REENTRY AND MENTAL HEALTH: A GENDERED ANALYSIS

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ABSTRACT

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In this study, I use data from the Serious and Violent Offender Reentry Initiative (SVORI) to examine how mental health changes during the reentry process. I also offer a gender-based model, whereby I posit that women will adjust differently post-incarceration than men. In particular, prior research on the negative internalization of emotions among women leads me to predict that women will suffer more anxiety and depression than men. Based on prior research on the externalization of emotions among men, I also examine post-incarceration feelings of hostility as well as the likelihood of reincarceration, with the expectation that men will have higher levels of hostility and a greater likelihood of reincarceration than women. Introducing various conceptions of strain, I speculate that gender differences in mental health result from greater feelings of strain among women than men. Using various indicators of strain, I find that gender remains a significant predictor of depressive symptoms, anxiety, and recidivism risk. In addition, the overall strain versus specific strain scales seem roughly equivalent. Future research could focus on different indicators of strain, as well as discerning what factors contribute to this gender difference.

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INTRODUCTION

As of 2016, 1.5 million people were incarcerated in prison in the United States (Carson 2018). An increasing percentage are women. Most will reenter society and many are released each year. Increasingly, criminologists are focused on reentry because effective, consistently implemented programming can help people successfully reintegrate back into society (Bouffard and Bergseth 2008; Duwe 2012; Taxman, Pattavina, and Caudy 2014; Wikoff, Linhorst, and Morani 2012). However, few comprehensive programs exist to assist those released from prison. Often, they are left as outsiders to mainstream society. Many states bar those with felony convictions from voting. Some may offer a process for gaining this right back, but it can be a long and costly process, all to gain a right that all other citizens possess (Alexander 2010). Landlords are allowed to consider a criminal record in housing decisions, thereby legalizing discrimination against those with felony convictions. Probation and parole requirements often disrupt existing social networks, making a return to one's previous community precarious (Goffman 2009). Pager (2003) showed that a criminal record also reduced the chances of receiving a call back from a potential employer. In addition, there is the general societal stigma of being a felon. For example, people may protest the construction of a halfway house in their community to house the recently released. This could send the signal that formerly incarcerated people are unwanted and even feared. Some speculate that there is the additional burden of recovering from "incarceration culture" (Rotter et al. 2005). Behavioral adaptations often occur as a result of imprisonment, many of which may be unsuitable for everyday life.

The reentry process is a time of adjustment, with many accompanying challenges in obtaining housing, employment, and health care. Most people released from prison receive little aid in adapting to outside society. Women may have an even more difficult time with reentry due

to the presence of minor children and their roles as caregivers. As women frequently get primary custody of children, they may find it more challenging to obtain employment, as childcare may be needed. I posit that the numerous anticipated challenges and obstacles of the reentry process, or strain, can damage mental health. I also investigate whether there are gender differences in mental health trajectories over time. If the reentry process exerts a negative toll on mental health, it is necessary not only to treat their existing medical conditions, but to also fundamentally reconsider the reentry process in order to mitigate the structural barriers that might contribute to declining mental health and to assist those with felony convictions in reintegrating back into society. Importantly, we need to consider how reentry and its consequences are different for men and women.

In this study, I focus on one aspect of reentry that is often neglected: mental health. Many with a felony conviction have preexisting mental health problems (James and Glaze 2006), but few studies look at the effect of the reentry process on mental health. I use data from the Serious and Violent Offender Reentry Initiative (SVORI), a longitudinal study following people as they leave prison and reenter society, which provides a plethora of information on post-release outcomes, including various mental health dimensions to assess this change over time. I examine three types of mental health outcomes: depression, anxiety, and hostility, as well as the likelihood of reincarceration.

LITERATURE REVIEW

Though many scholars have focused on the presence of mental health disorders among those in prison, few have examined how mental health changes during the reentry process. Incarceration is a stressful experience. Readjustment to freedom, taken with the additional social, structural, and legal challenges of reentry, may result in more mental health difficulties. Also, though we do not see high quality health care in prison, those being held in institutions have access to the medications they may need for mental health. Release can disrupt medication routines or prevent access altogether (Binswanger et al. 2011).

Baillargeon, Hoge, and Penn (2010) found that people with severe mental illness faced reentry challenges. Mallik-Kane and Visher (2008) showed that the majority of those with felony convictions were without access to health insurance eight to ten months following release. Mental health problems can compound other issues. Up to a quarter of the homeless have a mental illness diagnosis (2018 National Coalition for the Homeless).

In particular, women with mental health problems faced a variety of additional challenges post-incarceration when compared to their female counterparts without mental illness diagnoses (Visher and Bakken 2014). They were less likely to obtain employment and stable housing, and more likely to have negative health outcomes. Perhaps of most interest to policy makers, women with mental health problems reported higher levels of criminal involvement. Therefore, there is reason to believe that struggles with mental health may lead to increased recidivism. I expand on this research by examining several mental health outcomes and the determinants of mental health. Although women represent a small portion of those incarcerated, they are a growing share of prison admissions (Sawyer 2018) and likely face different societal constraints upon release.

Women, Felony Convictions, and Reentry

Women and men in prison differ from one another in at least a few notable ways. First, the presence of minor children may be more salient for women than men. Second, women with felony convictions tend to have extensive victimization histories. Snell and Greenfeld (1999) report that 57% of women in state prisons have been sexually or physically victimized. Messina et al. (2006) find that women have higher levels of sexual and physical abuse upon entry than males in the prison system. Given the prevalence of victimhood for women, it may be important to consider a trauma-informed approach, whereby reentry programs are led by those with the training to help women confront symptoms resulting from past victimization (Covington 2008). In addition, those trained in this approach will avoid triggering memories of past victimization.

Third, previous work suggests that mental illness may operate differently for women than for men. Women have been found to have higher rates of mental illness than men, with young women at the highest risk (Gulland 2016). Even if women and men exhibit similar rates of mental illness in the U.S., they often suffer from different disorders. Eaton et al. (2012) report that women are more likely to internalize negative emotions, often resulting in depression and anxiety. Afifi (2007) notes that men may be socialized to act out in cases of emotional distress, whereas women tend to express symptoms through psychological symptoms. Therefore, men may be more likely to develop disorders of anger or other externalizing behaviors.

Indeed, there are reasons to believe that incarcerated women may have additional mental health concerns compared to their male counterparts. Green et al. (2005) found that the majority of women in jail have been victimized, suffer from mental illness, or have substance abuse problems. In addition, women self-reported their greatest problem areas were substance abuse

and family issues. This emphasizes the importance of family and minor children in the lives of women with a felony conviction.

Unfortunately, most studies on mental health following incarceration have excluded women. Freudenberg et al. (2005) interviewed men and women in New York City jails at the time of release and one year after release and found that women fared worse on a variety of mental health outcomes, including depression, anxiety, and other mental health conditions. When examining a variety of health outcomes among those with felony convictions following release, Mallik-Kane and Visher (2008) also found that mental health problems increased for both men and women following release, with both men and women's self-reports of mental illness diagnoses going up by one-third compared to their pre-release level. Blitz et al. (2005) noted that women in the New Jersey prison system were more likely to receive the label of "special needs," a phrase reserved for those needing mental health care. They reinforce previous findings that women are likely to internalize emotions, as they have higher rates of depressive disorders, whereas the men in the sample tend to be diagnosed with psychotic disorders. Often incarcerated people may suffer from multiple disorders, both mental and physical.

Prior work also attempts to elucidate some of the mechanisms that can explain the gender differences in mental illness following release from prison. Wallace et al. (2016) looked at the role of family support using SVORI, finding that increases in family conflict and tension resulted in worse mental health outcomes, as assessed by the Wave 3 Summary Mental Health Scale. Post-release family support was also more important to mental health than in-prison family support. I expand on this work by introducing gender-related types of strain, such as parenting and domestic violence.

THEORETICAL BACKGROUND

Agnew (1992)'s General Strain Theory notes that strain is not just the inability to gain positive stimuli, it is also marked by relationships that present with negative stimuli. Resulting negative emotions from these relationships, such as anger, might pressure people into committing crime or violence, but there are other responses to strain as well. Agnew and White (1992) find that negative experiences of strain are associated with increased delinquency and drug use.

Importantly, women and men may face different types of strain and have different responses. Most important to the current analysis is the likely presence of children in women's homes. This could keep them from maintaining employment or achieving other conventional goals. I argue here that this strain is manifested differently for women; whereas men may be more likely to recidivate, I argue that women will internalize this strain, resulting in a variety of mental health problems.

General Strain Theory describes a process whereby strain leads to negative affect, which in turn leads to problem behaviors (1992). In this case, mental illness is the negative affect, which in turn can influence the likelihood of reoffending, the problem behavior. To look at these two different phenomena, I examine the process by which strain affects mental health and ultimately the likelihood of reincarceration.

I also draw on Pearlin's stress process model (1981). This model posits that stress occurs as a result of either single events or chronic stressors that occur over time. Stressors are linked to psychological or emotional conditions in the future. Factors, such as personal resources, coping strategies, and social support play a role in the impact of these events on individual health, in this case, mental health. Pearlin also notes that stress can have a snowball effect, where one negative

event leads to other stressors. For example, stress proliferation suggests that people reentering society might lack useful job skills, which in turn could harm chances for employment and income. This stress expands to other parts of their lives resulting in a greater likelihood of mental health problems.

HYPOTHESES

I start with several research questions. First, does mental health worsen as a result of reentry? Second, do men and women have similar mental health reactions to reentry? Third, if men and women have differences in mental health outcomes as a result of reentry, what can explain these differences? Fourth, do differences in strain, mental health, and other factors account for differences in the likelihood of reincarceration between men and women? Using these four research questions, I posit several hypotheses:

Hypothesis 1: Mental illness, here examined as depressive symptoms, anxiety, and feelings of hostility, will increase following release from prison for both men and women.

Hypothesis 2: Men and women will report different types of mental health problems. I expect to see higher levels of anxiety and depression among women and higher levels of hostility among men.

Hypothesis 3: Gender differences in strain help to explain gender differences in mental health. Concerns about parenting and domestic violence will be particularly salient.

Hypothesis 4a: I expect men to have a greater likelihood of reincarceration than women, even when strain is considered.

Hypothesis 4b: Those reporting higher levels of mental illness will be more likely to be reincarcerated despite controls.

Hypothesis 4c: Women will be less likely to be reincarcerated than men, despite higher levels of mental illness.

METHODOLOGY

In this analysis, I use data from SVORI, collected from 2004 until 2007. The focus of the original study was to provide funding for post-release programming that could offer people exiting prison assistance with employment, housing, health, and education, and to assess their performance following release from prison. Respondents were interviewed in sixteen institutions in Colorado, Florida, Indiana, Iowa, Kansas, Maine, Maryland, Missouri, Nevada, Ohio, Oklahoma, Pennsylvania, South Carolina, and Washington. The data relied on matched pairs, comprised of one person who received SVORI programming and another who did not. Interviews were conducted face-to-face thirty days before release, three months after release, nine months after release, and fifteen months after release. The overall sample includes 1,697 men and 357 women, as well as a sample of male juveniles. I rely on the adult samples of men and women. After running each model, I limited the sample to the model with the fewest cases, thereby ensuring that results did not differ based on the sample used. Most cases were lost due to missing values on the mental health variables, with a very small number due to the strain variables. The final sample includes 1,143 respondents: 925 men and 218 women.

Mental Health and Reincarceration

I examine four dependent variables including mental health scales for depression, anxiety, and hostility, and one behavioral outcome, reincarceration. All mental health scales are taken from Waves 2, 3, and 4. I focus on depression and anxiety because they represent the most common mental health problems faced by women. The depression and anxiety scales are created from summing frequency variables asking how often in the past week the respondent has experienced the symptoms (1: not at all, 2: a little bit, 3: moderately, 4: quite a bit, 5: extremely). The *depression scale* includes: 1) feeling lonely, 2) feeling blue, 3) feeling no interest, 4) feeling

hopeless, and 5) feeling worthless (Cronbach's alpha=0.86). The *anxiety scale* includes: 1) feeling fearful, 2) being suddenly scared for no reason, 3) feeling tense, 4) spells of terror or panic, and 5) feeling restless (alpha=0.77). The *hostility scale* is meant to tap into externalizing behaviors that may be more prevalent among men. Components of this scale include 1) temper outbursts, 2) urges to beat someone, 3) urges to break something, 4) arguments, and 5) shouting or throwing things. I also examine reincarceration as an externalizing behavioral outcome (alpha=0.83). Reincarceration is measured at Waves 2, 3, and 4, and is assessed by asking whether the respondent was not reincarcerated. Responses are reverse-coded, with one indicating reincarceration and 0 indicating the respondent has not been reincarcerated.

Family Support and Strain

I examine the role of two key sets of independent variables related to mental health and the risk of reincarceration that also might help to explain gender differences: family support and strain. Family support includes both instrumental and emotional forms of support. *Emotional support* is a measure assessing the degree to which one can rely on family for guidance, and is assessed through asking agreement (Strongly Disagree, Disagree, Agree, Strongly Agree) with the following statements: 1) I feel close to my family, 2) I want my family involved in my life, 3) I consider myself a source of support for family, 4) I have someone in the family to talk to, 5) I have someone in the family to turn to, 6) I have someone in the family who understands my problems, and 7) I have someone in the family to love me and make me feel wanted.

*Instrumental suppor*t is focused on the financial assistance provided by family members, and is assessed through agreement with the following statements: 1) I have someone in my family who would provide help or advice on finding a place to live, 2) I have someone in my family who would provide help or advice on finding a job, 3) I have someone in my family who

would provide support for dealing with a substance abuse problem, 4) I have someone in my family that would provide transportation to work or other appointments if needed, and 5) I have someone in my family who would provide me with financial support. I separate elements of *family conflict* into its own scale, including: 1) I fight a lot with family members, 2) I often feel like I disappoint my family, and 3) I am criticized a lot by my family. Answers are reverse-coded, with lower scores indicating disagreement and higher scores indicating agreement. All family support and conflict measures are taken at Wave 2, which occurred three months after release.

Strain is constructed by summing dichotomous questions where respondents indicated whether they will need help in that area. I rely on Wave 1 measures (thirty days prior to release), so they reflect anticipated strain following release. The overall scale includes those who report needing help in the following areas at Wave 1: 1) finding a job, 2) getting more education, 3) child support payments, 4) modifications in custody, 5) legal assistance, 6) medical treatment, 7) mental health treatment, 8) drug and alcohol treatment, 9) financial assistance, 10) public financial assistance, 11) public healthcare insurance, 12) spiritual or religious assistance, 13) finding a mentor, 14) batterer intervention program, 15) domestic violence support group, 16) victims group for sex/physical abuse, 17) anger management program, 18) employment documents, 19) money management skills, 20) life skills, 21) work on personal relationships, 22) parenting skills, 23) change attitudes related to criminal behavior, 24) need a place to live, 25) need a job, 26) need transportation, 27) need child care, 28) need driver's license, and 29) need access to clothing banks/food pantries. These measures are combined into one dimension with a Cronbach's alpha of 0.82. Highly gendered variables were identified by identifying missing patterns. Consequently, missing values were recoded to 0 to account for those who were lacking

children, and therefore could not need help in this area. Recoded variables included child support payments, modifications in custody, parenting skills, and child care. Apart from these variables, missing values were generally low (<1%).

A confirmatory factor analysis was used to examine which factors of strain seemed to fit with one another. The intention was to assess which types of strain were more influential to gender differences in mental health. This resulted in four subscales of strain: instrumental, functional, parenting, and domestic violence. Factors were included when the factor analysis produced a value greater than 0.5. *Instrumental strain* consists of assistance in: 1) finding a place to live, 2) transportation, 3) access to clothing banks/food pantries, and 4) public financial assistance (alpha=0.67). As illustrated by the factors included, instrumental strain is concerned with practical concerns following reentry. *Functional strain* refers to the ability of the individual to function autonomously following incarceration. It includes 1) money management skills and 2) life skills (alpha=0.63). *Parenting strain* focuses on those who report needing assistance with 1) parenting, 2) childcare, 3) custody, and 4) child support payments (alpha=0.71). Finally, the *domestic violence strain* includes 1) batterer intervention and 2) domestic violence support (alpha=0.72). These two measures get at whether the participant has been a victim of domestic violence or fears future domestic violence.

Control Variables

Control variables include basic demographic information, including race and age. Due to small sample sizes, races other than non-Hispanic white and non-Hispanic black are placed together in an "other" category, with white serving as the reference category. *Age* is assessed at Wave 1 and used as a time-invariant measure. I also control for *mental health prior to release* from prison (Wave 1), which is a self-report measure of overall emotional/mental health.

Responses include excellent (1), very good (2), good (3), fair (4), and poor (5), meaning that higher scores indicated worse prior mental health.

ANALYTICAL STRATEGY

I follow the lead of others who have studied individual change over time using SVORI and rely on a mixed effects model (Boman & Mowen 2017; Mowen & Boman 2018; Mowen & Boman 2018; Stansfield et al. 2016). When using panel data, the independence assumption for other methods may be violated. Therefore, a mixed effects approach introduces a random intercept, whereby individuals can vary over time. It also allows the researcher to assess both time-invariant and time-variant factors (Boman and Mowen 2017).

Two sets of analyses are conducted here. First, I use a series of nested mixed effects models to examine how strain and family support affect each of the three time-varying mental health variables and whether these variables help explain gender differences in mental health during reentry. The baseline model includes gender and basic demographics, including age and race. The second model adds prior mental health to control for baseline mental health before release. The third model introduces three dimensions of family dynamics: instrumental support, emotional support, and family conflict. Subsequent models introduce overall strain (including numerous measures), instrumental strain, functional strain, parenting strain, and domestic violence strain, before including all of the subscales in one model.

Second, I use a series of nested logit models to look at the impact of the three types of mental illness on reincarceration. The first model examines predictors of reincarceration without considering the impact of mental illness. Subsequent models examine the additional effects of depression, anxiety, and hostility on reincarceration.

RESULTS

Descriptive Statistics

In Table 1, I present descriptive statistics for all variables separately for women and men. The final analytic sample includes 1,143 participants: 218 women and 925 men. Looking first at mental health and reincarceration, we can see differences by gender. Overall, women have significantly higher levels of depression and anxiety than men. Surprisingly, women also have higher levels of hostility than men, but the differences are smaller. Women's mental health tends to improve over time; depression, anxiety, and hostility scores decrease with each wave after release. Men's mental health fluctuates within a narrower range, generally decreasing in the first three months before increasing back towards pre-release levels thereafter. The gender gap shrinks over time as women's mental health improves while men's stays more constant. The percentage reincarcerated increases over time for both men and women. Men have higher reincarceration rates and the gender gap grows over time. Women report higher levels of strain overall as well as for the instrumental, parenting, and domestic violence strain subscales. There is no gender difference in functional strain. Men report better prior mental health than women.

I find preliminary support for my hypotheses that women will have higher levels of depression and anxiety than men. Also consistent with my hypothesis, men are more likely to be reincarcerated than women. But, I find two results that run counter to my hypotheses. I find that women report more hostility than men and that neither men nor women show increasing levels of depression, anxiety, or hostility over time after release. In fact, women show improvements in self-reported mental health over time. Men show fewer changes after release.

Mixed Effects Models

Tables 2, 3, and 4 show the results of mixed effects regression analyses of depression, anxiety, and hostility, respectively. Beginning with Table 2, the effect of gender is statistically significant after controlling for demographic factors in Model 1. Women have higher levels of depression than men. In Model 2, I added prior mental health in order to account for differences in baseline mental health before release from prison. The gender gap in depression was reduced, but remained statistically significant. Adding measures of family support and conflict in Model 3 does not change the gender gap in depression. Higher levels of family conflict are associated with greater depressive symptoms. Family emotional support is not related to depression. Next, we can see in Models 4 through 9 that strain is positively associated with depression and that adding overall strain in Model 4 decreases the gender coefficient substantially. Furthermore, while each type of strain captured in the four subscales is positively related to depression (Models 5-8), the overall strain measure reduces the gender gap more than when all four subscales are included in the same model (Model 4 versus Model 9). Only instrumental and functional strain remain statistically significant when all subscales are included in Model 9. Therefore, our overall strain measure seems to capture something that is missing in the subscales. But even in the full model, women report higher levels of depression than men during reentry.

In Table 3, similar to the findings for depression, women report higher levels of anxiety than men after controlling for demographics (Model 1), prior mental health (Model 2), and family support and conflict (Model 3). Again, the overall strain and strain subscales are all significant in their individual models (Models 4-8). In the overall model (Model 9), we see that only instrumental strain and domestic violence strain remain significant. Similar to the depression models, gender remains highly significant across all models. This means that women

have higher levels of anxiety, despite accounting for differences in family support and conflict, strain, and other controls.

Table 4 shows that women tend to have higher levels of hostility than men, which is contrary to my expectations. This could be due to the less serious nature of the offenses mentioned. For instance, shouting is relatively minor compared to major acts of violence. Women also may encounter more stressors in parenting that can lead to hostile or aggressive behavior. It is important to note that the gender gap in hostility is smaller to begin with than the gender gap for depression and anxiety. Family conflict is significantly related to hostility (Model 3), but does little to change the gender coefficient. Higher family conflict is associated with an increase in depression, anxiety, and hostility.

In Model 4, when overall strain is added to the model, the gender effect loses statistical significance. Of the strain subscales, only instrumental and domestic violence strain are related to hostility, both when added to the model individually and all at once. These results suggest that differences in strain over access to necessary resources and concerns about domestic violence might explain why women have higher levels of hostility than men during reentry. While a similar pattern emerged for depression and anxiety, gender differences persisted even after accounting for strain. Women may experience greater depression and anxiety than men regardless of reentry or reentry-related strain.

I also ran interaction models between gender and the specific types of strain (results available by request). Most interactions were not significant. However, an exception was with parenting strain. I found a negative female x parenting strain interaction in the depression, anxiety, and hostility models. This indicates that the impact of anticipatory parenting strain is smaller for women. Stated differently, the gender gap in depression, anxiety, and hostility

shrinks as anticipatory parenting strain increases. A possible explanation is that women with higher levels of anticipatory strain before release are overestimating their post-release parenting difficulties.

Logit Models

In Table 5, I present regression results showing the relationship between gender and reincarceration considering the influence of mental health. In Model 1, I show that after controlling for family support and conflict, strain, and other controls, women are less likely to be reincarcerated than men. In Models 2, 3, and 4, I show that all three types of mental illness are positively related to reincarceration. Higher levels of depression, anxiety, and hostility increase the likelihood of being reincarcerated. However, we also can see that the gender effect is significant in all of the models, despite controls and mental illness. This illustrates that women have higher levels of mental illness and that mental illness is strongly associated with recidivism risk, but men are still more likely to recidivate. I call this the gender paradox: despite higher levels of mental illness, women remain less likely to be reincarcerated at all subsequent waves.

DISCUSSION & LIMITATIONS

Through this study, we can observe the gendered nature of both mental illness and recidivism. I also illustrate the multiple dimensions captured in one strain measure and compare this to several specific subscales of strain. I find partial support for Hypothesis 1; mental health was relatively stable for men upon release, while it actually improved for women. Perhaps women gain family support and contact after release, which improves mental health. Hypothesis 2 is also partially supported. While women report higher levels of anxiety and depression, they also report higher levels of hostility. This ran contrary to my expectations. However, as mentioned previously, future research could use more severe indicators of hostility. Hypothesis 3 finds some support; parenting strain and domestic violence strain have a greater impact on mental illness for women. However, they are more important to the depression and anxiety measures than to hostility. All of the components of Hypothesis 4 are supported. Men are more likely to recidivate, even when considering mental health and strain. Those with mental illness are significantly more likely to recidivate.

This study shows evidence of a gender paradox: while women have higher symptomology scores in depression and anxiety, they still are less likely to be reincarcerated than men. Mental illness is clearly a crucial predictor of recidivism, yet we find that women are still less likely to recidivate. This shows that mental illness matters and should be a focus on reentry programming. Future studies should focus on explaining this gender gap. Strain or family relationships could matter more for women or men when examining mental health outcomes. Evidence of an interaction between gender and parenting strain in my study suggests a need for further investigation of gendered explanations of mental health outcomes among formerly incarcerated men and women. There also may be interactions between strain and mental health.

For example, people with high levels of strain and poor mental health may have a more difficult time during reentry and be at greater risk of reincarceration.

Future research could also focus on racial differences in mental illness during reentry. In the present study, whites are more likely to be depressed than blacks after accounting for overall strain and the subscales of strain together, which is surprising considering the significant racial barriers and discrimination faced by African Americans in America. Similarly, whites report more anxiety than blacks. Hostility is the only variable that seems unaffected by race, but the disparities in depression and anxiety might be worth further investigation. In particular, research could focus on possible racial differences in support or strain.

Intersectional approaches could also yield interesting results. For instance, examining the differences in mental health outcomes by race and gender could be done easily and has great potential. Potter (2006) talks about the double marginalization of African American women in the criminal justice system: they face difficulties of being a racial minority and being women. For these reasons, I speculate that they may face even greater mental health challenges than white women. Further analyses could be conducted to specify the differences in mental health outcomes of African Americans, Latinx, and other racial minorities.

Other interactions, such as the interaction between gender and age, could be informative. Given previous findings focusing on the prevalence of these issues amongst young females, there could be differences based on age. In addition, we see that only hostility is affected by age, meaning that further exploration of this facet of mental illness may be warranted.

Alternative modeling strategies, such as growth curve models, could illustrate change over time in mental health symptoms. The descriptive statistics yielded interesting patterns of mental health symptoms across waves, with different trends observed for men and women.

Future research could focus on the impact of family support or the role of strain on mental health trajectories, which may differ by gender.

This study has several limitations. I chose to use only the mental health, anxiety, depression, and hostility scales, though I could arguably examine other aspects of mental health, such as psychosis, phobias, or paranoia. I focused on them because they were more common and highlight the different manifestations of negative stimuli for women and men. Supplementary analyses focusing on psychosis did not find a significant gender effect, but this could be due to low rates of psychotic symptoms. Also, there may be differences in self-reported symptoms versus official diagnoses. Wallace et al. (2016) found differing results using self-reports of mental health diagnoses. However, I think official diagnoses are less common and possibly miss those who are experiencing symptoms, but have not sought medical care.

In addition, we may see gender differences in reporting of mental illness. Especially for men, there is the potential to not want to disclose personal information on one's mental state. Unfortunately, there is little that can be done for this in the current work. Instead, I would advocate for broader societal change and openness regarding mental illness. I also think that gender socialization may be relevant to how mental illness is even manifested for men and women. Perhaps men tend to develop mental illness that is more in line with societal gender roles, such as alcoholism and drug abuse. Future research could examine substance abuse as an outcome as well. My strain models were also limited. Future studies could include different measures of strain. It may also be informative to look at strain from other time points, as anticipated strain may differ from actual strains faced upon reentry.

CONCLUSION

In this study, I set forth to examine the mental health implications of reentry. The results suggest yet another negative consequence resulting from incarceration. In particular, I have focused on gender. Due to the different methods men and women use to cope with negative emotional experiences, I posited that women would be more likely to have negative mental health consequences as a result of the specific challenges facing women with a felony conviction when they reintegrate (or attempt to reintegrate) back into society. The potential in studying this issue is that mental health care could be better incorporated into reentry programming. Often, the focus in reentry has been limited to compliance and recidivism. Through this work, I hope to demonstrate the benefits as well as challenges of a system that seeks to address the everyday living conditions of those released from prison. Reentry programs for women will also need to take a family-based approach to reentry, possibly focusing on parenting skills or fostering family support.

The challenge of developing a program with all of these facets lies in the types of skills officials would have to have. The expectation would be not that all individuals have skills in all of these areas. Rather, people with all different specialties would be united in one place, working together and coordinating care. Ideally, those involved would have more of a social work than a law enforcement background. Those who are suffering from mental health or substance abuse problems would not be punished, but rather would be given the care they need.

REFERENCES

Affifi, M. 2007. "Gender Differences in Mental Health." *Singapore Medical Journal* 48(5): 385-391.

Agnew, Robert. 1992. "Foundation for a General Strain Theory of Crime and Delinquency." *Criminology* 30(1): 47-87.

Agnew, Robert and Helene Raskin White. 1992. "An Empirical Test of General Strain Theory." *Criminology* 30(4): 475-500.

Alexander, Michelle. 2011. *The New Jim Crow: Mass Incarceration in the Age of Colorblindness*. New York: New Press.

Baillargeon, Jacques, Stephen K. Hoge, and Joseph V. Penn. 2010. "Addressing the Challenge of Released Inmates with Serious Mental Illness." *American Journal of Community Psychology* 46: 361-375.

Bernburg, Jon Gunnar and Marvin D. Krohn. 2003. "Labeling, Life Chances, and Adult Crime: The Direct and Indirect Effects of Official Intervention in Adolescence on Crime in Early Adulthood." *Criminology* 41: 1287-1318.

Binswanger, Ingrid A., Carolyn Nowels, Karen F. Corsi, Jeremy Long, Robert E. Booth, Jean Kutner, and John F. Steiner. 2011. "'From the Prison Door Right to the Sidewalk, Everything Went Downhill,' A Qualitative Study of the Health Experiences of Recently Released Inmates." *International Journal of Law and Psychiatry* 34: 249-255.

Blitz, Cynthia L., Nancy Wolff, Ko-Yu Pan, and Wendy Pogorzelski. 2005. "Gender-Specific Behavioral Health and Community Release Patterns Among New Jersey Inmates: Implications for Treatment and Community Reentry." *American Journal of Public Health* 95 (10): 1741-1746.

Boman, John H. IV and Thomas J. Mowen. 2017. "Building the Ties that Bind, Breaking the

Ties that Don't." *Criminology and Public Policy* 16(3): 753-774.

Bouffard, Jeffrey A. and Kathleen J. Bergseth. 2008. "The Impact of Reentry Services on Juvenile Offenders' Recidivism." *Youth Violence and Juvenile Justice* 6(3): 295-318.

Braithwaite, John. "Crime, Shame, and Reintegration." 1989. Pp. 277-285 in *Criminological Theory: Past to Present*, edited by Francis T. Cullen and Robert Agnew. Oxford, United Kingdom, Oxford University Press.

Carson, E. Ann. 2018. *Prisoners in 2016*. Bureau of Justice Statistics. Washington, DC: U.S. Department of Justice. Retrieved April 11, 2018 (https://www.bjs.gov/content/pub/pdf/p16.pdf).

Covington, Stephanie. 2008. "Women and Addiction: A Trauma-Informed Approach." *Journal of Psychoactive Drugs* November 2008: 377-385.

Duwe, Grant. 2012. "Evaluating the Minnesota Comprehensive Offender Reentry Plan (MCORP): Results from a Randomized Experiment." *Justice Quarterly* 29(3): 347-383.

Eaton, Nicholas R. et al. 2012. "An Invariant Dimensional Liability Model of Gender Differences in Mental Disorder Prevalence: Evidence from a National Sample." *Journal of Abnormal Psychology* 121 (1): 282-288.

Federal Bureau of Prisons. 2018. *Inmate Gender*. Federal Bureau of Prisons. Washington, DC: U.S. Department of Justice. Retrieved April 22, 2018 (https://www.bop.gov/about/statistics/statistics_inmate_gender.jsp).

Freudenberg, Nicholas et al. 2005. "Coming Home From Jail: The Health and Social Consequences of Community Reentry for Women, Male Adolescents, and Their Families and Communities." *American Journal of Public Health* 95: 1725-1736.

Goffman, Alice. 2009. "On the Run: Wanted Men in a Philadelphia Ghetto." *American*

Sociological Review 74:339-357.

Green, et al. 2005. "Trauma Exposure, Mental Health Functioning, and Program Needs of Women in Jail." *Crime and Delinquency* 51(1): 133-151.

Greenfeld, Lawrence A. and Tracy L. Snell. 1999. *Women Offenders.* Bureau of Justice Statistics. Washington, DC: U.S. Department of Justice. Retrieved April 15, 2018 (https://www.bjs.gov/content/pub/pdf/wo.pdf).

Gulland, Anne. 2016. "Women Have Higher Rates of Mental Disorders Than Men, NHS Survey Finds." *The BMJ*, September 29. Retrieved April 22, 2018 (https://www.bmj.com/content/354/bmj.i5320).

Hawkins, Stephanie R., Pamela K. Lattimore, Debbie Dawes, and Christy A. Visher. *Reentry Experiences of Confined Juvenile Offenders: Characteristics, Service Receipt, and Outcomes of Juvenile Male Participants in the SVORI Multi-site Evaluation.* National Institute of Justice. Washington, DC: U.S. Department of Justice (https://www.ncjrs.gov/pdffiles1/nij/grants/230423.pdf).

James, Doris J. and Lauren E. Glaze. 2006. *Mental Health Problems of Prison and Jail Inmates*. Bureau of Justice Statistics. Washington, DC: U.S. Department of Justice. Retrieved April 11, 2018 (https://www.bjs.gov/content/pub/pdf/mhppji.pdf).

Lattimore, Pamela K. and Christy A. Visher. 2009. *The Multisite Evaluation of SVORI: Summary and Synthesis*. National Institute of Justice. Washington, DC: U.S. Department of Justice (https://www.ncjrs.gov/pdffiles1/nij/grants/230421.pdf).

Mallik-Kane, Kamala and Christy A. Visher. 2008. *Health and Prisoner Reentry: How Physical, Mental, and Substance Abuse Conditions Shape the Process of Reintegration*. Justice Policy Center. Washington, DC: The Urban Institute.

Messina, N., W. Burdon, G. Hagopian, and M. Pendergast. 2006. "Predictors of Prison Therapeutic Communities Treatment Outcomes: A Comparison of Men and Women Participants." American Journal of Drug and Alcohol Abuse 31(1): 7-28.

Mowen, Thomas J. and John H. Boman IV. 2018. "Do We Have it All Wrong? The Protective Roles of Peers and Criminogenic Risks From Family During Prison Reentry." *Crime & Delinquency*: 1-24.

Mowen, Thomas J. and John H. Boman IV. 2018. "The Duality of the Peer Effect: The Interplay Between Peer Support and Peer Criminality on Offending and Substance Use During Reentry." *Crime & Delinquency* 64(8): 1094-1116.

National Coalition for the Homeless. 2018. *Mental Illness and Homelessness*. Washington, DC: National Coalition for the Homeless. Retrieved February 7, 2019. (https://www.nationalhomeless.org/factsheets/Mental_Illness.pdf).

Pager, Devah. 2003. "The Mark of a Criminal Record." *American Journal of Sociology* 108 (5): 937-975.

Pearlin, Leonard I., Elizabeth G. Menaghan, Morton A. Lieberman, and Joseph T. Mullan. 1981. "The Stress Process." *Journal of Health and Social Behavior* 22(4): 337-356.

Potter, Hillary. 2006. "An Argument for Black Feminist Criminology: Understanding African American Women's Experiences With Intimate Partner Abuse Using an Integrated Approach." *Feminist Criminology* 1(2): 106-124.

Rabe-Hesketh, Sophia and Anders Skrondal. 2012. Multilevel and Longitudinal Modeling Using Stata. 3rd ed. College Station, TX: Stata Press.

Rotter, Merrill, Hunter L. McQuistion, Nahama Broner, and Michael Steinbacher. 2005. "Best Practices: The Impact of the "Incarceration Culture" on Reentry for Adults With Mental

Illness: A Training and Group Treatment Model." *Psychiatric Services* 56(3): 265-267.

Sawyer, Wendy. *The Gender Divide: Tracking Women's State Prison Growth*. North Hampton, Prison Policy Initiative. Retrieved April 2, 2019.

Stansfield, Richard, Thomas J. Mowen, Thomas O'Connor, and John H. Boman. "The Role of Religious Support in Reentry: Evidence from the SVORI Data." *Journal of Research in Crime and Delinquency* 54(1): 111-145.

Taxman, Faye S., April Pattavina, and Michael Caudy. 2014. "Justice Reinvestment in the United States: An Empirical Assessment of the Potential Impact of Increased Correctional Programming on Recidivism." *Victims and Offenders* 9(1): 50-75.

Visher, Christy A. and Nicholas W. Bakken. 2014. "Reentry Challenges Facing Women with Mental Health Problems." *Women & Society* 54(8): 768-780.

Wallace, Danielle, Chantal Fahmy, Lindsy Cotton, Charis Jimmons, Rachel McKay, Sidney Stoffer, and Sarah Syed. "Examining the Role of Familial Support During Prison and After Release on Post-Incarceration Mental Health." *International Journal of Offender Therapy and Comparative Criminology* 60(1): 3-20.

Wikoff, Nora, Donald M. Linhorst, and Nicole Morani. 2012. "Recidivism Among Participants of a Reentry Program for Prisoners Released Without Supervision." *Social Work Research* 36(4): 289-299

APPENDIX A. TABLES

Table 1. Descriptive Statistics for All Variables Partitioned by Gender

	Men				**Women**			
	Obs.	Mean	Std. Dev.	Range	Obs.	Mean	Std. Dev.	Range
Depression								
Wave I	921	8.402***	3.840	5-25	217	10.092	4.906	5-25
Wave II	922	7.333***	3.446	5-25	218	9.014	4.765	5-25
Wave III	745	7.851***	3.816	5-25	188	9.144	4.980	5-25
Wave IV	759	8.066	4.040	5-25	193	8.679	5.038	5-25
Anxiety								
Wave I	921	7.581***	2.930	5-25	217	9.359	4.293	5-25
Wave II	921	6.683***	2.637	2-25	218	8.174	4.160	5-25
Wave III	743	6.868***	2.852	5-25	188	7.856	3.806	5-25
Wave IV	758	7.140*	3.018	5-25	193	7.777	3.630	5-25
Hostility								
Wave I	921	6.458***	2.596	5-25	217	7.230	3.536	5-25
Wave II	921	6.124**	2.360	5-25	218	6.697	3.201	5-25
Wave III	744	6.413*	2.829	5-25	188	6.883	3.212	5-25
Wave IV	757	6.481	2.925	5-25	193	6.658	3.120	5-25
Prior Mental Health	925	2.464***	1.094	1-5	218	2.922	1.191	1-5
Age	925	26.871***	7.584	15-68	218	29.821	7.178	16-53
Family Emotional Support	925	23.456	3.680	7-28	218	23.633	3.999	7-28
Family Conflict	925	6.205	2.175	3-12	218	6.048	1.888	3-12
Family Instrumental Support	925	16.428	2.930	5-20	218	16.206	3.668	5-20
Strain	925	14.037***	4.689	0-27	218	16.922	4.954	0-27
Instrumental Strain	925	2.365***	1.357	0-4	218	2.729	1.322	0-4
Functional Strain	925	1.45	0.767	0-2	218	1.491	0.733	0-2
Parenting Strain	925	1.128*	1.333	0-4	218	1.431	1.269	0-4
Domestic Violence Strain	925	0.16***	0.493	0-2	218	0.427	0.677	0-2

Statistically significant gender difference: *p < .05. **p < .01. ***p < .001

	Percentage
Race	
White	36%
Black	51%
Other	12%

	Women	Men
Reincarceration	Percent Reincarcerated	
Wave II	5.046%	6.833%
Wave III	12.234%	21.074%
Wave IV	15.544%	28.458%

Table 2. Mixed Effects Regression of Depression on Gender, Family Support/Conflict, Strain, and Controls

	Mixed Effects Models, Depression							
	Model 1		Model 2		Model 3		Model 4	
	B	SE	B	SE	B	SE	B	SE
Female	1.316	0.248***	0.795	0.227***	0.788	0.214***	0.454	0.213*
Race								
Black	-0.441	0.209*	-0.193	0.190	-0.169	0.180	-0.360	0.177*
Other	-0.087	0.316	0.090	0.287	-0.071	0.271	-0.220	0.265
Age	0.018	0.013	0.012	0.012	0.009	0.011	0.007	0.011
Previous Negative Mental Health			1.235	0.078***	1.025	0.076***	0.878	0.076***
Family Emotional Support					0.059	0.036	0.047	0.035
Family Conflict					0.470	0.050***	0.439	0.049***
Family Instrumental Support					-0.119	0.043**	-0.094	0.042*
Strain							0.139	0.018***
Instrumental Strain								
Functional Strain								
Parenting Strain								
Domestic Violence Strain								
Constant	7.667	0.380***	4.625	0.395***	10.002	0.690***	8.194	0.711***
N	1143							
	*p < .05. **p < .01. ***p < .001							

	Mixed Effects Models, Depression (cont.)									
	Model 5		Model 6		Model 7		Model 8		Model 9	
	B	SE	B	SE	B	SE	B	SE	B	SE
Female	0.714	0.212**	0.761	0.213***	0.741	0.214**	0.687	0.217**	0.617	0.214**
Race										
Black	-0.323	0.181	-0.253	0.180	-0.205	0.180	-0.197	0.180	-0.389	0.180*
Other	-0.206	0.269	-0.095	0.269	-0.084	0.270	-0.117	0.271	-0.236	0.268
Age	0.005	0.011	0.013	0.011	0.009	0.011	0.008	0.011	0.007	0.011
Previous Negative Mental Health	0.959	0.076***	1.012	0.076***	1.004	0.076***	1.004	0.076***	0.938	0.076***
Family Emotional Support	0.045	0.036	0.051	0.036	0.057	0.036	0.061	0.036	0.043	0.036
Family Conflict	0.458	0.049***	0.457	0.050***	0.472	0.050***	0.463	0.050***	0.447	0.049***
Family Instrumental Support	-0.085	0.043*	-0.117	0.042**	-0.116	0.043**	-0.122	0.043**	-0.090	0.043*
Strain										
Instrumental Strain	0.322	0.064***							0.263	0.065***
Functional Strain			0.422	0.109***					0.283	0.112*
Parenting Strain					0.171	0.062**			0.078	0.064
Domestic Violence Strain							0.425	0.155**	0.304	0.156
Constant	9.291	0.697***	9.407	0.703***	9.921	0.689***	9.975	0.688***	8.968	0.705***
N	1143									
	*p < .05. **p < .01. ***p < .001									

Table 3. Mixed Effects Regression of Anxiety on Gender, Family Support/Conflict, Strain, and Controls

	Mixed Effects Models, Anxiety							
	Model 1		Model 2		Model 3		Model 4	
	B	SE	B	SE	B	SE	B	SE
Female	1.269	0.195***	0.883	0.180***	0.869	0.173***	0.626	0.173***
Race								
Black	-0.423	0.165*	-0.242	0.151	-0.237	0.145	-0.377	0.144**
Other	-0.038	0.249	0.092	0.228	-0.023	0.219	-0.131	0.215
Age	-0.004	0.010	-0.009	0.009	-0.011	0.009	-0.012	0.009
Previous Negative Mental Health			0.914	0.062***	0.775	0.062***	0.667	0.062***
Family Emotional Support					0.057	0.029	0.048	0.029
Family Conflict					0.357	0.040***	0.334	0.039***
Family Instrumental Support					-0.063	0.035	-0.045	0.034
Strain							0.102	0.014***
Instrumental Strain								
Functional Strain								
Parenting Strain								
Domestic Violence Strain								
Constant	7.429	0.299***	5.180	0.314***	8.474	0.557***	7.155	0.577***
N	1143							

*p < .05. **p < .01. ***p < .001

Mixed Effects Models, Anxiety (cont.)

	Model 5		Model 6		Mode l 7		Model 8		Model 9	
	B	SE	B	SE	B	SE	B	SE	B	SE
Female	0.827	0.173***	0.852	0.173***	0.837	0.173 ***	0.767	0.175***	0.727	0.174***
Race										
Black	-0.325	0.147*	-0.289	0.146*	-0.262	0.145	-0.266	0.145	-0.374	0.147*
Other	-0.101	0.219	-0.038	0.218	-0.032	0.219	-0.070	0.218	-0.135	0.218
Age	-0.013	0.009	-0.008	0.009	-0.011	0.009	-0.012	0.009	-0.013	0.009
Previous Negative Mental Health	0.737	0.062***	0.767	0.061***	0.760	0.062***	0.754	0.062***	0.716	0.062***
Family Emotional Support	0.049	0.029	0.052	0.029	0.055	0.029	0.059	0.029*	0.049	0.029
Family Conflict	0.350	0.040***	0.348	0.040***	0.358	0.040***	0.349	0.040***	0.341	0.040***
Family Instrumental Support	-0.043	0.035	-0.061	0.034	-0.061	0.034	-0.065	0.034	-0.048	0.035
Strain										
Instrumental Strain	0.184	0.052***							0.141	0.0532**
Functional Strain			0.260	0.088**					0.169	0.091
Parenting Strain					0.117	0.050*			0.053	0.052
Domestic Violence Strain							0.429	0.125**	0.358	0.126**
Constant	8.069	0.566***	8.108	0.569***	8.418	0.557***	8.448	0.555***	7.878	0.572***
N	1143									

*p < .05. **p < .01. ***p < .001

Table 4. Mixed Effects Regression of Hostility on Gender, Family Support/Conflict, Strain, and Controls

	Mixed Effects Models, Hostility							
	Model 1		Model 2		Model 3		Model 4	
	B	SE	B	SE	B	SE	B	SE
Female	0.660	0.168***	0.378	0.160*	0.377	0.152*	0.256	0.154
Race								
Black	0.015	0.142	0.146	0.134	0.159	0.127	0.089	0.128
Other	0.082	0.214	0.176	0.202	0.062	0.192	0.008	0.191
Age	-0.029	0.009**	-0.032	0.008***	-0.033	0.008***	-0.034	0.008***
Previous Negative Mental Health			0.667	0.055***	0.527	0.054***	0.473	0.055***
Family Emotional Support					0.020	0.026	0.015	0.025
Family Conflict					0.349	0.035***	0.338	0.035***
Family Instrumental Support					-0.022	0.030	-0.013	0.030
Strain							0.051	0.013***
Instrumental Strain								
Functional Strain								
Parenting Strain								
Domestic Violence Strain								
Constant	7.128	0.258***	5.488	0.278***	8.877	0.489***	8.221	0.513***
N	1143							
	*p < .05. **p < .01. ***p < .001							

Mixed Effects Models, Hostility (cont.)

	Model 5		Model 6		Model 7		Model 8		Model 9	
	B	SE	B	SE	B	SE	B	SE	B	SE
Female	0.343	0.151*	0.374	0.152*	0.371	0.152*	0.291	0.153	0.270	0.153
Race										
Black	0.086	0.129	0.150	0.128	0.154	0.128	0.135	0.127	0.075	0.129
Other	-0.001	0.192	0.059	0.192	0.060	0.192	0.023	0.191	-0.033	0.192
Age	-0.035	0.008***	-0.033	0.008***	-0.033	0.008***	-0.034	0.008***	-0.036	0.008***
Previous Negative Mental Health	0.496	0.054***	0.526	0.054***	0.524	0.054***	0.509	0.054***	0.483	0.055***
Family Emotional Support	0.013	0.026	0.019	0.026	0.019	0.026	0.022	0.025	0.016	0.025
Family Conflict	0.344	0.035***	0.348	0.035***	0.350	0.035***	0.343	0.035***	0.339	0.035***
Family Instrumental Support	-0.006	0.030	-0.022	0.030	-0.022	0.030	-0.024	0.030	-0.009	0.030
Strain										
Instrumental Strain	0.151	0.045**							0.144	0.047**
Functional Strain			0.046	0.077					-0.020	0.080
Parenting Strain					0.023	0.044			-0.018	0.046
Domestic Violence Strain							0.363	0.110**	0.341	0.111**
Constant	8.545	0.497***	8.812	0.501***	8.866	0.489***	8.854	0.487***	8.575	0.503***
N	1143									

*p < .05. **p < .01. ***p < .001

Table 5. Logit Models Reincarceration

	Logit Models, Reincarceration											
	Model 1			Model 2			Model 3			Model 4		
	B	SE	Odds Ratio	B	SE	OR	B	SE	Odds Ratio	B	SE	Odds Ratio
Female	-0.773	0.242**	0.462	-1.098	0.293***	0.334	-0.905	0.256***	0.405	-0.802	0.247**	0.448
Race												
Black	0.031	0.185	1.032	0.166	0.220	1.181	0.092	0.195	1.096	0.036	0.189	1.037
Other	0.132	0.270	1.141	0.256	0.322	1.292	0.175	0.283	1.191	0.160	0.275	1.174
Age	-0.050	0.012***	0.951	-0.061	0.015***	0.941	-0.051	0.013***	0.951	-0.047	0.013***	0.954
Previous Negative Mental Health	0.016	0.079	1.016	-0.249	0.098*	0.780	-0.105	0.085	0.901	-0.042	0.082	0.959
Family Emotional Support	0.047	0.036	1.048	0.025	0.043	1.026	0.036	0.038	1.037	0.046	0.037	1.047
Family Conflict	0.243	0.050***	1.275	0.111	0.060	1.118	0.185	0.053***	1.203	0.213	0.052***	1.238
Family Instrumental Support	-0.041	0.043	0.960	-0.009	0.051	0.991	-0.032	0.045	0.969	-0.038	0.044	0.963
Strain	0.005	0.019	1.005	-0.043	0.023	0.958	-0.011	0.020	0.989	0.001	0.019	1.001
Depression				0.305	0.026***	1.356						
Anxiety							0.174	0.026***	1.190			
Hostility										0.100	0.025***	1.105
Constant	0.646	0.742	1.908	-1.825	0.907*	0.161	-0.577	0.799	0.561	-0.232	0.787	0.793
N	1143											
	*p < .05. **p < .01. ***p < .001											