducing or eliminating the harms of incarceration entirely.

In sum, existing literature highlights the complex and multifaceted challenges faced by incarcerated women, emphasizing the need for gender-responsive care to address their unique needs. It is evident that incarcerated women often contend with trauma, inadequate psychiatric care, and for some, the overwhelming responsibilities that accompany motherhood—all of which are exacerbated by systemic inequality in the U.S. criminal justice system. This disparity in access to prison programming, particularly in regards to education and psychiatric care, unscores the necessity of tailed

interventions that acknowledge the intersectionality of gender, trauma, and criminal behavior. Gender-responsive programming, though still emerging in type and widespread application, offers a promising framework for mitigating these challenges by providing specialized care, including legal and educational support in some instances. While gender-responsive literacy programs may demonstrate great value and feasibility in relation to community support, basic/legal education, alternatives to imprisonment, and psychiatric and trauma-related support, literacy programs are rather standardized in nature to include a variety of individuals, and therefore may not sufficiently address the diverse mental health needs of incarcerated women despite accounting for the role of gender in prison.

Chapter 3: Methodology

Secondary Data Collection

To investigate the post-incarceration effects of gender-responsive programming on incarcerated women, this study employs the dataset "Understanding Incarceration and Re-Entry Experiences of Female Inmates and Their Children: The Women's Prison Inmate Networks Study (WO-PINS), Pennsylvania, 2017-2018." A total of 283 women (n = 283) were surveyed over the course of a year across three different women's units in two Pennsylvania prisons. The first unit surveyed (U1) was the largest of the three studied during this time, including 131 respondents. Unit 2 and Unit 3 (U2 and U3, respectively) each surveyed 76 women. Among the 283 total women surveyed, three participants were deemed unable to consent to research based on the University of California San Diego Brief Assessment of Capacity to Consent (UBACC) (Kreager et al., 2023). Their responses were removed from the dataset by the research team to ensure the most accurate representation of the intended study population was obtained.

WO-PINS contributes to the understanding of the impact of incarceration and reentry by examining the social systems within prisons and their informal network structures. WO-PINS addresses four key research questions: (1) What constitutes the informal social structure within the prison environment? (2) How do incarcerated individuals' positions within this structure correlate with their health? (3) What are the repercussions of the informal social structure and individuals' positions on both individual and prison-wide outcomes? (4) How does social capital, both within and outside prison, relate to community reentry and family reintegration?

WO-PINS was conducted in three phases. In the initial phase, network data were gathered, focusing on perceptions of proximity and power nominations, as well as survey data providing context to the measured networks. The second phase involved semi-structured interviews with eligible participants to capture expectations for re-entry and anticipated egocentric support networks. In the third phase, paroled individuals were followed through two subsequent interviews, and additional interviews were conducted with their children and caretakers. Administrative records were utilized to construct a tool for modeling the risk of recidivism post-release. Finally, behavioral data were amalgamated from various sources, including surveys, prison work records, misconduct records, drug tests, visitation lists, and gang classification data.

Variables

WO-PINS has a response rate ranging from 74-82%, indicating generally consistent results that are conducive to reliable quantitative analysis. Details from the second and third phases are integral to my study, as pre- and post-testing of the impact of incarceration occurred during this time. In the study, researchers conducted semi-structured interviews concerning attitudes surrounding reentry; those spoken to were phase one participants eligible for release within a year of the researcher's initial contact. In this phase, data was collected prior to release with the intention of comparison following each participants' time incarcerated. In phase three, researchers conducted follow-up interviews with women from earlier phases to gauge their reactions to life following release; it is with these participants that researchers were able to compare pre- and post-test results to determine the impact of incarceration.

As I am primarily interested in the recidivism rates of formerly incarcerated women who have participated in prison programs, I focus on four key variables. The primary dependent variable in this study is the recidivism rate of women who have participated in prison programming. In the dataset, this variable is labeled, "EVENTTYPE," and tracks recidivism following release from prison. Recidivism is recorded as a categorical variable with four possible outcomes: 1) the participant has not been released from prison, 2) the participant was released and did not recidivate, 3) the participant was released, recidivated, and returned to the prison facility due to parole violations according to Department of Corrections (DOC) records, or 4) the participant was released, recidivated, and officially arrested according to court documents.

In addition to the dependent variable, my analysis will include three primary independent variables labeled: "D1PRGRMCNT," "D2PRGRMCNT," and "D3PRGRMCNT," which represent the number of prison programs that a woman participated in within their unit. Unlike the categorical dependent variable of recidivism rates, these independent variables are continuous measuring the frequency of participating in prison programs. I hypothesize that participation in prison programming is associated with lower recidivism rates following release. Furthermore, I include several control variables—age, race, and highest level of educational attainment—in my analysis to account for other variables that may influence the likelihood of recidivism following release. However, it is important to acknowledge that many other variables were included in this dataset, which may also impact recidivism.

I employ IBM SPSS Statistics to analyze my data. More specifically, logistic regression is most useful for analyzing the data to determine the probability of recidivism, which is coded as a binary variable (0 = did not recidivate; 1= did recidivate).

Ethical Considerations

While the examination and usage of secondary data in analysis poses fewer ethical concerns for researchers, it cannot be assumed that the data is without flaws. Specifically I am curious as to what specific measures researchers employed to ensure that each participant was approached with the same degree of consideration and sensitivity when speaking about their experiences while incarcerated so as not be placed under duress or respond dishonestly.

Furthermore, my second-most concern surrounds the methods by which researchers obtained the trust of their participants. Given that these women were incarcerated and often speaking in interviews about their experiences as mothers, distrust in the research process and analysis could dramatically impact the degree of honesty with which participants respond. Ideally, it would pose fewer, if any, ethical concerns had researchers interacted with participants for prolonged periods of time prior to data collection in order to ensure complete trust. However, if participants were primarily offered monetary incentives to participate in the study, this may have implications for the types of respondents most likely to engage with the researchers.

Data Analysis

In order to create the unique datafile used for my research, I first extracted each numerical identifier from each of the datasets for U1, U2, and U3. I then linked the

identifiers to their corresponding responses. The new dataset includes each participant's demographic information, such as age, race, educational attainment, as well as the number of prison programs they participated in, and their recidivism status following release.

I then created new variables to conduct a binary logistic regression analysis. I began by converting the number of prison programs each individual participated in (D1PRGRMCNT/D2PRGRMCNT/D3PRGRMCNT) into a binary variable. The original data were recorded as continuous variables, with values ranging from 0 to 4 programs. I re-coded this variable into a binary format: "1" for any participation in prison programs (program participation count > 0) and "0" indicating no participation (program participation count = 0). I coded recidivism, the dependent variable in this study, into binary terms "0" to denote a lack of recidivism and "1," as an event of recidivism. Recidivism events with the labels "1" or "2" both indicated that an individual did recidivate by either violating the terms of their parole agreement or through a new arrest; these values were both coded as "1."

The remaining three variables were the categorical variable of race coded using numerical values: 1 for White/Caucasian, 2 for Black, 3 for Hispanic/Latino/a, and 4 for Mixed or Other. Due to thes limited cases of Mixed and Hispanic participants, I combined the cases of participants who identified as Black, Hispanic, or Mixed/Other into a non-White category. I included race within the regression analysis as a categorical variable. Second, I utilized the race value of "1," (White or Caucasian), as the reference category when creating additional binary variables. This resulted in three new variables, each indicating whether or not an individual belonged to a specific racial group.

However, given that the sample was limited in cases, I reduced these three variables into a binary code as well, simply differentiating individuals by whether they were White or non-White.

Finally, in order to ensure that my data only reflected information pertaining to women who were released from prison, I filtered out the select with an assigned value of "-1" to the variable EVENTTYPE. This value signified that the individual had not been released during the study period, resulting in truncated events. These truncated events were excluded from the analysis to maintain the integrity of the findings.

Chapter 4: Results

Multivariate Logistic Regression Output

Table 1 includes the Omnibus Tests of Model Coefficients to determine whether the independent variables included in the model collectively provide a statistically significant improvement in predicting the outcome variable compared to a baseline model with controls (or the "null model") that includes no predictors. With a significance level of 0.041 ($p < 0.05$), it can be concluded that the model utilized did not produce such results by chance, and therefore has some explanatory power for the variables used.

Table 1. Omnibus Tests of Model Coefficients (n = 173)

	Chi-square	df	Sig.
Step	3.976	4	0.409
Block	3.976	4	0.409
Model	3.976	4	0.409

Note: Reference standard for significance: $p < 0.05$

Table 2. Probability of Recidivism (n = 173)

Variable	B	Standard Error	Wald χ^2	df	p-value Sig.	Odds Ratio Exp(B)
Program Participation	-0.391	0.626	0.390	1	0.532	0.676
Age	-0.032	0.028	1.238	1	0.266	0.969
Race (1 = Non White)	0.386	0.629	0.377	1	0.539	1.471
Education	-0.111	0.070	2.544	1	0.111	0.895
Constant	0.087	1.450	0.004	1	0.952	1.091

Note: Reference standard for significance: $p < 0.05$

Results

Table 2, however, provides more detailed insight into the relationship between variables entered. The above data provides detailed information about the contribution of each predictor variable to the model. Program participation had a B coefficient of -0.391, and a p-value of 0.532, with an odds ratio of 0.676, indicating that program participation was not a significant predictor of recidivism. This odds ratio suggests that with increased program participation, the probability of women recidivating decreases by 32.4.5% (1 - 0.676 = 0.324), though this should also be considered in tandem with an non-significant p-value, suggesting no significant relationship between the two variables.

The results showed that age had a B coefficient of -0.032, and a p-value of 0.266 with an odds ratio of 0.969. The odds ratio of 0.969 in particular suggests that with each additional year of age, the chances of recidivating decrease by 3.1%. In tandem with a lower p-value, however, this suggests that while age was not a significant predictor of recidivism, it should not be discounted from the model.

The category of race had a B coefficient of 0.386, and a p-value of 0.539, resulting in an odds ratio of 1.471. This indicates that being non-White, was not a significant predictor of recidivism. While individuals in this category are 47.1% more likely to recidivate, the p-value of 0.539 renders this statistic insignificant.

Education had a B coefficient of -0.111, and a p-value of 0.111, with an odds ratio of 0.895. The odds ratio reveals that for each additional level of educational attainment, the chances of recidivating decrease by 10.5% (1 - 0.895 = 0.105, or 10.5% decrease, given that the odds ratio was less than 1). Despite education having an odds ratio of 0.895, this predictor is not statistically significant at the 0.05 level (p = 0.111). Overall,

there is not enough evidence is not enough to conclusively state that any of the predictors in the model are statistically significant predictors of recidivism.

Regression Model: Interaction Effects

The model in Table 2 did not show a significant relationship between participating in a prison literacy program, and recidivism status following incarceration. To ensure the robustness of these findings, I repeated the binary regression analysis with interaction terms. Interaction terms are used to explore whether the relationship between the primary independent variable (prison program participation) and the dependent variable (recidivism) differs based on another variable, such as race, age, or educational attainment. Specifically, an interaction term allows the analysis to determine if the effect of prison program participation on recidivism is not uniform across all groups but varies depending on the value of another variable. For example, the influence of participating in prison programs on reducing recidivism might be stronger or weaker depending on an individual's age or level of education. By including interaction terms in the regression model, the study can uncover whether these secondary variables modify the relationship between program participation and recidivism. Accordingly, I created four additional variables to account for these possibilities: the interaction between program participation and age/educational attainment/race; I did not have to create an interaction term for the "White" category, as the race interaction term would account for this reference variable.

Table 3. Omnibus Tests of Model Coefficients, Accounting for Interaction Effects (n = 173)

	Chi-square	df	Sig.
Step	8.139	7	0.321
Block	8.139	7	0.321
Model	8.139	7	0.321

Note: Reference standard for significance: $p < 0.05$

Table 4. Probability of Recidivism with Interaction Effects (n = 173)

Variable	B	Standard Error	Wald χ^2	df	p-value Sig.	Odds Ratio Exp(B)
Program Participation	-2.283	3.992	0.327	1	0.567	0.102
Age	-0.053	0.039	1.826	1	0.177	0.949
Race (1 = Non White)	-0.493	0.922	0.285	1	0.593	0.611
Education	-0.054	0.288	0.035	1	0.852	0.948
Age * Program Participation	0.053	0.062	0.714	1	0.389	1.054
Race * Program Participation	2.071	1.321	2.459	1	0.117	7.931
Education * Program Participation	-0.091	0.298	0.093	1	0.760	0.913
Constant	0.623	3.443	0.033	1	0.856	1.865

Note: Reference standard for significance: $p < 0.05$; * = multiplied for interaction terms

In this model, the interaction between program participation and age was not statistically significant, with a p-value of 0.389; in fact, when compared to the results in Table 2, its significance decreased when analyzed in tandem with program participation. The odds ratio for this interaction term was 1.054, suggesting a minimal impact of age on the relationship between program participation and recidivism. In other words, for each

increase in the combined effect of program participation and age in this study (i.e., if a woman participates in at least one prison program, and then ages), the odds of recidivating are multiplied by 5.4% with each year of age. Yet given the non-significant p-value for this interaction term, this slight increase in odds should be interpreted with caution, as it may not represent a meaningful or reliable effect.

The interaction term for program participation and race showed a p-value of 0.117, which is not statistically significant. However, the odds ratio of 7.931, was particularly interesting. This suggests that compared to the reference category, in this case White incarcerated women, the odds of the recidivism are about 7.93 times higher for non-White incarcerated women. Though this result did not reach statistical significance, the relationship should not be dismissed entirely.

Finally, the interaction between program participation and education was also not statistically significant ($p = 0.760$), with an odds ratio of 0.913. This indicates that the effect of program participation on recidivism did not significantly vary with greater levels of education. The odds ratio of 0.913 implies a slight decrease in the odds of recidivating ($1 - 0.913 = 0.087$, or 8.7%) with increased interaction between program participation and increased levels of education, but this effect is not statistically significant. However, it is still important to note that the Wald statistic is greater than 0.05, suggesting that there is little evidence to reject the null hypothesis. This means that the interaction between program participation and education does not significantly contribute to the model seen above.

Chapter 5: Discussion, Conclusion, & Limitations

Examining the Relationship Between Variables

It is critical to thoroughly examine the output of Tables 2 and 4 and its potential significance for research of gender-responsive programming and its subsequent effects on recidivism. Program participation in Table 2 had a p-value of 0.532 and an odds ratio of 0.676, indicating that program participation was not a significant predictor of recidivism. This was perhaps the most surprising finding. Given the impact that increased education, which could be obtained by way of prison programming, has historically demonstrated on recidivism rates for both men and women (Barangr et al., 2018), I had initially hypothesized that the significance of program participation would parallel the same degree of influence on recidivism, which it evidently did not, at least in any significant terms. The odds ratio in particular suggests that with increased program participation, the probability of women recidivating decreases by 32.4.5%, however it is due to the lack of statistical significance, this value may not be the most accurate representation of the relationship between program participation and recidivism.

Similarly, while age (B = -0.032) and level of education (B = -0.111) show slight negative effects, their p-values indicate they are not statistically significant predictors when utilizing the standard benchmark of p = 0.05. However, the impact of increased levels of age and education do closely approach significance (p = 0.266, p = 0.111, respectively). For revealing the impact of gender-responsive programming on recidivism, this was consistent with previous studies conducted primarily in men's prison units (Bozick et al., 2018). This ultimately indicates that as a women's level of education

increases prior to incarceration, they are less likely to recidivate, and therefore, do not reoffend as frequently.

Table 2 also revealed that the category of race utilized in the regression analysis (White or non-White) were not significant predictors of recidivating following release ($p = 0.539$). Perhaps most notably, the odds ratio for incarcerated non-White women showed nearly a 50% chance of recidivism simply accounting for race, though this statistic was also not statistically significant and from a discussion standpoint, the probability of recidivism appears to be more likely due to random variation in the data.

Based on these results, it is clear that no single factor entirely influences the chances of an individual recidivating following release. Hence, it is only with consideration of the interactions between variables as presented in Table 4 that my findings can be contextualized, particularly in light of the non-significant findings generated.

In Table 3, the interaction between program participation and age was not statistically significant, with an odds ratio of 1.054 and a p-value of 0.389. This suggests that the effect of age on recidivism might vary depending on whether an individual participated in the program. Specifically, for each additional year of age, the odds of recidivism are slightly higher by about 5.4% for those who participated in the program compared to those who did not. However, the effect is not statistically significant ($p = 0.389$), meaning that we cannot confidently say that this interaction truly impacts recidivism rates in a meaningful way. The lack of statistical significance indicates that the observed effect might be due to random variation in the sample rather than a genuine interaction between age and program participation. Therefore, while the odds ratio

suggests a potential interaction where older individuals in the program might have slightly increased odds of recidivism, this finding should be interpreted with caution, as it does not provide strong evidence that age modifies the impact of program participation on recidivism. Therefore, it may be suggested that gender-responsive programming should not rely heavily on age-specific interventions but rather cater to the varied experiences of women across different age groups.

Similarly, the interaction between program participation and education yielded a p-value of 0.760, with an odds ratio of 0.913. This result highlights that the effect of program participation on recidivism is generally consistent across different educational levels. The odds ratio only indicates a slight decrease (8.7%) in the odds of recidivating for women with each additional unit increase in levels of education.. This lack of significance indicates that we cannot confidently conclude that the interaction between education and program participation has a meaningful impact on recidivism. Instead, it may be more effective for gender-responsive programs to focus on providing education and vocational training as core components, enhancing overall empowerment and self-sufficiency, rather than assuming pre-existing education levels as a determinant of program success. As such, it becomes even more imperative that programs such as the Second Chance Pell Experiment are effectively implemented to ensure continued education, with prison administration focusing on overcoming the impact of previous budget constraints (BOP, 2023).

Notably, the interaction term for program participation and the variable for race ($p = 0.117$) with an had a high odds ratio of 7.931, suggesting that the effect of race on recidivism is significantly modified by participation in the program. For Non-White

women in the study, the odds of the recidivism are about 693% higher than White women. This is a surprising and counterintuitive finding, and it highlights a critical area for further research. However, it's important to note that this interaction effect is not statistically significant. A. It has already been well documented that people of color, particularly Black,Hispanic, and Native American individuals, are disproportionately incarcerated compared to other racial groups—it is only appropriate that the intersectionality of the challenges these women face in such conditions is granted just as much attention to mitigate the harms of incarceration (Morash & Schram, 2022). Culturally tailored interventions that address the specific challenges faced by non-White women align particularly well with the principles of gender-responsive programming, which advocate for intersectionality and the consideration of multiple identities and experiences.

Limitations

While Kreager et al. (2023) were understandably limited in their follow-up research by the coronavirus pandemic, perhaps a revisitation of the study could include additional prison units from different areas in the U.S. The dataset used does not specify where in Pennsylvania the prisons are located, however it would not be surprising if the recidivism rates differed greatly in an urban setting or in a geographically distant region altogether. Such diverse data collection may also reveal how local approaches to reintegration can shape likelihood of recidivism, and it would be especially interesting to see how education might be incorporated into such methods.

Should future data collection permit, it would also be useful to study additional dependent variables through multivariate logistic regression to determine how

participation in prison programs may affect women. For example, while recent literature suggests that prison programs have no significant impact on employment or educational attainment after incarceration (Espirian, 2010; Bozick et al., 2018; Duwe, 2018), I am curious as to whether the same holds true when specifically studying women's units, especially if all participants are in fact mothers, which was not the case in Kreager et al.'s (2023) study.

This was one of few design limitations of the study that inhibited more all-encompassing results to be derived from the data set, however it is one that could easily be ameliorated should a similar design be implemented elsewhere with sample groups that are at greater in number.

In conclusion, the exploration of gender-responsive and literacy programs within the context of female incarceration underscores their potential as vital tools in mitigating the adverse effects of imprisonment. While these programs offer components such as trauma-informed care and legal education, the evidence suggests that their success in reducing recidivism is not as straightforward as previously thought. The complex interplay between race, educational attainment, and program participation calls for a more nuanced understanding of these dynamics. Ultimately, a multifaceted approach to prison programming may hold the key to meaningful reductions in recidivism and supporting successful reintegration for incarcerated women.

Conclusion

In exploration of literature pertaining to the experiences of incarcerated women, gender-responsive programming, and the merits of prison literacy programs, it is clear that gender-responsive programs and literacy programs in prisons are both feasible interventions for mitigating the harms of female incarceration. From trauma-informed care to parenting support and legal education, these programs can include various components to equip women with the skills necessary to interact with those involved in the justice system and beyond to lessen the effects of their sentence. Yet recognizing the limitations of such initiatives, especially in severe mental health cases, highlights the need for a comprehensive, individualized approach that literacy programs may not offer—hence, the significance of a program that can meet several different needs at once.

Gender-responsive literacy programs in prisons undeniably impacts post-incarceration outcomes for women. Though previous research placed primary emphasis on education as a predictor for recidivism following release from a carceral institution, the data obtained by Kreager et al. (2023) suggests that various other factors may also impact recidivism rates and should be explored in conjunction with education, rather than separately from it. While it was unexpected that program participation would not have a strong positive correlation with decreased recidivism rates, the simultaneous significance of an increased education and age and its impact on recidivism warrants further exploration into the exact components of prison programs at the institutions surveyed. Furthermore, the relative insignificance of race, particularly for Black individuals, when considered *alongside* prison program participation reinforces the notion that recidivism rates for women transcend racial boundaries and cannot fully nor adequately be explained

by a single independent variable.

Ultimately, these results are crucial for researchers as they inform the understanding of which factors *are* significant in influencing recidivism among incarcerated women. These findings suggest that while educational prison programming remains a promising avenue for recidivism reduction, the effectiveness of such programs may be contingent upon more nuanced approaches and additional supportive measures. Future research should aim to address the limitations of this study by including larger, more diverse samples and incorporating a broader range of variables to better understand the multifaceted relationship between race, education, program participation, and recidivism. This would provide a more accurate assessment of how gender-responsive programming can be optimized to achieve its intended goals and reduce recidivism more effectively. In this study, the asymmetric number of individuals from different racial groups, educational backgrounds, and even ages lends itself to data that does not adequately control for such major confounding variables, whether considered in tandem with program participation as an interaction term or alone.

Furthermore, with ten individuals excluded from the dataset, as they were not released by the completion of the longitudinal study, it goes without saying that future research should increase the sample size of the groups studied, as 173 participants is miniscule in the context of how many women are incarcerated each year. Finally, given the extensive number of variables included in the dataset, future research may benefit from examining the interaction between program participation and other variables such as motherhood or relationship status.

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