

EXAMINING THE IMPACT OF PARENTHOOD AND FAMILY CONNECTEDNESS  
ON OFFENDERS' REENTRY EXPERIENCES

by

Jessica Grossmann  
A Dissertation  
Submitted to the  
Graduate Faculty  
of  
George Mason University  
in Partial Fulfillment of  
The Requirements for the Degree  
of  
Doctor of Philosophy  
Psychology

Committee:

\_\_\_\_\_ Dissertation Director

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ Department Chairperson

\_\_\_\_\_ Program Director

\_\_\_\_\_ Dean, College of Humanities and Social  
Sciences

Date: \_\_\_\_\_ Summer Semester 2015  
George Mason University  
Fairfax, VA

Examining the Impact of Parenthood and Family Connectedness on Offenders' Reentry  
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A Dissertation submitted in partial fulfillment of the requirements for the degree of  
Doctor of Philosophy at George Mason University

by

Jessica Grossmann  
Master of Arts  
George Mason University, 2012

Director: Lauren Bennett Cattaneo, Professor  
Department of Psychology

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Fairfax, VA



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## **DEDICATION**

Thank you to my husband, Dan, for all of your support and encouragement throughout this process. To say I could not have done this without you is an understatement.

## **ACKNOWLEDGEMENTS**

I would like to thank my family and friends for their unconditional support throughout this process. I want to thank my husband, Dan, for his patience and humor, my brother Casey for his support and writing expertise, and my friend Kelly for her validation and statistics magic. In addition, my committee, Drs. Cattaneo, Tangney, and Esposito-Smythers, were of invaluable help, and contributed wonderful ideas and research implications. Thank you to my labmates for taking energizing breaks with me, in the form of long walks to find coffee. Finally, thank you to Dr. Jeffrey Stuewig for your guidance and wisdom in statistics.

## TABLE OF CONTENTS

	Page
List of Tables .....	vii
List of Figures .....	viii
Abstract .....	ix
Chapter One .....	1
Offender Risks in Reentry .....	2
Family Support is a Key Aspect of Reintegration .....	4
Measuring Social Networks Through Family Connectedness .....	8
Facilitating Relationships During Incarceration .....	10
The Current Study .....	11
Chapter Two .....	13
Participants .....	13
Procedures .....	15
Measures .....	15
Data Analysis Plan .....	19
Chapter Three .....	22
Sample Description .....	22
Hypotheses 1 and 2 .....	30
Hypotheses 3 and 4 .....	34
Chapter Four .....	44
Parents' and families' experience of incarceration .....	45
Family connectedness as a (non) predictor of post-release success .....	47
The impact of contact on family connectedness .....	49
Limitations .....	52
Implications for research .....	53
Implications for practice .....	56
Chapter Five .....	60

Appendix.....	61
References.....	84

## LIST OF TABLES

Table	Page
Table 1. Descriptive statistics for full sample.....	22
Table 2. Descriptive statistics of sample used to examine predictors of post-release outcomes (hypotheses 1 and 2).....	25
Table 3. Descriptive statistics of sample used to examine changes in family connectedness (hypotheses 3 and 4).....	29
Table 4. Bivariate relationships between family connectedness and post-release outcomes (hypotheses 1 and 2).....	30
Table 5. Multiple regression analyses predicting post-release outcomes (hypotheses 1 and 2).....	32
Table 6. Bivariate relationships between family connectedness, contact with family members, and types of contact (hypotheses 3 and 4).....	36
Table 7. Multiple regression analyses predicting changes in family connectedness (hypotheses 3 and 4).....	39



## LIST OF FIGURES

Figure	Page
Figure 1. Interaction of family connectedness and parenthood predicting mental health symptoms one-year post-release .....	34
Figure 2. Interaction of phone call contact and parenthood predicting change in family connectedness .....	43

## **ABSTRACT**

### **EXAMINING THE IMPACT OF PARENTHOOD AND FAMILY CONNECTEDNESS ON OFFENDERS' REENTRY EXPERIENCES**

Jessica Grossmann, Ph.D.

George Mason University, 2015

Dissertation Director: Dr. Lauren Bennett Cattaneo

Approximately 12.9 million individuals are released from jails each year into communities, where they are at-risk for recidivism, homelessness, substance abuse, difficulty transitioning into new employment roles, and other negative outcomes. Research has examined the reentry process for offenders, and suggests that family relationships may influence the likelihood of success during reentry. However, this literature focuses on the broad population of offenders, and has not identified whether family relationships influence some groups of offenders differently. Incarcerated parents have additional complexities within their family relationships, and the current study investigated whether parents' post-release outcomes are impacted differently by family connectedness. This study then explored whether contact with family during incarceration predicts changes in family connectedness. Data were drawn from a longitudinal study of male and female felony offenders in a county jail ( $N=238$ ). Results

of multiple regression analyses determined that family connectedness does not predict post-release outcomes (i.e. recidivism), except that among nonparents higher family connectedness predicts better mental health post-release. In addition, results suggest that contact by family members improves perceptions of family connectedness for both parents and nonparents. Further, phone calls from family may be an especially important intervention for parents to increase family connectedness.

## CHAPTER ONE

Individuals with criminal histories represent a large and at-risk population. Approximately 12.9 million individuals are released from jails each year into communities (Minton, 2011; West, Sabol, & Greenman, 2010), where they are at-risk for recidivism, homelessness, substance abuse, difficulty transitioning into new employment roles, and other negative outcomes (see Spjeldnes, Jung, & Yamatani, 2014). These outcomes affect not only inmates, but also their families. Research has examined the reentry process for the general population of offenders, but has not focused on the difficulties facing post-incarcerated parents.

A recent statistic suggests that over half of individuals incarcerated in prisons are parents (Maruschak, Glaze, & Mumola, 2010). While inmates' reentry may impact families of various constellations, the re-integration of parents into the community post-release may have an even greater impact on family members. Family support is important to offenders pre-release, especially parents, as they make preparations to rejoin their families (Richie, 2001; Arditti, Smock, & Parkman, 2005). Family members anticipate and prepare for this reunion, and this particularly affects children and their caretakers (Glaze & Maruschak, 2008; Yocum & Nath, 2011). Thus, while a bidirectional relationship exists between inmates' family support and reentry outcomes (e.g. Wolff & Draine, 2004), it is possible that this relationship is especially important for parents.

This study explores the importance of the connection among family members for parents being released from incarceration, and the extent to which contact in jail changes those connections. Before describing the study, I will review the literature regarding offenders' reentry experiences both with and without the context of parenthood, the importance of family support in general and family connectedness in particular, and contact with family during incarceration as a potential component of that dynamic.

### **Offender Risks in Reentry**

The reentry process is difficult for most offenders, and is compounded by their individual struggles, which may include past substance use, association with antisocial peers, mental illness, chronic health problems, homelessness, and parenting stress (Luther, Reichert, Holloway, Roth, & Aalsma, 2011; Davis & Pacchiana, 2004; Levin, Culhane, DeGenova, O'Quinn, & Bainbridge, 2009). Offenders report that they are likely to re-use substances post-release (Luther, et al., 2011), and substance use post-release frequently leads to recidivism (Blumstein & Beck, 2005; Davis, Bahr, & Ward, 2012). In fact, regardless of the offense, nearly 50% of offenders recidivate and are re-arrested within three years of their release (Langan & Levin, 2012). During reentry, offenders often face challenges obtaining housing and employment (Luther, et al., 2011), and without this stability may cycle back into the criminal justice system (Davis, Bahr, & Ward, 2012). Many inmates struggle with mental health concerns even prior to incarceration (Osher, Steadman, & Barr, 2003), and the stress of reentry can intensify this symptomology. Research consistently demonstrates that offenders are at risk during the

reentry process, yet there may be individual factors that make this process more or less difficult.

One such individual factor is parenthood. The reentry process is certainly different for parents, given their additional concerns regarding reunification with children (e.g. Michalson, 2011; Smith, Krisman, Strozier, & Marley, 2004), but there is also some evidence that the process may be more difficult. For example, some studies indicate that parents report using substances to cope when relationships with children are strained (Davis, Bahr, & Ward, 2012), have additional concerns regarding employment in order to provide for their children (Arditti, Smock & Parkman, 2005; Clarke et al., 2005; Magaletta & Herbst, 2001), and a link has been established between perceived relationships with children and symptoms of depression post-release (Lanier, 1993). On the other hand, offenders often report their children are motivators to desist from substance use and criminal activity (Buchanan et al., 2011; Davis, Bahr, & Ward, 2012). Thus, having children may improve or exacerbate offenders' reentry experiences, and offenders' reentry experiences differ based on whether they have children.

Research has not explored whether potential mechanisms that influence offenders' success post-release impact parents and nonparents differently. A greater understanding of those mechanisms could inform efforts to support offenders. One particular factor that influences offenders, but perhaps especially parents, is family support.

## **Family Support is a Key Aspect of Reintegration**

Family relationships are an important component in understanding offenders' experiences during and after incarceration. Several well-known theories, including attachment theory (Bowlby, 1980; Hairston, 1998; Genty, 2002), life course theory (Sampson & Laub, 1993), and family systems theory (Bowen, 1978; Minuchin, 1974.), support the idea that family relationships may be particularly important to consider for parents. However, despite both theoretical support and some empirical evidence that parents have different experiences than offenders without children, it is unknown how parenthood continues to influence behavior post-release, or whether there are variables to consider above and beyond just having children. In the effort to understand how to best help parents, it is particularly important to identify mechanisms that explain their experiences, and that might be amenable to change. A potentially key mechanism is reliance on family support. As evidenced by theory and logic, family relationships can aid or hinder the reentry process, as the quality of these relationships tends to vary among offenders. For parents, who tend to view incarceration as a temporary separation from their children and rely on family members to care for them (Enos, 1997; Glaze & Maruschak, 2008), support received by family members may be particularly influential during reentry.

There is evidence that incarceration can be a period when offenders reflect on their family relationships, and contemplate ways to facilitate more prosocial roles post-release (Richards & Jones, 1997). Offenders may develop expectations about their family relationships post-release, and family support during incarceration may impact expectations of success and reintegration. For example, in a recent study by Visser and

O'Connell (2012), perceived family support and having children were both strong predictors of inmates' optimism about returning to the community. During incarceration, inmates also report that having children, wanting to return home, and wanting to give back to the community are reasons for desired desistance (Davis, Bahr, & Ward, 2012; Giordano, et al 2007). In sum, prior to release, offenders report that their family will be an important component of the reentry experience, and family support fuels positive intentions. However, after release, offenders are faced with the reality of their relationships, and expectations of support are tested.

When offenders' expectations hold true, and there is positive family support available upon release, there is more potential for positive outcomes during reentry. Research indicates when offenders are offered positive social support, they are more successful during the reentry process, and this effect remains when offenders perceive that the support is available (whether or not it actually is; Wolff & Draine, 2004). Research on the general inmate population suggests that inmates with stronger family and social connections have better post-release outcomes. The positive psychology and resilience literature indicates that relationships with friends and family serve as protective factors, which can buffer the effects of stress and adversity (Hamby, Banyard, & Grych, 2014), such as incarceration and reentry. To provide this buffering effect, perceptions of support, rather than tangible assistance, may be especially important. For example, offenders report that when they believe they have strong support and attachments with family members, these relationships positively facilitate the reentry process (Luther et al., 2011). In addition, perceived bonds with family members may prevent continued



engagement in criminal behavior (Laub & Sampson, 2003), and research suggests that family support is related to less recidivism (e.g. Shinkfield & Graffam, 2009; Brown, St. Amand, & Zamble, 2009), reduced substance use (Farrell, 2000; Staton-Tindell, Royse, & Leukefeld, 2007; Carmody, 2008), and reduces the effects of mental health stressors (Norris, 2009). Thus, perceptions of positive family support are a potential resource for offenders during reentry.

However, offenders' expectations are not always congruent with reality, and offenders do not always receive support, especially if maladaptive relationship patterns exist within the family. The separation of individuals from the community and their family network can strain their relationships, so even if the relationship was originally positive and supportive prior to incarceration, it can deteriorate during this period (Wolff & Draine, 2004; Genty, 2002). Supporting this contention, poorer family relationships have been associated with worse outcomes among parolees (Fendrich, 1991), and inmates who expect support and do not receive it report more depressive symptoms than inmates who do receive support post-release (Carlson & Cervera, 1992). Thus, family relationships not only serve as protective factors, as described above; family relationships can also be detrimental when offenders do not perceive that they are connected to or receiving support from the family.

If relationships with family are important considerations when examining any offender's reentry process, they may be particularly important for parents, who anticipate problems with their family and children during the post-release transition (Freudenberg, Daniel, Crum, Perkins, & Richie, 2005). When parents' concerns are unwarranted, and

they are indeed offered support, there is evidence that family relationships are beneficial for parents. For example, one study found that parents who indicated having “excellent” relationships with their children were less likely to recidivate at a six-month follow up, compared to parents who did not report this relationship (Bahr, Armstrong, Gibbs, Harris, & Fisher, 2005). In a separate study, fathers who were reunited with their children shortly after release were less likely to recidivate or use substances and worked more often at an eight-month follow up than fathers with less contact (Visher, Bakken, & Gunter, 2013). Strong bonds among family members appear to be a protective factor for parent offenders during reentry, such that they are related to reduced chemical dependency and potentially recidivism; improve parents’ mental health outcomes; and generate opportunities for reunification post-release (Hairston, 1991; Smith, Krisman, Strozier, & Marley, 2004). Thus, there is evidence that family support, not just identification as parents, influences parents’ reentry experience profoundly, and increases the likelihood that parents will succeed post-release.

There are two gaps in the literature involving family support and parenthood. First, many studies do not compare parents to non-parents, but only examine each group separately. Second, they focus on parents’ perceived relationships with their children, and many do not include other family members who may be influential. Prior research suggests that parents’ own parents may be instrumental in the reentry process: one study examined mothers’ own relationships with their parents, and determined that positive relationships six months prior to incarceration predicted less substance use even six months after release (Staton-Tindall et al. 2011). Further, extended family relationships

may be particularly important for parents who rely on family members to care for their children during their absence (Glaze & Maruschak, 2008). These family members may act as “gatekeepers” to children, regulating whether parents are able to communicate with their children during incarceration (Shlafer & Poehlmann, 2010). Parents who wish to be reunited with their children, or who report that their children are motivations to change, need the support of extended family in order to tap into this resource. Thus, the literature on family support suggests that relationships are important to consider when examining offenders’ reentry, and for parents, there are particular relationships with family members that may be most important: their children, their children’s caregivers, and their own parents.

### **Measuring Social Networks Through Family Connectedness**

The social support literature demonstrates the importance of social support on offenders’ reentry, and suggests that family is a key aspect of the social support network. However, there are a wide variety of ways of measuring social support (e.g. tangible support, emotional support, perceived support; Wolff & Draine, 2004), and the extent of the influence of social support depends on context. For inmates, it may be best to examine social relationships through offenders’ perceptions, and to focus on their sense of family connectedness.

The construct of family connectedness originates from Aron and Aron’s (1986) self-expansion model, which describes individuals’ incorporation of their relationships with others into their own identities. Although this theory aimed to understand the impact of close relationships, it has since been expanded to understand the integration of the

community in the self (Mashek, Cannaday, & Tangney, 2007). The paradigm of community connectedness (e.g. the family community, the peer community) is related to other important constructs, including community helping, social support, and scales of belonging, support, sense of community ties, and friendship (Mashek, Cannaday, & Tangney, 2007). Thus, the family connectedness construct goes beyond measures of social support or relationship quality, and examines the personal impact these relationships have on perceptions of the self, identity, and integration with the family network.

There are three reasons family connectedness seems a particularly relevant construct for inmates about to be released into the community. First, inmates reflect on their relationships during incarceration, and this integration of perceptions of relationships into their self-view could be more indicative of the quality of family support than any tangible measure. Second, unlike perceptions of connectedness within specific relationships, the construct of family connectedness focuses on the broader family. For inmates who may have relationships of varied quality with individual family members, this construct may more accurately tap into the perception of connectedness with the entire family overall. Third, measures of social support that are more concrete or behavioral include items that would be irrelevant in a jail setting (e.g. whether family members will provide specific resources). Family connectedness can be measured at the point of release, and does not rely on tangible resources family members are able to provide during incarceration. However, to date research has not examined the unique

relationship between family connectedness and post-release outcomes, and it is unknown whether family connectedness is truly a mechanism for post-release success.

### **Facilitating Relationships During Incarceration**

If offenders' perceptions of family connectedness are a mechanism for reentry success, facilitating positive relationships during incarceration becomes important. One intervention already available during incarceration is contact with family through visits, phone calls, or letters. Jail and prison policies regarding contact vary in terms of type and amount of communication allowed (Sturges & Hardesty, 2005), and contact in any form is regulated and costly for families (Hairston, 1996). When families are able to navigate these barriers, contact during incarceration has the potential to be meaningful in a variety of ways (Enos, 2001). For parents, contact may be particularly important. Contact with children during incarceration may decrease parents' and children's concerns about reunification post-release (Smith, Krisman, Strozier, & Marley, 2004), and may mend potentially ruptured bonds. Advocates argue for policies and interventions that consider the importance of these bonds, given that the period of separation, no matter how long, can impact connections quickly and permanently (Hairston, 1998). When children visit or call their parents, parents perceive their relationships with their children to be more positive (Snyder, Carlo, & Mullins, 2001; Poehlmann, 2005) and experience less parenting stress (Beckmeyer & Arditti, 2014). In contrast, when parents receive fewer visits they report more depressive symptoms (Poehlmann, 2005).

On the other hand, the financial cost of contact or more negative or damaged relationships with family may decrease the amount of contact inmates receive during

incarceration, potentially weakening connectedness to the family. This consequence may be especially difficult for parents, since family members are also caring for and regulating contact with inmates' children (Shlafer & Poehlmann, 2010; Poehlmann, 2003; Poehlmann, Shlafer, Maes, & Hanneman, 2008). A recent study suggests that when offenders have poorer relationships with caregivers, as indicated by conflict and lack of warmth, contact in the form of visitation or phone calls are less likely (Poehlmann, 2005). However, there is evidence that more contact with their children's caregivers improves inmates' perceptions of parenting alliance with the caregivers (Poehlmann, 2005), and may also strengthen family connectedness.

Few studies have empirically examined the impact of contact on offenders' evolving perceptions of family relationships during incarceration, and despite the literature advocating contact for incarcerated parents and their children, and petitions to examine means to improve offenders' relationships with the family (Poehlmann, 2005), it is unknown whether contact differently impacts the family relationships of offenders with and without children. From an advocacy standpoint, the incarceration period provides an opportunity to intervene with an at-risk population; if family connectedness is improved by contact during incarceration, and more family connectedness leads to success post-release, then it behooves the criminal justice system to facilitate this intervention.

### **The Current Study**

The current study seeks to address gaps in the literature regarding the post-release adjustment of a particularly important group of offenders. Specifically, we explore the following hypotheses:

1. Family connectedness prior to release will predict better adjustment (less recidivism and substance use, better mental health and community adjustment) one year post-release.

2. Parenthood will strengthen the relationship between family connectedness and post-release outcomes.

3. Contact with family members during incarceration will predict increases in family connectedness.

4. Contact during incarceration will be more strongly related to increases in ratings of family connectedness for inmates with children than for inmates without children.

## CHAPTER TWO

### Methods

This study is a secondary data analysis, using data collected as part of a longitudinal study examining moral emotions and criminal recidivism (Tangney, Mashek, & Stuewig, 2007).

### Participants

Participants were inmates held on felony charges in a county jail located outside of Washington, D.C. ( $N = 508$ ). Selection criteria for the parent study required that inmates were: 1) either sentenced to a term of four months or more or held on one or more felony charges with no bond or a bond of at least \$7,000; 2) assigned to the jail's medium or maximum-security general population; and 3) proficient in either English or Spanish. The current study drew data from interviews at baseline (Time 1), pre-release (Time 2), and one-year post-release (Time 3).

The longitudinal nature of the parent study resulted in missing data at each time point. Inmates were eligible for the Time 2 interview if they remained incarcerated at the jail for a minimum of six weeks following the Time 1 assessment; 414 participants met that criterion. Of those eligible participants, 93 did not complete the Time 2 interview, primarily because they were released early or before researchers were notified of release, provided invalid data in the Time 1 measure, or withdrew from the study. Of the 481



participants eligible for the Time 3 interview, 367 completed the assessment. Attrition was primarily due to difficulty contacting participants post-release. Finally, because participants did not always complete the full interview post-release, analyses utilizing Time 3 measures have varying sample sizes (see Table 2). For a detailed description of the parent study's longitudinal design and related attrition see Folk, Mashek, Stuewig, & Tangney (2015).

In addition to attrition due to longitudinal data collection, individuals whose responses were missing or invalid on key constructs (parenthood or family connectedness) were excluded from this study. Our final pool ( $N = 238$ ) yielded two overlapping subsamples for our two sets of hypotheses, described below ( $n = 176$ ;  $n = 189$ ).

**Hypotheses 1 and 2.** Participants included in these analyses ( $n = 176$ ) were interviewed shortly before their release into the community, and thus this sample was used to examine hypotheses 1 and 2<sup>1</sup>. Attrition analyses indicated participants with Time 2 pre-release data did not differ from participants without these data on any of the study variables.

**Hypotheses 3 and 4.** Participants included in these analyses ( $n = 189$ ) completed Time 2 interviews at the local jail<sup>2</sup>, and also completed the Time 1 measure of

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<sup>1</sup> The reduction in participants making up this sample is due to difficulty obtaining follow-up interviews pre- or post-transfer to new facilities. Participants who were transferred without notice or who were transferred to facilities unaffiliated with the parent study may have missed the interview or completed a partial interview.

<sup>2</sup> Only participants who completed a pre-release or pre-transfer interview at the local jail were included in these analyses, due to inconsistencies in the interview questions regarding contact conducted in Time 2 interviews at other facilities.

connectedness. Attrition analyses indicated that participants with both Time 1 and Time 2 connectedness data did not differ from participants missing these data on other study variables of interest.

### **Procedures**

The GMU Human Subjects Review Board reviewed and approved procedures and the U.S. Department of Health and Human Services provided a Certificate of Confidentiality to ensure the confidentiality of the data. Each interview was conducted with a trained graduate or undergraduate research assistant. Shortly after incarceration, participants completed a baseline structured interview (Time 1). Before being released or transferred from the jail, participants completed a face-to-face interview (Time 2). For Time 3 one-year post-release assessments, researchers contacted participants via phone or met in person (for participants who were re-incarcerated). Participants received a \$15-18 honorarium for completing the Time 1 interviews, a \$25 honorarium for completing the Time 2 assessment, and a \$50 honorarium for completing Time 3.

### **Measures**

**Parenthood.** Participants were asked if they had any children at each time point. Participants whose parental identity changed across time points, or who did not answer any question about children, were excluded from this study. Data were collected at Time 3 regarding number and age of children, and whether children are biological, adopted, or stepchildren. This information is described in Table 1.

**Family Connectedness.** Participants completed the Inclusion of Community in Self scale (ICS; Mashek, Cannaday, & Tangney 2007), through which they identified

their actual and desired levels of connectedness with various entities on a rating scale of six figures of circles overlapping to various degrees (representing “not at all connected” to “as connected as possible”). In the current study, we use one item to measure participants’ perceived actual levels of family connectedness with their current family at both the Time 1 intake interview and the Time 2 assessment (“Circle the picture that best describes your relationship with your current family”). For hypotheses 3 and 4, we created a difference score reflecting changes in family connectedness over the course of incarceration from the Time 1 intake interview to the Time 2 pre-release or pre-transfer interview.

**Recidivism.** The parent study assessed recidivism one-year post-release (Time 3) through both participant self-reports and official records. Participants reported whether they had been arrested and whether they had committed crimes without being detected, and the parent study also collected Official National Crime Information Center (NCIC) criminal records of arrests in this first year after release. Data were coded into 16 types of crimes (e.g. theft, drug offenses, murder, domestic violence), and the parent study created three variables to reflect the number of types of crimes (i.e. 0-16) in three categories: official arrests, self-reported arrests, and undetected offenses. These 16 crimes were then recoded into five categories proposed by the Bureau of Justice Statistics (violent crimes, property crimes, drug crimes, public-order crimes, and other; e.g. Mumola, 2000). Criminal versatility (the number of different types of crimes committed), rather than the frequency of arrests/offenses, was utilized because the type of crime is often confounded

with the frequency of arrests/offenses (e.g., violent offenses versus illegal substance use which may occur daily).

**Substance Use and Dependence.** Symptoms of substance use and dependence were assessed at Time 3 with Simpson and Knight's (1998) Texas Christian University: Correctional Residential Treatment Form, Initial Assessment (TCU-CRTF), which other research shows to be reliable with jail inmates (Simpson & Knight, 1998; Stuewig, Tangney, Mashek, Forkner, & Dearing, 2009). Four scales were created to capture symptoms of alcohol, marijuana, cocaine, and opiate dependence in the first year post-release, using symptoms of substance dependence domains outlined by the DSM-IV-TR (APA, 2000). Item responses ranged from 0 = "Never" to 4 = "7 or more times." For domains with multiple items, participant responses were averaged to compute a single score. A total score for each drug type was computed by taking the mean across domains. Given the similarities between cocaine and opiates (illegal, highly addictive) and the low rate of opiate use in the sample, a single category of hard drugs combined opiates and cocaine: hard drug use was defined as the higher of the two ratings for either cocaine or opiates.

**Mental Health.** At Time 3, the parent study assessed mental health symptoms using the PAI (Morey, 2007), a 344 item self-report measure that yields 11 clinical scales, four validity scales, five treatment scales, and two interpersonal scales. Item responses ranged from 1 = "False, not at all true" to 4 = "Very true." T-scores of 65 and above indicate borderline clinically significant problems; T-scores of 70 or above

indicate clinically significant symptoms. Four clinical scales of the PAI were used: depression, anxiety, features of borderline personality disorder, and stress.

**Community Functioning Index.** This index (CFI; Moore, Stuewig, & Tangney, in press) measures offenders' level of functioning in the community at Time 3, as demonstrated by participation in activities related to daily living. Items included 1) residential stability, 2) homeownership, 3) current marital status, 4) largest source of support in the past year, 5) valid driver's license, 6) educational and vocational upgrades, and 7) volunteerism in the community. The original CFI (Moore, Stuewig, & Tangney, in press) included an eighth item regarding financial support of children, but this item was excluded due to the confound with the current study's examination of parenthood.

**Employment.** During the Time 3 interview participants stated how much and in what capacity they were employed (i.e. full/part time/odd jobs), and the number of weeks they worked in the year post-release. A continuous variable was created to capture the number of hours participants worked over the entire year.

In order to create dependent variable constructs similar to other post-release adjustment models (see Moore, Stuewig, & Tangney, in press), within-group correlations of the observed recidivism, substance dependence, mental health, CFI, and employment variables were examined separately for parents and nonparents. Fisher's  $r$  to  $z$  transformation was utilized to test for significant differences between parent and nonparent groups, and after Bonferroni corrections, no significant differences were found between parents and nonparents on the correlations among these variables; thus, we were able to continue with construct creation. The four constructs – recidivism, substance

dependence, mental health, and community adjustment – were created by calculating the means of the standardized observed variables within each construct.

**Contact.** In the Time 2 interview, participants described the frequency of contact from various family members (spouse/significant other, parent(s), children under the age of 18, children 18 years and older, and other/extended family members) and type of contact (visitation, phone calls, or letters). Participants placed responses on a 7-point scale: 0 = never, 1 = once, 2 = less than once per month, 3 = once per month, 4 = two or three times per month, 5 = once per week, 6 = a few times per week, and 7 = every day.

**Length of incarceration.** This variable measures the amount of time, in days, participants were incarcerated for before their Time 2 pre-release interview.

### **Data Analysis Plan**

**Hypotheses 1 and 2.** Preliminary analyses include distributions and bivariate correlations among all variables for descriptive purposes and to assess normality and multicollinearity (see Table 3). Also for descriptive purposes, independent samples t-tests and chi-square analyses compared parents and nonparents on study variables. Hypotheses 1 and 2 were analyzed using three-step hierarchical regressions, one for each dependent variable (recidivism, substance dependence, mental health symptoms, and community adjustment). Variables were centered and an interaction term was created by multiplying the predictor by the moderator (Frazier, Tix, & Barron, 2004). Step 1 of the regression analysis included the control variables age, race, and gender, and step 2 included Time 2 family connectedness and parenthood. In step 3 we included the interaction term. When the interaction term had a significant relationship with the dependent variable, we used

the standardized regression coefficients to plot the simple intercepts and slopes, probing the two-way interaction (Preacher, Curran, & Bauer, 2012).

Power analyses using the statistical software G\*Power 3 (Faul, Erdfelder, Lang, & Buchner, 2007) suggest that the sample size for each analysis is large enough to detect small to medium effects in a multiple regression with seven predictors, one outcome variable, and a power level of 0.95.

**Hypotheses 3 and 4.** Preliminary analyses included descriptive statistics, bivariate correlations to explore relationships among continuous variables, and independent samples t-tests to compare parents and nonparents on study variables. Preliminary analyses also evaluated the mean level of change in family connectedness between Time 1 and Time 2. Linear hierarchical regression was used to explore hypotheses 3 and 4, one for each source of family member contact (block of all family contact, parents, children, and extended family). Variables were centered and an interaction term was created by multiplying the predictor by the moderator (Frazier, Tix, & Barron, 2004). The difference score of family connectedness over the course of incarceration (Time 2 - Time 1) was entered as the dependent variable in all analyses. Family connectedness at Time 1 was entered in step 1 of the regression analysis, to address potential regression to the mean (Fitzmaurice, 2001), and length of incarceration was entered into step 1 of the regression model in order to control for this variable's impact on opportunities to receive amounts of contact from family members. Demographic control variables were also included in step 1, which included age, race, and gender. Step 2 of the models included the contact variable of interest and the

parenthood variable, and step 3 then included the interaction term of parenthood and contact. To examine significant main effects of the continuous contact variables, we investigated mean differences using tertiary splits and ANCOVA analyses. Data were grouped using mean differences of the upper third (66<sup>th</sup> percentile and above) and the lower third (33<sup>rd</sup> percentile and below) of the sample. When the interaction significantly predicted the change in family connectedness, we explored the interaction using the standardized regression coefficients to plot the simple intercepts and slopes (Preacher, Curran, & Bauer, 2012).

When contact from various sources (different family members) predicted changes in family connectedness, post-hoc analyses explored whether family contact aggregated into types of contact (phone calls, letters, and visits) also predicted changes in family connectedness. Linear hierarchical regression was used, following the steps described above.

Power analyses using the statistical software G\*Power 3 (Faul, Erdfelder, Lang, & Buchner, 2007) suggest that the sample size for each analysis is large enough to detect small to medium effects in a multiple regression with seven or nine predictors, one outcome variable, and a power level of 0.95.



## CHAPTER THREE

### Results

#### Sample Description

As detailed in Table 1, the final pool of participants ( $N = 238$ ) was majority male ( $n = 161$ ; 67%), African American ( $n = 104$ ; 44%) or White ( $n = 86$ ; 36%), and averaged 30 years old. Similar to comparable studies (e.g. Maruschak, Glaze, & Mumola, 2010), the pool included many parents ( $n = 163$ ; 68%). Within this group, there was diversity in the types of family constellations. On average parents reported having between 2 and 3 children. The majority of parents in this study had biological children, but parents also reported having stepchildren ( $n = 11$ ) and adopted children ( $n = 5$ ). Parents were older than nonparents on average (parents:  $M = 36.07$ ,  $SD = 9.75$ ; nonparents:  $M = 27.10$ ,  $SD = 7.51$ ) and were significantly more likely than nonparents to be African American and female.

**Table 1. Descriptive statistics for full sample**

	All participants	Nonparents	Parents	Comparing parents and nonparents
Total sample size ( $N$ )	238	75	163	
Demographic variables				
<u>Age</u>	33.24 ( $M$ ) 10.00 ( $SD$ )	27.10 ( $M$ ) 7.51 ( $SD$ )	36.07 ( $M$ ) 9.75 ( $SD$ )	$t = -7.77^*$
<u>Sex</u> %( $n$ )				$\chi^2 = 11.29^*$
Male	68% (161)	83% (62)	61% (99)	

Female	32% (77)	17% (13)	39% (64)	
<u>Race %(<i>n</i>)</u>				$\chi^2 = 11.9^*$
African American	44% (104)	31% (23)	50% (81)	
White	36% (86)	37% (28)	36% (58)	
Other	20% (48)	33% (25)	14% (24)	
Number of types of crimes committed	0.51 ( <i>M</i> ) 0.89 ( <i>SD</i> )	0.43 ( <i>M</i> ) 0.84 ( <i>SD</i> )	0.56 ( <i>M</i> ) 0.92 ( <i>SD</i> )	$t = -0.98$
<u>Child Variables</u>				
<u>Number of Children</u>				
Pre-release	--	--	2.52 ( <i>M</i> )	
	--	--	1.31 ( <i>SD</i> )	--
Biological children <sup>a</sup>	--	--	53% (87)	--
Step-children <sup>a</sup>	--	--	7% (11)	--
Adopted children <sup>a</sup>	--	--	3% (5)	--

*Note.* <sup>a</sup>These data were only collected at Time 3, and 71 parents did not answer this question.

<sup>b</sup>This variable was created by calculating the average number of BJS crime categories committed in order to capture the versatility of crimes.

\*Statistically significant difference between parents and nonparents.

The sample also demonstrated variability in post-release outcomes, suggesting that a) participants in this sample were indeed high-risk, and b) there may be individual factors influencing participant's success during the reentry process. Among participants included in analyses for hypotheses 1 and 2, one third of the sample was re-arrested in the year post-release (30%), but nearly half of our participants reported committing crimes without getting caught (49%). Participants also reported using a variety of substances post-release: Nearly half the sample reported using alcohol (46%), and about one quarter used marijuana (22%) and hard drugs (26%). Participants who were younger or male were more likely to recidivate and use substances than those were older or female. Approximately half of the sample (52%) was adjusting poorly post-release, in that they earned credit for fewer than 4 of 7 adaptive behaviors on the CFI. Most participants

reported some level of mental health symptoms. Pre-release, a relatively substantial number of participants reported clinically significant symptoms ( $T$ -score over 65) of depression (20%), anxiety (14%), stress (33%) and features of borderline personality disorder (32%). This trend continued post-release: nearly a quarter of participants reported clinically significant symptoms of depression (18%), others reported symptoms of anxiety (13%), and approximately one third reported stress (30%) and features of borderline personality disorder (35%).

On average, participants felt moderately connected to their families pre-release. In our examination of potential differences in this reentry process based on parenthood, independent samples  $t$ -tests comparing parents ( $n = 123$ ) and nonparents ( $n = 53$ ) on variables relevant to hypotheses 1 and 2 indicated no significant differences between groups (see Table 2).

**Table 2. Descriptive statistics of sample used to examine predictors of post-release outcomes (hypotheses 1 and 2)**

	Full sample <i>N</i> = 176		Parents <i>n</i> = 123		Nonparents <i>n</i> = 53		Comparison of parents and nonparents
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
<u>Time 2 Family Connectedness</u> ( <i>n</i> =176) <sup>a</sup>	4.61	1.53	4.60	1.57	4.62	1.51	<i>t</i> = -0.06
<u>Recidivism</u> ( <i>n</i> =132) <sup>a</sup>	0.01	0.81	-0.08	0.76	0.05	0.82	<i>t</i> = -0.83
Self-reported arrests	0.52	0.86	0.36	0.63	0.59	0.93	<i>t</i> = -1.66
Official arrests	0.54	1.00	0.38	0.90	0.61	1.03	<i>t</i> = -1.46
Undetected offenses	0.97	1.20	1.05	1.38	0.94	1.27	<i>t</i> = 0.46
<u>Substance Dependence</u> ( <i>n</i> =140) <sup>b</sup>	0.00	0.72	-0.00	0.65	0.00	0.75	<i>t</i> = -0.02
Alcohol	0.61	1.02	0.69	1.04	0.57	1.02	<i>t</i> = 0.63
Marijuana	0.22	0.53	0.23	0.56	0.21	0.52	<i>t</i> = 0.15
Hard drugs	0.67	1.32	0.53	1.22	0.73	1.37	<i>t</i> = -0.80
<u>Time 2 Mental Health</u> ( <i>n</i> =171) <sup>c</sup>	0.00	0.88	-0.12	0.76	0.51	0.92	<i>t</i> = -1.15
Depression	53.74	11.30	52.87	10.23	54.13	11.76	<i>t</i> = -0.67
Anxiety	52.19	10.12	50.81	8.57	52.79	10.70	<i>t</i> = -1.27
Stress	59.84	12.62	57.83	12.13	60.72	12.78	<i>t</i> = -1.38
Borderline P.D.	59.30	12.67	58.14	11.70	59.81	13.08	<i>t</i> = -0.79
<u>Time 3 Mental Health</u> ( <i>n</i> =115) <sup>c</sup>	-0.01	0.86	0.06	0.95	-0.04	0.83	<i>t</i> = 0.54
Depression	54.13	10.44	56.03	11.28	53.40	10.07	<i>t</i> = 1.22
Anxiety	51.92	10.35	51.47	11.79	52.10	9.81	<i>t</i> = -0.29
Stress	58.53	11.35	60.77	12.93	57.69	10.67	<i>t</i> = 1.30
Borderline P.D.	59.82	11.85	60.83	12.66	59.43	11.65	<i>t</i> = 0.43

<u>Community Adjustment (n=131)<sup>d</sup></u>	0.02	0.82	0.04	0.76	0.02	0.84	<i>t</i> = 0.16
Total hours employed	1166.40	746.46	1211.90	755.82	1148.00	746.42	<i>t</i> = -0.77
CFI	0.36	0.19	0.34	0.20	0.36	0.19	<i>t</i> = 0.42

*Note.* <sup>a</sup>Recidivism, substance dependence, and community adjustment data were collected at the Time 3 interview. Composite variables (underlined) are averages of standardized versions of the observed variables listed beneath; original unstandardized means and standard deviations are presented for the observed variables.

Recidivism observed variables portray the number of types of crimes that participants committed in each category.

<sup>b</sup> Substance Dependence observed variables are presented as the percentage of endorsed items within each drug category.

<sup>c</sup>Mental Health observed variables are reported in *T*-scores, where a *T*-score of over 70 indicated clinical significance (according to PAI guidelines, Morey, 2007).

<sup>d</sup>The CFI variable is a percentage of participant's "credits" out of 7 possible items.

Participants included in analyses for hypotheses 3 and 4 were incarcerated for an average of 216 days: the shortest period of incarceration was 48 days, and the longest was 556 days. Despite this separation, participants reported being moderately connected to their families both at Time 1 and Time 2. On average participants received more contact through phone calls than visits or letters (see Table 3). Across all types of contact, on average participants communicated with family members on a monthly, rather than weekly or daily, basis. Only 8 participants reported that they did not receive any contact from any family member during incarceration. Other participants reported that they did not receive different types of contact: 26% did not receive visits, 11% did not communicate via letters, and 6% did not communicate via phone calls. The majority of participants were in contact with their significant others, when applicable (81%). Similarly, most parents were in contact with their children (84%), though 17 parents did not communicate with their children, and this included both children under and over age 18.

Independent samples t-tests comparing parents ( $n = 132$ ) and nonparents ( $n = 57$ ) on variables relevant to hypotheses 3 and 4 suggest that overall parents and nonparents had similar experiences pre-release, but a few differences did exist. Parents and nonparents did not differ in their reports of family connectedness pre-release, or on post-release substance use, community adjustment, or mental health. However, regression results suggest that parenthood predicts recidivism post-release, such that parents are more likely to recidivate ( $t(125) = 2.20, p = .03$ ). In addition, nonparents reported higher levels of family connectedness at Time 1, ( $t(124.99) = 2.22, p = .03$ ), received more visits during incarceration, ( $t(119.88) = 3.51, p < .01$ ), and received more contact from their own parents ( $t(137.83) = 3.63, p < .01$ ) than did parents.

**Table 3. Descriptive statistics of sample used to examine changes in family connectedness (hypotheses 3 and 4)**

	Full sample <i>N</i> = 189		Parents <i>n</i> = 132		Nonparents <i>n</i> = 57		Comparison of parents and nonparents
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
<u>Length of Incarceration</u>	216.36	104.90	209.77	103.38	219.15	105.80	<i>t</i> = -0.56
<u>Family Connectedness</u>							
Time 1	4.63	1.55	4.98	1.36	4.48	1.61	<i>t</i> = 2.22*
Time 2	4.64	1.54	4.79	1.42	4.58	1.58	<i>t</i> = 0.88
<u>Contact by Person</u>							
Spouse/Significant Other	4.02	2.23	3.80	2.33	4.11	2.19	<i>t</i> = -0.78
Parent	3.55	2.01	4.26	1.49	3.24	2.13	<i>t</i> = 3.63*
Children (all)	---	---	---	---	3.64	2.01	--
Children under 18	---	---	---	---	3.71	2.13	--
Children over 18	---	---	---	---	3.03	2.07	--
Other family	3.09	1.88	3.26	1.80	3.03	1.91	<i>t</i> = 0.74
<u>Contact by Type</u>							
Visitation	2.72	1.96	3.43	1.66	2.43	2.01	<i>t</i> = 3.51*
Phone calls	4.60	1.77	4.51	1.99	4.63	1.68	<i>t</i> = -0.40
Letters	3.31	2.16	3.45	2.29	3.25	2.11	<i>t</i> = 0.54

Note. \*Variable significantly different between parent and nonparent groups,  $p < .05$ .



## Hypotheses 1 and 2

As displayed in Table 4, pre-release family connectedness was significantly negatively correlated with Time 2 mental health symptoms, suggesting that participants with higher connectedness had fewer mental health symptoms pre-release; family connectedness was not significantly correlated with Time 3 mental health symptoms. Time 2 mental health symptoms were significantly positively correlated with Time 3 mental health symptoms, indicating that symptoms are connected across the one-year post-release. The relationship between symptoms at each time point was significant, but not equivalent, indicating that there may be other factors impacting this relationship.

**Table 4. Bivariate relationships between family connectedness and post-release outcomes (hypotheses 1 and 2)**

	1.	2.	3.	4.	5.	6.
1. Family Connectedness	1.00	--	--	--	--	--
2. Recidivism	.01	1.00	--	--	--	--
3. Substance Dependence	-.09	.60***	1.00	--	--	--
4. Time 2 Mental Health	-.27***	.22**	.32***	1.00	--	--
5. Time 3 Mental Health	-.14	.26**	.45***	.60***	1.00	--
6. Community Adjustment	.07	-.06	-.19*	-.42***	-.40***	1.00

*Note.* \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$

Results of multiple regression analyses did not support hypotheses 1 and 2: As demonstrated in Table 5, family connectedness pre-release did not significantly predict post-release recidivism, substance dependence, mental health symptoms, or community

adjustment. Parenthood did moderate the relationship between family connectedness and post-release mental health ( $t(111) = 2.23, p = .03$ ), but not in the direction hypothesized. As shown in Figure 1, a plot of the interaction suggests that higher family connectedness predicts better mental health symptoms for nonparents, but not for parents.

**Table 5. Multiple regression analyses predicting post-release outcomes (hypotheses 1 and 2)**

<b>Outcome</b> Predictors	<i>B (SE B)</i>	$\beta$	<i>R</i> <sup>2</sup>	Adj. <i>R</i> <sup>2</sup>	$\Delta R^2$	<i>F</i> Change	<i>df</i>
<b>Recidivism</b>							
Age	-0.01(.01)	-0.18*	---	---	-----	---	---
Race	0.07 (.10)	0.07	---	---	-----	---	---
Gender	0.37 (.16)	0.21*	---	---	-----	---	---
Family Connectedness	0.04 (.08)	0.07	---	---	-----	---	---
Parenthood	0.38 (.18)	0.22*	---	---	-----	---	---
F.C. x Parenthood	-0.06 (.10)	-0.09	0.01	0.05	0.00	0.39	1,125
<b>Substance Dependence</b>							
Age	-0.01 (.01)	-0.10	---	---	-----	---	---
Race	-0.04 (.09)	-0.04	---	---	-----	---	---
Gender	0.35 (.14)	0.22*	---	---	-----	---	---
Family Connectedness	-0.04 (.07)	-0.08	---	---	-----	---	---
Parenthood	0.15 (.16)	0.09	---	---	-----	---	---
F.C. x Parenthood	-0.03 (.09)	-0.04	0.07	0.03	0.00	0.08	1,133
<b>Mental Health Symptoms</b>							
Age	0.00 (.01)	-0.00	---	---	-----	---	---
Race	0.10 (.11)	0.09	---	---	-----	---	---
Gender	-0.13(.18)	-0.07	---	---	-----	---	---
Family Connectedness	-0.22(.09)	-0.40*	---	---	-----	---	---
Parenthood	0.01 (.20)	0.00	---	---	-----	---	---
F.C. x Parenthood	0.24 (.11)	0.35*	0.07	0.02	0.04	4.75*	1,108
<b>Community Adjustment</b>							

Age	0.00 (.01)	0.04	---	---	-----	---
Race	0.03 (.11)	0.03	---	---	-----	---
Gender	-0.06(.17)	-0.04	---	---	-----	---
Family Connectedness	-0.02(.09)	-0.03	---	---	-----	---
Parenthood	-0.06(.20)	-0.03	---	---	-----	---
F.C. x Parenthood	0.09 (.11)	0.14	0.02	-0.04	0.01 0.66	1,111

*Note.* For each regression, only control variables (age, race, gender) were entered at Step 1. Independent variables were entered in Step 2 (family connectedness and parenthood). The interaction term was entered alone as the final step. All parameters are for the model at the final step, with all variables included.

\* $p < .05$ ; \*\* $p < .01$

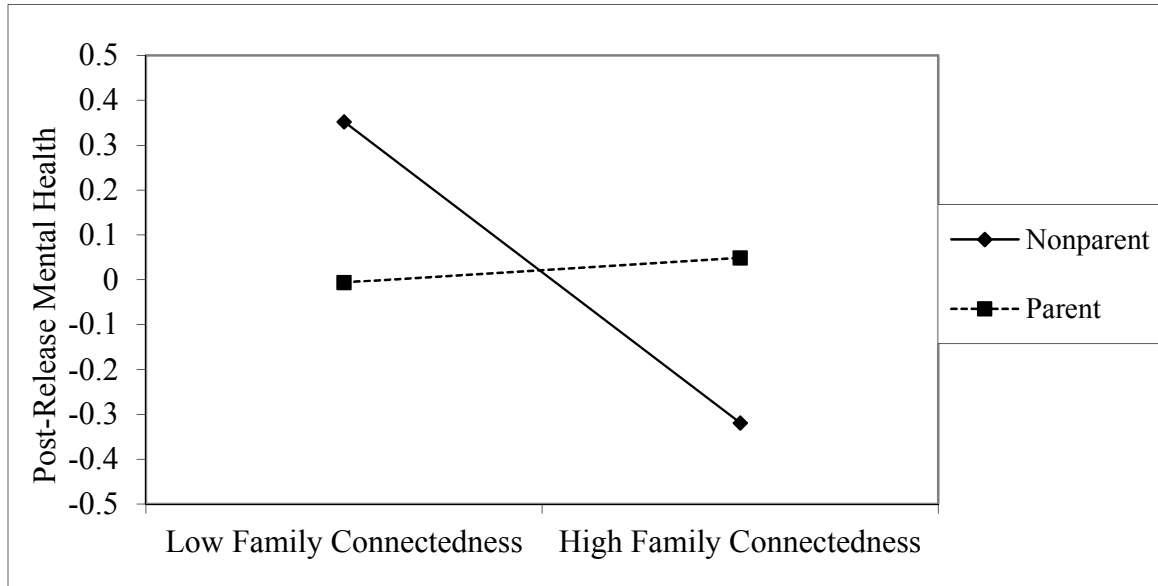


Figure 1. Interaction of family connectedness and parenthood predicting mental health symptoms one-year post-release

### Hypotheses 3 and 4

In terms of sources of contact, as displayed in Table 6, significant positive correlations existed between Time 1 and Time 2 family connectedness and contact from all family members, except children over the age of 18. In terms of types of contact, Time 1 and Time 2 family connectedness were significantly positively associated with visitation and phone calls with family members, but not with letters/written correspondence. Paired samples t-tests demonstrated that there are no mean changes in family connectedness between Time 1 and Time 2 ( $t(188) = -0.09, p = .93$ ), suggesting that on average family connectedness did not change over the course of incarceration. Similarly, stability correlations indicated that family connectedness was moderately stable over the course of incarceration ( $r(188) = .48, p < .01$ ), with about 25% of the variance in Time 2 connectedness explained by Time 1 connectedness. Taken together,

these statistics suggest that the remaining variance in Time 2 connectedness is likely explained by individual-level predictors rather than the common experience of incarceration.

**Table 6. Bivariate relationships between family connectedness, contact with family members, and types of contact (hypotheses 3 and 4)**

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
1. Length of incarceration	1.00	--	--	--	--	--	--	--	--	--	--
<b>Family connectedness</b>											
2. Time 1	-.13 <sup>+</sup>	1.00	--	--	--	--	--	--	--	--	--
3. Time 2	-.08	.48**	1.00	--	--	--	--	--	--	--	--
<b>Contact with family members</b>											
4. Significant Other/Spouse	-.14 <sup>+</sup>	.20*	.19*	1.00	--	--	--	--	--	--	--
5. Parents	-.05	.15*	.28**	.39**	1.00	--	--	--	--	--	--
6. Other family	-.08	.21**	.31**	.36**	.31**	1.00	--	--	--	--	--
7. Children (all)	.05	.31**	.31**	.32**	.15	.28**	1.00	--	--	--	--
8. Children (under age18)	.03	.40**	.44**	.34**	.21 <sup>+</sup>	.31**	.95**	1.00	--	--	--
9. Children (over age 18)	-.01	.13	.16	.51**	.10	.45**	.91**	.63**	1.00	--	--
<b>Types of contact</b>											
10. Visitation	-.04	.15*	.18*	.35**	.45**	.24**	.29**	.26*	.37**	1.00	--
11. Phone calls	-.08	.12 <sup>+</sup>	.29**	.64**	.53**	.44**	.53**	.56**	.62**	.39**	1.00
12. Letters	-.11	.08	.06	.55**	.32**	.18*	.01	-.06	.17	-.00	.31**

Note. <sup>+</sup> $p < .10$ ; \* $p < .05$ ; \*\* $p < .01$ .

Overall, results of multiple regression analyses (see Table 7) suggest that contact with family members predicts increases in family connectedness. When examining contact from all family members in a block, results suggest that no single form of contact with family members is most predictive of increases in family connectedness. For just the parent sample, contact with children was most predictive of increases in family connectedness ( $t(75) = 2.50, p = .02$ ).

In separate multiple regression analyses, we also explored whether main effects exist between contact with various types of family members and family connectedness. Results suggest that contact with parents ( $t(167) = 1.77, p = .08$ ) marginally predicted and contact with other family members ( $t(168) = 2.52, p = .01$ ) significantly predicted changes in family connectedness. Tertiary splits and the estimated marginal means of ANCOVA analyses for the highest and lowest groups showed that more family contact predicts greater increases in family connectedness (contact from offender's parent:  $M = 0.34$ ; other family contact:  $M = 0.23$ ), and less family contact predicts decreases in family connectedness (contact from offender's parent:  $M = -0.41$ ; other family contact:  $M = -0.53$ ). When applicable, contact with children under the age of 18 also predicted changes in family connectedness ( $t(85) = 3.11, p < .01$ ) and the same trend existed such that more contact increased connectedness ( $M = 0.72$ ) and less contact decreased connectedness ( $M = -0.38$ ). Contact with children over the age of 18 was not predictive of changes in connectedness. Fewer participants were included in this analysis ( $n = 45$ ) due to missing data and fewer participants reporting that they had children over the age of 18. With our sample size, we had ample power (.99) to detect an effect size of 0.49 or greater, but we



lacked power to detect smaller effects (G\*Power 3 software; Faul, Erdfelder, Lang, & Buchner, 2007). For the entire sample of participants, contact with spouses/significant others did not predict changes in family connectedness. Contrary to hypothesis 4, parenthood status did not moderate these relationships.

Post-hoc analyses also examined whether types of contact (i.e. phone calls, visits, letters) averaged across all family members are predictive of changes in family connectedness. In analyzing types of contact, results indicated that letters/written correspondence and visitation were not predictive of changes in connectedness. Phone calls demonstrated a significant main effect ( $t(172) = 3.36, p < .01$ ) in step 2 of this analysis ( $F(7, 172) = 11.25, p < .01$ ), such that more frequent phone calls predicted greater increases in connectedness ( $M = 0.25$ ) and less frequent calls predicted decreases ( $M = -0.46$ ). Further, parenthood moderated this relationship ( $t(171) = 2.75, p < .01$ ) in step 3 of the analysis. A plot of the interaction demonstrated that more frequent phone calls increased family connectedness among parents, but for nonparents more frequent phone calls did not predict changes in connectedness (see Figure 2).

**Table 7. Multiple regression analyses predicting changes in family connectedness (hypotheses 3 and 4)**

<b>Outcome Predictors</b>	<i>B (SE B)</i>	$\beta$	<i>R</i> <sup>2</sup>	Adj. <i>R</i> <sup>2</sup>	$\Delta R^2$	<i>F</i> Change	<i>df</i>
<b><u>Contact by Person</u></b>							
<b>Changes in F.C.<sup>a</sup></b>							
Age	0.00 (.01)	0.01	---	---	-----	---	---
Race	-0.16 (.18)	-0.07	---	---	-----	---	---
Gender	0.28 (.26)	0.08	---	---	-----	---	---
Time 1 Connectedness	-0.60(.08)	-0.57**	---	---	-----	---	---
Length of Incarceration	0.00(.00)	-0.01	---	---	-----	---	---
Contact with Spouse	0.03 (.06)	0.04	---	---	-----	---	---
Contact with Parents	0.11 (.07)	0.14	---	---	-----	---	---
Contact with Other Family	0.12 (.07)	0.15 <sup>+</sup>	0.34	0.30	0.05	3.37*	3,132
<b>Changes in F.C.<sup>b</sup></b>							
Age	0.01 (.02)	0.04	---	---	-----	---	---
Race	-0.41 (.26)	-0.16	---	---	-----	---	---
Gender	0.32 (.33)	0.09	---	---	-----	---	---
Time 1 Connectedness	-0.83 (.10)	-0.75**	---	---	-----	---	---
Length of Incarceration	0.00(.00)	-0.06	---	---	-----	---	---
Contact with Spouse	0.04 (.08)	0.06	---	---	-----	---	---
Contact with Parents	0.17 (.09)	0.21*	---	---	-----	---	---
Contact with Other Family	-0.10 (.10)	-0.11	---	---	-----	---	---
Contact with Children	0.19 (.08)	0.24*	0.49	0.43	0.08	3.03*	4, 75
<b>Changes in F.C.</b>							
Age	-0.01 (.01)	-0.08	----	---	-----	---	---

Race	-0.23 (.16)	-0.10	---	---	-----	---
Gender	0.27 (.26)	0.08	---	---	-----	---
Time 1 Connectedness	-0.60 (.08)	-0.57*	---	---	-----	---
Length of Incarceration	0.00(.00)	-0.02	---	---	-----	---
Contact with Spouse	0.05(.09)	0.08	---	---	-----	---
Parenthood	0.19 (.28)	0.06	---	---	-----	---
Contact x Parenthood	0.02 (.11)	0.02	0.32	0.28	0.00 0.03	1,139

**Changes in F.C.**

Age	-0.01 (.01)	-0.03	---	---	-----	---
Race	-0.17 (.14)	-0.08	---	---	-----	---
Gender	0.18 (.23)	0.06	---	---	-----	---
Time 1 Connectedness	-0.52 (.06)	-0.54**	---	---	-----	---
Length of Incarceration	0.00(.00)	-0.00	---	---	-----	---
Contact with Parents	0.22 (.12)	0.29 <sup>+</sup>	---	---	-----	---
Parenthood	0.16 (.25)	0.05	---	---	-----	---
Contact x Parenthood	-0.07 (.13)	-0.09	0.31	0.28	0.00 0.31	1,167

**Changes in F.C.**

Age	-0.01 (.01)	-0.06	---	---	-----	---
Race	-0.06 (.14)	-0.03	---	---	-----	---
Gender	0.20 (.22)	0.07	---	---	-----	---
Time 1 Connectedness	-0.50 (.06)	-0.53**	---	---	-----	---
Length of Incarceration	0.00(.00)	-0.01	---	---	-----	---
Contact with Other Family	0.25 (.10)	.33**	---	---	-----	---
Parenthood	0.07 (.23)	0.02	---	---	-----	---
Contact x Parenthood	-0.12(.11)	-0.14	0.29	0.26	0.01 1.15	1,168

**Changes in F.C.<sup>b</sup>**

Age	-0.02 (.02)	-0.08	---	---	-----	---
Race	-0.03 (.22)	-0.01	---	---	-----	---
Gender	0.51 (.31)	0.14	---	---	-----	---
Time 1 Connectedness	-0.75(.09)	-0.73**	---	---	-----	---
Length of Incarceration	0.00(.00)	-0.07	---	---	-----	---
Contact with Children Under 18	0.22 (.07)	0.28**	0.47	0.43	0.06 9.64**	1, 85

**Changes in F.C.<sup>b</sup>**

Age	-0.03 (.02)	-0.15	---	---	-----	---
Race	-0.36 (.31)	-0.16	---	---	-----	---
Gender	-0.56 (.35)	-0.24	---	---	-----	---
Time 1 Connectedness	-0.36(.09)	-0.52**	---	---	-----	---
Length of Incarceration	0.00(.00)	0.10	---	---	-----	---
Contact with Children Over 18	0.01 (.08)	0.01	0.33	0.23	0.00 0.00	1, 44

Contact by Type**Changes in F.C.**

Age	-0.01 (.01)	-0.08	---	---	-----	---
Race	-0.16 (.14)	-0.07	---	---	-----	---
Gender	0.13 (.22)	0.04	---	---	-----	---
Time 1 Connectedness	-0.50 (.06)	-0.52**	---	---	-----	---
Length of Incarceration	0.00(.00)	0.00	---	---	-----	---
Visitation	0.04(.11)	0.06	---	---	-----	---
Parenthood	0.09 (.25)	0.03	---	---	-----	---
Visitation x Parenthood	0.03 (.12)	0.04	0.28	0.24	0.00 0.08	1,173

**Changes in F.C.**

Age	-0.01 (.01)	-0.05	---	---	-----	---
Race	-0.08 (.14)	-.04	---	---	-----	---
Gender	0.17 (.22)	0.05	---	---	-----	---
Time 1 Connectedness	-0.51 (.06)	-0.53**	---	---	-----	---
Length of Incarceration	0.00(.00)	0.03	---	---	-----	---
Phone Calls	-0.01(.09)	-0.01	---	---	-----	---
Parenthood	0.01 (.23)	0.00	---	---	-----	---
Phone x Parenthood	0.30 (.11)	0.29**	0.34	0.31	0.03 7.57**	1,171

**Changes in F.C.**

Age	-0.02 (.01)	-0.11	---	---	-----	---
Race	-0.15 (.15)	-0.07	---	---	-----	---
Gender	0.14 (.23)	0.05	---	---	-----	---
Time 1 Connectedness	-0.49 (.07)	-0.50**	---	---	-----	---
Length of Incarceration	0.00(.00)	0.00	---	---	-----	---
Letters	-0.04 (.08)	-0.06	---	---	-----	---
Parenthood	0.14 (.25)	0.04	---	---	-----	---
Letters x Parenthood	0.09 (.10)	0.11	0.27	0.23	0.00 0.84	1,166

*Note.* For each regression, only independent control variables were entered at Step 1. The main independent variables of interest in each regression (type of contact and parenthood) were entered in Step 2. If applicable, the interaction term was entered alone as the third step. All parameters are for the model at the final step, with all variables included.

<sup>a</sup>F.C. stands for family connectedness.

<sup>b</sup>These regressions were only tested among the sample of parents.

\* $p < .05$ . \*\* $p < .01$  † $p < .10$ .

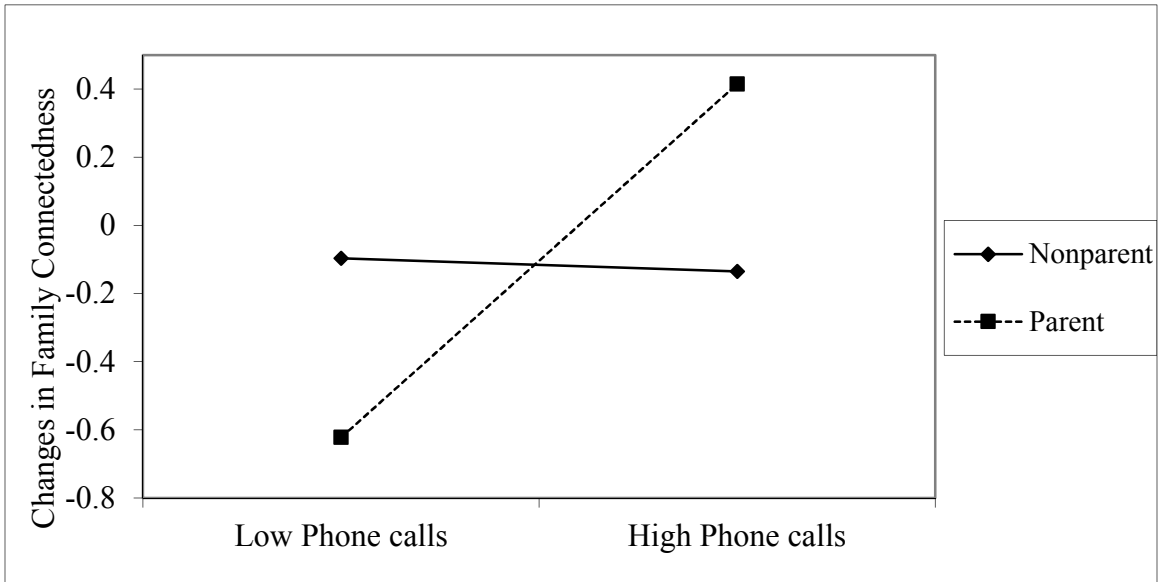


Figure 2. Interaction of phone call contact and parenthood predicting change in family connectedness

## CHAPTER FOUR

### Discussion

Overall, the sample represents a diverse group of offenders, in terms of demographics, post-release outcomes, and incarceration experiences. Descriptive statistics depict our sample as a high-risk group, due to the rates of criminal versatility, high substance dependence, mental health difficulties, and community maladjustment. Variance within these outcomes suggests that there are multiple factors occurring during and post-incarceration that influence offenders' risk in the reentry process. This variance presents us with an opportunity to explore predictors of post-release adjustment, such as family connectedness, and to consider influences during incarceration that impact these dynamics, such as contact with family. Results of this study suggest that family connectedness does not predict post-release outcomes, but is a malleable construct that is influenced by factors occurring during incarceration, including contact from various family members. Nonparents who are highly connected experience better mental health post-release. Compared to offenders without children, parents are more likely to recidivate. Phone calls seem to be particularly useful in facilitating increases in parents' perceptions of family relationships.

### **Parents' and families' experience of incarceration**

Prior research suggests that having children is one component of offenders' lives that has the potential to be beneficial or detrimental to their adjustment both in jail and in the community (e.g. Davis, Bahr, & Ward, 2012). Descriptively, results of the hypothesis tests in the current study suggest that in most ways, parents and nonparents do not substantively differ: parents and nonparents struggle post-release, and family contact is beneficial for both groups' perceptions of family connectedness. However, despite the general similarity, there were a few significant differences between offenders with and without children. At intake, nonparents reported feeling more connected to their families than parents. Consistent with prior literature (Wolff & Draine, 2004), it is possible that parents in this sample experienced more disconnect and strain with their families before entering jail. However, over time, this difference disappears, as both parents and nonparents reported similar levels of family connectedness prior to release. Participants in our sample were incarcerated on average for over six months; it is possible that during this lengthy separation, the differences between offenders that exist outside of jail, including nuances in family roles, become less influential.

In our sample, parents were more likely than nonparents to recidivate post-release. Prior literature regarding desistance (e.g. Sampson & Laub, 1993) suggests that men and younger individuals are more likely to engage in criminal activity, and our findings were consistent with this pattern, as younger participants and men were more likely to recidivate and use drugs post-release. After controlling for these effects, however, we found that parenthood also predicted recidivism, despite other theory indicating that having children may deter individuals from criminal behavior (Sampson &



Laub, 1993). These results suggest that there are other influences in parents' lives post-release that increase their risk of engaging in criminal behavior, and that although children may serve as reasons for wanting to desist (Davis, Bahr, & Ward, 2012), other risk factors may negate that protective factor.

Although they did not differ in perceptions of family connectedness pre-release, differences did exist in parents' and nonparents' experiences communicating with family members over the course of incarceration. Parents were less likely to receive visits, and any contact from their own parents, than offenders without children. Our sample of nonparents tended to be younger than parents, and it is possible they received more contact from their own parents because they still rely on them or perhaps lived with them prior to incarceration. Another interpretation is that in combination with parents' lower levels of family connectedness at intake, results support the notion that parents enter jail with more familial stress, and that this stress may subsequently reduce the likelihood that parents receive some types of family contact. Specifically, the finding that parents receive fewer visits and less contact from their own parents may be explained by the likelihood that offenders leave their children under the care of extended family (Glaze & Maruschak, 2008). It may be more difficult for grandparents (offenders' parents) caring for inmates' children to contact or visit inmates, due to the added burden of coordinating communication with children. Results do suggest that contact with their own parents can be particularly influential for parent offenders' perceptions of connectedness, indicating that this communication is important when parents are able to receive it.

### **Family connectedness as a (non) predictor of post-release success**

Family connectedness was not correlated with post-release recidivism, substance dependence, or community adjustment. It was, however, correlated with pre-release mental health, suggesting that individuals who reported high connectedness had better mental health. This is consistent with prior literature suggesting that as offenders prepare for the reentry process, perceptions of family relationships are influential (e.g. Luther et al., 2011). Further, our finding adds to other research in which offenders with better family relationships report feeling better about reintegrating with their communities and networks (Visher & O'Connell, 2012), and that family support buffers mental health difficulties (Norris, 2009).

Although family connectedness was related to mental health pre-release, these constructs were not related post-release. Family connectedness was measured as offenders' perceptions of their integration with families; pre-release, this construct may be more related to inmates' mental health because they have limited interactions with their families. In the community, offenders' mental health may be more related to other forms of family support, rather than perceptions of connectedness. Mental health across time points was significantly positively correlated, but this relationship was not very strong, suggesting that there are different factors that influence mental health at each time point.

Aside from these significant preliminary analyses, results of multiple regression analyses contradict hypothesis 1, despite prior theoretical and empirical literature suggesting that family support influences post-release adjustment (Shinkfield & Graffam, 2009; Brown, St. Amand, & Zamble, 2009; Farrell, 2000; Staton-Tindell, Royse, &

Leukefeld, 2007; Carmody, 2008). Pre-release family connectedness did not predict reentry outcomes one-year post-release. One possible explanation for our null results is that family connectedness measured before release is irrelevant to success measured after a full year, during which time there is likely much fluctuation in family relationships. In the year between Time 2 and Time 3, participants' perceptions of family connectedness likely changed several times, and later perceptions of family relationships might be more predictive of offenders' success. Prior research indicates that inmates' develop expectations of family support pre-release (Wolff & Draine, 2004), and that these expectations are not always accurate; therefore, revised reports of family connectedness, perhaps much sooner after release, could be a stronger predictor of reentry success.

Also contrary to hypotheses, the one subgroup for whom pre-release family connectedness predicted post-release outcomes was nonparents, in that among participants who felt highly connected with their families before their release, nonparents were more likely to have better mental health one year later. It is possible that this result stems from differences in the type of support that is meaningful to parents versus nonparents. For parents, who enter jails with concerns about how their absence will impact their children (Hairston, 1996; Genty, 2002), the perceptions of family connectedness may not be as important as more concrete assistance like childcare or levels of familial stress. Parents' mental health may be more dependent on these external factors in their relationships, as opposed to their own internal perceptions of whether they are connected with the family. The opposite may be true of nonparents, who do not have to manage added family stressors like childcare.

### **The impact of contact on family connectedness**

Results of analyses related to hypotheses 3 and 4 suggest that family connectedness is a malleable construct that can change over the course of incarceration, but that those changes are likely due to individual level predictors rather than the group-level experience of incarceration. Contact with various family members and contact of various types were related to connectedness at each time point. Offenders reporting higher connectedness at intake were likely to receive more contact in jail, and more contact in jail was also associated with higher levels of connectedness pre-release. This suggests that contact with family members influences offenders' perceptions of connectedness, and vice versa.

To summarize our findings succinctly, we determined that “more is better.” Results demonstrated that family contact predicted increases in offenders' perceptions of connectedness with family, and when offenders had less contact with their family, connectedness decreased. Contact with offenders' own parents, other/extended family members, and children under age 18 (if applicable) are particularly influential in predicting changes in family connectedness. For the entire sample, contact with other/extended family was most predictive of changes in connectedness. It is possible that regular communication with extended family may be indicative of broader integration of the family unit, suggesting that the family is more connected as a whole.

Contact with spouses or significant others functioned differently than contact with other types of family: it was most frequent, had the most variance across offenders, and did not predict changes in family connectedness. Prior to incarceration, significant others and spouses are likely the family members closest to offenders, and perhaps their most

meaningful adult relationships. Separation caused by incarceration may cause a major shift in the functioning and quality of these relationships, but may not impact other family relationships in the same way. Offenders may also view these intimate relationships as isolated from the rest of their family as a whole, and therefore their consideration of connectedness to the aggregate family may be unaffected.

When exploring whether different types of contact influence offenders' perceptions of family connectedness, results demonstrated that phone call contact predicted increases in family connectedness. Contact through letters and written correspondence was not correlated with connectedness at either time point, and was not predictive of changes in family connectedness. Contact via letters may be less meaningful for offenders' perceptions of family integration, since written correspondence is becoming an outdated form of communication and therefore offenders may not expect family members to communicate in this way. Written correspondence is also less interactive and personal than in-person visits or phone calls. However, visitation also was not predictive of changes in connectedness. Family members, not offenders, mainly control both of these forms of communication: offenders may not have access to letter-writing materials (i.e. pens are often considered a safety hazard since they can be used as weapons) and offenders cannot initiate visits. Knowing that offenders often utilize incarceration as a "reflection period" in which they consider ways to improve relationships (Richard & Jones, 1997), other forms of contact that offenders can partially control may be more influential to offenders' perceptions of their relationships. Although often expensive (Hairston, 1996), phone calls are typically more accessible for offenders, and are less

burdensome for family members. Thus, there are more opportunities for phone communication, initiated by both offenders and their family members, and this shared responsibility may increase offenders' perceptions of connectedness.

Results also demonstrated an interaction between phone call contact and parenthood status. More frequent phone calls increased family connectedness among parents, but for nonparents this relationship did not exist. When parents were examined in a separate block regression analysis, contact with children under age 18 was most predictive for parents' connectedness (not contact with other family members). Together, these findings are consistent with prior literature (Hairston, 1998) and logic that relationships with children are important to parents, and may be the most influential family members to consider. However, although undoubtedly important, it may also be harder for parents to receive contact from their children. Bringing children to jails and prisons requires effort and preparation, and caregivers must initiate and regulate this contact (Shlafer & Poehlmann, 2010). Phone calls are easier to coordinate, and thus it makes more sense that they are more influential for parents, because that is likely parents' primary source of communication with the people who matter most to them.

Despite the importance of communication with children under age 18, contact with children over age 18 was not related to either intake or pre-release connectedness for parents, and was not predictive of changes in connectedness. This null result may be due to our smaller sample size and lower power in analysis of parents with children over age 18, but it also possible that older children may not be as influential to parents' perceptions of integration and connection to the family unit. Presumably, older children

are autonomous and are unsupported by parents, whereas younger children require supervision and may be cared for by other family members while parents are in jail. Also, it is possible that relationships with older children are more strained, and remain so during incarceration, because older children have more awareness of parents' behaviors and the implications of parents being in jail.

### **Limitations**

The primary limitation of this study is our use of one item from the ICS to measure family connectedness. While it has conceptual merit, because it is an aggregate of family connectedness we cannot differentiate relationships with each family member.

In addition, this study has three limitations regarding our measurement of parenthood. First, our sample does not include people who become parents during or after incarceration, or those who lost their identity as parents (e.g. through divorce, death). This protected the results from confounds related to other changing family dynamics, but limits our interpretation of more complex relationships between offenders, their family, and how this impacts their post-release adjustment and pre-release contact. Second, the current study lacked data and sample size to be able to examine differences in parenthood based on level of responsibility for children or the salience of identity as a parent. Further, in our analyses focused on inmates with children over age 18, we only had enough power to detect a medium to large effect size; future research with a larger sample could explore whether contact with children over the age of 18 has an impact we were unable to detect here. Third, this study drew on participants from a large longitudinal study of both male and female offenders (Tangney, Mashek, & Stuewig,

2007). Given that prior research typically examines mothers and fathers separately, one of this study's strengths is that it includes parents overall; however, it may be beneficial, with the appropriate sample size, to also examine potential gender differences in parents' roles as parents and their family connectedness.

Finally, although this study is one of the first to examine different types of contact and contact with different family members jointly, we only measure the frequency of contact within each of these categories. The current study does not take the quality of contact into account, though results of hypotheses 3 and 4 suggest that frequency of contact is important, perhaps regardless of its quality. Also, our data are limited in that we do not know whether offenders or their family members initiated the contact. In order to broaden our understanding of how contact is beneficial during incarceration, future studies should measure contact quality and determine whether offenders or their family is more likely to initiate contact, and how this impacts perceptions of family relationships.

### **Implications for research**

The current study suggests that family connectedness is one meaningful way to understand offenders' perceptions of family relationships, but that it is not the only mechanism for post-release outcomes. Given the possibility parents and nonparents define connectedness differently, future research could provide a definition of connectedness in data collection, and explore whether that common reference point changes results. Future studies should also explore family connectedness post-release in order to determine if offenders' perceptions of connectedness change during and after this



transition, and whether these perceptions are stronger predictors of offenders' behaviors and experiences.

Further, the current study suggests that the aggregate of connectedness is important to understand; although our results suggest that family connectedness measured in this way does not predict post-release outcomes, results do suggest that it is a malleable construct during incarceration. Before ruling family connectedness out as a predictor of outcomes post-release, it would be important to explore whether connectedness to different family members individually (e.g. family members who live with the offender) is more predictive of reentry success. Future research should also examine whether perceptions of family of origin versus current family influence offenders' post-release adjustment differently. This comparison may be particularly important in understanding parents' experiences: for example, knowing that other family members may be caring for their children during incarceration (Glaze & Maruschak, 2008) and regulating contact between parent and child (Shlafer & Poehlmann, 2010), it would be useful to collect data regarding relationships with specific caregivers.

Our measurement of family connectedness was related to pre-release mental health, but not post-release mental health. Future research should attempt to disentangle the relationship between family connectedness and mental health, and identify what aspects of family relationships are more influential to post-release mental health. In addition, our findings suggest that interventions targeting family connectedness during incarceration have the potential to benefit the mental health of nonparent offenders as they adjust to community living, but that a gap still remains in understanding what impacts parents'

post-release mental health. It would be useful to explore other potential predictors of mental health specifically applicable to parents, such as stress related to childcare or interpersonal conflicts with children or caregivers.

Another important future direction for research is to examine how identifying parents in different ways – such as by level of childcare, custody, or financial responsibilities – would produce different results. Parents who are responsible for their children may also care more about how their relationships with their children are impacted during incarceration. These parents’ perceptions of family connectedness to their children could influence their behaviors post-release, or could be more malleable based on contact during incarceration. Further, future research should explore how family connectedness compares to other forms of family support in predicting post-release outcomes, and whether other forms of support are more influential for parents. Finally, knowing that parents are more likely to recidivate than offenders without children, research should examine what factors influence parents’ post-release recidivism, including greater stress, less tangible support, or barriers that may prevent parents from engaging in prosocial behaviors post-release (e.g. difficulty finding employment; Arditti, Smock & Parkman, 2005; Clarke et al., 2005; Magaletta & Herbst, 2001).

Results of the current study also suggest that communication with family members improves inmates’ perceptions of family connectedness. This finding illustrates that even during this period of separation offenders’ family relationships can change, and leads to more questions regarding our understanding of these dynamics. For example, it would be useful to examine whether increased contact also improves family members’ perceptions

of their relationships with offenders, and whether this is predictive of whether they provide support to offenders post-release. In addition, future studies could examine various components of contact and how it impacts family relationships, such as: exploring whether opportunities for contact impact the frequency of contact with family members, and whether this leads to increased satisfaction or relationship quality; identifying whether offenders or family members are more likely to initiate contact; and investigating whether content of the communication (e.g. discussions of current events versus family updates) influences offenders' perceptions of their integration with the family.

### **Implications for practice**

The current study set out to understand how parents and nonparents differ in their pre-release and post-release experiences, and with a few exceptions, parents and nonparents appear to be similar. Other research has examined the experiences of parents and nonparents in different marginalized populations, and also determined that the groups are overall fairly similar (Dunn & Cattaneo, 2012). This is important information for detention facilities to consider, as our results suggest that interventions would benefit both groups. For all offenders, relationships with family predicted increases in family connectedness. For nonparents, higher connectedness predicted better mental health during reentry, and contact with extended family members and their own parents was beneficial. For parents, it is still unknown what aspects of family relationships impact their mental health, but we do know that phone calls are a particularly influential form of contact, and contact with their children is important. Results suggest that a) some aspects

of family relationships should be addressed in order to improve reentry success, perhaps in addition to connectedness, and b) facilitating communication with family members is beneficial, and preparing offenders' for reentry may involve tailoring interventions towards contact with certain family members.

Since family connectedness was related to pre-release mental health, it would be beneficial to discuss inmates' perceptions and expectations of family relationships prior to their release, and to teach inmates' coping skills to use if their expectations of support are different from reality. Results indicate that communication with family members does facilitate changes in perceptions of those relationships. In order to maximize the benefits of this contact, inmates would benefit from programming that addresses communication: interventions could teach offenders how to seek help from family, how to have difficult conversations about their incarceration experiences with others, and how to express their needs in order to build (or rebuild) their support networks. Because contact with multiple family members improves family connectedness, including contact with their own parents, children under age 18, and extended family, a more general approach to teaching communication skills may be most effective and efficient.

Further, if parents are more at risk for recidivating post-release, interventions should be tailored to help parents prepare for this risk prior to reentry. Family connectedness does not appear to be a mechanism for improving reentry behavior for parents, but it is possible that other forms of family support would improve parents' experiences. Through workshops or classes, parents could practice ways to request tangible support with family even before release. Further, parents could learn and discuss

effective ways of managing child-rearing stress with other potential post-release stressors, such as finding employment.

One aspect of offenders' lives that may be particularly impacted by family relationships is mental health. In response to this difficulty, facilities could promote interventions addressing mental health symptoms during incarceration and teaching coping skills for mental health symptoms post-release. The general reentry literature indicates that many offenders, regardless of varied life and personal experiences, struggle with mental health difficulties during their involvement with the criminal justice system, and that these difficulties continue into the reentry process (Osher, Steadman, & Barr, 2003). In support of this, a large proportion of our sample reported difficulties with mental health, specifically related to stress and features of borderline personality disorder. According to diagnostic criteria, these disorders are related to difficulties in interpersonal relationships; thus, regardless of parenthood status, offenders would benefit from mental health programming specifically addressing the benefits of family relationships and potential reentry difficulties in these relationships. Further, results of the current study demonstrated that mental health was related to family connectedness pre-release, and that contact influences perceptions of connectedness; by improving offenders' perceptions of connectedness through contact, facilities may simultaneously address inmates' mental health pre-release, reducing the likelihood that they enter communities with this risk.

During incarceration, facilities can promote family relationships and connectedness by increasing access to means of contact with family members. Although

contact policies already act as an intervention during incarceration (Hairston, 1998), there are often barriers that impede offenders' ability to communicate with their family.

Results suggest that facilities should increase offenders' opportunities to communicate via phone calls, as this form of communication is less impacted by factors outside of inmates' control, such as inability to access writing utensils and computers, or physical distance from family. Prior research supports the importance of phone calls on parents' connection to family, specifically for mothers (Poehlmann, 2005), but even in our majority male sample more phone communication improved parents' connectedness during incarceration.

## **CHAPTER FIVE**

### **Conclusion**

This study highlights the importance of understanding the incarceration and reentry experiences of offenders and of exploring individual differences that impact offenders' adjustment. Our exploration of differences between parents and nonparents in this population revealed surprising similarities regarding the reentry process, but also provided valuable information regarding differences in communication with family members and its impact on offenders' perceptions of these relationships. Identifying these differences, and accepting the similarities, contributes to our broader understanding of the diverse experiences of this marginalized population during this high-risk transition.

## APPENDIX

### Full literature review

Individuals with criminal histories represent a large and at-risk population. Approximately 12.9 million individuals are released from jails each year into communities (Minton, 2010; West, Sabol, & Greenman, 2010), where they are at-risk for recidivism, homelessness, substance abuse, difficulty transitioning into new employment roles, and other negative outcomes (see Spjeldnes, Jung, & Yamatani, 2014). These outcomes affect not only the inmates, but also their families. Research has examined the reentry process for the general population of offenders, but has not focused on the difficulties facing post-incarcerated parents specifically.

A recent statistic suggests that over half of individuals incarcerated in prisons are parents (Maruschak, Glaze, & Mumola, 2010). Incarceration is a period of separation from the family, which has been established as difficult for everyone involved (Adams, 1992), and there is likely individual variance to examine within this experience. While inmates' reentry may impact families of various constellations, the re-integration of parents into the community post-release may have an even greater impact on family members. The reintegration process creates an interaction within the family network: children and caretaking family members are affected (e.g. Glaze & Maruschak, 2008; Yocum & Nath, 2011) and parents are preparing to retake their role in the family even



before they are released (Richie, 2001; Arditti, Smock, & Parkman, 2005). Family members also anticipate that parents will be successful after release: for example, they express hopes that incarcerated fathers will become involved in the children's lives post-release (Yocum & Nath, 2011). A bidirectional relationship exists between inmates' family support and reentry outcomes (e.g. Wolff & Draine, 2004), and it is possible that this relationship is especially important for parents. In order to help prepare inmates for this critical time, it is necessary to understand the role relationships with family play in their integration success.

Specifically, in this review, I will examine the literature relevant to the impact of parenting on reentry experiences after incarceration, and will identify the gaps in the literature that the proposed study would fill. First, I will describe the current literature on parenthood and incarceration, and will overview theory that supports the importance of understanding how separation from family impacts parents. Although prior literature suggests that having children is an important family-related factor that impacts reentry experiences, to date research has not directly compared the reentry experiences of parents to offenders without children. Second, I will identify studies that demonstrate offenders' risks during the reentry process. After release from jails and prisons, it is clear that offenders are at risk for several negative outcomes (e.g. recidivism, substance use, inability to find employment or housing), but it is unknown whether this risk is similar or different for parents and non-parents. Third, I will explore the broader literature on the impact of family relationships on offenders' reentry. For parents in particular, family support and complex identities may be important for their post-release adjustment, but to

date this possibility has not been studied. In the final section, I will describe the literature suggesting contact with family members during incarceration is important for offenders' sense of connectedness with the family. The current literature is unclear as to whether contact facilitates changes in family integration, or whether contact is particularly important for parents' perceptions of family relationships. I propose a study that addresses these gaps with a longitudinal sample of male and female jail offenders, and describe how results of this study could inform interventions during incarceration.

### **Parenting Theories Applicable to Incarceration**

According to a 2009 statistic, 1.2 million parents were incarcerated in the United States, and approximately one third were held in local jails. Within this population, the majority (90%) were fathers and maintained legal custody of their children during the period of incarceration (Downing, 2012). Compared to the general population of inmates, parents overall are less likely to be mentally ill, more likely to be employed prior to incarceration, and are more likely to be married (Downing, 2012). These statistics suggests that parents are different from other offenders, but no studies actually compare parents to individuals without children during the reentry process. Three theoretical frameworks – attachment theory, family systems theory, and life course theory – help explain why a comparison between parents and non-parents is warranted, and support the logic that parents have unique needs during and post-incarceration.

### **Attachment and Family Systems Theories**

Incarceration impacts the parenting process and interrupts the parent-child relationship, which has implications for parents' and children's well-being and behaviors

during incarceration. Attachment theory suggests that the presence of parents during children's development is an important mechanism for healthy emotional growth; for children, separation from parents has negative implications for development (Bowlby, 1980; Hairston, 1998; Genty, 2002), and in cases like parental incarceration, having multiple caregivers can lead to further confusion and negative effects (Kobak & Madsen, 2008). In the context of incarceration, parents may be unable to develop these important bonds with their children. In fact, a recent study found that nearly two-thirds of children of incarcerated mothers or maternal caregivers had insecure attachments, which means children varied in their emotional reactions to these figures, and were either ambivalent about or distressed by the absence of their mothers (Poehlmann, 2005). In the same study, children who had one main caregiver during this separation were more likely to be securely attached to that person, which may indicate that children identify with their primary caregiver more than their absent parent. In a qualitative study interviewing 51 children of incarcerated parents in prison (Shlafer & Poehlmann, 2010), children reported evidence of disrupted bonds through their avoidance or ambiguity about their parental relationships. Nearly half of the children (22) would not discuss their relationships with their parents and avoided the topic, even when directly asked questions about the relationship. Out of the remaining 29 children, only 12 indicated they have positive relationships with their parents (e.g. stated that they missed their parents and wanted to be with them). The remaining 17 children reported some negative feelings towards their parents, demonstrating the variety of relationships that exist among incarcerated parents and their children.

Parents do seem to recognize this problem, and worry about being replaced (Hairston, 1995). Some parents even hesitate to reunite with their children post-release to prevent rupturing bonds with their children's interim caregivers (Michalson, 2011). Advocates argue for policies and interventions that consider the importance of these bonds, given that the period of separation, no matter how long, can impact connections quickly and permanently (Hairston, 1998). In sum, parents who are incarcerated are unable to facilitate these fundamental bonds with their children, and their added concerns differentiate their incarceration and re-entry experience from that of non-parents.

While attachment theory recognizes the effect of incarceration on the early bonds formed in relationships between caregivers and children, this literature is most applicable to children's experiences while their parents are incarcerated. Family systems theory emphasizes how incarceration contributes to continued strains in relationships in the family as a whole, and impacts parents more directly. Family systems theory suggests that there are patterns in the ways that families function, which develop over time, are dynamic, and can be improved with interventions (e.g. Bowen, 1978; Minuchin, 1974). Theorists state that communication is a key component of improving maladaptive patterns (Friedman & Allen, 2011), but communication is difficult to accomplish in the context of incarceration, and the literature demonstrates a straining effect on the parent-child relationship.

For example, several studies have examined the alliance among parents, their children, and their children's caregivers, and the effects these associations have on parents' well-being. A study by Loper, Carlson, Levitt, and Scheffel (2009) determined

that when mothers felt more aligned with their children's caretakers, they experienced less distress, including depressive symptoms. Overall, fathers reported less alliance with their children's caretakers, and higher levels of parenting stress due to lower attachment and perceptions of parenting incompetence. Fathers also reported more symptoms of depression when they perceived poorer relationships with their children, as measured by less closeness, contact, and involvement (Lanier, 1993). Thus, incarcerated parents' well-being is impacted by family dynamics during this period of separation, and these dynamics extend beyond relationships with children to include their children's caretakers as well.

Additionally, findings of two studies suggest that increased parenting stress is associated with more aggression and prison-violence, anxiety, depression, and somatization during incarceration (Loper, Carlson, Levitt, & Scheffel, 2009; Houck & Loper, 2002). In another qualitative study examining mothers' relationships during incarceration, themes emerged related to suicidal ideation and intense distress, attempts to emotionally distance themselves from their children, and preoccupation with familial concerns (Poehlmann, 2005). In support of family systems theory, results of these studies demonstrate that parents' experiences during incarceration are influenced by the dynamics present in their family relationships, and parents express concern that these maladaptive patterns are strengthened by separation. Thus, parents may have different experiences during incarceration because of family-related dynamics, and the literature supports a reciprocal relationship between parents' distress during incarceration and family stress. Despite theoretical support regarding the impact of family dynamics on

parents during incarceration, research has not compared the role of family relationships during offender's transition back into the community for parents and non-parents.

### **Life Course Theory**

In addition to parents' concerns about their relationships with their children, parents' own experiences becoming parents and developing this identity may impact their behaviors. Developed in the criminology literature, life course theory suggests that individuals with criminal histories may desist from crime depending on the presence of subjective or social factors (Sampson & Laub, 1993). According to this theory, subjective factors (e.g. identity, motivation) and social factors (e.g. family, parenthood, marriage) facilitate desistance over time (Davis, Bahr, & Ward, 2012). This framework suggests that having children is a developmental shift that influences people profoundly, both through their identities as parents and also through the growth of their family network. In other words, being a parent could make it more likely that an offender would desist from criminal behavior after release. On the other hand, there is evidence that increased parenting stress intensifies the difficulty of the reentry process (Luther, Reichert, Holloway, Roth, & Aalsma, 2011), which could make it harder to engage in prosocial behaviors. Empirical work has not examined these possibilities.

Another component of life course theory suggests that when offenders have motivations to change, in conjunction with the support necessitated to enact the change, desistance is more likely (Laub & Sampson, 2001). Other theories support the importance of having both desire to change and support (e.g. Lebel, Burnett, Maruna, & Bushway, 2008), and highlight the importance of motivations to change in starting the desistance

process (e.g. cognitive transformation theory; Giordano, Cernkovich, & Rudolf, 2002). For parents, this theory suggests that they must desire change but also require support to enact change; thus, family support may be a necessary resource for parents to rehabilitate. Researchers have highlighted parents' reports that their children are motivations to change (Davis, Bahr, & Ward, 2012), and that family involvement plays a role in offenders' experiences during and after incarceration (discussed later in this review). Despite the theoretical evidence that parents may have different experiences post-release, others have noted that parenthood is a potentially under-studied transition that influences desistance (e.g. Michalson, 2011).

In sum, offenders with children may differ from offenders without children in terms of their behavior, perceptions, and expectations. Parents may be different before and during incarceration, and hold additional concerns and expectations about reentry. Three established theoretical frameworks (attachment theory, family systems theory, and life course theory) support logic that parents may experience unique difficulties during the separation from their families, and may anticipate different outcomes post-release. Despite this theoretical support, research on parents' experiences during incarceration and post-release is scant and has limitations. These limitations include cross-sectional study designs, including only female inmates (mothers) in samples, limiting the measurement of parenthood to children of specific ages, or only including parents with primary custody. No study has directly compared parents to nonparents post-release on reentry outcomes. Instead, most of the literature on reentry examines the general offender

population. Next, I will review that broader literature about offenders' reentry experiences, applying the findings to posit additional challenges that parents may face.

### **Offender Risks in Reentry**

Approximately 12.9 million adults are released back into communities each year (Minton, 2010; West, Sabol, & Greenman, 2010). The reentry process is a stressful and difficult transition for offenders, and is compounded by their individual struggles, which may include past substance use, association with antisocial peers, mental illness, chronic health problems, homelessness, and parenting stress (Luther, Reichert, Holloway, Roth, & Aalsma, 2011; Davis & Pacchiana, 2004; Levin, Culhane, DeGenova, O'Quinn, & Bainbridge, 2009). These risk factors likely contribute to the behavior that resulted in incarceration, and await offenders in the community post-release.

Substance use and recidivism are two of the most prevalent behaviors that occur post-release and lead to further challenges in offenders' lives. Regardless of the offense, nearly 50% of offenders recidivate and are re-arrested within three years of their release (Langan & Levin, 2012). Approximately three quarters of prison inmates used substances prior to incarceration (Petersilia, 2005), and their initial arrests are often consequences of substance use (Weekes, Moser, Wheatley, & Matheson, 2013). Offenders report that they are likely to re-use substances post-release (Luther, Reichert, Holloway, Roth, & Aalsma, 2011), and substance use post-release frequently leads to recidivism (Blumstein & Beck, 2005; Davis, Bahr, & Ward, 2012). The results of studies on substance use and recidivism suggest that inmates are likely to cycle through the criminal justice system



again after release, and highlight the need to identify potential factors that lower this likelihood.

It is unclear how parents compare to non-parents in these behaviors post-release, but there is some evidence that parents may be different. Parents may be especially likely to return to substances and criminal behavior post-release due to additional responsibilities and the strained family connections described above. Providing evidence for this possibility, in a qualitative study, some participants stated that losing their children in custody battles or separation made reentry difficult and led them to cope through substance use (Davis, Bahr, & Ward, 2012). Further, in another study, mothers who had children at home were at increased risk of being re-arrested on a drug charge than were women without children (Freudenberg, Daniels, Crum, Perkins, & Richie, 2005). In contrast, other studies indicate that parenthood is a strong facilitator of desistance (Brown & Bloom, 2009; Graham & Bowling, 1995; Kreager, Matsueda, & Erosheva, 2010; Edin, Nelson, & Paranal, 2004; Moloney, MacKenzie, Hunt, & Joe-Laidler, 2009) and parents report that their children are motivations to desist from crime and drug use (Davis, Bahr, & Ward, 2012; Buchanan, Murphy, Martin, Korchinski, et al., 2011). Despite this empirical and theoretical evidence that parents are likely different from non-parents in some way, few studies have examined the relationship between parenthood and recidivism and substance use post-release.

Even when offenders may intend or attempt to engage in more prosocial behaviors post-release, social barriers make it difficult for offenders to enact this change. During reentry, offenders often face challenges obtaining housing and employment

(Luther, Reichert, Holloway, Roth, & Aalsma, 2011). Offenders are impacted by stigma surrounding their histories of incarceration, and may be uneducated or lack specific job-related trainings and skills (Seiter & Kadela, 2003). Even prior to release, inmates predict that housing and employment will be difficult to obtain post-release (Fedock, Fries, & Kubiak, 2013; Luther et al., 2011), and accurately so; offenders report that finding employment and acquiring stable housing are two of the most difficult components of the reentry process (Luther et al., 2011). Unfortunately, other research suggests that the inability to obtain housing and employment increases offender susceptibility to criminal and risky behavior, which increases the likelihood for recidivism (Davis, Bahr, & Ward, 2012). Conversely, higher job income has been related to lower likelihood of recidivism (Freudenberg, Daniels, Crum, Perkins, & Richie, 2005), suggesting that if offenders are able to overcome the social barrier, they may be more successful.

The difficulties demonstrated in the studies above may be amplified for parents, who could face increased stigma and have additional responsibilities in regards to their children. After release, parents have to juggle rehabilitating their family relationships and pressure to provide for their families. For example, mothers who are released may regain custody of their children, and without childcare, they may be unable to seek employment or attend treatment programs (Luther et al., 2011). Mothers also have an overall lower earning potential than fathers and women without children (Mapson, 2013), so even if they find employment, the stress of financial instability will remain. Fathers report concerns about being able to provide for the family (Arditti, Smock & Parkman, 2005; Clarke, O'Brien, Godwin, Hemmings et al., 2005; Magaletta & Herbst, 2001) and

without consistent employment, this worry is realistic. Research is needed to confirm the possibility that these difficulties post-release are indeed more acute for parents than for offenders without children.

The challenges of the reentry process affect offenders' physical and mental health. Female inmates appear to have more mental health concerns than male inmates (Drapalski, Youman, Stuewig, & Tangney, 2009), and some researchers argue that this gender difference is due to complex relationship histories, such as past trauma (Chesney-Lind & Shelden, 2004). In addition to mental health concerns, offenders are also at risk for general physical health issues, particularly those resulting from risky behavior. For example, inmates may be at an increased likelihood to acquire or transmit HIV following their release (Reentry Policy Council, 2005). Substance use may be used as a coping method to address mental health issues, but can compound maladaptive patterns of behavior and lead to situations that risk physical health. In combination with concerns about recidivism, substance use, and difficulties finding housing and employment, the mental and physical health concerns add to the complexity of offenders' reentry experiences.

Prior to incarceration, parents are less likely to have mental illness compared to non-parents (Downing, 2012). After release, however, mental health and physical health may deteriorate for parents, who must navigate the added stressors of reunification with children and caregivers. For example, a relationship exists between fathers' reports of depressive symptoms and perceived relationships with their children (Lanier, 1993). This

possibility has not been examined, and it is unknown whether or not parents are different from non-parents in terms of physical or mental health post-release.

The reentry literature suggests that transitioning back into communities is difficult for all offenders, and there may be specific ways in which this process is different for parents. The variance in reentry between parents and non-parents may lead community members and family to support them in particular ways, but the research has not honed in on those dynamics. In the next section, I will examine the dynamics between offenders and their family, and will explore whether there are potential differences between parents and non-parents.

### **Family Support is a Key Aspect of Reintegration**

Despite both theoretical support and some empirical evidence that parents have different experiences than offenders without children, it is unknown how parenthood continues to influence behavior post-release, or whether there are variables to consider above and beyond just having children. In the effort to understand how to best help parents, it is particularly important to identify mechanisms that explain their experiences, and that might be amenable to change. A potentially key mechanism is reliance on family support. As evidenced by theory and logic, family relationships can aid or hinder the reentry process, as the quality of these relationships tends to vary among offenders. For parents, who tend to view incarceration as a temporary separation from their children and rely on family members to care for them (Enos, 1997; Glaze & Maruschak, 2008), support received by family members may be particularly influential during reentry.

Family support, and offenders' perceptions of it, influences offenders' expectations of the reentry process. There is evidence that incarceration can be a period when offenders reflect on their family relationships, and contemplate ways to facilitate more prosocial roles post-release (Richard & Jones, 1997). During this "reflection period," offenders may develop beliefs and expectations about their family relationships post-release, and family support during incarceration may impact expectations of success and reintegration. For example, in a recent study by Visher and O'Connell (2012), perceived family support and having children were both strong predictors of inmates' optimism about returning to the community. During incarceration, inmates also report that having children, wanting to return home, and wanting to give back to the community were reasons for desired desistance (Giordano, et al 2007). In sum, prior to release, offenders report that their family will be an important component of the reentry experience, and family support fuels positive intentions. However, after release, offenders are faced with the reality of their relationships, and their expectations of support are tested.

When offenders' expectations hold true, and there is positive family support available upon release, there is more potential for positive outcomes during reentry. Research indicates when offenders are offered positive social support, they are more successful during the reentry process, and this effect remains when offenders perceive that the support is available (whether or not it actually is; Wolff & Draine, 2004). Research on the general inmate population suggests that inmates with stronger family and social connections have better post-release outcomes. The positive psychology and

resilience literature indicates that relationships with friends and family serve as protective factors, which can buffer the effects of stress and adversity (Hamby, Banyard, & Grych, 2014), such as incarceration and reentry. To provide this buffering effect, the quality of connections may be more relevant than the quantity of connections (e.g. Froland, Brodsky, Olson, & Stewart, 2000; McMahon, 2001), and perceptions of support, rather than tangible assistance, may be especially important. For example, offenders report that when they believe they have strong support and attachments with family members, these relationships positively facilitate the reentry process (Luther et al., 2011). In addition, perceived bonds with family members may prevent continued engagement in criminal behavior (Laub & Sampson, 2003), and research suggests that family support is related to less recidivism (e.g. Shinkfeld & Graffam, 2009; Brown, St. Amand, & Zamble, 2009), reduced substance use (El Bassel, Gilbert, Schilling, Ivanoff, Borne, & Safyer, 1996; Farrell, 2000; Staton-Tindell, Royse, & Leukefeld, 2007; Carmody, 2008), and reduces the effects of mental health stressors (Norris, 2009). Thus, perceptions of positive family support are a potential resource for offenders during reentry.

Although offenders believe that family connections will facilitate success during reentry, and this appears to be true when they receive support, the ways that family connections influence this transition may not always be positive. The relational model suggests that poor relationships with the community (including family, peers, the general neighborhood) can lead to negative emotions, and that to cope with these emotions, individuals may engage in risky behaviors and substance use (Covington & Surrey, 1997; Finkelstein, 1993). It may be harder for inmates who do not possess strong or positive

family relationships to succeed post-release. The separation of the individual from the community and their family network can strain their relationships, so even if the relationship was originally positive and supportive prior to incarceration, it can deteriorate during this period (Wolff & Draine, 2004; Genty, 2002). Supporting this contention, poorer family relationships have been associated with worse outcomes among parolees (Fendrich, 1991), and inmates who expect support and do not receive it report more depressive symptoms than inmates who do receive support post-release (Carlson & Cervera, 1992). Thus, family relationships not only serve as protective factors, as described above; family relationships can also be detrimental when offenders do not perceive that they are integrated with or receiving support from the family.

If relationships with family are important considerations when examining any offender's reentry process, they may be particularly important for parents, who anticipate problems with their family and children during the post-release transition (Freudenberg, Daniel, Crum, Perkins, & Richie, 2005). When parents' concerns are unwarranted, and they are indeed offered support, there is evidence that various family relationships are beneficial for parents. For example, one study found that parents who indicated having "excellent" relationships with their children were less likely to recidivate at a six-month follow up, compared to parents who did not report this relationship (Bahr, Armstrong, Gibbs, Harris, & Fisher, 2005). In a separate study, fathers who were reunited with their children shortly after release were less likely to recidivate or use substance and worked more often at an eight-month follow up than fathers with less contact (Visher, Bakken, & Gunter, 2013). Strong bonds among family members appear to be a protective factor for

parent offenders during reentry, such that they are related to reduced chemical dependency and potentially recidivism; improve parents' mental health outcomes; and generate opportunities for reunification post-release (Hairston, 1991; Smith, Krisman, Strozier, & Marley, 2004). Thus, there is evidence that family support, not just identification as parents, influences parents' reentry experience profoundly, and increases the likelihood that parents will succeed post-release.

There are two gaps in the literature just reviewed. First, many studies do not compare parents to non-parents, but only compare within groups. Second, they focus on parents' perceived relationships with their children. Those relationships are undoubtedly important. However, as suggested by family system's theory, other relationships with family members are also influential. Extended family relationships may be particularly important for parents, who rely on family members to care for their children during their absence (Glaze & Maruschak, 2008). Family members who serve as caregivers during incarceration often view themselves as "gatekeepers" and "protectors" of the children, and therefore regulate whether parents are able to communicate with their children during incarceration (Shlafer & Poehlmann, 2010). Parents who wish to be reunited with their children, or who report that their children are motivations to change, need the support of extended family in order to tap into this resource. In addition, parents' relationships with their personal caregivers seem to be instrumental; for example, one study examined mothers' own relationships with their parents, and determined that positive relationships six months prior to incarceration predicted less substance use even six months after release (Staton-Tindall, Frisman, Lin, Leukefeld, Oser, Havens, Prendergast, Surratt, &



Clarke, 2011). Thus, the literature on family support suggests that relationships are important to consider when examining offenders' reentry, and for parents, there are particular relationships with family members that may be most important: their children, their children's caregivers, and their own parents.

In sum, perceived family support is important for offenders' success during the reentry process. During incarceration, offenders report that their reuniting with their family is their motivation for improved behaviors, but also acknowledge that this process may be difficult. When offenders' expectations of receiving familial support are congruent with the level of support they actually receive, they are more likely to be successful post-release. However, offenders' expectations are not always congruent with reality, and offenders do not always receive support, especially if maladaptive relationship patterns exist within the family. Understanding the dynamics between these expectations and receipt of support during reentry may be particularly important for parents. Compared to offenders without children, parents face additional challenges related to their family relationships during incarceration and reentry, and without support from family, parents are likely to struggle.

### **Measuring Social Networks Through Family Connectedness**

The social support literature demonstrates the importance of social support on offenders' reentry, and suggests that family is a key aspect of the social support network. However, there are a wide variety of ways of measuring social support (e.g. tangible support, emotional support, perceived support; Wolff & Draine, 2004), and the extent of the influence of social support depends on context. For inmates, it may be best to

examine social relationships through offenders' perceptions, and to focus on their sense of family connectedness.

The construct of family connectedness originates from Aron and Aron's (1986) self-expansion model, which describes individuals' incorporation of their relationships with others into their own identities. Although this theory aimed to understand the impact of close relationships, it has since been expanded to understand the integration of the community in the self (Mashek, Cannaday, & Tangney, 2007). The paradigm of community connectedness (e.g. the family community, the peer community) is related to other important constructs, including community helping, social support, and scales of belonging, support, sense of community, ties, and friendship (Mashek, Cannaday, & Tangney, 2007). Thus, the family connectedness construct goes beyond measures of social support or relationship quality, and examines the personal impact these relationships have on perceptions of the self, identity, and integration with the family network.

There are three reasons family connectedness seems a particularly relevant construct for inmates about to be released into the community. First, inmates reflect on their relationships during incarceration, and this integration of perceptions of relationships into their self-view could be more indicative of the quality of family support than any tangible measure. Second, unlike perceptions of connectedness within specific relationships, the construct of family connectedness focuses on the broader family. For inmates who may have relationships of varied quality with individual family members, this construct may more accurately tap into the perception of connectedness with the

entire family overall. Third, measures of social support that are more concrete or behavioral include items that would be irrelevant in a jail setting (e.g. whether family members will provide specific resources). Family connectedness can be measured at the point of release, and does not rely on tangible resources family members are able to provide during incarceration. However, to date research has not examined the unique relationship between family connectedness and post-release outcomes, and it is unknown whether family connectedness is truly a mechanism for post-release success.

### **Facilitating Relationships During Incarceration**

Given that offenders' perceptions of family connectedness are important and likely one mechanism related to reentry success, there may be ways to facilitate positive relationships during incarceration. Advocates argue for policies that facilitate relationships with families (Hairston, 1998). Interventions post-release often focus on a target concern, such as mental health, and include treatments such as therapy, workshops, and trainings focused on anger management or specific skills (Blackburn, 2004). However, one intervention already available during incarceration is contact with family through visits, phone calls, or letters. Jail and prison policies regarding contact vary in terms of type and amount of communication allowed (Sturges & Hardesty, 2005), and contact in any form is regulated and costly for families (Hairston, 1996). Policies and costs may be barriers to communication with family members during incarceration, but if contact is a mechanism for increased family support, and support's subsequent potential benefits, then it is worth investigating ways to increase family contact during incarceration.

Contact during incarceration has the potential to be meaningful in a variety of ways for inmates and their family members (Enos, 2001). Communication likely influences offenders' perceptions of family relationships, and therefore influences offenders' behaviors and motivations. For parents, contact may be particularly important. Contact with children during incarceration may decrease parents' and children's concerns about reunification post-release (Smith, Krisman, Strozier, & Marley, 2004), and may mend potentially ruptured bonds. When children visit their parents, parents perceive their relationships with their children to be more positive (Snyder, Carlo, & Mullins, 2001). Similarly, mothers report a more positive and warm view of their relationship when receiving more phone calls, and report more depressive symptoms when they receive fewer in-person visits (Poehlmann, 2005). Additionally, when in-person visits are received and are not problematic (e.g. children were behaving, visits were not cut short), parents experience less parenting stress (Beckmeyer & Arditti, 2014). From the children's perspective, children report less alienation from parents when they are in contact with them during incarceration (Shlafer & Poehlmann, 2010). Results of these findings overall suggest that contact can improve perceptions of family relationships for both parents and children, and imply that these perceptions affect parents' well-being during incarceration.

Despite the potential benefits of contact for offenders, relationships with inmates during incarceration may have social or economic consequences for family members (Christian, Mellow, & Thomas, 2006), which could prevent them from contacting offenders during incarceration. More negative or damaged relationships with family may

decrease the amount of contact inmates receive during incarceration, which lessens the availability of family support during reintegration (Wolff & Draine, 2004) and may weaken connectedness to the family. This consequence may be especially difficult for parents, since family members are also caring for and regulating contact with inmates' children (Shlafer & Poehlmann, 2010; Poehlmann, 2003; Poehlmann, Shlafer, Maes, & Hanneman, 2008). A recent study suggests that when offenders have poorer relationships with caregivers, as indicated by conflict and lack of warmth, contact in the form of visitation or phone calls are less likely (Poehlmann, 2005). However, there is evidence that more contact with their children's caregivers improves inmates' perceptions of parenting alliance with the caregivers (Poehlmann, 2005), and may also strengthen family connectedness. During incarceration, the amount of contact received may be a proxy variable representative of the quality of offenders' family connections, and can also strengthen or degrade offenders' perceptions of support from family.

Although theoretical literature supports the relationship between various forms of contact and quality of family bonds, few studies have empirically examined the impact of contact on offenders' evolving perceptions of family relationships during incarceration. In other words, it is important to examine whether contact is related to change in perceptions of relationships during incarceration. Also, despite the literature advocating contact for incarcerated parents and their children, and petitions to examine means to improve all offenders' relationships with the family (Poehlmann, 2005), it is unknown whether contact differently impacts the family relationships of offenders with and without children. From an advocacy standpoint, the incarceration period provides an

opportunity to intervene with an at-risk population; if family connectedness is improved by contact during incarceration, and more family connectedness leads to success post-release, then it behooves the criminal justice system to facilitate this intervention.

## REFERENCES

- Adams, K. (1992). Adjusting to prison life. *Crime and Justice: A Review of Research*, 16, 275–359.
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.). Arlington, VA: American Psychiatric Publishing, Inc.
- Arditti, J. A., Smock, S. A., & Parkman, T. S. (2005). “It’s been hard to be a father”: A qualitative exploration of incarcerated fatherhood. *Fathering*, 3, 267–288.
- Aron, A., & Aron, E.N. (1986). *Love as the expansion of self: Understanding attraction and satisfaction*. New York: Hemisphere.
- Bahr, S. J., Armstrong, A. H., Gibbs, B. G., Harris, P. E., & Fisher, J. K. (2005). The reentry process: How parolees adjust to release from prison. *Fathering*, 3, 243–265.
- Beckmeyer, J.J. & Arditti, J.A. (2014). Implications for in-person visits for incarcerated parents’ family relationships and parenting experience. *Journal of Offender Rehabilitation*, 53, 129-151. doi: 10.1080/10509674.2013.868390.
- Blackburn, R. (2004). “What works” with mentally disordered offenders. *Psychology, Crime, and Law*, 10(3), 297-308). doi: 10.1080/10683160410001662780.
- Blumstein, A. & Beck, A.J. (2005). Reentry as a transient state between liberty and recommitment. In J. Travis & C. Visher (Eds.), *Prison Reentry and Crime in America* (pp. 50-79). New York: Cambridge University Press.
- Bowen, M. (1978). *Family therapy in clinical practice*. Northvale, NJ: Jason Aronson.
- Bowlby, J. (1980). *Attachment and loss: Vol. 3. Loss*. New York: Basic Books.
- Brown, M., & Bloom, B. Reentry and renegotiating motherhood: Maternal identity and success on parole. *Crime & Delinquency*, 55, 313–336.
- Brown, S.L., St. Amand, M.D., & Zamble, E. (2009). The dynamic prediction of criminal

- recidivism: A three-wave prospective study. *Law & Human Behavior*, 33, 25–45.
- Buchanan, M., Murphy, K., Martin, M.S., Korchinski, M., Buxton, J., Granger-Brown, A., Hanson, D... & Martin, R.E. (2011). Understanding incarcerated women's perspectives on substance use: Catalysts, reasons for use, consequences, and desires for change. *Journal of Offender Rehabilitation*, 50, 81-100. doi: 10.1080/10509674.2011.546232.
- Carlson, B. E., & Cervera, N. (1992). *Inmates and their wives: Incarceration and family life*. Westport, CT: Greenwood Press/Greenwood Publishing Group.
- Carmody, J. (2008). Reentry for safer communities: Effective county practices in jail to community transition planning for offenders with mental health and substance abuse disorders . Washington, DC: National Association of Counties and Bureau of Justice Assistance. Retrieved from [http://www.ojp.usdoj.gov/BJA/pdf/Reentry\\_Safer\\_Comm.pdf](http://www.ojp.usdoj.gov/BJA/pdf/Reentry_Safer_Comm.pdf)
- Chesney-Lind, M., & Shelden, R. G. (2004). *Girls, delinquency, and juvenile justice* (3rd ed.). Belmont, CA: Thompson Wadsworth.
- Christian, J., Mellow, J. & Thomas, S. (2006). Social and economic implications of family connections to prisoners. *Journal of Criminal Justice*, 34, 443-452.
- Clarke, L., O'Brien, M., Godwin, H., Hemmings, J., Day, R.D., Connolly, J... & Van Leeson, T. (2005). Fathering behind bars in English prisons: Imprisoned fathers' identity and contact with their children. *Fathering: A Journal of Theory, Research, and Practice About Men as Fathers*, 3, 221–241.
- Covington, S., & Surrey, J. L. (1997). The relational model of women's psychological development: Implications for substance abuse. In R.W. Wilsnack, & S.C. Wilsnack (Eds.), *Gender and alcohol: Individual and social perspectives* (pp. 335-351). New Brunswick, NJ: Alcohol Research Documentation, Inc.
- Davis, C., Bahr, S.J., & Ward, C. (2012). The process of offender reintegration: Perceptions of what helps offenders reenter society. *Criminology & Criminal Justice*, 13(4), 446-469. doi: 10.1177/1748895812454748.
- Davis, L. M., & Pacchiana, S. (2004). Health profile of the state prison population and returning offenders: Public health challenges. *Correctional Health Care*, 10(3), 303–331.
- Downing, M.D. (2012). Barriers to reunification for incarcerated parents: A judicial perspective. *Family Court Review*, 50(1), 71-76.



- Drapalski, A. L., Youman, K., Stuewig, J., & Tangney, J. (2009). Gender differences in jail inmates' symptoms of mental illness, treatment history and treatment seeking. *Criminal Behaviour and Mental Health, 19*, 193–206.
- Dunn, J. & Cattaneo, L.B. (2012, July). Intimate partner violence victims in the court system: Exploring mothers' experiences. Paper presented at the International Family Violence and Child Victimization Research Conference, Portsmouth, NH.
- Edin, K., Nelson, T. J., & Paranal, R. (2004). Fatherhood and incarceration as potential turning points in the criminal careers of unskilled men. In M. Pattillo, D. Weiman, & B. Western (Eds.), *Imprisoning America: The social effects of massive incarceration* (pp. 46–75). New York, NY: Russell Sage Foundation.
- El Bassel, N., Gilbert, L., Schilling, R., Ivanoff, A., Borne, D., & Safyer, S. F. (1996). Correlates of crack abuse among drug-using incarcerated women: Psychological trauma, social support, and coping behavior. *American Journal of Drug and Alcohol Abuse, 22*, 41–57.
- Enos, S. (1997). Managing motherhood in prison. *Women and Therapy, 20*, 57-73.
- Enos, S. (2001). *Mothering from the inside: Parenting in a women's prison*. Albany, NY: State University of New York Press.
- Farrell, A. (2000). Women, crime, and drugs: Testing the effect of therapeutic communities. *Women & Criminal Justice, 11*, 21–48.
- Faul, F., Erdfelder, E., Lang, A.G., & Buchner, A. (2009). Statistical power analyses using G\*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods, 41*, 1149–1160.
- Fendrich, M. (1991). Institutionalization and parole behavior: Assessing the influence of individual and family characteristics. *Journal of Community Psychology, 19*, 109-122.
- Finkelstein, N. Using the relational model as a context for treating pregnant and parenting chemically dependent women. In B. L. Underhill, & D. G. Finnegan (Eds.), *Chemical dependency: Women at risk* (pp. 23–44). New York: Harrington Park Press.
- Fitzmaurice, G. (2001). A conundrum in the analysis of change. *Nutrition, 17*(4), 360-361.
- Folk, J., Mashek, D., Stuewig, J., & Tangney, J.P. (2015). Connectedness to the

criminal community and the community at large prospectively predicts post-release outcomes among felony offenders. *Unpublished manuscript*.

Frazier, P.A, Tix, A.P., & Barron, K.E. (2004). Testing moderation and mediator effects in counseling psychology research. *Journal of Counseling Psychology, 51*(1), 115-134. doi: 10.1037/0022-0167.51.1.115.

Freudenberg, N., Daniels, J., Crum, M., Perkins, T., & Richie B.E. (2005). Coming home from jail: The social and health consequences of community reentry for women, male adolescents, and their families and communities. *American Journal of Public Health, 95*, 1725-1736.

Friedman, B.D. & Allen, K.N. (2011). Systems theory. In J.R. Brandell (Ed.) *Theory and Practice in Social Work (2<sup>nd</sup> Ed)* (pp.3-20). Sage Publications, Inc.

Froland, C., Brodsky, G., Olson, M., & Stewart, L. (2000). Social support and social adjustment: Implications for mental health professionals. *Community Mental Health Journal, 36*(1), 61-75.

Genty, P.M. (2002). Damage to family relationships as a collateral consequence of parental incarceration. *Fordham Urban Law Journal, 30*(5), 1671-1684.

Giordano, P.C., Cernkovich, S.A., & Rudolf, J.A. (2002). Gender, crime, and desistance: Toward a theory of cognitive transformation. *American Journal of Sociology, 107*(4), 880-1064.

Giordano, P. C., Schroeder, R. D., & Cernkovich, S. A. (2007). Emotions and crime over the life course: A neo-Meadian perspective on criminal continuity and change. *The American Journal of Sociology, 112*, 1603–1661.

Glaze, L. E., & Maruschak, L. M. (2008). Parents in prison and their minor children (Bureau of Justice Statistics Special Report No. NCJ222984). Washington, DC: Bureau of Justice Statistics, U.S. Department of Justice.

Graham, J., & Bowling, B. (1995). *Young people and crime*. London, England: Home Office.

Hairston, C.F. (1991). Family ties during imprisonment: Important to whom and for what? *Journal of Sociology and Welfare, 18*(1), 87-1041.

Hairston, C.F. (1996). How correctional policies impact father-child relationships. *Family and Corrections Network Report, 8*, 3-4.

Hairston, C.F. (1998). The forgotten parent: Understanding the forces that influence

- incarcerated fathers' relationships with their children. *Child Welfare*, 77(5), 617-639.
- Hamby, S., Banyard, V., & Grych, J. (2014, July). Patterns and interconnections among protective factors: Preliminary thoughts about resilience portfolios. Paper presented at the International Family Violence and Child Victimization Research Conference, Portsmouth, NH.
- Houck, K.D.F. & Loper, A.B. (2002). The relationship of parenting stress to adjustment among mothers in prison. *American Journal of Orthopsychiatry*, 72, 548-558.
- Kobak, R. & Madsen, S. (2008). Disruptions in attachment bonds: Implications for theory, research, and clinical intervention. In J. Cassidy & P.R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (2<sup>nd</sup> ed.) (pp. 23-47). New York: Guilford Press.
- Kreager, D. A., Matsueda, R. L., & Erosheva, E. A. (2010). Motherhood and criminal desistance in disadvantaged neighborhoods. *Criminology*, 48 (1), 221–258.
- Lanier, C.S. (1993). Affective states of fathers in prison. *Justice Quarterly*, 10, 49-65.
- Langan, P. A., & Levin, D. J. (2002). Recidivism of prisoners released in 1994. Bureau of Justice Statistics Special Report No. NCJ 193427. Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics.
- Laub, J.H. & Sampson, R.J. (2001). Understanding desistance from crime. In Tonry, M. (Ed.) *Crime and Justice: An Annual Review of Research* (pp. 1-69). Chicago, IL: University of Chicago Press.
- Laub, J.H. & Sampson, R.J. (2003). *Shared beginnings, divergent lives: Delinquent boys to age 70*. Cambridge, MA: Harvard University Press.
- LeBel, T.P., Burnett, R., Maruna, S., & Bushway, S. (2008). The 'chicken and egg' of subjective and social factors in desistance from crime. *European Journal of Criminology*, 5(2), 131-159.
- Levin, A. J., Culhane, D. P., DeGenova, J., O'Quinn, P., & Bainbridge, J. (2009). Health and social characteristics of homeless adults in Manhattan who were chronically or not chronically unsheltered. *Psychiatric Services*, 60(7), 978–981.
- Loper, A.B., Carlson, L.W., Levitt, L., & Scheffel, K. (2009). Parenting stress, alliance, child contact, and adjustment of imprisoned mothers and fathers. *Journal of Offender Rehabilitation*, 48(6), 483-503.

- Luther, J.B., Reichert, E.S., Holloway, E.D., Roth, A.M., & Aalsma, M.C. (2011). An exploration of community reentry needs and services for prisoners: A focus on care to limit return to high-risk behavior. *AIDS Patient Care & STDs*, 25(8), 475-481.
- Magaletta, P. R., & Herbst, D. P. (2001). Fathering from prison: Common struggles and successful solutions. *Psychotherapy*, 38, 88–96.
- Mapson, A. (2013). From prison to parenting. *Journal of Human Behavior in the Social Environment*, 23, 171-177. doi: 10.1080/10911359.2013.747402.
- Maruschak, L. M., Glaze, L. E., & Mumola, C. J. (2010). Incarcerated parents and their children: Findings from the Bureau of Justice Statistics. In J. M. Eddy & J. Poehlmann (Eds.), *Children of incarcerated parents: A handbook for researchers and practitioners* (pp. 33–54). Washington, DC: Urban Institute Press.
- Mashek, D., Cannaday, L.W., and Tangney, J.P. (2007). Inclusion of community in self scale: A single item pictorial measure of community connectedness.” *Journal of Community Psychology*, 54, 257-275.
- McMahon, R.C. (2001). Personality, stress, and social support in cocaine relapse prediction. *Journal of Substance Abuse Treatment*, 21(2), 77-87.
- Michalson, V. (2011). Mothering as a life course transition: Do women go straight for their children? *Journal of Offender Rehabilitation*, 50, 349-366. doi: 10.1080/10509674.2011.589887.
- Minton, T. D. (2011). Jail inmates at midyear 2011—Statistical tables. Washington, DC: Bureau of Justice Statistics.
- Minuchin, S. (1974). *Families and family therapy*. Boston: Harvard University Press.
- Moloney, M., MacKenzie, K., Hunt, G., & Joe-Laidler, K. (2009). The path and promise of fatherhood for gang members. *British Journal of Criminology*, 49, 305–325.
- Moore, K., Stuewig, J., & Tangney, J.P. (in press). The effects of stigma on criminal offenders’ post-release functioning: a longitudinal meditational model. *Deviant Behavior*.
- Morey, Les C. 2007. *Personality Assessment Inventory: Professional Manual (2nd ed.)*. Odessa, FL: Psychological Assessment Resources.
- Mumola, C.J. (2000). *Incarcerated parents and their children* (Bureau of Justice

Statistics Special Report No. NCJ 182335). Washington, DC: Office of Justice Programs, U.S. Department of Justice.

Osher, F., Steadman, H.J., & Barr, H. (2003). A best practice approach to community reentry from jails for inmates with co-occurring disorders: The Apic model. *Crime and Delinquency*, 48, 79-96. doi: 10.1177/0011128702239237.

Petersilia, J. (2005). From cell to society: Who is returning home? In J. Travis & C. Visser (Eds.) *Prison Reentry and Crime in America* (pp. 15-49). New York: Cambridge University Press.

Poehlmann, J. (2003). An attachment perspective on grandparents raising their very young grandchildren: Implications for intervention and research. *Infant Mental Health Journal*, 24, 149-173.

Poehlmann, J. (2005). Representations of attachment relationships in children of incarcerated mothers. *Child Development*, 76, 679-696.

Poehlmann, J., Shlafer, R.J., Maes, E., & Hanneman, A. (2008). Factors associated with young children's opportunities for maintaining family relationships during material incarceration. *Family Relations*, 57, 267-280.

Preacher, K. J., Curran, P. J., & Bauer, D. J. (2012). *Simple intercepts, simple slopes, and regions of significance in MLR 2-way interactions*. Retrieved from <http://www.quantpsy.org/interact/mlr2.htm>

Reentry Policy Council (2005). Report of the reentry policy council: Charting the safe and successful return of prisoners to the community. Council of State Governments, New York.

Richards, S. C., & Jones, R. S. (1997). Perpetual incarceration machine: Structural impediments to post-prison success. *Journal of Contemporary Criminal Justice*, 13, 4-22.

Richie, B. E. (2001). Challenges incarcerated women face as they return to their communities: Findings from life history interviews. *Crime & Delinquency*, 47, 368-389.

Sampson, R.J. & Laub, J.H. (1993). *Crime in the making: Pathways and turning points through life*. Cambridge, MA: Harvard University Press.

Seiter, R.P. & Kadela, K.R. Prisoner reentry: What works, what does not, and what is promising. *Crime and Delinquency*, 49(3), 360-388. (1993).

- Shlafer, R.J. & Poehlmann, J. (2010). Attachment and caregiving relationships in families affected by parental incarceration. *Attachment and Human Development, 12*(4), 395-415. doi: 10.1080/1466730903417052.
- Shinkfield, A.J. & Graffam, J. (2009). Community reintegration of ex-prisoners: Type and degree of change in variables influencing successful reintegration. *International Journal of Offender Therapy and Comparative Criminology, 53*(1), 29-42.
- Simpson, D. D. & Knight, K. (1998). *TCU Data Collection Forms for Correctional Residential Treatment (TCU-CRTF)*. Fort Worth, TX: Texas Christian University, Institute of Behavioral Research.
- Smith, A., Krisman, K., Strozier, A.L., & Marley, M.A. (2004). Breaking through the bars: Exploring the experiencing of addicted incarcerated parents whose children are cared for by relatives. *Families in Societies, 85*(2), 187-195.
- Snyder, Z.K., Carlo, T.A., & Mullins, M.M. (2001). Parenting from prison: An examination of children's visitation program at a women's correctional facility. *Marriage and Family Review, 32*, 33-61.
- Spjeldnes, S., Jung, H., & Yamatani, H. (2014) Gender differences in jail populations: Factors to consider in jail reentry strategies. *Journal of Offender Rehabilitation, 53*(2), 75-94. doi: 10.1080/10509674.2013.868387.
- Staton-Tindall, M., Frisman, L., Lin, H., Leukefeld, C., Oser, C., Havens, J.R., Prendergast, M., Surratt, H.L., & Clarke, J. (2011). Relationship influence and health risk behavior among re-entering women offenders. *Women's Health Issues, 21*(3), 230-238. doi: 10.1016/j.whi.2010.10.006.
- Staton-Tindall, M., Royse, D., & Leukefeld, C. (2007). Substance use, criminality, and social support: An exploratory analysis with incarcerated women. *American Journal of Drug & Alcohol Abuse, 33*, 237-243.
- Stuewig, J., Tangney, J.P., Mashek, D., Forkner, P., & Dearing, R. (2009). The Moral Emotions, Alcohol Dependence, and HIV Risk Behavior in an Incarcerated Sample. *Substance Use and Misuse, 44*, 449-471.
- Sturges, J., & Hardesty, K. (2005). Survey of Pennsylvania jail wardens: An examination of visitation policies within the context of ecosystem theory. *Criminal Justice Review, 30*, 141-154.

- Tangney, J.P., Mashek, D., & Stuewig, J. (2007). Working at the social-clinical-community-criminology interface: The George Mason University inmate study. *Journal of Social and Clinical Psychology, 26*, 1-21.
- Visher, C.A, Bakken, N.D., & Gunther, W.D. (2013). Fatherhood, community reintegration, and successful outcomes. *Journal of Offender Rehabilitation, 52*, 451-469. doi: 10.1080/ 10509674.2013829899.
- Visher, C.A. & O'Connell, D.J. (2012). Incarceration and inmates' self-perceptions about returning home. *Journal of Criminal Justice, 40*, 386-393.
- Weekes, J.R., Moser, A.E., Wheatley, M., & Matheson, F.I. (2013). What works in reducing substance-related offending? In L.A. Craig, L. Dixon & T.A. Gannon (Eds.) *What works in offender rehabilitation: An evidence-based approach to assessment and treatment* (pp. 237-254). Wiley-Blackwell.
- West, H. C., Sabol, W. J., & Greenman, S. J. (2010). Prisoners in 2009. (*Bureau of Justice Statistics Bulletin, NCJ 231675*). Washington, DC: Bureau of Justice Statistics.
- Wolff, N. & Draine, J. (2004). Dynamics of social capital of prisoners and community reentry: Ties that bind? *Journal of Correctional Health Care, 10*(3), 457-490.
- Yocum, A. & Nath, S. (2011). Anticipating fathers' reentry: A qualitative study of children's and mothers' experiences. *Journal of Offender Rehabilitation, 50*(5), 286-304.

## **BIOGRAPHY**

Jessica Grossmann graduated from Liberty High School, Eldersburg, Maryland, in 2006. She received her Bachelor of Arts from McDaniel College in 2010. She then received her Master of Arts in Clinical Psychology from George Mason University in 2010.