

All Support Is Not Created Equal:
Examining the Effects of Positive and Negative Emotional Family Support
on Recidivism Among Formerly Incarcerated Individuals

by

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ABSTRACT

As scholars continue to generate research on social support, so has the realization that our understanding of this theoretical concept is not so clear. Originally introduced by Francis Cullen in 1994, social support has traditionally been examined as a single measure. Cullen, however, posits that there are numerous forms of social support that can be provided by different actors. Little research has sought to examine these different forms of social support and their relationship with recidivating. Further, the extant literature generally places social support in the positive light, hypothesized to have an inverse relationship with crime. Studies have shown, however, that not all social support provides an inverse relationship with recidivism, and instead, some forms of support may actually increase an individual's likelihood of recidivating. Using data from the Serious and Violent Offender Reentry Initiative, this dissertation examines both positive and negative emotional family support and the effects they have on the likelihood that formerly incarcerated individuals will recidivate. Utilizing discrete time hazard modeling, and controlling for instrumental family and instrumental peer support, results reveal that while positive emotional family support does indeed have an inverse relationship with recidivating, negative emotional family support has a more salient and direct relationship with recidivating. Additionally, other findings are explored, along with implications for criminological theory, correctional programming, and criminal justice policy.

DEDICATION

The dedication of this dissertation is twofold. First, I would like to dedicate this dissertation to the source of positive emotional support in my life—my family. In particular, my number one supporter—my mom—Rosalina Sanchez Yanguas Galeste, who in life and in death has served as the driving force in every decision I have made thus far in my life. Even in your absence, my goal in life is to continually make you proud. You are missed beyond measure. To my dad—Antonio—I thank you for your unwavering support throughout all of the ups and downs in my life, including this process. Even at my lowest points, you never questioned my abilities to move forward, with the mindset that when something didn't go the way I expected—“it wasn't the end of the world.” To my sisters—Renee, Antoinette, and Andrea—I thank you for stepping in for mom, and providing me with the love and support that I needed to continue on with pursuing my dreams. You all never let me forget mom in the process, and I thank you for that.

Secondly, I would also like to dedicate this dissertation to the more than 600,000 men and women that will return to the community from an institution this year. Shedding light on the growing number of challenges you and your families face upon your return to the community served as the inspiration behind this dissertation. It is my hope that through research, effective policy development and change will occur—providing the opportunities you necessitate to become the voices this nation needs to create a more just society.

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CHAPTER 1

Introduction

The United States incarcerates its adult population more than any other country in the world (Schmitt, Warner, & Gupta, 2010). There are over 2 million adults incarcerated within the United States, and of these adults, 1.5 million are currently being housed in our state and federal prison system (Carson, 2018), with the remaining population housed in county and city jails, or approximately 740,700 inmates (Zeng, 2018). Up until 2010, the United States experienced a continual rise in its incarceration rates, dating back to 1972 when the prison population totaled approximately 200,000 prisoners (Sabol, West, & Cooper, 2009). Although 2010 marked a decline in overall incarceration rates, this still amounted to over 1.6 million adults, or approximately one sentenced prisoner for every 200 U.S. residents (see Guerino, Harrison, & Sabol, 2011). Additionally it is estimated that approximately 95 percent of state and federal inmates are released into the community, equating to approximately 700,000 inmates released into the community each year (Sabol, West, & Cooper, 2009). Of these formerly incarcerated individuals returning to the community, research suggests that a large portion is likely to return to prison (Petersilia, 2005), and longer periods of incarceration have been found to increase an individual's likelihood to recidivate (see Gendreau, Goggin, & Cullen, 1999).

In their meta-analysis of 50 studies examining the effects of imprisonment on those incarcerated, Gendreau and colleagues (1999) found that those incarcerated at a mean of 30 months showed a 3 percent increase in recidivism when compared to those incarcerated for less time at a mean of 13 months. While recidivism rates have varied

across states, research conducted by the Pew Center and the Association of State Correctional Administrators (2011) found that, across states, 45.4% of individuals released in 1999 were re-incarcerated, and 43.3% of individuals released in 2004 were re-incarcerated. Further, a portion of these offenders are likely to cycle in and out of prison multiple times (Clear, 2007; Blumstein & Beck, 2005). In their study of reentry cycling in four states, Blumstein and Beck (2005) examined those released between 1995 and 2001, and found 14.8% of those released in Florida, 21% of those released in New York, and 48.2% of those released in California were re-incarcerated by the end of 2001 at least two or more times. With these numbers in mind, the prioritization of the reentry of formerly incarcerated individuals returning to society is warranted as incarceration has had direct impacts on both the individual and their family.

Formerly incarcerated individuals reentering the community are faced with a number of problems that make their reintegration difficult. These individuals experience difficulty securing employment upon release (Pager, 2007; Uggen, Wakefield, & Western, 2005), and may also face the denial of social welfare benefits (Rubinstein & Mukamal, 2002), both of which have been found to be detrimental to the reintegration process. Coupled with these difficulties, individual life circumstances, such as coming from a history of substance abuse (Dowden & Brown, 2002; Gendreau, Little, & Goggin, 1996) as well as a history of mental illness (Marzuk, 1996) make reintegration difficult, and also increases the likelihood that returning individuals will again become involved in crime once in the community. It is for this reason that the needs of those who are incarcerated must be met prior to, and once released into the community.

Reentering individuals are often in need of housing assistance (La Vigne, Shollenburger & Debus, 2009), education services (Visher & Lattimore, 2007), substance abuse treatment (La Vigne, Shollenburger, & Debus, 2009), employment services (Berg & Huebner, 2011; Kruttschnitt, Uggen, & Shelton, 2000; Uggen, 2000), as well as mental healthcare (Visher & Lattimore, 2007). Assistance in gaining access to these forms of support is often provided by family members, who play a pivotal role in an offender's successful reentry into the community. (La Vigne, Visher, & Castro, 2004; Naser & Visher, 2006; Nelson, Dees, & Allen, 1999; Shollenberger, 2009; Singer, 2012; Taylor, 2012; Visher & Courtney, 2006; Visher, La Vigne, & Farrell, 2003; Visher, La Vigne & Travis, 2004). Not only do families play a vital role in ensuring their returning family member gains access to needed services, but returning individuals want their families involved in their lives, and a large percentage report feeling close to their families (Visher et al., 2003; La Vigne et al., 2004). To that end, it is not surprising that a large percentage of incarcerated individuals reside with family upon their return home (La Vigne, Visher, & Castro, 2004; Visher et al., 2004; Nelson, Deess, & Allen, 1999). In their "Returning Home" study, La Vigne and colleagues (2004) found that 72% of their Chicago respondents expected to live with family members upon release, and 90% actually reported living with family in the period following their release into the community.

Aside from instrumental support, such as housing, returning individuals often rely on their families for emotional support—a vital aspect of successful reintegration (La Vigne, Visher, & Castro, 2004; Naser & Visher, 2006; Nelson et al., 1999; Shollenberger,

2009; Visher, La Vigne & Travis, 2004). The support that family members provide indeed varies, and returning individuals often self-report relying on their family members for both emotional and instrumental support.

Because the literature shows that not only do formerly incarcerated individuals rely on their families for support, but also that support from family is vital to the reintegration process, examining social support within the narrow focus of the family unit is warranted. Still, however, social support is not homogenous, and the literature supports the notion that not all types of support are conducive to successful reintegration. For example, offenders may perceive family members providing varying levels of instrumental and/or emotional support, which may also differ among support from peers and other formal agencies. This study seeks to provide clarity to differing forms of family social support.

Scope of the Study

This study builds upon, extends, and improves prior research in the study of emotional family support and its impact on a formerly incarcerated individual's likelihood to reoffend. Research focusing on support provided by family is continuing to grow; however, much of this research lacks theoretical guidance, creating unclear measures of social support provided by family and its effect on crime. This study is guided by Social Support Theory (Cullen, 1994), which posits that social support is negatively related to crime.

In his presidential address before the Academy of Criminal Justice Sciences, Cullen laid out the framework for Social Support Theory. Social support theory finds its

roots in the Chicago School, which promoted, among other ideas, the theory that relationships at both the individual and community level are vital to meeting the emotional and instrumental needs of individuals (Cullen, 1994). Meeting these emotional and instrumental needs are necessary elements in the prevention of crime.

In defining social support, Cullen looked to the work of Lin (1986), who defined social support as “the perceived or actual instrumental and/or expressive provisions supplied by the community, social networks, and confiding partners” (p. 18). Cullen broke down this definition and further defined social support according to three major dimensions:

1. The perception of support and objective/actual receipt of support,
2. Instrumental and expressive support; and
3. Micro-level and macro-level support

Cullen introduced a fourth dimension—the distinction between social support being delivered by a formal agency, such as by a government agency, or through an informal relationship, such as family or among peers. Using this expanded definition of social support, Cullen laid out fourteen propositions hypothesizing the role of social support relative to crime. While addressing all propositions laid out by Cullen is outside the scope of this study, Cullen’s third proposition is examined. In this third proposition, Cullen proposed that “the more support a family provides, the less likely it is that a person will engage in crime” support by family is the focus of this study (p. 538). Social support as framed by Cullen is explored further in Chapter 2.

Although social support has been studied extensively within behavioral and physical sciences, social support within the realm of crime has continued to burgeon. Some studies that have been guided by Social Support Theory tend to clump these forms of social support into one measure, thus limiting our understanding of the nuances of social support and their effect on crime and recidivism (see, e.g., Hochstetler, DeLisi, & Pratt, 2010; Kort-Butler, 2010; La Vigne et al., 2004). Other studies examining social support have focused on specific dimensions of social support, such as formal instrumental social support (Singer, 2012), while others have focused on informal emotional and instrumental social support (Taylor, 2012).

Although these studies have progressed our understanding of social support and its effect on recidivism, there are other aspects of social support that are not addressed. One such area is the effect that negative family dynamics within the context of an otherwise supportive family environment may have on an individual's likelihood to commit a crime. Cullen, in his framework of social support, briefly touches upon the notion that social support is not always consistently provided, and that the erratic delivery of social support interrupts the perception of the levels of positive social support (see Colvin, Cullen, Vander Ven, 2002). Additionally, social support can be provided from illegitimate sources, which can affect the extent to which social support has a positive effect on individuals.

Consistent with all dimensions of social support, this study examines social support within the context of recidivism. Specifically, emotional family social support is highlighted. A growing body of research points to the fact that not all forms of emotional

support are conducive to the reduction of negative outcomes, such as recidivism. This body of research touches upon the inconsistency and the receipt of social support from illegitimate sources. This study examines not only positive and negative forms of social support, but also changes in levels of these forms of emotional support within specified time periods (to be described in Chapter 4). Emotional family support is examined among instrumental family support, as well as instrumental peer support. While there are still other aspects of social support that need to be studied to gain a wider understanding of Social Support Theory, understanding how these different dimensions impact an individual's likelihood to recidivate can potentially have large policy implications.

Plan of Presentation

To begin, a review of the literature is presented in Chapter 2. Chapter 2 begins with an introduction to social support as a concept and theoretical perspective. Specifically, Cullen's (1994) Social Support Theory is laid out and defined. After establishing the broader concept of social support, chapter two explores each element of social support as proposed by Cullen—perceptive and actual/objective, emotional and instrumental, micro and macro, as well formal and informal social support. This literature will present research among criminology as well as other behavioral and social science fields, such as psychology. The literature review will not only support Cullen's theoretical propositions, but also reveal the nuances of social support as a concept. In doing so, the inverse effect that social support can have on a number of negative outcomes is established. The literature will also reveal that not all forms of social support

have an inverse effect on negative outcomes, and the need to explore negative social support that can occur within an otherwise supportive environment.

Once these elements of social support have been introduced, Chapter 2 focuses the literature around the family unit, and examines family emotional support and its relation to reoffending. Here, the literature is separated between positive and negative emotional family support.

Chapter 3 presents the statement of the problem, which provides context to the data and variables used in this study. Additionally, the research questions and hypotheses that will guide this study are laid out in chapter 3. Five separate research questions will guide this study. These research questions will examine positive and negative emotional family support and their effect on an individual's likelihood to recidivate. Additionally, the effects of changes in levels of positive and negative emotional family support on an individual's likelihood to recidivate are examined.

Chapter 4 presents the methodology plan of this study. First, the data used to explore the research questions presented in chapter 3 is introduced. This study utilizes data from the Multi-Site Evaluation of the Serious and Violent Reentry Initiative. This initiative began in 2003, and involved a number of federal agencies, including: the U.S. Department of Justice (DOJ), Department of Labor (DOL), Department of Education (DoEd), the Department of Housing and Urban Development (HUD), and the Department of Health and Human Services (HHS). The purpose of this initiative was to provide funds to states to develop, enhance, or expand the reentry programming opportunities of adult and juvenile offenders returning to the community. Once this data has been further

outlined, methods to address attrition and missing data are described. Following this discussion, a description of all dependent, independent, and control variables, inclusive of all support measures used in the study are presented. Following a description of all variables used in the study, chapter 4 presents the initial descriptive statistics of all variables. Lastly, chapter 4 concludes by presenting the analytic strategy for the study. Specifically, this section will describe the use of discrete hazard modeling to explore the data and answer the research questions posed in chapter 3.

Findings for this study are provided in Chapter 5. Chapter 5 begins by presenting the bivariate analyses results, followed by discrete hazard modeling results. Results from analyses are presented according to all research questions posed in this study relative to positive and negative emotional family support and changes in positive and negative emotional family support. Following the results of the study, Chapter 6 presents the discussion, policy implications, limitations, and future directions of the study.

CHAPTER 2

Review of the Literature

This chapter begins by introducing social support as the guiding theoretical component of this study. Social support is explored as a theoretical concept that has been measured extensively in other social science fields, such as psychology and social work, as distinguishable from other similar concepts. In doing so, different forms of social support are introduced, such as instrumental and emotional, perceptive and objective, as well as positive and negative. Although these different forms of social support have been explored within other social science fields, they have not been explored as extensively in the field of criminology and criminal justice. Much of the literature surrounding social support has not been studied comprehensively, leaving many assumptions. One assumption is that all social support is *positive*, regardless of the form it takes or the provider of support, and that all forms of social support have reverse effects on negative behaviors. Although it may seem counterintuitive to grasp the idea of negative social support, literature highlighting negative forms of social support is explored within this study. More specifically, a review of the extant literature relative to some of these forms of social support as a component to reentry and reoffending is provided. In doing so, gaps that exist in the literature are identified, informing this study.

Following an overview of social support and its different forms, literature relative to social support provided by family is examined more closely. This study focuses on emotional support provided by family as well as instrumental support provided by family and peers. In giving attention to these forms of social support from different members of

a formerly incarcerated individual's support system, a broader understanding of social support as a component to reentry is gleaned, specifically with regard to the impact that it may have on an individual's likelihood to recidivate.

Social Support

Although research examining the effects of social support on crime is relatively new, the effects of social support on a number of other outcomes have been explored within the fields of sociology, psychology, other behavioral sciences, and medicine for a number of years. The extant research largely explores the effects of social relationships in the maintenance of individual health and well-being (Berkman & Glass, 2000; Cohen, Underwood, & Gottlieb, 2000; House, Landis, & Umberson, 1988; Smith & Christakis, 2008; Stansfeld, 2006). Specifically, social support affects an individual's mental and physical health by influencing emotions, cognitions, and behaviors (Cohen, 1988; Cohen, Kaplan, & Manuck, 1994; Lakey, Orehek, Hain & VanVleet, 2010; Stansfeld, 2006; Uchino, Cacioppo, & Keicolt-Glaser, 1996; Wallace, Fahmy, Cotton, Jimmons, McKay et al., 2014). For example, Stansfeld (2006) argues that a lack of social support may lead to social isolation, affecting the overall mental health of an individual, yet the exact nature of this influence is not completely clear. The lack of clarity was also evident in a study conducted by Lakey and colleagues (2010). In their study, Lakey and colleagues examined social support's connection to mental health. Social support has typically been linked to mental health by way of perceived support when enacted support is also present. The authors sought to examine whether enacted support could be directly linked to mental health. It was found that enacted support could be directly linked to negative

effects of mental health, but only when social influences were present; alternatively, trait influences were linked to a high negative affect.

Social support within the field of criminology has similarly not been so clear-cut, nor has it been explored as extensively as other social science fields. Social support, as a concept, has been explored without theoretical clarity, leading to ambiguous and inconsistent attempts to measure the correlation between social support and crime (Alzheimer, 2008; Antonaccio, Tittle, Brauer, & Islam, 2014; Baron, 2015; Brezina & Azimi, 2018; Cid & Marti, 2017; Martinez & Abrams, 2013; Orrick, Worrall, Morris, Picquero, et al., 2011; Pratt & Godsey, 2003). For example, theoretical concepts like social capital (Bourdieu, 1986; Rosenfeld, Baumer, & Messner, 2001), and social bonds (Gottfredson & Hirschi, 1990; Hirschi, 1969; 2002; Hirschi & Gottfredson, 1983) within criminology *allude* to the importance of social support, but do not measure it directly. Instead, social bonds theory highlights the importance of strong bonds with family members that may *enable* several processes, such as the receipt of support. Researchers suggest, for example, that the greater the social bond between adolescents and parents, the more likely support is to be provided that may buffer an individual from committing a crime (Hirschi, 1969). Social support, however, is not measured directly.

Another theoretical perspective that has alluded to the importance of social support in explaining crime has been general strain theory; however, social support is not the only concept explored. Agnew (1992) posits that the relationship between strain and crime is dependent on the level of social support an individual receives. Thus, individuals who experience strain are less likely to resort to crime if they possess high

levels of social support. Again, social support is just one factor that Agnew identifies as being a buffer against the negative effects of strain—others include individual coping resources, constraints to delinquent coping, and macro level variables.

In order to provide conceptual clarity to the relationship between social support and crime, while also giving credence to other processes that precede the receipt of social support, Francis Cullen (1994) developed a Social Support Theory as an organizing theory of crime. Social Support Theory will serve as the theoretical foundation for this study.

Social Support Theory

Social support theory, as introduced by Francis Cullen In his 1994 presidential address to the Academy of Criminal Justice Sciences, draws on other theoretical works to become a general framework of social support to explain crime at the micro and macro level. Cullen’s framework utilizes Lin’s (1986) definition of social support as a basis for his theory. Lin defines social support as “the perceived or actual instrumental and/or expressive provisions supplied by the community, social networks, and confiding partners” (p. 18). Adding to this definition, along with work by Vaux (1988), Cullen (1994) introduced four other areas to conceptualize social support. The first area involves the way in which social support is assessed. According to Cullen, social support can be based on the objective or *actual* delivery of support, or the *perception* of support (p. 530). Secondly, social support can be provided either *emotionally* by “meeting the needs for love and affection, esteem and identity, and belonging and companionship” (Vaux, 1998, p. 21), or *instrumentally* by providing financial assistance, help finding a

job, or receiving advice or guidance. The third element of social support asserts that social support can be provided at the *individual* level as well as at the *macro* level. A friend or parent can provide individual level support, whereas neighborhoods, state, local, or federal governments can provide macro level support. Lastly, social support can be provided both *informally*, such as from friends and family, and also *formally*, such as from a state or county department, or an educational institution (see also Cullen, Wright, & Chamlin, 1999; Hochstetler, DeLisi, & Pratt, 2010; Pratt & Godsey, 2003).

Cullen's (1994) general proposition contends that social support, in all of its forms, "whether social support is delivered through governmental social programs, communities, social networks, families, interpersonal relations, or agents of the criminal justice system, it reduces criminal involvement" (p. 527). Essentially, the higher levels of social support that an individual has, the more likely they are to resist a criminogenic environment and/or to partake in criminal behavior. Additionally, social support may act as a buffer between the individual and a criminogenic environment. Higher levels of social support are argued to create mechanisms that reduce an individual's involvement in crime. For example, higher levels of social support may increase family efficacy—or the extent to which family are intact (see Loeber & Stouhamer-Louber, 1986), it may also assist in earlier criminal desistance over the life course (see Sampson & Laub, 1993), and also be a precondition to the impact of social control (Braithwaite, 1989). Accordingly, social support can help to insulate individuals from negative experiences, to promote pro-social adaptations, and to facilitate coping responses to strain (Capowich, Mazerolle, & Piquero, 2001; Cullen, 1994; Cullen et al., 1999).

The propositions above acknowledge the benefit that social support plays in facilitating a supportive correctional system and community that is essential to the reentry process (Colvin, Cullen, & Vander Ven, 2002; Cullen, et al., 1999; Hochstetler et al., 2010). Cullen and colleagues (1999) argue that supporting a formerly incarcerated individual by investing in developing interpersonal skills and supplying counseling and other services can help rehabilitate individuals and reduce recidivism. Alternatively, investing in non-supportive programs and policies not only abandons the rehabilitative efforts meant to lessen criminal propensities (see Andrews & Bonta, 1988; Lipsey & Wilson, 1998), but also makes for a “prima facie case for the futility of socially supportive correctional philosophies” (Cullen et al., 1999, p. 201). Social support theory purports that providing pro-social support is not only a condition that insulates individuals from crime, but should be an approach that policy makers might consider in developing crime control policies.

Although this study has a narrower focus on the family unit and social support that is provided by family to formerly incarcerated individuals, the four elements of Cullen’s (1994) Social Support Theory help to focus the study. More specifically, this study relies on self-report data to measure *perceptive* levels of social support and any changes in these perceptions over time. Additionally, *expressive* (referred to as emotional in this study) and *instrumental* social supports are examined at the individual level. Lastly, social support provided *informally* by family members and peers is explored; Serious and Violent Offender Reentry Initiative (SVORI) programming upon which the data used in this study is based, serves as an indicator of *formal* support.

Because literature specific to crime continues to burgeon, these forms of social support are first explored among criminology and other social science fields. Once these forms of social support are addressed, the extant literature relative to social support and the narrower family unit and crime is presented.

Perceptive social support and actual social support.

Most research that examines social support at the individual level relies on the individual's self-reported perceptions of support. It is important to understand the difference between perceptive and objective (actual) social support as these two elements differ in the effect that they may have on an individual's behavior. It is assumed, for example, that the perception of having social support can work to reverse the potential harm posed by a stressful event (Cohen, Underwood, & Gottlieb, 2000; Lakey, Orehek, Hain, & VanVleet, 2010; Listwan, Colvin, Hanley, & Flannery, 2010; Nelson, Dees, & Allen, 1999; Paterline & Petersen, 1999; Procidano & Heller, 1983). Further, it is argued that the perception of having social support rather than the actual receipt of social support is enough to buffer an individual from negative responses when faced with a stressful event (Lakey, Orehek, Hain, & VanVleet, 2010; Lepore, Silver, Wortman, & Wayment, 1996; Thoits, 2011). Studies show that individuals that perceive higher levels of social support experience reduced levels of anxiety and depression (Zimet, Dahlem, Zimet, & Farley, 1988), as well as better overall psychological adjustment (Friedlander, Reid, Shupak, & Cribbie, 2007; Halamandaris & Power, 1999; Smith & Christakis, 2008).

Social support scholars argue that *perceived* social support is more salient a factor than objective social support in its effect on positive psychological or social states of an

individual (see Barrera, 1981; Lakey et al., 2010; Sarason, Shearin, Pierce, & Sarason, 1987). In other words, an individual's perception of having individuals that provide support differs from the actual receipt of support (Sarason et al., 1987; Thoits, 2011). Similarly, research suggests that individuals who feel supported, and perceive that they have a support system in place are less likely to experience the number of strains and increased levels of stress, anxiety, and depression than individuals that do not feel supported (Thoits, 1995; 2011; Sarason et al., 1987; Zimet et al., 1988). It is thus assumed that individuals who do not feel supported may experience a number of strains that may increase levels of stress, anxiety, and depression (Brissette, Scheier, & Carver, 2002; Smith & Christakis, 2008).

Research examining perceived levels of social support is limited. Studies, however, have pointed to positive outcomes for things such as a reduction in levels of depression. In their study of multidimensional perceived social support, Zimet and colleagues (1988) surveyed 275 undergraduate students to determine whether or not symptoms such as anxiety and depression were present and how these symptoms may be related to relationships with family, friends, and a significant other. Among their findings, perceived support from family was inversely related to depression, more so than perceived support from a significant other. A recent study, however, has shown that although perceived support has generally been more salient in outcomes, there are nuances within these types of support that may affect overall outcomes. For example, Lakey and colleagues (2011) found that the effect of enacted (actual) support could have a differing effect on mental health outcomes when different influences are prevalent.

Individuals recently released from an institution are saddled with a number of social problems that make their reintegration to society difficult. For one, life circumstances and individual struggles, such as substance abuse, unemployment, and family reunification, increase levels of strain on the individual reentering society following a prison term (Martinez & Abrams, 2013; La Vigne, Visher, & Castro, 2004; Petersilia, 2003; Visher, La Vigne & Travis, 2004). The nature and visibility of the formerly incarcerated individual's public identification may impact the social support provided by families; this public identification may also have adverse impacts on the returning individual's family.

Understanding that the perception of support provided can reduce levels of stress, anxiety, and depression, and a lack of support can increase the levels of these psychological problems (Barrera, 1981; Sarason et al., 1987), it is important to explore these findings within the context of recidivism in order to move the reentry literature forward. Possible reasons for a gap in literature that explores the perception of support may be due to a lack of availability of disaggregated data allowing for the assessment of support before an event, support received during the event, and the relationship with subsequent outcomes (Wills & Sinar, 2000). This study is unique in that it utilizes perceptive data from individuals prior to release from an institution and during follow-up periods while in the community, providing an important glimpse into the perceptive nature of support and how these levels of perceived support can lead to negative outcomes (recidivism).

Emotional social support and instrumental social support.

Emotional and instrumental supports have been examined quite extensively within the disciplines of sociology, psychology, and both physical and mental health. (Cohen, Underwood, & Gottlieb, 2000). Emotional support, for example, is regarded as the most important type of support where overall mental well-being is concerned (Berkman, 1995; House, Landis, & Umberson, 1988; Semmer, Elfering, Jacobshagen, Perrot, et al., 2008; Thoits, 1995; 2011). However, a meta-analysis conducted by Schwarzer and Leppin (1991) concluded that instrumental support is more relevant than is emotional support to an individual's physical health. Researchers grapple with the lack of clarity and the possible overlap of emotional and instrumental social support. This has led to conflicting findings on whether emotional or instrumental support is the stronger of the two. For example, Semmer and colleagues (2008) argue that instrumental support can sometimes have emotional meaning, and that a reason for conflicting results may be that the characteristics of a particular situation can sometimes dictate whether emotional or instrumental support is more salient (see also Cohen & Wills, 1985; Cutrona & Suhr, 1994).

With this in mind, exploring the effects that both emotional and instrumental social support may have within the context of recidivism is important to our understanding of the reentry process, especially as researchers and practitioners fail to come to a consensus on effective methods for increasing reentry success among formerly incarcerated individuals. Still, however, research in criminology examining emotional and instrumental social support is limited, and does not always directly measure

emotional and instrumental support as separate forms of social support. For example, some studies examining social support create a “social support measure,” that collapses the two into one measure, thereby making it impossible to determine whether emotional *or* instrumental social support is more salient in the reduction of crime or other negative behaviors (see, e.g., Altheimer, 2008; Antonaccio, Tittle, Brauer, & Islam, 2014; Baron, 2015; Brezina & Azimi, 2018; Cao, Burton, & Liu, 2018; Cid & Marti, 2017; Hochstetler, DeLisi, & Pratt, 2010; Kort-Butler, 2010; Kurtz & Zavala, 2017; Lakey et al., 2010; Orrick et al., 2011; Shorey & Lakey, 2011).

Research that has examined the relative effects of emotional and instrumental social support on recidivism has generally focused on support provided by family (Breese, Ra’el, & Grant, 2000). In their study of the effects of emotional and instrumental family support on recidivism, Breese, Ra’el, and Grant (2000) interviewed male prisoners who had been incarcerated for at least a second offense. Among their findings, instrumental support (referred to as resources) was found to create a negative response among former prisoners who felt pressured to contribute instrumentally to their families upon release from prison. Conversely, emotional support did not seem to have an impact on the prisoners.

More recent research has continued this tradition by exploring both emotional and instrumental social support. Singer (2012) sought to examine the effect of both emotional and instrumental social support from both a formal (state level) and an individual (family) level on reoffending. Using data from Uniform Crime Reports, Current Population Survey, and Health and Human Services as measures of instrumental

support, Singer found that instrumental support provided by states was inversely related to crime. With regard to expressive support (emotional support), Singer discovered that both the presence of a supportive mother and the presence of a supportive spouse/partner were inversely related to criminal activity, but neither the presence of a supportive father and the presence of someone to talk to about problems was significantly related to criminal behavior.

Similar results were found during Taylor's (2012) examination of the effect of emotional and instrumental support from family on a formerly incarcerated individual's likelihood to recidivate. Results indicated that emotional family support had an inverse relationship with recidivating, whereas instrumental family support provided no significant relationships with recidivating. These findings did, however, vary among follow-up periods. For example, while emotional and instrumental family support was found to be significantly related to a reduction in reoffending within the first three months post-release, neither emotional family support nor instrumental family support were significant in the three to nine months post-release period. Emotional family support was found to be significantly associated with a reduction in reoffending in the nine to fifteen months post-release period¹.

Although the literature has generally found emotional support to be more salient than instrumental support, one limitation is that instrumental support is generally measured either generally, or among family members. It is rare for studies to examine instrumental support among peers. Research has indicated, however, that support from

¹ Taylor's study is explored more extensively in the section examining family support, reentry, and reoffending

family and peers are two distinct mechanisms that impact individual behavior in distinct ways (see Garnefski & Diekstra, 1996; Helsen, Vollebergh, & Meeus, 1999; Kerr, Preuss, & King, 2006; Licitra-Kleckler & Wass, 1993; Piko, 2009). For example, Licitra-Kleckler and Wass (1993) found that perceived family support and peer support differed in how they were connected to levels of depression and delinquent behaviors in adolescents. The authors found that adolescents with high levels of perceived family support reported fewer depression and delinquency outcomes. Alternatively, inconsistent outcomes were found among adolescents reporting high levels of perceived support among peers.

Piko (2009) also found distinct differences in results among peers and family. In her study, Piko sought to examine how sociodemographics, psychological health, and perceived support from parents and friends might predict smoking, drinking, and drug use in adolescence. Results indicated different effects not only between friends and parents, but also between mother and father support. Piko found that perceived support from friends or mothers were not strong predictors of smoking, drinking, and drug use, while low levels of perceived support from fathers was found to increase the likelihood that an individual would partake in various forms of substance abuse.

While these studies included indicators of both emotional and instrumental support, these indicators were collapsed into one support measure. Because both of these studies examined support in a general form, determining the saliency of perceived emotional or instrumental support among family *or* peers was not possible. This study seeks to examine emotional and instrumental support as separate measures. While

perceived emotional support among family is the main focus of the study, perceived instrumental support among family, as well as peers, is examined.

Formal social support and informal social support.

Research on formal social support generally focuses on the “main effects” that social support provides, such as economic assistance (Alzheimer, 2008; Chamlin & Cochran, 1997; Chamlin, Novak, Lowenkamp, & Cochran, 1999; Hannon & DeFronzo, 1998; Pratt & Godsey, 2003; Reisig, Holtfreter, & Morash, 2002; Woo, Lu, & Stohr, 2016). For example, Pratt and Godsey (2003) used data gathered from the World Health Organization and the United Nations Statistics Division to examine the relationship between social support and homicide rates among a cross-national sample. Pratt and Godsey (2003) found that there is a significant relationship between social support, inequality, and crime rates. Specifically, the authors found that higher levels of social support, such as economic welfare programs, result in lower homicide rates. Similar results were found in a study conducted on social capital among women offenders by Reisig, Holtfreter, and Morash (2002). Reisig and colleagues found that lower levels of formal social support through community welfare programs influenced recidivism among their female sample. A more recent study conducted by Woo and colleagues (2016) examined informal and formal support relative to prison misconduct. Woo and colleagues conducted research on a sample of 359 Korean inmates—303 males and 56 females. Their study sought to determine the effects of social support on prison misconduct by gender. Their study revealed that male inmates were provided with more formal social support within the institution than females; however, females were provided

with more informal social support than males. Overall, it was revealed that females that were provided with more informal social support were less likely to engage in misconduct than males.

Research examining informal social support has generally centered on that provided by friends and family. For example, research finds a negative relationship between social support provided by parents and recidivism among adolescents (Wright, 1995; Wright & Cullen, 2001). In his study of adolescents and their parents, Wright (1995) found that support provided by parents to their children was reduced due to poverty and broken homes. This reduction in parental support increased delinquency among adolescents. Similarly, Wright and Cullen (2001) reported that social support, along with parental supervision, leads to decreases in delinquency. More recently, research has shown that social support can prevent overall delinquent responses (Kort-Butler, 2010). Using data from Waves 1 and 2 of the National Longitudinal Study of Adolescent Health, Kort-Butler found that low levels of social support is linked to future violent delinquency. Literature examining social support among adult populations also finds social support is linked to reduced levels of recidivism (Berg & Huebner, 2011; Estroff, Zimmer, Lachicotte, & Benoit, 1994; La Vigne et al, 2004; Nelson et al., 1999; Reising, Holtfreter, & Morash, 2002; Singer, 2012; Taylor, 2012; Jiang & Winfree, 2006). These studies generally point to the notion that increased formal support provided by state governments as well as informal support provided by families decrease an individual's likelihood to recidivate.

Informal support has also been examined among peers. The literature differentiates between support provided by peers and its effect on delinquency and other negative outcomes, such as substance use and depression (Brezina & Azimi, 2018; Garnefski & Diekstra, 1996; Helsen, Vollebergh, & Meeus, 1999; Kerr, Preuss, & King, 2006; Licitra-Kleckler & Wass, 1993; Piko, 2009). Garnefski and Diekstra (1996) examined negative perceptions of support from family, school, and peers and how they affect emotional and behavioral problems. The authors found differences in perceptions of negative support from peers versus family. Negative perceptions of peer support were found to be related to emotional problems among adolescents. Alternatively, negative perceptions of family support were found to be significantly related to emotional as well as behavioral problems.

Similar distinctions were found in a study conducted by Kerr and colleagues (2006). In their study, Kerr and colleagues examined perceptions of social support from family, non-family adults, and peers and how these perceptions were related to psychopathology reported by 220 suicidal adolescents. Results showed that peer support was positively related with externalizing behavior problems. Family support, however, was found to be negatively related to these same problems as well as alcohol and substance abuse. A more recent study conducted by Brezina & Azimi (2018) examined the effect of social support on delinquency provided by peers. Brezina and Azimi examined the differential social support hypothesis and its effect on delinquency. In their study, Brezina and Azimi wanted to determine the effect that social support from deviant sources had on delinquency. Particularly, the authors sought to understand how support

from delinquent peers affected the way in which peer social support was associated with delinquency. Results indicated that peer social support was correlated with an increase in delinquent behavior when individuals associate with delinquent peers.

Micro-level social support and macro-level social support.

The final element of social support examines the extent to which social support is provided on a social level. Here, social support can be provided at the micro- or macro-level. Support that is provided at the micro-level involves persons within the individual's social network who have developed confiding relationships with the recipient, such as a spouse or a friend. Alternatively, support can be provided at the broader macro-level by a social network within the community (see Lin, 1986). According to Lin (1986), the confiding relations that are closest to the individual will have the most significant impact on their well-being.

Much of the extant literature involving micro-level social support overlaps with other social support research as the previous sections have revealed. This is especially true where support provided by peers and family is concerned. Here, studies have shown that support provided by peers and family has been shown to directly impact the emotional and behavioral state of adolescents and adults (see Brezina & Azimi, 2018; Garnefski & Diekstra, 1996; Helsen, Vollebergh, & Meeus, 1999; Stice, Ragan, & Randall, 2004). Still, however, these studies also indicate that differences exist in the impact that peer support versus family support has on individual outcomes. For example, in their study of 2,918 adolescents aged 23 to 24, Helsen and colleagues (2000) found that the effect of support from peers seemed to depend on the level of support that was

received from the individual's parents. Here, the authors found that high levels of perceived support from parents had a slightly positive effect on the effect of peer support. Although peer support is not the focus of this dissertation, the extent to which micro-level support from confiding individuals has on a returning offender—whether it is from family or peers—is examined in this study.

Similarly, macro-level support also overlaps with research that examines formal social support. Research has shown that support provided by local, state, and federal governments can directly impact the way in which social support is provided to individuals. Additionally, research also indicates that social support provided at the macro-level but can have a significant impact on how social support works as a mechanism to buffer individuals from negative behaviors, such as delinquent acts and crime (Chamlin & Cochran, 1997; Chamlin et al., 1999; Hannon & DeFronzo, 1998; Pratt & Godsey, 2003; Reisig et al., 2002; Woo, Lu, & Stohr, 2016).

Negative social support.

Overall, the differing forms and elements of social support point to the way in which social support can have a reverse effect on negative behavior. As social support has continued to garner more credence within the field of criminology, research has started to recognize that not all forms of social support are alike, or that not all support has a reverse effect on negative outcomes, such as recidivism (see Martinez, 2006). The prior sections have addressed social support, various elements, and their *positive* or reverse effect on negative behaviors, however, the literature supports that (1) social support is not a *singular* element that has a reverse effect on negative behavior, but rather

has many different forms, (2) these different forms of support can be provided by family or peers, and (3) that not all forms of social support have a significant reverse effect on negative behavior. Social support is thus not created equal.

Although it is not typical to think of social support in both a positive and negative light, there is a growing amount of literature that has examined the potential for social support to be positive *or* negative in nature (Antonucci, 1985; Brezina & Azimi, 2018; Jairam & Kahl, 2012; Lincoln, 2000; Kurtz & Zavala, 2017; Pettus-Davis, Howard, Roberts-Lewis, & Scheyett., 2011; Ray, 1992; Seal, Eldridge, Kacanek, Bison, et al., 2007). As evidenced in previous sections, social support has long been examined in the “positive” sense, and has generally been found to have a reverse relation to negative behaviors and outcomes like crime. More recent research relative to social support, however, suggests that it may not be so simple to study and understand, as the interactions that occur between the formerly incarcerated and providers of social support are complex. One area that is not clear is the extent to which negative social support plays a role in the reentry process and how negative social support is an important and distinct concept that should be studied further.

Although it may seem counterintuitive, social support may also be negative. Researchers that have studied social support have long recognized the existence of a negative element of social support that can be measured independently of positive social support. It is argued that non-support or negative support, especially among family members, can and has led to an increase in negative outcomes, such as ill health (see Antonucci, 1985; Berkman & Syme, 1979; House, Robbins & Metzner, 1982; Medalie &

Goldbourt, 1976; Nuckolls, Cassel, & Kaplan, 1972; Pettus-Davis et al., 2011; Revenson, Schiaffino, Majerovitz, & Gibofsky, 1991; Wilcox & Vernberg, 1985; Wallace et al., 2014). According to Antonucci (1985), although social support may be *intended* to be positive from a provider, support “may be negative either because the objective outcome of the support provided is negative or the recipient of the support perceives the support negatively” (p. 29). Examples of negative behavior might include a friend or family member that (1) is perceived to be too overprotective, (2) the provider may reinforce damaging behaviors, or (3) support may be provided “on demeaning or debilitating terms” (Antonucci, 1985, p. 29). For example, the substance-using friends or family members may be “supportive,” however, support is provided despite partaking in maladaptive behaviors. Similarly, although friends or family members may be emotionally supportive, arguing and fighting may also occur that causes increased stress to the recipient.

Similarly, Brezina and Azimi (2018) found that social support from peers was actually correlated with an increase in delinquent behavior if the provider of support was delinquent themselves. Thus, it is argued that failing to provide support or the presence of a negative support relationship, especially among family members, can increase the likelihood of negative outcomes, such as increased criminal activity (see Antonucci, 1985; Brezina & Azimi, 2018; Kurtz & Zavala, 2017; Pettus-Davis et al., 2011). In their study of social support interventions for former prisoners, Pettus-Davis (2011) examined naturally-occurring social support programs in order to provide a conceptual framework for programs, such as the Support Matters program that illustrate naturally-occurring

social support and promote reduced relapse for substance abuse and crime. Pettus-Davis' review of the literature highlighted studies linking negative social support to negative outcomes (i.e. increased substance abuse), and overall positive post-release success (see, e.g., Falkin & Strauss, 2003; Seal et al., 2007; Shinkfield & Graffman, 2009). Research has shown that social support is widely available to the formerly incarcerated and that social support plays a role in the success of the individual once they have returned to the community. Although examining negative social support has continued to garner more attention recently, studying negative social support in and of itself is not without complication.

Aside from the unidirectional approach most studies take to examine social support, there are also conceptual and methodological limitations revolving around the examination of negative social support. One major issue is the variety of terms used to refer to what can be thought of as “negative social support.” For example, the diversity of terms in which negative social support has been conceptualized have included: social conflict (Gant & Ostrow, 1995), interpersonal stress (Beach, Martin, Blum, & Roman, 1993) problematic social interactions (Davis, Rhodes, & Hamilton-Leaks, 1997), problematic support (Revenson et al., 1991), negative social interactions (Lakey, Tardiff, & Drew, 1994; Lincoln, 2000; Rauktis, Koeske, and Tereshko, 1995), and negative relations (Elder, Eccles, Ardelt, & Lord, 1995), among many others. All of these terms represent a myriad of ways that an individual may experience negative social support during an otherwise supportive relationship.

Another methodological issue revolves around the distinction between positive and negative social support as independent factors. Because negative social support has not received much attention in the social support literature, this methodological issue has not been addressed. For example, when examining positive and negative social relations, Okun and Keith (1998) found a weak association between the two concepts suggesting that each concept exerts independent effects on individual well-being (Okun & Keith, 1998). Still, however, because negative social support is difficult to measure, it is not given much attention as a separate concept, and as a result, clarification of the relationship between negative and positive social support is not extended. Questions remain, and are examined in this study, including examining the distinction between positive and negative social support and whether or not they relate to one another. Similarly, if the two concepts are distinct, which has more saliency with regard to negative outcomes, such as recidivism. The focus of this study is on social support—both positive and negative—that is provided by family. Social support relative to family members is discussed in subsequent sections.

The previous section examined the different elements and ways in which social support is provided to individuals. Additionally, a separate form of social support—negative social support—was introduced as a possible separate element that should be examined. These differing elements of Cullen's (1994) Social Support Theory are examined in this study. While these elements are all examined—to an extent—in this study, the narrow focus is on micro-level, informal social support provided by family. The following sections narrow the literature to not only social support provided by

family, but also the extent to which both positive and negative forms of social support provided by family are related to crime and criminal behavior. Consistent with the separation between the positive and negative effect of social support, the literature on family social support is presented separately between positive and negative social support in the sections to follow.

Family Social Support

While the extant research demonstrates the effective nature of social support in facilitating positive re-entry outcomes for recently released inmates (Brown, Amand, & Zamble, 2009; Spjeldnes, Jung, Maguire, & Yamatani, 2012), it also suggests that social support is made up of various forms. The prior discussion introduced some of these forms of social support, however, it is important to now focus the attention on the family unit as being the critical source of social support. Social support provided by family is consistent with the micro-level, and informal elements of social support as discussed by Cullen (1994) and Lin (1986).

The extant research examining social support relative to family has examined the negative consequences not only among adolescents who lack social support (Abrams, 2007; Cornwell, 2003; Fader, 2008; Loeber & Stouthamer-Loeber, 1986; Martinez & Abrams, 2013; Shannon & Abrams, 2007; Wernsman, 2009; Wright, 1995; Wright, Cullen, & Miller 2001), but also the role that family support plays among adults reentering society (La Vigne, Visher, & Castro, 2004; Naser & Visher, 2006; Nelson et al., 1999; Shollenberger, 2009; Singer, 2012; Taylor, 2012; Visher & Courtney, 2006; Visher, La Vigne, & Farrell, 2003; Visher, La Vigne & Travis, 2004). The sections to

follow will address the positive and negative aspects of family social support and their connection to reentry and reoffending.

Positive family social support, reentry, and reoffending.

Research relative to social support provided by family highlights both the reduction of negative behavior when social support is provided, as well as the increase in negative behavior when social support is lacking. For example, in his study of adolescents and their parents, Wright (1995) used data collected from the National Survey of Families and Households to examine the effect that social support had on adolescents. Among his findings, Wright (1995) determined that poverty and broken homes increased delinquency among adolescents by reducing the amount of support that parents were able to provide to their children. Similarly, Wright, Cullen, and Miller (2001) reported that social support itself acts to reduce delinquent involvement among adolescents as well as in combination with parental control. Additionally, Wright and colleagues (2001) found that social support provided by the family was positively correlated with moral beliefs, time studying, and grades, and inversely related to having criminal friends.

Among the adult population, studies also point to the positive effects that social support from family can have on formerly incarcerated individuals. Research examining the effect of social support and the reentry of formerly incarcerated individuals finds that social support plays an important part in the reentry process (Antonaccio, Tittle, Brauer, & Islam, 2014; Cid & Marti, 2017; Ekland-Olson, Supancic, Campbell, & Lenian, 1983; Fishman, 1986; La Vigne, Visher, & Castro, 2004; Markson, Losel, Souza, & Lanskey,

2015; Martinez & Abrams, 2013; Martinez & Christian, 2009; Naser & Visher, 2006; Nelson et al., 1999; Shollenberger, 2009; Visher & Courtney, 2006; Visher, La Vigne, & Farrell, 2003; Visher, La Vigne & Travis, 2004). Research indicates that family social support has the potential to modify depressive symptoms among returning individuals (Ekland-Olson et al., 1983), and is related to higher post-release success among inmates that remain connected and supported by family via visitations and phone calls, compared to those that do not maintain contact with their families (Bales & Mears, 2008; Hairston, 1988; Jiang, Fisher-Giorlando, & Mo, 2005; Martinez & Christian, 2009), though types of support varies among varying relational characteristics, such as if the incarcerated individual is visited by parents or partners (see Meyers, Wright, Young, & Tasca, 2017). A growing amount of literature exists that seeks to examine the effect that family social support has on the successful reentry of formerly incarcerated individuals.

Extant research on family support and the effect that it has on the reentry of formerly incarcerated individuals has come from the Returning Home reentry study that examined challenges that individuals face when they reenter society. This study, conducted by the Urban Institute, examined reentry in four separate cities/states: Baltimore, MD; Chicago, IL; Cleveland, OH; and Houston, TX (for study summaries see: La Vigne & Travis, 2004; La Vigne, Visher, & Castro, 2004; Visher & Courtney, 2006; Visher, La Vigne, & Farrell, 2003; and Shollenberger, 2009). In the Returning Home study, participants were interviewed both prior to their release from custody as well as at varying points following their release. This structure was important to examining the reentry of the individuals because it grasped their perceptions of support prior to release

as well as the level of support they received once in the community. With regards to family support, the Returning Home study, across all study sites, found families to be an important part of the returning individual's life. For example, in the Chicago sample, approximately 94% of the 400 respondents who were interviewed prior to release stated that they wanted their families to be involved in their lives, and 86% reported that they felt close to their families (Visher et al., 2003). Further, in terms of closeness, 46% of respondents reported feeling close to their families prior to being incarcerated, 43% reported feeling close while incarcerated, and 52% reported feeling close to their families once released (La Vigne et al., 2004). In the Baltimore study, family support was found to change over time, however, no reports of significance were discussed (Visher et al., 2004). Despite these changes, the Returning Home study revealed that families are supportive of newly released individuals. This support comes in a variety of methods—financial support, housing, assistance with finding employment, as well as assistance with abstaining from drugs. Further, in the majority of cases, actual receipt of support exceeded expectations of support. For example, while 72% of Chicago respondents expected to live with family members following release, 90% actually reported living with family in the four to eight months following results (La Vigne et al., 2004); similar results were found in other city samples.

Although the Returning Home study provided an extensive look at how family support is related to the reentry process, it does not directly explore these correlations with recidivism. Studies examining these connections are limited. For one, studies often allude to support, but actually measure different concepts, such as social ties, or fail to

provide conceptual clarity when measuring support. For example, Berg and Huebner (2011) used data from the Level of Service Inventory—Revised (LSI-R) among 400 males released from prison to examine the relationship between family *ties* and likelihood of recidivating. The authors found that family *ties* reduced the likelihood that an individual would be rearrested. Another study examined perceived levels of family support and the effect it may have on a variety of issues, including crime (Nelson et al., 1999). Although higher levels of family support were correlated with lower drug use, a greater likelihood of finding employment following release, and less criminal offending, this study was limited in a number of different ways. First, the study relied on a sample size of forty-nine individuals; second, the study used a very short follow-up period of one month; and third, respondents were allowed to provide their own definition of family support.

Two of the Returning Home study sites explored the relationship between family support and the likelihood of recidivism and were the first to do so. The Chicago study (La Vigne et al., 2004) revealed that individuals who reported higher levels of family support prior to being incarcerated were less likely than those reporting lower levels of family support to be reconvicted in the six months following their release. The Baltimore study explored levels of family support prior to incarceration, while incarcerated, as well as expectations of family support following release. Unlike the Chicago study, however, no significance was found between levels of family support and recidivism (La Vigne et al., 2004). While these two studies were the first to explore the relationship between

levels of family support and recidivism, limitations were also apparent, such as short follow-up periods, small sample sizes, and attrition.

Recognizing these limitations, recent research (Baron, 2015; Singer, 2012; Taylor, 2012) provide a more extensive examination on instrumental and emotional support and their effect on crime and reoffending, while others (Antonaccio, Tittle, Brauer, & Islam, 2014) have focused on the “probability” of committing a crime. Beginning with Baron’s study (2015), social support was found to be associated with criminal activity, however, only through other mediating factors—such as anger, low self-control, low social control, and access to illegitimate social support. In his study, a social support measure was taken using items from the Childhood Trauma Questionnaire; respondents noted levels of how true it was that: “there was someone in your family who helped you feel important or special; you felt loved; people in your family looked out for each other; people in your family felt close to each other; your family was a source of strength and support” (p. 1099). Among results, Baron (2015) found that social support was associated with criminal activity through varying degrees of anger, self-control, social control, and access to illegitimate social support. While Baron’s study examined social support, it was measured according to an individual’s reference to their childhood. Additionally, Baron examined social support in a homogenous manner and relative to coercive relationships.

Another study conducted by Singer (2012) examined social support relative to additional criminal behavior. While Singer’s research examined the effect that both macro- and micro-level instrumental support had on crime, these measures were

examined on a macro level (support provided by state governments). In addition to formal instrumental support, Singer also examined informal emotional support from family. To do so, Singer used data from the National Longitudinal Survey of Youth in 1997 to examine respondents' relationship to his/her parents, level of emotional support and advice provided, as well as level of support from his/her spouse or partner. Among her findings, Singer (2012) found that having a supportive mother and spouse/partner was negatively related to crime, however, having a supportive father and having someone to talk to about problems was not significantly related to crime.

Recall that Taylor's (2012) study sought to examine the effect that family support had on the successful reentry of individuals released from prison. Her study addressed limitations of the Chicago and Baltimore Returning Home studies by including a larger sample size and examining the effect of these supports over larger follow-up periods. Taylor used data gathered from the Serious and Violent Offender Reentry Initiative ([SVORI], Lattimore & Visser, 2004) to explore the effect that both emotional and instrumental family support had on reoffending. To guide her research, social support was framed according to Cullen's (1994) conceptualization of social support, as defined by Vaux (1988), where expressive support is that which meets "the needs for love and affection, esteem and identify, and belonging and companionship," as well as instrumental support, which involves financial aid or advice and guidance (Vaux, 1988, p. 21). Taylor's research sought to examine the effect that levels of emotional and instrumental support from family had on returning individual's likelihood to reoffend. Additionally, Taylor sought to examine gendered differences as well as to determine if

changes in levels of family support were apparent, and if so, whether or not these levels influenced the likelihood of reoffending.

Using logistic regression, Taylor (2012) found that emotional family support had an inverse relationship with reoffending, while instrumental family support had no significant effect on reoffending (both official and self-reported). These findings suggest that emotional family support acts as a greater protective factor than instrumental family support. These differences did vary among follow-up periods; no significant effect of emotional family support on reoffending was found during the 3 to 9 month period for men, however, these effects were significant during the 9 to 15 month period for men; instrumental family support did not have any significant effect for men across all waves/follow-up periods. Interestingly, emotional family support did have a significant negative effect on reoffending for women during the 3 to 9 month period; however, these findings were only significant for official reporting, whereas these findings did not hold for self-reported reoffending. With regard to change, levels of social support were apparent over each follow-up period; however, Taylor did not find that these changes had any significant effect on likelihood of reoffending for both men and women.

Although studies conducted by Singer (2012) and Taylor (2012) add a great deal to our understanding of instrumental and emotional family social support and its effect on reentry, there are also areas unexplored. Recall that among the different social sciences, the effect of social support on various behaviors can vary. A growing body of literature has started to address the assumption that not all forms of support are positive nor equally provide the same impact on recidivism (Cottle, Lee, & Heilbrun, 2001; Martinez &

Abrams, 2013; Naser & Visher, 2006; Shapiro & Schwartz, 2001; Wallace et al., 2014). Researchers in this area have noted that not all forms of support result in a reduction of recidivism, and that negative family support can result in an increased likelihood of recidivism.

Negative family social support, reentry, and reoffending.

Research indicates that not all support is created equal. It is a troubling assumption among studies that all family support is beneficial for individuals returning to the community. The social support literature is heavily weighted toward the positive impacts that family social support may have on an individual's reentry following incarceration; however, research also points to the fact that family relationships may also be strained while an individual is incarcerated, which may continue once the individual is released into the community. These strained relationships result in support that is negative in nature, which may create family dynamics that affect the potential buffering impact that social support can have on an individual (Braman & Wood, 2003; Breese, Ra'el, & Grant, 2000; Cottle, Lee, & Heilbrun, 2001; Wallace et al., 2014). Still, a limited amount of research exists examining both the reasons why family relationships are often strained, and how negative family dynamics surrounding the perceptions of social support can have a counteracting effect on an individual leading to negative outcomes, like crime. Although negative social support has been examined in other social sciences and medical fields, its exploration within criminology and criminal justice is limited. Research that has been conducted to date has been qualitative in nature with no direct connection to negative family support relative to an individual's propensity to

commit another crime (see for examples, Braman & Wood, 2003; Breese Ra'el, & Grant, 2000; Cottle, Lee, & Heilbrun, 2001; Nelson & Trone, 2000; Travis, Solomon, & Waul, 2001). Research that quantitatively examines how supportive families, in some cases, can actually contribute to negative outcomes for the formerly incarcerated is lacking. In particular, a lack of housing, financial instability, and conflicting relationships often create additional stressors on an otherwise positive buffering effect of social support, thereby impacting a returning individual's ability to reintegrate successfully and remain crime free.

Given that housing is a large issue for many returning individuals, it is easy to understand why nearly 75% of formerly incarcerated individuals initially reside with family (La Vigne, Visher, & Castro, 2004; Visher et al., 2004; Nelson, Deess, & Allen, 1999). Formerly incarcerated individuals often do not have many housing options and so they are in a sense forced to reside with family, however, negative support and family dynamics often create additional stressors limiting the positive support a returning individual may need to be successful in the community. For one, it is important to note that family members may not always *want* to provide the support their returning family member may require (Shapiro & Schwartz, 2001). More importantly, however, families do not always have the means to support a returning individual as they may be dealing with their own financial crises, mental illness, or addictions. Families have noted the difficulties of not only the logistics of visiting a family member in prison, but also the costs associated with the travel. Prisons are noted as often being too far away for family

members to visit on a regular basis, especially when family members do not have the necessary transportation to visit their loved one (Naser & Visser, 2006).

Conflicting relationships have often been cited as contributing to negative forms of support that complicate a returning individual's successful reentry (Braman & Wood, 2003; Cottle, Lee, & Heilbrun, 2001; Nelson & Trone, 2000; Travis, Solomon, & Waul, 2001). Similar to the effect that negative support has on an individual's health (see Antonucci, 1985; Berkman & Syme, 1979; House, Robbins & Metzner, 1982; Medalie & Goldbourt, 1976; Nuckolls, Cassel, & Kaplan, 1972; Pettus-Davis et al., 2011; Revenson, Schiaffino, Majerovitz et al., 1991; Wilcox & Vernberg, 1985; Wallace et al., 2014), within the context of a generally supportive environment, negative family support among the formerly incarcerated may directly contribute to criminal behavior. For example, regardless of the positive emotional or instrumental support provided, there are some cases where family problems may have directly contributed to the criminal behavior; if the returning individual chooses to associate or reside with these family members, they may be placing themselves in the same environment leading to recidivism. Thus, it has been found that some living environments can worsen problems for the formerly incarcerated (Travis, Solomon, & Waul, 2001).

Braman and Wood (2003) conducted a case study on incarcerated fathers and the effect that their incarceration had on family dynamics. Braman and Wood determined that social support does not always outweigh the costs when those providing the support are sources of distress, leaving the individual feeling defeated. This was found to be especially true in cases of a family history of sexual or domestic abuse. Similar

associations between poor family relationships and reoffending have been found in studies focusing on juveniles (see Cottle, Lee, and Heilburn, 2001). Further, Nelson and Trone (2001) have also noted that family members, although delighted about the release of a loved one, may have conflicting emotions expressed in anger, a sense of betrayal, or disappointment about their family member's return, which can directly impact the transition process and how the returning individual perceives the level of support provided by family.

Additionally, it is important to recognize that individuals who have struggled with addiction may have, at one point, alienated members of their family members, broken promises through relapse, and caused an otherwise grave amount of suffering through material loss, and emotional and physical harm (Shapiro & Schwartz, 2001). Family members also note that they experience financial hardships, increased anxiety, and troubled relationships due to the return of their family member from prison. Family dynamics are especially strained when children are involved, causing emotional strain on children of parents who have been incarcerated (see Adalist-Estrin, 1994; Fishman, 1983; Hairston, 1989; Schneller, 1976; Sharp & Marcus-Mendoza, 2001; Turanovic, Rodriguez, & Pratt, 2012).

Taken together, there is a growing body of research that indicates that the absence of positive support is not the same as the presence of negative support, but that positive support and negative support represent two continua of family support that affect recidivism. Positive family social support can have a significant positive impact on a formerly incarcerated individual's successful reentry, but the provision of positive family

support is not always possible. Furthermore, strained relationships and negative family dynamics may result in negative family support, which can have an undesirable effect on an individual's reentry into the community. These family dynamics suggest that the adjustment in roles between family members of recently released individuals may be significant and likely to have an impact on the individual's successful reintegration (Furstenberg, 1995; Hagan & Dinovitzer, 1999; Markson, Losel, Souza, & Lanskey, 2015). Recently released individuals, for example, have noted that the most common difficulty in their adjustment included conflicts with their significant other (Zamble & Quinsey, 1997). Similar findings were found in a study conducted at the University of Oxford. Here, researchers conducted a two-year longitudinal study of 130 male property offenders and recorded results from the individual's transition from an institution to the community. It was noted that those who continued to engage in criminal activity, also reported experiencing relationship problems, and were less likely to have children, and more likely to have experienced conflicts with their parents and other relatives than those who desisted from criminal involvement (Burnett, 2004).

The literature supports the notion that social support provided by family is negatively related to an individual's likelihood to reoffend, but this relationship is ambiguous. The extant literature highlights how family dynamics can, in some cases, complicate a returning individual's reentry process despite the well-intentioned support a family may provide. Similarly, the literature also reveals the many nuances and elements of social support that exist, muddying our understanding of social support overall. Studies to date have not explored many of these elements and have, instead, typically

collapsed social support into one measure. This study seeks to provide clarity to these issues and fill a gap in the literature surrounding many of these elements of social support, including the distinction between positive and negative family social support. With this in mind, the following chapter presents the statement of the problem of this study as well as the research questions that will guide the study.

CHAPTER 3

Statement of the Problem

The following chapter presents the statement of the research problem, as well as the research questions that will guide this study. Specifically, the statement of the research problem provides the framework upon which the research questions and methodology follow. This study focuses on the social support research on emotional family support and the differing impacts that positive and negative emotional support has on an individual's likelihood to recidivate. Guiding the inquiry are five research questions that examine positive and negative emotional support as separate measures, the impact of changes in levels of either support measure, as well as an examination into these two measures in the same model.

Statement of the Research Problem

The presence of social support is theorized to decrease an individual's likelihood of reoffending (Cullen, 1994). Research that has examined this theoretical perspective has continued to grow and generally receives a great deal of support. In doing so, however, researchers have come to find that social support, as a concept, is not so clear or simple to measure. Most studies within criminology combine social support into one measure even though Cullen proposed that social support takes on a number of different forms. Social support, for example, can be provided through either formal or informal means, or can be emotional or instrumental. Further, researchers suggest that not all support is positive and that some support may actually lead to negative behaviors, such as crime. Lastly, changes in levels of support provided are likely to occur, which may also

lead to negative behaviors if either positive support decreases or negative support increases.

Although Social Support Theory has been examined in a number of other different social science fields, Social Support Theory has continued to garner much support in the fields of criminology and criminal justice. It is within these fields that scholars have sought to understand the impact that levels of social support can have on a formerly incarcerated individual's ability to reenter society following a prison term. It is well known that a large number of incarcerated individuals return to society and lack the instrumental and emotional support of others, which research suggests increases their odds of reoffending. Once in the community, the continued support of these individuals is paramount as the returning individual readjusts to life outside of prison. Support from family has been shown to be a salient factor in the successful readjustment of returning individuals. Research suggests, however, that negative dynamics may occur within an otherwise supportive family relationship, and thus not all support is equal or positive, and further, not all types of support provided to formerly incarcerated individuals are as fundamental as others in the individual's ability to remain crime-free.

To date, there has been very little research to examine the different forms of social support within the context of crime or recidivism. Research that does exist can be found within the reentry literature that focuses on social support from family. This literature finds social support to be important to the reentry process. Only a few studies, however, have explored these issues further by examining and separating family social support by emotional and instrumental support and its effect on recidivism. It is because

very little research has examined social support in its many forms, that our understanding of types and levels of social support provided by family within the context of crime and recidivism is unclear. For example, is emotional *or* instrumental family support more salient to an individual's likelihood to reoffend? Does instrumental support differ in its impact when provided by family or friends? Do *all forms* of social support have a positive impact on a formerly incarcerated individual's successful reentry? Do *changes* in perceptions of social support occur between an individual's release from custody and their time within the community? Do these changes have an impact on recidivism? And more collectively, what effect do these forms of social support have between different offense types?

Social support has been examined broadly in its connection to the success of a formerly incarcerated individual returning to society. Research in this realm has consistently found that social support has been a positive factor in a formerly incarcerated individual's ability to remain crime-free (see, e.g., Antonaccio, Tittle, Brauer, & Islam, 2014; Brezina & Azimi, 2018; La Vigne & Travis, 2004; La Vigne, Visher, & Castro, 2004; Naser & Visher, 2006; Nelson et al., 1999; Shollenberger, 2009; Singer, 2012; Taylor, 2012; Visher & Courtney, 2006; Visher, La Vigne, & Farrell, 2003). Lacking in these studies, however, is a focus on more specific elements of social support. As the literature demonstrated, there are elements of emotional support as well as instrumental support that can individually affect an individual's behavior within an institution (Meyers, Wright, Young, & Tasca, 2017; Woo, Stohr, Hemmens, Lutze, et al., 2016; Woo, Lu, & Sohr, 2016), but also a formerly incarcerated individual's success in the community once

they are released (Breese, Ra'el, & Grant, 2000; Singer, 2012; Taylor, 2012). Breese and colleagues (2000) found that instrumental support appeared to have a negative response among returning individuals, as they felt pressured to contribute instrumentally to their family, whereas emotional support did not have an impact on these individuals. Singer (2012) found an inverse relationship between both instrumental and emotional support and criminal behavior. In Taylor's (2012) study, however, instrumental and emotional support had differing effects on reoffending. Among her results, Taylor found that while emotional support had an inverse relationship with reoffending, it varied across waves. Where instrumental support was concerned, Taylor did not find a significant relationship with reoffending. Instrumental support in these studies, however, did not differentiate between that provided by family or that provided by peers. This is an important exclusion. In his framework, Cullen (1994) also added a caveat relative to the effect of social support on negative behavior. Cullen posits that negative behavior is contingent upon the source of social support, such that when social support is derived from a legitimate source, it may promote conformity on the part of the recipient of the support.

Social support, whether it is examined individually, or separated into emotional or instrumental support, has been examined in such a way that has assumed a *positive* effect on a returning individual's success within the community. While research points to the positive impact that social support—be it collectively, instrumental, or emotional—can have on an individual's ability to remain crime-free, the extant research also fails to acknowledge that opportunities for and access to social support are not created equal. Further, individual pathways to recidivism may vary.

It is known that for many individuals leaving prison there are a number of collateral consequences stemming from their label as an ex-felon, which may limit their access to certain forms of social support, such as social welfare benefits, housing availability, and employment opportunities. Because returning individuals oftentimes rely on family members for emotional and instrumental support, family members may also face increased strains when their family member returns from prison. Consequently, these strains may impact their ability to provide social support (Farkas & Miller, 2007; Makarios, Steiner, & Travis, 2010; Markson, Losel, Souza, & Lanskey, 2015; Petersilia, 2001; Travis, 2002). Family dynamics may become strained in an incarcerated individual's absence, which may affect the type of support that they are able to provide to the individual once they return home. This may result in *negative* emotional social support, directly impacting the reverse effect that *positive* emotional support can have on an individual. Further, social support is not static and may change over time and our understanding of the impact of these changes is largely unknown.

In order to fill the gap that exists in the social support literature within criminology and criminal justice, this study focuses on emotional social support from family relative to recidivism. Specifically, this study focuses on how a reentering individual's perception of levels of positive and negative emotional family support prior to release from custody may affect their likelihood to recidivate once in the community. Additionally, this study seeks to examine changes in perception of positive and negative emotional family support over time and the effect that these changes have on a formerly incarcerated individual's likelihood to recidivate. To examine changes of perception over

time, this study will use change scores from levels of emotional family support prior to release (wave 1) as well as levels of emotional family support captured at the wave immediately preceding the wave in which they recidivated. Specifics to measurement are discussed in the description of variables. In addition to emotional family support, this study will also examine instrumental family and instrumental peer support as separate control variables. Five research questions are posed to guide this study. Research questions one and two examine “positive” forms of emotional family support and research questions three and four examine “negative” forms of emotional family support. The final research question examines both positive and negative emotional family support in the same model.

Research Questions

Research Question 1. *Does positive emotional family support have an inverse relationship with an individual’s likelihood to recidivate?*

Because research supports the notion that social support serves as a buffer between individuals and crime, it is expected that, after controlling for other predictors of social support and recidivism, positive emotional family support will be inversely related with an individual’s likelihood to recidivate. High levels of positive emotional family support will result in less of a likelihood of recidivism. The hypothesis for research question 1, thus becomes:

Hypothesis 1: Positive emotional family support will be inversely related to an individual’s likelihood to recidivate such that higher levels of positive emotional family support decreases an individual’s likelihood to recidivate.

Aside from static perceptions of social support provided by family, little research examines whether or not *changes* in social support provided by family occur—and if so, what role these changes play in a reentering individual’s likelihood to recidivate. This study examines *changes* in emotional family support and any effects these changes may have on the individual’s likelihood to recidivate. The second research question examines differences between levels of “positive” emotional family support prior to release from custody, and levels of “positive” emotional family support once in the community.

Research Question 2: *As positive emotional family support increases across waves, does an individual’s likelihood of recidivating decrease?*

Because social support stands as a possible buffer to reoffending, a decrease in social support suggests a lowered level of social support. A decrease in levels of positive emotional family support may lead to increases in recidivism. Conversely, increases in positive emotional family support may lead to decreases in recidivism.

Hypothesis 2: Changes in positive emotional family support will be associated with changes in recidivism outcomes such that an increase in levels of positive emotional family support will result in a decreased likelihood of recidivating in comparison to individuals whose levels of positive emotional family support remain static or decrease.

Recall that one area that is often left unexplored in the social support literature is negative support. The third and fourth research questions examine emotional family support that has been typified as “negative.”

Research Question 3: *Does negative emotional family support have a direct relationship with an individual's likelihood to recidivate?*

Hypothesis 3: Negative emotional family support will be directly related to an individual's likelihood to recidivate such that higher levels of negative emotional family support increases an individual's likelihood to recidivate.

The extant research consistently reports a negative relationship between social support and reoffending (see Berg & Huebner, 2011; Brezina & Azimi, 2018; Estroff, Zimmer, Lachicotte, & Benoit, 1994; Gutierrez-Lobos et al., 2001; Kurtz & Zavala, 2017; La Vigne et al., 2004; Nelson et al., 1999). Social support, however, is not created equal in that social support is provided in varying degrees and within differing social contexts, such as that provided by family members. When support is of a "negative" degree, such that negative family dynamics are prevalent, this may result in "negative" behaviors, such as crime. Thus, it is expected that, net of controls, negative emotional family support will increase an individual's likelihood of recidivating where higher levels of negative family support will lead to increases in likelihood of recidivism.

Research Question 4: *As negative emotional family support increases across waves, does an individual's likelihood of recidivating increase?*

Hypothesis 4: Changes in negative emotional family support will be associated with changes in recidivism outcomes such that an increase in levels of negative emotional family support will result in an increased likelihood of recidivating in comparison to individuals whose levels of negative emotional family support remain static or decrease.

Research indicates that not all forms of social support have positive impacts on an individual's propensity to remain crime-free. These other forms of support have been typified as being positive and negative for exploration. With this in mind, individuals who perceive an increase in levels of negative emotional family support over time will be more likely to recidivate than individuals who do not perceive any measurable increases in levels of negative emotional family support over time.

Research questions one and two examine "positive" forms of emotional family support and research questions three and four examine "negative" forms of emotional family support. These forms of support are examined in separate models to grasp the true effect of each form of emotional family support, however, this study also sought to determine the relative contribution of each form of support as they relate to recidivism. That is, does positive *or* negative emotional family support explain an individual's likelihood to recidivate; a fifth research question is posed to examine these differences.

Research Question 5: *Does positive and negative emotional family support have a differential effect on an individual's likelihood to recidivate when both are entered as covariates in the same model?*

Hypothesis 5: Negative emotional family support will have a greater influence on an individual's likelihood to recidivate. Little research exists that examines negative outcomes relative to "positive" and "negative" forms of social support, especially with regard to recidivism. Recent studies have examined negative family support relative to negative mental health outcomes, and have found that increases in negative family support was associated with lower post-incarceration

mental health whereas positive family support had no impact (see Wallace, Fahmy, Cotton, et al., 2014). It is expected that there will be differences with regard to recidivism, such that *both* negative *and* positive emotional family support will influence an individual's likelihood to recidivate in either direction. It is hypothesized, however, that *negative* emotional family support will have a greater influence on an individual's likelihood to recidivate than *positive* emotional family support.

CHAPTER 4

Research Methodology

Presented in this chapter are three major components related to the methodology utilized in this study. First, a description of the data used is presented. The data, as presented, will inform later discussions of limitations in Chapter Six that were faced during analyses. Once the data have been described, the measures of the study—including all support measures—are defined, operationalized, and analyzed for model fit. Model fit is examined in two steps: first traditional and tetrachoric correlations are run to determine correlations between the dependent variable and all independent variables; next, factor analysis using principal components is used to examine all individual items used in each support measure. Chapter Four concludes by describing the analytic strategy that is used for this study.

Serious and Violent Offender Reentry Initiative (SVORI)

Overview.

In order to examine the research questions posed, this study utilizes data from the Multi-site Evaluation of the Serious and Violent Reentry Initiative (SVORI) that began in 2003. SVORI was an effort of multiple federal agencies, including: the U.S. Department of Justice (DOJ), Department of Labor (DOL), Department of Education (DoEd), the Department of Housing and Urban Development (HUD), and the Department of Health and Human Services (HHS). These federal agencies provided for \$100 million grant funds to states to “develop enhance, or expand programs to facilitate the reentry of adult and juvenile offenders returning to communities from prisons or juvenile facilities”

(Lattimore & Steffey, 2009, p. ES-1). Funded agencies developed programs that specifically improved criminal justice, employment, education, health, and housing outcomes for individuals released from prison. Additionally, programs were required to collaborate with correctional agencies, supervision agencies, other state and local agencies, as well as community and faith-based organizations.

In total, 69 agencies received SVORI funding and were responsible for developing a total of 89 programs. Of these 89 programs, 12 adult and 4 juvenile programs were part of an intensive impact evaluation (Lattimore et al., 2005). Programs were located in 14 different states, including Colorado, Florida, Indiana, Iowa, Kansas, Maine, Maryland, Missouri, Nevada, Ohio, Oklahoma, Pennsylvania, South Carolina, and Washington. The purpose of the intensive impact evaluations was to ensure that these programs accomplished the overall goals set forth by SVORI, including the increase of public safety and a reduction in recidivism among the populations served. To this extent, SVORI participants (experimental condition) received reentry services that were largely dependent on needs and risk assessments and could include, such as, employment services, substance abuse treatment, and cognitive programs. Non-SVORI participants received treatment as they normally would receive in prison without any intermediate services. Programs were to have three phases of providing services for serious or violent prisoners guided by needs and risk assessments of services and programs. The first phase occurred pre-release, the second during the earlier months post-release, and the third phase continued for extended periods of time.

Data for the impact evaluation were gathered through interviews with SVORI participants approximately 30 days prior to release from prison (Wave 1), as well as subsequent follow-up interviews conducted at 3-months (Wave 2), 9-months (Wave 3), and 15-months (Wave 4) post-release. A total of 2,400 male, female, and juvenile individuals returning to the community from prison (inclusive of SVORI and non-SVORI participants) were included in the sample (Lattimore & Steffey, 2009). Selection for participation in SVORI programs varied among impact sites; for example, Iowa and Ohio randomly assigned individuals to SVORI programs, whereas other sites used criteria set forth by local site staff for enrollment in SVORI programs, including factors such as age, criminal history, risk level, post-release supervision, transfer to pre-release facilities, and county of release. In addition to data collected during interviews over the four waves, oral swab drug tests as well as administrative data collected from state correctional agencies, the National Crime Information Center (NCIC), and the Federal Bureau of Investigation (FBI) were collected. The information provided by NCIC and the FBI, however, were later removed from the publicly available data, and thus, this administrative data was not utilized in analyses for this study (Lattimore & Visser, 2017).

Pre-release (Wave 1) interviews were conducted between July 2004 and November 2005 and gathered data relative to the respondents' characteristics and pre-prison experiences, as well as experiences and services received while incarcerated. Post-release (Waves 2-4) interviews were conducted between January 2005 and May 2007 in the community or in jail or prison if the respondent was re-incarcerated. Data collected post-release included reentry experiences, housing, employment, family and

community integration, substance abuse, physical and mental health, supervision and criminal history, service needs, as well as services received (Lattimore & Steffey, 2009).

Overall, the SVORI evaluation indicated that participants were provided with greater access to a myriad of services than non-participants. Services that were received significantly more by SVORI participants than non-SVORI participants included: reentry coordination (inclusive of needs assessment, reentry plan, etc.), and employment and education skills, transition services (including mentoring, legal assistance). With regard to reoffending outcomes, results found few differences between SVORI and non-SVORI participants (Lattimore et al., 2005). Scholars show that support provided by a government agency (formal support) has the potential to influence crime and recidivism (see Jiang & Winfree, 2006; Pratt & Godsey, 2003; Reisig et al., 2003; Woo et al., 2016). Therefore, SVORI programming (which consisted of the experimental group in the impact evaluation) is included as a control in this study as a form of *formal social* support to further explore the influence that formal support can have on an individual's likelihood to recidivate.

SVORI attrition and missing data.

In the original Multi-site Evaluation of SVORI, interviews of respondents were gathered within the community at three separate waves—approximately six months apart. The original investigators noted that post-release attrition was minimal, and that the largest amount of attrition occurred between the in-prison interview (Wave 1) where 1,697 interviews were completed, and the first community wave (Wave 2) where 984 interviews were completed. To that end, there were a number of reasons that affected

whether or not an individual completed an interview while in the community. For example, attrition was prevalent when an individual absconded from community supervision, researchers had no access to a treatment facility, the respondent moved out of the area, could not be located, or refused to complete an interview (Lattimore & Visher, 2009). In the study, individuals were still contacted to interview at each wave, regardless if they were able to be located at a prior wave (i.e. respondent could not be located at Wave 2, but was interviewed at Wave 3 and Wave 4). For the current study, individuals were included in the analysis even if they did not complete all interviews because only two sequential waves of data were necessary to provide the information needed to examine the research questions posed in this study. Additionally, discrete-time hazard modeling accommodates for changes in participation rates by using person-periods as the unit of analysis and controlling for each wave within a longitudinal data file.

In order to determine whether or not respondents from subsequent waves of interviews differed between SVORI and non-SVORI groups, Lattimore and Visher (2009) used propensity score techniques and weighted analyses. Their analyses revealed that the two groups did not differ at each wave on a range of characteristics relative to family, peer, criminal behavior, and recidivism variables. Consequently, the investigators concluded that attrition was at random and not related to whether or not an individual responded to an interview (Lattimore & Visher, 2009). To address missing data, listwise deletion was utilized. Because it was determined that attrition was at random, there was no need to impute time variant characteristics. Additionally, status

characteristics, such as age, race, and criminal history were taken at Wave 1, and thus were time-invariant in analyses. With this in mind, listwise deletion of missing data was more related to a non-response on a question than an individual failing to answer questions on status characteristics, such as age or race.

Study Sample

While this study examines the effect of social support measures across waves, not all variables were captured at every wave. For example, static variables, such as age, criminal history, family criminogenic factors, and formal support were taken at Wave 1 (pre-release). All other variables were taken from subsequent post-release waves (Waves 2-4)—these include all support measures. Using post-release social support measures also allows for the examination of the effect of changes in social support scores.

Following release, the original SVORI study experienced attrition and the number of males in the sample was reduced from 1,697 males at Wave 1 (pre-release) to 984 males in Wave 2 (post-release). Wave 2 (984) serves as the baseline sample for this study. Two additional steps were taken to arrive at the final sample. First, listwise deletion was utilized so that only individuals with responses to all variables in the study were included in the sample—individuals with missing responses were deleted. Listwise deletion was conducted on all waves of data, and the final sample includes only individuals with complete information on all study variables during two sequential waves (i.e. wave 2 and wave 3, or wave 3 and wave 4). After listwise deletion, the study sample was reduced from 984 males to 639 males with complete data and served as the baseline for further analyses.

Second, the analytic strategy for this study utilizes discrete hazard modeling, which requires that data be converted into person-period observations. As discussed later in this chapter, discrete hazard modeling was chosen to observe the effect of social support over time. Unlike other types of event history modeling (i.e. proportional hazard modeling), discrete hazard modeling allows for the inclusion of covariates that are time-variant when a dependent variable—recidivism—is censored (see Gupta & Costa Leite, 1999; Reardon, Brennan, & Buka, 2002). Converting data to person-period observations requires that once males have recidivated, they effectively “fail out” of the dataset for subsequent waves. What results are subsequent reductions of the sample size, such that males who recidivate, or fail, do not influence results in future waves once they have been removed from the dataset. For example, Wave 2 begins with a baseline of 639 males of whom 55 recidivated/failed, resulting in 584 males that succeeded in the sample—this produces the first person-period observations of the study. Subsequently, of the 584 males that were successful in Wave 3, 22% or 129 failed during this period, resulting in 455 males that succeeded in the sample.

Because the study only includes data through Wave 4, analyses cannot be made for future time periods, though individuals recidivated during Wave 4. For example, an additional 72 males recidivated at Wave 4, however, without additional data past this point, further analyses was not possible and so individuals after Wave 4 were right censored (Cleves, Gould, Gutierrez, & Marchenko, 2008). With this in mind, taking into account attrition and additional data cleaning, the final sample size was 1,223 person-

period observations (Baseline at Wave 2: 639 males + Surviving males at Wave 3: 584 males), of which about 15% recidivated/failed (185 failures).

Measures

Dependent variable.

The original SVORI evaluation (Lattimore & Steffey, 2009) examined both self-reported and official reoffending measures, including self-reported re-incarceration, as well as arrest data provided by the FBI's National Crime Information Center. During the time of this study, however, arrest data from the FBI's National Crime Information Center were removed, leaving strictly self-reported re-incarceration data (Lattimore & Visher, 2017). The *recidivism* variable in this study utilized a self-reported re-incarceration variable that is obtained from wave 3 (9-months post-release), and wave 4 (15-months post-release). Data within each model were taken to predict recidivism at each post-release period, such that recidivism at wave t is predicted from $t-1$. For example, to predict recidivism at wave 3, data were taken from wave 2; to predict recidivism at wave 4, data were taken during from wave 3. Because SVORI data were only gathered until fifteen months post-release (wave 4), recidivism was evaluated at waves 3 and 4.

Independent variables.

The differentiation of the family support measures.

In the SVORI study, "Family" was operationally defined as being "blood or legal relatives, people you have a child in common with, steady intimate relationships, or guardians you live with or lived with" (Lattimore & Visher, 2011). Various family

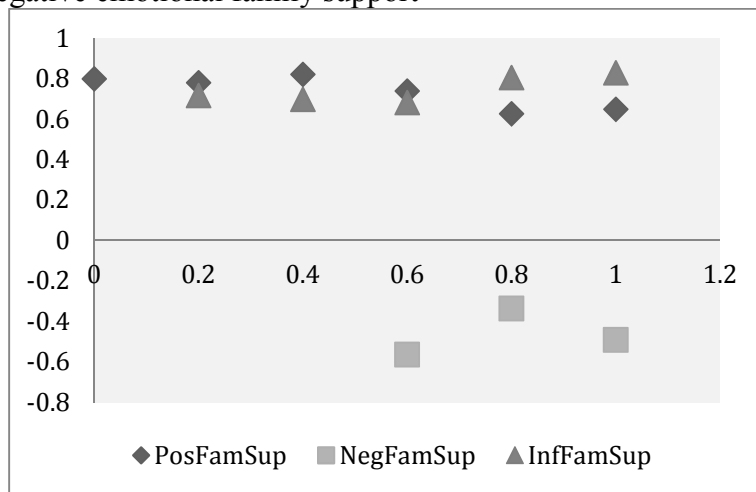
support measures were used in the SVORI study, such as measures of emotional family support, and instrumental family support.

Emotional family support items, as well as instrumental family support items, consistent with the literature, were conceptually distinct. As such, two separate measures were extracted and scaled from the support measures provided in the SVORI study. Additionally, the third support measure – negative family support – was constructed because a few support items in the SVORI measures did not, on face value, conceptually match positive emotional or instrumental family support. These items included: I fight a lot with my family members, I often feel like I disappoint my family, and I am criticized a lot by my family. These items are not a continuum, and had an Eigenvalue of 1.50 and loaded onto a single factor and standardized distribution, without any other prominent factors evident.

To explore these measures further, factor loadings of positive emotional, negative emotional, and instrumental family support items were placed on an axis. Figure 1 illustrates these factor loadings. Factor loadings in Figure 1 indicate some overlap between some positive family support items and instrumental family support items. Negative family support items, however, clearly loaded separately from positive emotional family support and instrumental family support items, with no overlap evident. Little research has been conducted that separates these three measures, and while the literature on emotional and instrumental support suggests these supports are distinct, research has also lacked clarity. Further, this study was a test of these elements, and as such, it is argued that though these support measures possess varying degrees of

correlation, they are measuring different elements of social support. It is for this reason that it is important to explore the effect of these measures further, particularly with regard to an individual's likelihood to recidivate. These support variables are presented in the following sections.

Figure 1: Factor loadings: positive emotional family support, instrumental family support, and negative emotional family support



Positive emotional family support.

According to Sarason and colleagues (1983), social support can be defined as “the existence or availability of people on whom we can rely, people who let us know they care about, value, and love us” (p. 127). These measures were captured during waves 2-4 to examine *positive emotional* family support. Respondents were asked to indicate their feelings on six separate items; respondents indicated their level of agreement ranging from strongly disagree to strongly agree. All items were scaled and reverse coded. Response options were 1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree. Taken together, lower scores indicated that the individual perceived lower levels of positive emotional family support, and higher scores indicated the individual perceived

higher levels of positive emotional family support. Post-release items included to measure *positive* emotional family support were:

1. I feel close to my family.
2. I want my family to be involved in my life.
3. I have someone in my family to talk to about myself or my problems.
4. I have someone in my family to turn to for suggestions about how to deal with a personal problem.
5. I have someone in my family who understands my problems.
6. I have someone in my family to love me and make me feel wanted.

These items were combined to create a positive emotional family support measure.

These items were factored using the principal components analysis. The results from this analysis are shown in Table 1. All items loaded into one factor without any evidence of other factors. Additionally, inter-item correlations were examined. Items representing positive emotional family support resulted in a Chronbach's alpha of .888 indicating strong reliability between items. The factor is standardized.

Table 1. Factor Analysis for Positive Emotional Family Support

Wave	Eigenvalue	Factor Loadings
Wave 2 (3-months post-release)	3.60	0.67-0.88
Wave 3 (9-months post-release)	3.71	0.60-0.91

These items have been adapted in similar forms as tested measures of Perceived Social Support (PSS) from family and used with a wide range of symptomatology measures ranging from anxiety to drug use (Procidano & Heller, 1983). The PSS included items relative to the availability of closeness, confiding, and emotional support that were found to tap into perceived social support, and have consistently been found to be reliable

measures (Wills & Shinar, 2000). Recently, these measures were used to examine mental health outcomes resulting from positive emotional family support (Wallace et al., 2014).

Negative emotional family support.

In order to measure *negative* emotional family support, pre and post-release measures of negative emotional family support were used. Negative emotional family support captured the extent to which an individual experienced a lack of love or value from family members, which is in contrast to positive emotional family support that measures the opposite (Sarason et al., 1983). Three items were used to examine interpersonal relationships and support that are not considered to be of a positive nature. Respondents were asked to indicate their feelings on three separate items. Respondents indicated their level of agreement ranging from strongly disagree to strongly agree. All items were scaled, and response options were: 1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree. Lower scores indicated that the individual perceived lower levels of negative emotional family support, and higher scores indicated the individual perceived higher levels of negative emotional family support. Post-release items included to measure *negative* emotional family support were:

1. I fight a lot with my family members.
2. I often feel like I disappoint my family.
3. I am criticized a lot by my family.

These items were factored using principal components analysis. The results indicated a single factor with a standardized distribution. The results from this analysis are shown in Table 2. All items loaded into one factor without any other factors being evident. Additionally, inter-item correlations were examined. Items representing negative

emotional family support resulted in a Chronbach’s alpha of .725 indicating strong reliability between items, signaling all items represent negative emotional family support well. Although not used extensively, these items have been used in a negative family support measure in a recent study examining the impact of family support on mental health outcomes (see Wallace et al., 2014).

Table 2. Factor Analysis for Negative Emotional Family Support

Wave	Eigenvalue	Factor Loadings
Wave 2 (3-months post-release)	1.45	0.58-0.80
Wave 3 (9-months post-release)	1.40	0.60-0.79

Changes in positive or negative emotional family support.

To examine changes in positive and negative emotional support, continuous variables were created for both positive and negative emotional family support change. These variables were used to estimate change in either positive or negative emotional support across waves: *Positive Emotional Family Support Change* and *Negative Emotional Family Support Change*. To create these measures, data were lagged, such that the respondent’s score on either variable—positive or negative emotional family support—was taken from wave t and subtracted from wave $t+1$ (see Taylor, 2012; Wallace et al., 2014). Put more simply, to examine changes in family support between wave 2 and wave 3, a wave 2 family support score was subtracted from a wave 3 family support score. Subsequently, to examine changes in family support between waves 3 and wave 4, a wave 3 family support score was subtracted from a wave 4 family support

score. Because all support factors are standardized, a resulting positive score indicated that the respondent experienced an *increase* in that type of family support and alternatively, a negative score indicated that the respondent experienced a *decrease* in that type of support. This change variable was then added to models for analyses to examine the effect that any change in positive or negative emotional support at either wave 3 or wave 4 had an impact on an individual's likelihood to recidivate.

The analytic strategy used in this study—discrete time hazard modeling—is advantageous in addressing temporal ordering of variables because it allows for a multivariate approach that controls for numerous factors (Allison, 1987; Miller, 1997; Reardon, Brennan, & Buka, 2002). The analytic strategy is discussed further in a later section of this chapter. While the exact timing of responses to surveys in the original survey may have exhibited some overlap and questions relative to temporal ordering, this is a limitation of the study that is discussed further in Chapter 6.

Instrumental family support.

Although the focus of this study is on *emotional* family support, *instrumental family support* is a major component of the Social Support Theory (Cullen, 1994), and is thus included as an independent variable. Instrumental support measures were not taken during wave 1 (pre-release) and instead, were part of wave 2, wave 3, and wave 4 measures. This in mind, instrumental family support was used to predict recidivism that occurs at wave 3 and wave 4. To measure *instrumental family support*, a five-item scale that measured family instrumental support was used. Respondents were asked to indicate their feelings on five separate items. All items were scaled, and response options

included: 1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree. Taken together, lower scores indicated that the individual perceived lower levels of instrumental family support, and higher scores indicated the individual perceived higher levels of instrumental family support. Post-release items included to measure *instrumental family support* were:

1. I have (if re-incarcerated: had) someone in my family who would provide help or advice on finding a place to live.
2. I have (if re-incarcerated: had) someone in my family who would provide help or advice on finding a job.
3. I have (if re-incarcerated: had) someone in my family who would provide support for dealing with a substance abuse problem.
4. I have (if re-incarcerated: had) someone in my family who would provide transportation to work or other appointments if needed.
5. I have (if re-incarcerated: had) someone in my family who would provide me with financial support

Using the principal components analysis, these items were factored. The results of this analysis indicated a single factor with a standardized distribution; results from this analysis are shown in Table 3. Additionally, inter-item correlations were examined. Items representing instrumental family support resulted in a Chronbach's alpha of .885 indicating strong reliability between items, signaling all items represent instrumental family support well.

Table 3. Factor Analysis for Instrumental Family Support

Wave	Eigenvalue	Factor Loadings
Wave 2 (3-months post-release)	3.17	0.67-0.88
Wave 3 (9-months post-release)	3.17	0.72-0.87

Instrumental peer support.

As the social support literature revealed, instrumental support is typically provided by either family or peers/friends, and the degree to which this support has an effect on the individual may vary as well. To that degree, an *instrumental peer support* measure is included as an additional test of social support, here with regard to peers. The items for *instrumental peer* support are similar to those for instrumental family support; a five-item scale that measures peer instrumental support was utilized. All items were scaled and reverse coded. Response options were: 1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree. Taken together, lower scores indicated the individual perceived lower levels of instrumental peer support, and higher scores indicated the individual perceived higher levels of instrumental peer support. Post-release items included to measure *instrumental peer* support were:

1. I have (if re-incarcerated: had) a friend who would provide help or advice on finding a place to live.
2. I have (if re-incarcerated: had) a friend who would provide help or advice on finding a job.
3. I have (if re-incarcerated: had) a friend who would provide support for dealing with a substance abuse problem.
4. I have (if re-incarcerated: had) a friend who would provide transportation to work or other appointments if needed.
5. I have (if re-incarcerated: had) a friend who would provide me with financial support

Using the principal components analysis, these items were factored, and resulted in a single factor with a standardized distribution. The results from this analysis are shown in Table 4. Additionally, inter-item correlations representing positive emotional family support resulted in a Chronbach's alpha of .927 indicating strong reliability between items, signaling all items represented instrumental peer support well.

Table 4. Factor Analysis for Instrumental Peer Support

Wave	Eigenvalue	Factor Loadings
Wave 2 (3-months post-release)	3.63	0.79-0.90
Wave 3 (9-months post-release)	3.59	0.81-0.89

Formal social support.

Although some social support studies include things such as receipt of government funded benefits and assistance, or employment assistance, these measures are not as stable for the sample being used because those included in this study may have recidivated in a short period of time, making the receipt of government funded programs unlikely. Instead, *formal social support* was measured using participation in SVORI programming. SVORI programming—which served as the experimental condition in the original impact evaluation—included elements to assist offenders in their successful reentry—elements that are traditionally included in community programming, such as employment assistance, anger management, financial education, etc. *Formal Social Support* was coded as “1” if the individual did receive SVORI programming, and “0” if the individual did not receive SVORI programming.

Control Variables

Data for control variables were taken at different points of the study. Some control variables used were static and obtained at Wave 1, these included: age, offense type, criminal history, and family criminogenic factors. Control variables that were not static were obtained at each interview wave, and included: number of children, education, partner, and housing instability.

Four offense dummy categories were included in this study. Offense types were taken at wave 1 and included: violent offense (1 = yes, 0 = no), property offense (1 = yes, 0 = no), drug offense (1 = yes, 0 = no), and other offense (1 = yes, 0 = no).

In order to control for *criminal history*, the logged number of prior incarcerations reported by each respondent was taken to represent criminal history, with a greater number of prior incarcerations indicating a greater criminal history. To control for *community supervision*, a dummy variable was created to indicate whether the respondent was on parole at the time of the Interview (coded: 1 = yes; 0 = no).

A major support element that returning offenders have difficulties with is maintaining stable housing. Housing stability and residing with family has been found to be influential on the perception and receipt of support (see Martinez, 2006; Martinez & Abrams, 2013; Martinez & Christian, 2009; Naser & La Vigne, 2006); therefore it is important to account for these variations. To measure *Housing Instability*, a variable was included to indicate the number of times the respondent moved since their last interview. This was a continuous measurement of the number of times the respondent moved. A larger number indicated a greater number of times moved, or greater *housing instability*.

In order to account for family involvement with the criminal justice system and other antisocial behaviors, such as substance abuse, this study included a variable, *Family Criminogenic Factors*. Research has consistently examined family criminal history or family involvement in antisocial behavior as a predictor in an individual's likelihood to recidivate (Bonta, Law, & Hanson, 1998; Cottle, Lee, & Heilbrun, 2001; Gendreau, Little, & Goggin, 1996; Murphy, Musser, & Maton, 1998). The *family criminogenic*

factors variable was a three-item measure taken at wave 1 (baseline). Respondents were asked to respond to the following items:

1. (If R has people in his life he considers to be family) Other than yourself, has anyone in your family ever been convicted of a crime? (Yes, No, You don't know)
2. (If R has people in his life he considers to be family) Other than yourself, has anyone in your family ever been in a correctional facility, such as a jail, prison, or juvenile correctional facility? (Yes, No, You don't know)
3. (If R has people in his life he considers to be family) Other than any problems you may have had, has anyone in your family ever had problems with drugs or alcohol? (Yes, No, You don't know)

These three items were collapsed to create the *family criminogenic factors* measure, and respondents that responded yes to *all* three items received a score of “1”; respondents that did not respond to all three items affirmatively were coded as “0.”

Other control variables included how many children the individual reported having, which was continuous. For this study, *children* was defined as biological or legally adopted. A higher score indicated a greater number of children the individual reported having. Lastly, demographic variables were also included. An individual's *age* was included. Because the study included men 18 years and older, age was grand mean centered. Additionally, four *race* dummy variable categories were included in the study: white (0 = no, 1 = yes), black (0 = no, 1 = yes), Hispanic (0 = no, 1 = yes), and other (0 = no, 1 = yes). Lastly, an individual's highest level of education was included. The average completed years of education was reported, ranging from 0 to 18, with 13 indicating high school graduation or a GED, 14 indicating vocational or trade school completion, 15 indicating some college (no degree), 16 indicating an associate's degree, 17 indicating a bachelor's degree, and 18 indicating a graduate degree. Table 5 below

provides a description of the dependent, independent, and control variables used in the study.

Table 5. Descriptions of Dependent, Independent, and Control Variables

Variable	Variable Description
<i>Dependent Variable</i>	
Recidivate	Whether or not respondent was re-incarcerated. Recidivism taken at wave 3 (9-months post-release), and wave 4 (15-months post-release); 1 = yes; 0 = no
<i>Independent Variables</i>	
Positive Emotional Family Support	Six-item measure; higher scores indicate higher levels of positive emotional family support.
Negative Emotional Family Support	Three-item measure; higher scores indicate higher levels of negative emotional family support.
Instrumental Family Support	Five-item measure; higher scores indicate higher levels of instrumental family support.
Instrumental Peer Support	Five-item measure; higher scores indicate higher levels of instrumental peer support.
Formal Support	Whether or not the respondent was provided with SVORI programming; 1 = yes; 0 = no
<i>Changes</i>	
Positive Emotional Family Support Change	A positive score indicates an increase in Positive Emotional Family Support
Negative Emotional Family Support Change	A positive score indicates an increase in Negative Emotional Family Support
<i>Control Variables</i>	
Offense Type	Four types: violent offense (1 = yes, 0 = no), drug offense (1 = yes, 0 = no), property offense (1 = yes, 0 = no), and other offense (1 = yes, 0 = no).
Criminal History	Number of prior incarcerations; continuous measurement, larger number = greater criminal history
Family Criminogenic Factors	Three-item measurement; 1 = presence of family criminogenic factors, 0 = no family criminogenic factors
Community Supervision	Dichotomous variable; 1 = on parole at time of interview; 0 = not on parole at time of interview.
Housing Instability	Continuous measurement; number of times respondent has moved since last interview.
Relationship Status	Dichotomous variable; 1 = respondent is involved in an intimate relationship at time of interview; 0 = respondent is not involved in an intimate relationship at time of interview.

Table 5. Descriptions of Dependent, Independent, and Control Variables

Number of Children	Continuous measurement
Age	Continuous measurement; calculated grand mean centered years of age.
Race	Four race variables: White (1 = yes, 0 = no), Black (1 = yes, 0 = no), Hispanic (1 = yes, 0 = no), and Other (1 = yes, 0 = no)
Education Level	Continuous measurement; calculated in total number of completed years of education.

Descriptive Statistics

Table 6 presents the descriptive statistics for all variables used in the study. First, all control variables are summarized (age, race, education, offense type, criminal history, number of children, community supervision, number of children, formal support and family criminogenic factors). Next, all support measures are summarized (positive emotional family support, instrumental family support, instrumental peer support, positive emotional family support change, negative emotional family support change, formal support). Recall that information for variables was taken at different waves—Table 6 summarizes all variables included in the study, but note that all other waves of data were also examined for stability, but not included in the table.

In the study sample, the majority of males were black, and were on average around 30-years of age. The age variable was grand mean centered as minimum age for adult males included in the SVORI study was 18-years of age. Education was taken at Wave 2 or Wave 3. Males in the sample, on average completed between 11 and 12 years of education at the time of their interview.

Among the males in the sample, the majority had an original conviction for a violent offense, with a large number of offenders originally convicted for a drug offense.

With regard to criminal history, males in the sample had on average almost 6 convictions prior to their release into the community. While in the community, the majority of males were being supervised (on parole) at the time of their interview at Wave 2 or Wave 3. Additionally, males in the sample reported having an average of one child, and the majority reported that they were in a relationship at the time of their interview. With regard to housing instability, on average, a large majority of males in the sample reported moving at least once prior to their interview. Lastly, on average, males indicated that their family members possessed criminogenic factors (had been convicted of a crime, been a correctional facility, and had problems with drugs or alcohol).

Table 6 also presents the overall statistics for all support measures included in the study. All support measures in the study, with the exception of formal support (dummy variable for SVORI participation) were standardized.² About half of the male sample reported that they received SVORI programming, which is consistent with the original SVORI study. While inferences cannot be made from these summary statistics alone, Table 6 shows that support measure scores appeared to be relatively stable from wave-to-wave. For example, from Wave 2 to Wave 3, there were only slight changes in the averages of positive emotional family, negative emotional family, instrumental family, instrumental peer, and positive emotional family change. The reported average change for negative emotional family change saw the greatest difference between Wave 2 and Wave 3. To better examine differences in levels of support measures across waves, while also controlling for a number of other factors, more advanced statistical analyses were

² SVORI participation was the experimental condition in the original impact evaluation (Lattimore & Visser, 2009)

employed. The analytic strategy used in the study is presented in the following section; results of these analyses are presented in Chapter 6.

Table 6. Descriptive Statistics of All Variables Used in the Study (N = 1,223)

	M	SD	Min	Max
Recidivated				
Wave 3 (taken at 9-months post-release)	.161	.433	0.00	1.00
Wave 4 (taken at 15-months post-release)	.170	.485	0.00	1.00
Positive Emotional Family Support				
Wave 2 (3-months post-release)	-.004	1.00	-4.38	1.14
Wave 3 (9-months post-release)	-.001	1.00	-4.17	1.22
Negative Emotional Family Support				
Wave 2 (3-months post-release)	-.019	1.00	-1.56	3.21
Wave 3 (9-months post-release)	-.019	1.00	-1.78	2.90
Instrumental Family Support				
Wave 2 (3-months post-release)	-.006	1.00	-1.21	3.89
Wave 3 (9-months post-release)	-.007	1.00	-1.27	3.75
Instrumental Peer Support				
Wave 2 (3-months post-release)	-.005	1.00	-1.40	2.51
Wave 3 (9-months post-release)	-.008	1.00	-1.40	2.45
Positive Emotional Family Support Change				
Wave 3 (9-months post-release)	-.018	1.00	-4.12	3.54
Wave 4 (15-months post-release)	-.018	1.00	-4.05	3.65
Negative Emotional Family Support Change				
Wave 3 (9-months post-release)	-.002	1.00	-3.71	4.04
Wave 4 (15-months post-release)	-.077	1.00	-3.76	4.05
Formal Social Support (SVORI)				
Wave 2 (3-months post-release)	.538	.499	0.00	1.00
Wave 3 (9-months post-release)	.546	.498	0.00	1.00
Age				
Wave 1 (pre-release)	29.10	7.31	18.00	73.00
White (n = 208)				
Wave 1 (pre-release)	.341	.474	0.00	1.00
Black (n = 328)				
Wave 1 (pre-release)	.534	.499	0.00	1.00
Hispanic (n = 24)				
Wave 1 (pre-release)	.041	.199	0.00	1.00
Other (n = 79)				
Wave 1 (pre-release)	.084	.277	0.00	1.00
Education (years of completed education)				
Wave 2 (3-months post-release)	11.98	2.02	0.00	18.00
Wave 3 (9-months post-release)	12.17	2.04	2.00	18.00
Violent Offense (n = 264)				
Wave 1 (pre-release)	.334	.506	0.00	1.00
Drug Offense (n = 161)				
Wave 1 (pre-release)	.225	.425	0.00	1.00
Property Offense (n = 147)				
Wave 1 (pre-release)	.300	.563	0.00	1.00
Other Offense (n = 67)				
Wave 1 (pre-release)	.213	.434	0.00	1.00
Criminal History (number prior convictions)				

Table 6. Descriptive Statistics of All Variables Used in the Study (N = 1,223)

Wave 1 (pre-release)	5.59	6.15	1.00	30.00
Community Supervision				
Wave 2 (3-months post-release)	.832	.374	0.00	1.00
Wave 3 (9-months post-release)	.679	.467	0.00	1.00
Number of Children				
Wave 2 (3-months post-release)	1.39	1.56	0.00	11.00
Wave 3 (9-months post-release)	1.36	1.55	0.00	10.00
Relationship				
Wave 2 (3-months post-release)	.572	.495	0.00	1.00
Wave 3 (9-months post-release)	.657	.475	0.00	1.00
Housing Instability				
Wave 2 (3-months post-release)	1.30	.622	0.00	4.00
Wave 3 (9-months post-release)	1.52	.785	0.00	4.00
Family Criminogenic Factors				
Wave 1 (Pre-release)	.562	.496	0.00	1.00

Note. SVORI participation was the experimental condition in the original impact evaluation (Lattimore & Visher, 2009)

Analytic Strategy

This study examined five research questions. In order to answer these questions, a form of survival analysis—discrete time-hazard models were used (Singer & Willett, 1993; herein referred to as discrete hazard models). Survival analysis was an appropriate modeling strategy as it is concerned with the time to the occurrence of an event (Cox, 1972; Cleves, Gould, Gutierrez, & Marchenko, 2008). Survival analysis was chosen as it has been used successfully to estimate recidivism over time (Berg & Huebner, 2011; Dejong, 1997; Hepburn, 2005; Hepburn & Griffin, 2004; Visher, Lattimore, & Linster, 1991) and has been found to be a more rigorous technique that allows for the examination and identification of covariates that may be associated with an individual’s failure across time (Visher et al., 1991). Discrete hazard models were chosen over other survival methods, such as proportional hazard models because it was hypothesized that predictors, such as positive and negative emotional family support will vary over time; proportional

hazard models are predicated on the assumption that the effect of a predictor on an event is constant over time (Singer & Willett, 1993).

Discrete hazard models allowed for the identification of not only an individual's likelihood to recidivate over time, but also factors that were associated with an individual's likelihood to recidivate, with the assumption that these other factors would vary over time. Discrete hazard models have been used to analyze the survival of an individual in a number of different areas, such as a clinical trial or the onset of a substance use (Cox, 1972; Cleves et al., 2008; Reardon, Brennan, & Buka, 2002), by isolating the effects of a treatment (such as participation in a trial) from the effects of other variables.

This study estimated a series of discrete hazard models to provide the net effect of positive and negative emotional family support, instrumental family support, instrumental peer support, formal support, type of offense, and other offender characteristics and the likelihood of an individual recidivating once released from prison. To do so, data were converted into a person-period dataset where each discrete interval is constituted by a wave (see Reardon, Brennan, & Buka, 2002). The data allowed for the inclusion of individuals who recidivated at multiple waves, however, this study was concerned with each individual's likelihood to recidivate *across* waves. Discrete time hazard models estimate a hazard function that examines the proportion of individuals that are at risk of recidivating during a discrete (non-proportional) time period. For example, the hazard function represents individuals that did not recidivate in a particular wave, and begin the subsequent wave with a risk for recidivating, or if they have recidivated, are no longer

used for discrete time hazard analysis. Put more simply, the data were coded in such a way that once an individual recidivated, they “dropped out” of the dataset and no longer contributed to the person-period of the dataset for further analysis (see Gupta & Costa Leite, 1999).

The dataset that is used for this study is made up of four separate waves and respondents were interviewed at each wave: a baseline wave (wave 1), three months post-release (wave 2), nine months post-release (wave 3), and fifteen months post-release (wave 4). Only waves 2-4 were included in analyses. This ensures that only indicators of support measures established post-release predict recidivism. Because the data does not allow for the identification of individuals who recidivated after wave 4, individuals that did not recidivate in the last wave (wave 4) were right censored (Cleves et al., 2008; Singer & Willett, 1993).

To test hypotheses, three confidence intervals were used to determine significance: $p < .01$, $p < .05$, and $p < .10$. A $p < .10$ level was used as this standard has been used in similar studies examining social support (Taylor, 2012; Woo, Lu, & Stohr, 2016), as well as the fact that descriptive statistics revealed little change over waves among some support variables. Findings that were significant at the .10 level are highlighted in the discussion of results. Here, a discrete-hazard model was used, which is defined as the conditional probability that an individual will experience a target event—recidivism—in the current wave given that he or she did not experience the event prior to the current wave (i.e., wave $t - 1$). The model is hierarchical with wave nested within individuals. The level one model for this function is written as:

$$\text{logit}(x_{ti}) = \beta_{0i} + \beta_1 X_{t-1i} + \beta_2 X_{ti} + r_{ti}$$

where x_{ti} is the probability of recidivating at time t for individual i , β_{0i} is the intercept, β_1 is the effect of positive or negative emotional family support at time $t - 1$ for individual i , with β_2 , representing the effect of additional controls at time t , and r_{ti} is the residual. Note that all control variables are time-invariant and taken at Wave 1. The level two equation is:

$$\beta_{0i} = \gamma_{00} + u_i$$

where γ_{00} is the level 2 intercept, and u_i is the random effect of each individual. Analyses examine the effect that *positive* emotional family support and *negative* emotional family support has on an individual's likelihood to recidivate.

Additionally, change in *positive* and *negative* emotional family support is examined. The level one model for this function is written as:

$$\text{logit}(x_{ti}) = \beta_{0i} + \beta_1 \text{Change}_{ti} + \beta_2 X_{ti} + r_{ti}$$

where x_{ti} is the probability of recidivating at time t for individual i , β_{0i} is the intercept, β_1 is the effect of changes in positive or negative emotional family support between time $t - 2$ and time $t - 1$ for individual i , with β_2 , representing the effect of additional controls at time t , and r_{ti} is the residual. The level 2 equation remains the same.

CHAPTER 5

Findings

Bivariate Analyses

The following section presents results of bivariate analyses of variables used in the study. Two separate correlation matrices are presented—Pearson's R correlation and tetrachoric correlation.³ Table 7 and Table 8 present Pearson's R and tetrachoric correlation matrices for all variables used in the study. Two separate correlation matrices were used, as a Pearson's R correlation matrix is only appropriate for variables that are made up of more than two items. For variables that are binary, a tetrachoric correlation matrix was necessary. A few interesting observations were made at the results of these two matrices. First, with the tetrachoric correlation matrix (Table 7), the following variables were entered: recidivism, formal support, White, Black, Hispanic, Other, violent, property, drug, community supervision, and partner. Variables that were found to be moderately to highly correlated included: violent and property offenses (-.481), drug offenses (-.832), and property and drug offenses (-.563). Property offenses among Whites (.331) and property offenses among Blacks (-.315) were found to be weakly correlated.

Pearson's R correlation matrix results are presented in Table 8. In the Pearson's R correlation, the following variables were entered: positive family support, negative

³ Tetrachoric correlation model refers to samples that are dichotomous in nature where the latent correlation ρ is the tetrachoric correlation. Pearson r's correlation tests independent samples made up of more than one random variable (see Faul, Erdfelder, Buchner, & Georg Lang, 2009)

family support, negative support change, positive support change, instrumental family support, peer instrumental support, age, criminal history, education, number of kids, housing instability, and family criminal history. Support measures, such as negative family support and positive family support (.453), as well as instrumental family support and negative family support (.445) approached moderate correlation. Results also indicated that instrumental family support and positive family support are strongly negatively correlated (-.794).

Among tetrachoric results in Table 7, no coefficients were found to be significantly related to recidivism. Tetrachoric correlations examine a number of binary variables and their relation to recidivism—in this case, results in Table 7 indicate that variables, such as race, property offense, community supervision, and partner are not correlated with recidivism. While this is not typical, it is important to understand that the SVORI study contained a relatively homogenous sample of serious and violent offenders, with more commonality than individuals that have committed lower levels of crime. Alternatively, Table 8 indicated strong correlations between some support measures and recidivism. This indicates that support is an important measure for recidivism as opposed to more traditional characteristics like race. While both tetrachoric and Pearson's R correlation results provided atypical results, it was important to move past these simple linear analyses and toward more complex analyses to see if these results still hold true.

While face validity suggested that all support measures were distinct, correlation results (see table 8) indicated that particular support measures were moderately correlated, necessitating further analysis. To further explore these correlated support

measures, factor analysis was employed on these particular items. All items for factor analyses are measured at wave 2 since instrumental support items were not captured prior to release (i.e., wave 1). Table 8 indicated that negative and positive emotional family support had a score of $-.453$ indicating these variables were moderately correlated; a factor analysis was conducted that included positive emotional family support and instrumental family support items. Factor analysis results showed that while positive and negative emotional family support loaded into one distinct factor (4.10), additional factors resulted, indicating that two factors loaded, as predicted. As indicated in Table 8, the three support measures – instrumental, positive, and negative support – were found to be moderately to strongly correlated with one another.

Table 8 also indicated a strong correlation between instrumental family support and positive emotional family support ($-.794$). Instrumental family support and positive emotional family support were entered into a factor analysis, using principal components; results showed that while these two measures loaded into one distinct factor (6.15), additional factors resulted, indicating that two factors loaded, as predicted. Similar results were found between instrumental family support and negative emotional family support. Table 8 indicated that these two measures approached moderate correlation ($.445$); similar to previous factor results, when instrumental family support and negative emotional family support were factored, these measures loaded into one distinct factor (3.67), however, an additional factor also loaded.

Table 7. Tetrachoric Correlation Results

	Recidivism	Formal Support	White	Black	Hispanic	Other	Violent	Property	Drug	Community Support	Partner Support
Recidivism ^c	1.000										
Formal Support ^b	-0.017	1.000									
White ^a	-0.015	-0.139*	1.000								
Black ^a	0.076	0.105	-1.000*	1.000							
Hispanic ^a	-0.102	0.086	-1.000*	-1.000*	1.000						
Other ^a	-0.246	0.036	-1.000*	-1.000*	-1.000	1.000					
Violent ^a	-0.076	-0.087	-0.058	0.008	0.007	0.202	1.000				
Property ^a	-0.003	-0.031	0.350*	-0.351*	-0.136	0.165	-0.481*	1.000			
Drug ^a	0.063	0.146*	-0.218*	0.214*	-0.083	-0.144	-0.832*	-0.563*	1.000		
Community Sup ^b	-0.144	0.110	-0.018	-0.039	-0.020	0.337*	0.340*	-0.113	-0.207*	1.000	
Partner ^b	0.065	-0.027	-0.083	0.053	0.150	-0.024	-0.034	-0.035	0.111	0.098	1.000

Note.

^a Data taken from Wave 1.

^b Data taken from Wave 2 or Wave 3.

^c Data taken from Wave 3 or Wave 4.

Table 8. Pearson's R Correlation Results

	Recidivism	Positive Support	Negative Support	Positive Change	Negative Change	Inst. Family Support	Inst. Peer Support	Age	Crim History	Educational	Kids	Housing Instability	Family Crim
Recidivism ^c	1.000												
Positive Support ^b	-0.082*	1.000											
Negative Support ^b	0.177*	-0.453*	1.000										
Positive Change ^c	-0.040	0.122*	-0.076*	1.000									
Negative Change ^c	0.118*	-0.110*	0.095*	-0.300*	1.000								
Inst. Fam. Support ^b	0.089*	-0.794*	0.445*	-0.123*	0.091*	1.000							
Inst. Peer Support ^b	0.067*	-0.324*	0.230*	-0.058	0.064*	0.372*	1.000						
Age ^a	-0.060*	0.040	-0.026	0.058	-0.034	0.008	-0.005	1.000					
Criminal History ^a	0.004	-0.044	0.047	0.016	0.006	0.022	0.006	0.005	1.000				
Education ^b	-0.037	-0.001	-0.154*	-0.006	-0.045	-0.063*	-0.066*	-0.020	0.004	1.000			
Kids ^b	0.022	0.070*	-0.003	0.041	-0.031	-0.048	0.061*	0.250*	0.080*	-0.030	1.000		
Housing Instability ^b	0.072*	-0.067*	0.162*	-0.032	-0.032	0.110*	0.040	-0.140*	0.006	0.006	-0.054	1.000	
Family Crim ^a	0.030	-0.030	0.046	0.014	-0.023	0.030	0.015	-0.017	0.050	-0.050	-0.020	0.030	1.000

Note.

^a Data taken from Wave 1.

^b Data taken from Wave 2 or Wave 3.

^c Data taken from Wave 3 or Wave 4.

Discrete Hazard Model Structuring

The following section describes the modeling structure used for analyses. Five separate sets of models are presented in order to address each of the five research questions. The first set of models examined positive emotional family support and likelihood to recidivate. The second set of models examined changes in positive emotional family support and likelihood to recidivate. The third set of models examined negative emotional family support and likelihood to recidivate, and the fourth set of models examined changes in negative emotional family support and likelihood to recidivate. The final set of models examined both positive and negative emotional family support and likelihood to recidivate.

Each set of models introduced variables in a hierarchical fashion to increase the exploratory power of the study and to also gain a better insight into which support variables have a stronger effect on an individual's likelihood to recidivate. All models were estimated using the `xtnlogit` command with an odds ratio option in STATA. This command was used to run a logistic regression model in a hierarchical form with the data as structured; results are presented in odds ratios. Table 9 presents the hierarchical organization of each set of models, organized by research question.

To examine research question 1, four separate models were run to examine positive emotional family support and recidivism. The first model in each set examined each support measure in isolation, and its effect on an individual's likelihood to recidivate. Positive emotional family support was tested along with the following control

variables: race variables, age, education, type of crime, criminal history, community supervision, and formal support. The second model introduced the same variables in model 1, but also added the instrumental support measures—instrumental family support and instrumental peer support. The third, full model, introduced other control variables that the extant literature suggests affect an individual’s likelihood to recidivate. These control variables included relationship status, number of children, housing instability, and family criminogenic factors.

Changes in positive emotional family support were examined in isolation without instrumental support measures. To examine research question 2, two sets of models were run. The first set of models tested each positive emotional family support change measure among control variables, including: race variables, age, education, type of crime, criminal history, community supervision, and formal support. The second, full model introduced number of children, relationship status, housing instability, and family criminogenic factors. Research question 3 was modeled similarly to research question 1. The difference in these models is that they examined negative emotional family support. Research question 4 was modeled similarly to research question 2. The difference in these models was that they examined changes in negative emotional family support. The final research question (research question 5) examined both positive and negative emotional family support using two models. Positive and negative emotional family support were examined in isolation without instrumental support measures. The first model tested positive and negative emotional family support among control variables, including: race variables, age, education, type of crime, criminal history, and community

supervision. The second, full model introduced number of children, relationship status, housing instability, and family criminogenic factors.

Table 9: Hierarchical structure of discrete hazard models

Research Question (RQ)	Model 1		Model 2	Model 3
RQ 1: Does positive emotional family support have an inverse relationship with an individual's likelihood to recidivate?	Formal Support Black Hispanic Other Race Age Violent Offense	Property Offense Drug Offense Criminal History Community Support Education	*Variables from Model 1 Instrumental Family Support Instrumental Peer Support	*Variables from Model 2 Number of Kids Partner Housing Instability Family Criminogenic Factors
RQ 2: As positive emotional family support increases across waves, does an individual's likelihood of recidivating decrease?	Formal Support Black Hispanic Other Race Age Violent Offense	Property Offense Drug Offense Criminal History Community Support Education	*Variables from Model 1 Number of Kids Partner Housing Instability Family Criminogenic Factors	
RQ 3: Does negative emotional family support have a direct relationship with an individual's likelihood to recidivate?	Formal Support Black Hispanic Other Race Age Violent Offense	Property Offense Drug Offense Criminal History Community Support Education	*Variables from Model 1 Instrumental Family Support Instrumental Peer Support	*Variables from Model 2 Number of Kids Partner Housing Instability Family Criminogenic Factors
RQ 4: As negative emotional family support increases across waves, does an individual's likelihood of recidivating increase?	Formal Support Black Hispanic Other Race Age Violent Offense	Property Offense Drug Offense Criminal History Community Support Education	*Variables from Model 1 Number of Kids Partner Housing Instability Family Criminogenic Factors	
RQ 5: Does positive and negative emotional family support have a differential effect on an individual's likelihood to recidivate when both are entered as covariates in the same model?	Positive Emotional Family Support Negative Emotional Family Support Formal Support Black Hispanic Other Race	Age Violent Offense Property Offense Drug Offense Criminal History Community Support Education	*Variables from Model 1 Number of Kids Partner Housing Instability Family Criminogenic Factors	

Results

Research question 1: Positive emotional family support and recidivism.

The first research question sought to examine whether or not positive emotional family support was negatively related to an individual's likelihood to recidivate. In turn, it was hypothesized that higher levels of positive emotional family support would decrease an individual's likelihood to recidivate. In order to examine positive emotional family support, discrete hazard models were used to determine the net effect of positive emotional family support on the log odds of an individual recidivating net of controls. While it is not expected that all individuals will recidivate, utilizing discrete hazard modeling allows for the censoring of observations/individuals that do not recidivate within the three waves post-release.

Table 10 shows the results from all models examining research question 1: positive emotional family support and recidivism. Before discussing positive emotional support, control variables are presented. When entered into Model 1, age ($p < .05$), formal support ($p < .05$), and property offenses ($p < .10$), were found to be significant; however it is important to note that property offenses was only found to be significant at the .10 level. Results indicated that for every 1-year increase in age, the odds of recidivating are reduced by almost 3 percent ($= (1 - 0.972) * 100$). Aside from age, results showed that property offenders had higher odds of recidivating compared to all other offense types: specifically, property offenders were 1.57 times more likely to recidivate than other offense types (reference category). Lastly, formal support was found to significantly increase an individual's odds of recidivating. It was revealed that the odds of

recidivating were increased by 48 percent among individuals that received SVORI programming in comparison to individuals that did not receive SVORI programming. Aside from controls, Model 1 also revealed that positive emotional family support had a significant ($p < .05$) indirect relationship with recidivism. That is, net controls, for every 1-unit increase in positive emotional family support, their odds of recidivating decreased by 17.3 percent.

Model 2 introduced instrumental family support and instrumental peer support. Past research has mixed results as to whether or not these forms of support are correlated with recidivism (see Breese, Ra'el, & Grant, 2000; Cohen & Wills, 1985; Cutrona & Suhr, 1994; Piko, 2009; Singer, 2012; Taylor, 2012). Additionally, research shows these two supports are not as salient of a predictor as positive emotional family support (see Cutrona & Suhr, 1994; Schwarzer & Leppin, 1991); Model 2 tested this hypothesis. First, controls were examined; in the model, age lost significance, however, property offenses ($p < .10$), and formal support ($p < .10$) remained significantly related to recidivism—though at the .10 level. Similar to Model 1, positive emotional family support remained significant, though its significance was reduced to the .10 level. That is, net controls, positive emotional family support continued to have a significant effect on recidivism when entered into the same model as instrumental family and instrumental peer support. Positive emotional family support was in the hypothesized direction, and individuals that reported higher levels of positive emotional family support decreased their odds of recidivating by 25.2 percent. Among instrumental support, results indicated

that instrumental family and instrumental peer support were not significantly related to recidivism.

Lastly, Model 3 introduced the relationship variable, number of kids, housing instability, and family criminogenic factors. Among controls, formal support was the only variable to reach significance, though at the .10 level. Here, results indicated that the odds of recidivating increased by almost 45 percent among individuals that received SVORI programming compared to their counterparts that did not receive SVORI programming. Among support measures, positive emotional family support remained significant at the .10 level, and was found to decrease an individual's odds of recidivating when compared to individuals reporting lower levels of positive emotional family support. More specifically, for every 1-unit increase in positive emotional family support, the individual's odds of recidivating were reduced by 25.5 percent. Instrumental family and instrumental peer support did not reach significance.

These results support the hypothesis laid out for research question 1. In all models, net controls, it was found that positive emotional family support was inversely related recidivism, with an individual's odds of recidivating decreasing with the addition of other independent variables. Interestingly, formal support was found to be significantly related to recidivism. Receiving formal support (SVORI experimental condition) was found to increase an individual's odds of recidivating when compared to individuals that did not receive formal support (SVORI experimental condition). While this was an unexpected finding, the extant literature supports the notion that formal support, or support provided by a government agency, has the potential to influence individual crime

and recidivism, though the literature is inconsistent (see Jiang & Winfree, 2006; Pratt & Godsey, 2003; Reisig et al., 2003; Woo et al., 2016). These results are explored further in Chapter 6.

Table 10. Positive Emotional Family Support and Recidivism

	Model 1		Model 2		Model 3	
	(N=1,223)		(N=1,223)		(N=1,223)	
	Odds Ratio	S.E.	Odds Ratio	S.E.	Odds Ratio	S.E.
Positive Emotional Family Support	0.827**	-0.076	0.748*	-0.120	0.745*	-0.120
Instrumental Family Support	--	--	0.874	-0.146	0.873	-0.145
Instrumental Peer Support	--	--	0.856	-0.096	0.848	-0.096
Formal Support	1.488**	-0.286	1.456*	-0.291	1.449*	-0.29
Black	1.246	-0.260	1.225	-0.264	1.235	-0.271
Hispanic	0.313	-0.234	0.346	-0.26	0.339	-0.255
Other	1.468	-0.651	1.112	-0.566	1.119	-0.572
Age	0.972**	-0.013	0.979	-0.013	0.980	-0.014
Violent Offense	1.167	-0.302	1.055	-0.286	1.018	-0.279
Property Offense	1.567*	-0.408	1.617*	-0.435	1.553	-0.422
Drug Offense	1.417	-0.392	1.37	-0.393	1.322	-0.384
Criminal History	0.974	-0.099	0.975	-0.111	0.965	-0.121
Community Supervision	0.843	-0.167	0.851	-0.174	0.855	-0.176
Education	0.956	-0.043	0.957	-0.046	0.960	-0.046
Number of Children	--	--	--	--	1.168	-0.255
Partner	--	--	--	--	1.012	-0.065
Housing Instability	--	--	--	--	1.104	-0.144
Family Criminogenic Factors	--	--	--	--	1.215	-0.238
Constant	0.144***	-0.095	0.139***	-0.095	0.095***	-0.070
Number of Groups	609		583		583	

Note. White and Other Offense are reference groups; formal support is SVORI experimental condition

*** p < 0.01

** p < 0.05

* p < 0.10

Research question 2: Positive emotional family support change and recidivism.

In addition to examining positive emotional family support's effect on an individual's likelihood to recidivate, this study also sought to examine the effect that changes in positive emotional family support scores has on recidivism. Research question 2 sought to examine this effect. It was hypothesized that increases in positive emotional family support scores over time would decrease an individual's likelihood of recidivating, and alternatively, decreases in levels of positive emotional family support scores over time would increase an individual's likelihood of recidivating. In order to capture changes in positive emotional family support between waves, an additional change variable was created and tested against all controls in the previous set of models (see table 9). As a reminder, to arrive at a change in positive emotional family support, an individual's positive emotional family support score was taken at wave t and subtracted from wave t+1. A positive score indicated that there was an increase in positive emotional family support and a negative score indicated a decrease in positive emotional family support.

Table 11 presents the results for research question 2. Model 1 tested the effect of positive emotional family support change net of controls. Among controls, age ($p < 0.05$), property offense ($p < .10$), and formal support ($p < .05$) were found to have a significant effect on recidivism. Age was found to have an inverse relationship with recidivism, where for every 1-year increase in age, an individual's odds of recidivating decreased by 3 percent. Both formal support and property offense were found to increase an

individual's odds of recidivating. The odds of recidivating increased by about 48 percent among individuals that received formal support (SVORI programming) when compared to individuals that did not receive formal support. Among offense types, the odds of recidivating increased by 56.2 percent among property offenders compared to all other offense types. Additionally, Model 1 also revealed that changes in positive emotional family support scores did not reach significance, and thus changes in positive emotional family support did not affect an individual's likelihood to recidivate.

Model 2 tests the effect of positive emotional family support change among the addition of number of kids, relationship status, housing instability, and family criminogenic factors. Among controls, housing instability ($p < .10$), and formal support ($p < .05$) reached significance. Here it was found that for every 1-unit increase in an individual's housing instability score (times moved since last interview), the odds of recidivating increased by 25.3 percent. Additionally, formal support was found to increase an individual's odds of recidivating by 47.2 percent.

Model 2 also revealed that positive emotional family support change, again, did not reach significance. Table 12 revealed that the mean changes for positive emotional family support were very minimal, and so, it is not surprising that changes in positive emotional family support scores did not have a significant effect on recidivism. Formal support was the only variable to reach significance ($p < .05$).

Table 11. Positive Emotional Family Support Change and Recidivism

	Model 1		Model 2	
	(N=1,223)		(N=1,223)	
	Estimate	S.E.	Estimate	S.E.
Positive Emotional Family Support Change and Recidivism	0.880	-0.082	0.888	-0.082
Formal Support	1.476**	-0.283	1.471**	-0.283
Black	1.228	-0.255	1.274	-0.270
Hispanic	0.315	-0.235	0.328	-0.246
Other	1.421	-0.630	1.392	-0.621
Age	0.974**	-0.013	0.979	-0.014
Violent Offense	1.145	-0.298	1.103	-0.291
Property Offense	1.562*	-0.408	1.535	-0.406
Drug Offense	1.396	-0.388	1.397	-0.395
Criminal History	0.981	-0.097	0.979	-0.103
Community Supervision	0.834	-0.165	0.857	-0.171
Education	0.956	-0.044	0.959	-0.044
Number of Children	--	--	1.073	-0.219
Partner	--	--	0.974	-0.061
Housing Instability	--	--	1.253*	-0.149
Family Criminogenic Factors	--	--	1.151	-0.216
Constant		-0.098	0.090***	-0.064
	0.147***			
Number of Groups	609	609	609	609

Note. White and Other Offense are reference groups; Formal support is SVORI experimental condition

*** $p < 0.01$

** $p < 0.05$

* $p < 0.1$

These results do not support the hypothesis laid out in Chapter 3 that changes in positive emotional family support would have an effect on recidivism, as no significant relationship was found between changes in positive emotional family support scores and recidivism. Among results—similar to research question 1—formal support was found to increase an individual’s odds of recidivating.

Research question 3: Negative emotional family support and recidivism.

The third research question posed for this study sought to examine negative emotional family support and its impact on an individual's likelihood to recidivate. It was hypothesized that negative emotional family support would be positively related to an individual's likelihood to recidivate, such that higher levels of negative emotional family support identified by an individual would result in an increased likelihood to recidivate.

The same methodology used to examine positive emotional family support and recidivism was used to examine negative emotional family support and an individual's likelihood to recidivate. Table 12 summarizes the results from all three models. The first model tested negative emotional family support among controls (race, age, type of crime, criminal history, community support, education, and formal support). Among controls, only age and formal support reached significance, though both at the .10 level. This model indicated that for every 1-unit increase in age, the odds of an individual recidivating were reduced by approximately 5 percent. Formal support was found to significantly increase an individual's likelihood of recidivating—it was found that individuals that received formal support (SVORI experimental condition) were 2.00 times more likely to recidivate than individuals that did not receive formal support. Lastly, when entered into the model, net of controls, negative emotional family support had a significant effect on recidivism ($p < .01$). Results indicated that net of controls, for every 1-unit increase in negative emotional family support, an individual's odds of recidivating increased by 119.6 percent.

The second model introduced instrumental family and instrumental peer support in order to test the effect each support type had on recidivism, when entered into the model with negative emotional family support. The only control to reach significance in this model was formal support ($p < .10$). It was found that receiving formal support increased an individual's odds of recidivating by 93.4 percent in comparison to individual's that did not receive formal support. Among instrumental support variables, neither instrumental family nor instrumental peer support reached significance. Negative emotional family support continued to reach significance ($p < .01$). Here, the salience of negative emotional family support increased with the inclusion of instrumental family and instrumental peer supports. Net of controls, for every 1-unit increase in negative emotional family support, an individual in the sample was 2.33 times more likely to recidivate.

The third and full model introduces relationship status, kids, housing instability, and family criminogenic factors. Among control variables, only formal support was found to reach significance ($p < .10$). Net of controls, individuals that received formal support (SVORI experimental condition) were 1.95 times more likely to recidivate than individuals that did not receive formal support. Among support variables, instrumental family and instrumental peer support did not reach significance. Lastly, negative emotional family support ($p < .01$) continued to be a significant factor in an individual's likelihood to recidivate. In the full model, net of controls, negative emotional family support also increased in salience. Results indicated that for every 1-unit increase in negative emotional family support, their odds of recidivating increased by 146.5 percent.

Results from each model support the hypothesis for research question 3 that negative emotional family support would increase an individual’s likelihood to recidivate. With the addition of controls, and other support variables, the likelihood of recidivating increased, suggesting that negative emotional family support has a strong effect on recidivism. Though there has been little literature directly testing negative emotional family support and recidivism, this finding is consistent with research that suggests negative emotions or support of a negative nature has an adverse effect on an individual’s success within the community (see Antonucci, 1985; Brezina & Azimi, 2018; Kurtz & Zavala, 2017; Pettus-Davis et al., 2011; Pettus-Davis, Doherty, Veeh, & Drymon, 2017).

Table 12. Negative Emotional Family Support and Recidivism

	Model 1		Model 2		Model 3	
	(N=1,223)		(N=1,001)		(N=1,001)	
	Estimate	S.E.	Estimate	S.E.	Estimate	S.E.
Negative Emotional Family Support	2.196***	-0.522	2.331***	-0.596	2.465***	-0.640
Instrumental Family Support	--	--	0.842	-0.168	0.835	-0.172
Instrumental Peer Support	--	--	0.752	-0.147	0.733	-0.148
Formal Support	2.008*	-0.767	1.934*	-0.767	1.954*	-0.795
Black	1.575	-0.635	1.516	-0.635	1.527	-0.666
Hispanic	0.174	-0.216	0.187	-0.235	0.171	-0.221
Other	1.391	-1.114	0.927	-0.840	0.934	-0.874
Age	0.949*	-0.027	0.957	-0.027	0.957	-0.028
Violent Offense	1.155	-0.556	0.927	-0.47	0.863	-0.457
Property Offense	1.989	-1.016	2.055	-1.094	1.938	-1.060
Drug Offense	1.611	-0.851	1.461	-0.801	1.341	-0.764
Criminal History	0.911	-0.216	0.893	-0.267	0.851	-0.324
Community Supervision	0.722	-0.252	0.725	-0.262	0.711	-0.264

Table 12. Negative Emotional Family Support and Recidivism

Education	0.981	-0.083	0.989	-0.088	0.990	-0.091
Number of Children	--	--	--	--	1.573	-0.621
Partner	--	--	--	--	1.045	-0.126
Housing Instability	--	--	--	--	1.217	-0.281
Family Criminogenic Factors	--	--	--	--	1.332	-0.518
Constant		-0.023	0.013***	-0.02	0.005***	-0.009
	0.015***					
Number of Groups	609		583		583	

Note. White and Other Offense are reference groups; Formal support is SVORI experimental condition

*** p < 0.01

** p < 0.05

* p < 0.1

Research question 4: Negative emotional family support change and recidivism.

The fourth research question sought to examine the effect that changes in negative emotional family support has on recidivism. It was hypothesized that changes in negative emotional family support would affect an individual's likelihood to recidivate such that increases in negative emotional family support would increase an individual's likelihood to recidivate, and a reduction in negative emotional family support would reduce an individual's likelihood to recidivate. Table 13 presents the results of all models examining research question 4. The first model tested the effect of an individual negative emotional family support change score among controls. In this model, age (p<.10), property offenses (p<.10), and formal support (p<.05) reached significance. Results indicated that for every 1-year increase in age, the odds of an individual recidivating were reduced by about 3 percent. Among offense types, the odds of recidivating were increased by 65.4 percent among property offenders when compared to other offense

types. Lastly, formal support was found to increase an individual's odds of recidivating by 48.6 percent when compared to those that did not receive formal support. Changes in negative emotional family support was found to be highly significant ($p < .01$) and increase an individual's likelihood to recidivate. Net of controls, for every 1-unit increase in an individual's negative emotional family support change score, their odds of recidivating increased by 42.6 percent.

The full model introduced relationship status, number of children, housing instability, and family criminogenic factors. Among controls, property offense (at the .10 level), housing instability ($p < .05$), and formal support ($p < .05$) were all found to be significantly related to recidivism. Property offenders were found to be 1.63 times more likely to recidivate than other offense types. Housing instability was also found to increase an individual's likelihood of recidivating. Results showed that for every 1-unit increase in an individual's housing instability score (times moved since last interview), their odds of recidivating increased by about 30 percent. Formal support was also found to increase an individual's odds of recidivating by almost 50 percent compared to individuals that did not receive formal support. Lastly, the full model revealed that changes in negative emotional family support also increased and individual's likelihood of recidivating. Here, it was revealed that net of controls, for every 1-unit increase in an individual's negative emotional family support change score, they were about 1.45 times more likely to recidivate.

Table 13. Negative Emotional Family Support Change and Recidivism

	Model 1		Model 2	
	(N=1,223)		(N=1,223)	
	Estimate	S.E.	Estimate	S.E.
Negative Emotional Family Support Change	1.426***	-0.133	1.449***	-0.136
Formal Support	1.486**	-0.287	1.496**	0.290
Black	1.186	-0.249	1.243	-0.267
Hispanic	0.308	-0.231	0.316	-0.238
Other	1.381	-0.613	1.352	-0.605
Age	0.974*	-0.013	0.981	-0.014
Violent Offense	1.157	-0.304	1.105	-0.295
Property Offense	1.654*	-0.438	1.631*	-0.438
Drug Offense	1.424	-0.399	1.418	-0.405
Criminal History	0.979	-0.094	0.977	-0.101
Community Supervision	0.849	-0.169	0.874	-0.176
Education	0.960	-0.044	0.965	-0.045
Number of Children	--	--	1.130	-0.233
Partner	--	--	0.974	-0.061
Housing Instability	--	--	1.300**	-0.157
Family Criminogenic Factors	--	--	1.167	-0.221
Constant	0.132***	0.088	0.071***	0.0514
Number of Groups	609		609	

Note. White and Other Offense are reference groups; Formal support is SVORI experimental condition

*** $p < 0.01$

** $p < 0.05$

* $p < 0.1$

Research question 5: Examining positive versus negative emotional family support and recidivism.

Because positive and negative emotional family support are the focus of this study, it was important to examine these two types of support in the same model in order to gain a better understanding of their effect on an individual's likelihood to recidivate.

Research question 5 sought to examine whether positive or negative emotional family

support increases an individual's likelihood to recidivate over time—when entered in the same model. While both positive emotional and negative emotional family support have remained consistently significant in this study, it was important to examine the two in the same model as our understanding of negative emotional family support and its effect on recidivism is limited. It was hypothesized that both types of emotional family support would have an influence on an individuals' likelihood to recidivate, but that negative emotional family support would have more of an influence.

Table 14 summarizes the results for both models. The first model tested both positive and negative emotional family support among controls: age, race, offense type, criminal history, community support, and formal support. Among controls, age and formal support reached significance at the .10 level. In the model, for every 1-year increase in an individual's age, their odds of recidivating were reduced by about 5 percent. Formal support continued to increase an individual's likelihood to recidivate. In model 1, it was found that individuals that received formal support were about 2.00 times more likely to recidivate than their counterparts that did not receive formal support. Among positive and negative emotional family support, only negative emotional family support ($p < .01$) reached significance. Net of controls, and with positive emotional family support in the same model, it was found that for every 1-unit increase in negative emotional family support, an individual's odds of recidivating increased by 123.5 percent. Interestingly, positive emotional family support is in the positive direction in this model, suggesting that positive emotional family support increases an individual's

likelihood of recidivating when entered into the same model as negative emotional family support.

The full model introduced number of number of kids, relationship status, housing instability, and family criminogenic factors. The full model revealed similar results to model 1. Among controls, age ($p < .10$), and formal support ($p < .10$) reached significance. Here, for every 1-year increase in age, an individual's odds of recidivating were reduced by about 5 percent. Additionally, individuals that received formal support (SVORI experimental condition) were found to be 2.05 times more likely to recidivate than individuals that did not receive formal support. Similar to model 1, positive emotional family support did not reach significance, but negative emotional family support did reach significance ($p < .01$). Net of controls, it was found that for every 1-unit increase in negative emotional family support, an individual in the sample was found to be 2.39 times more likely to recidivate. Interestingly, in the full model, it was also revealed that positive emotional family support was in the positive direction.

Taken together, results support the hypothesis for research question 5, in that, when entered into the same model, a differential effect would be found when both positive emotional and negative emotional family support were entered into the same model. It was hypothesized that negative emotional family support would have a greater influence on an individual's likelihood to recidivate. Results for both models revealed that negative emotional family support did indeed significantly increase an individual's likelihood of recidivating. Two other interesting findings were also revealed in these models. The first was that formal support continued to increase an individual's

likelihood of recidivating, but to a greater degree when both positive and negative emotional family supports were entered in the same model. Second, positive emotional family support, though not significant, was found to be in the positive direction. These findings are explored further in Chapter 6.

Table 14. Positive and Negative Emotional Family Support and Recidivism

	Model 1		Model 2	
	(N=1,223)		(N=1,223)	
	Estimate	S.E.	Estimate	S.E.
Positive Emotional Family Support	1.043	-0.186	1.078	-0.202
Negative Emotional Family Support	2.235***	-0.559	2.391***	-0.609
Formal Support	2.004*	-0.765	2.047*	-0.806
Black	1.567	-0.632	1.642	-0.697
Hispanic	0.175	-0.216	0.172	-0.219
Other	1.381	-1.108	1.325	-1.117
Age	0.949*	-0.027	0.952*	-0.028
Violent Offense	1.152	-0.554	1.082	-0.550
Property Offense	1.981	-1.012	1.925	-1.019
Drug Offense	1.597	-0.845	1.534	-0.851
Criminal History	0.910	-0.218	0.888	-0.252
Community Supervision	0.72	-0.251	0.707	-0.255
Education	0.982	-0.083	0.985	-0.088
Number of Children	--	--	1.531	-0.577
Partner	--	--	0.999	-0.116
Housing Instability	--	--	1.414	-0.313
Family Criminogenic Factors	--	--	1.136	-0.420
Constant	.0146***	0.023	0.005***	0.008
Number of Groups	609		609	

Note. White and Other Offense are reference groups; Formal support is SVORI experimental condition

*** p < 0.01

** p < 0.05

* p < 0.1

Summary

Five sets of models were created to address each of the five research questions posed in this study. The first set of models examined research question 1—positive emotional family support and its effect on an individual’s likelihood to recidivate. In the full model, net of controls, positive emotional family support was found to significantly reduce an individual’s likelihood of recidivating, as hypothesized—though at the .10 level.

The second set of models (research question 2) examined changes in positive emotional family support and the impact this has on an individual’s likelihood to recidivate. Results indicated that net of controls, a change in an individual’s positive emotional family support score did not have a significant effect on their likelihood to recidivate.

The third set of models examined research question 3 and negative emotional family support’s effect on an individual’s likelihood to recidivate. Negative emotional family support was found to be highly significant. Results showed that individuals that reported high levels of negative emotional family support were more likely to recidivate than an individual reporting less negative emotional family support.

The fourth model examined research question 4 and the effect that changes in negative emotional family support had on an individual’s likelihood to recidivate. Net controls, changes in negative emotional family support score had a significant effect on an individual’s likelihood to recidivate. This finding supported the hypothesis laid out for research question 4.

Lastly, both positive and negative emotional family support were entered into the same model in order to address research question 5, which sought to examine whether positive or negative emotional family support had more of an impact on an individual's likelihood to recidivate. When entered into the same model, negative emotional family support was found to be highly significant, whereas positive emotional family support did not reach significance. Additionally, net of controls, negative emotional family support increased in salience, with positive emotional family support in the same model.

Results from each model also raised a few interesting findings that are explored in Chapter 6. First, results revealed that the formal support indicator—whether or not the individual received SVORI programming—was significantly related to recidivism.⁴ This finding was consistent with the addition of controls and other support measures, and suggested that individuals in the sample who received formal support (SVORI programming) were more likely to recidivate. While this finding may seem counterintuitive, the literature around formal support is not consistent in its effect (see Jiang & Winfree, 2006; Pratt & Godsey, 2003; Reisig et al., 2003; Woo et al., 2016).

The second interesting finding was the significant effect of housing instability in a few of the models. It was found in these models that housing instability increased an individual's likelihood to recidivate. The degree to which an individual in the sample moved throughout the duration of the study served as the indicator for housing instability. This supports the literature in that stable housing is important in an individual's success

⁴ SVORI programming was the experimental condition in the original impact evaluation (Lattimore & Visser, 2009)

within the community (see Breese, Ra'el, & Grant, 2000; Cottle, Lee, & Heilbrun, 2001; La Vigne, Visher, & Castro, 2004; Nelson, Deess, & Allen, 1999; Shapiro & Schwartz, 2001).

Lastly, when examining positive and negative emotional family support in the same model, it was revealed that positive emotional family support, though not significant, was reported in the positive direction. This finding goes against much of the literature and hypotheses raised in this study, however, given that the sample consists of a specialized group of males—serious and violent offenders—this finding may be supported by the literature. This and all other findings are explored further in Chapter 6.

CHAPTER 6

Discussion And Conclusion

While the importance of addressing the reentry needs of the formerly incarcerated is well established in the literature (Berg & Huebner, 2011; Clear, 2007; Martinez, 2006; Martinez & Christian, 2009; Mowen & Visher, 2016; Visher, 2007), understanding that not all families are equipped to meet the needs of these individuals is just as important. In particular, while research indicates that upwards of 92 percent of formerly incarcerated individuals turn to their families for emotional and instrumental support (Arditti & Parkman, 2011; Berg & Huebner, 2010; Martinez & Abrams, 2013; Naser & La Vigne, 2006), research also highlights difficulties families face in providing their returning family member with support (Hairston & Oliver, 2006; Mowen & Visher, 2016). Families often report having strained incomes, mental and physical health concerns, as well as other caregiving responsibilities (Arditti, Lamber-Shute, & Joest, 2003; Fontaine, Gilchrist-Scott, Denver, & Rossman, 2012; Wildeman & Western, 2010). The added responsibility of supporting their formerly incarcerated family member can sometimes lead to strained relationships consisting of heightened frustration, resentment, and conflict (Hairston & Oliver, 2006). These strained family relationships, as a result, may interfere with the returning individual's ability to improve their lives, increasing the likelihood that they will resort to continued drug use and crime (Mowen & Visher, 2016).

Gaining better insight into how support systems are developed or re-established following a prison term is a key part of understanding the reentry needs of formerly incarcerated individuals. In particular, it is important to understand how different

elements and types of support within these family relationships affect outcomes among the returning individual. This study sought to examine the effect that family social support has on a formerly incarcerated individual's likelihood of recidivating. Social support has traditionally been examined in a homogenous manner, combining differing elements and types of social support into one measure to understand the behaviors of individuals in the community (Alzheimer, 2008; Antonaccio, Tittle, Brauer, & Islam, 2014; Baron, 2015; Brezina & Azimi, 2018; Cid & Marti, 2017; Martinez & Abrams, 2013; Orrick et al., 2011; Pratt & Godsey, 2003).

This study was framed by Cullen's Social Support Theory (1994) in order to provide guidance to the social support discussion. In his theory, Cullen proffered that "whether social support is delivered through government social programs, communities, social networks, families, interpersonal relations, or agents of the criminal justice system, it reduces criminal involvement" (p. 527). In Cullen's Social Support Theory, social support is defined as "the perceived or actual instrumental and/or expressive provisions supplied by the community, social networks, and confiding partners" (p.18). Using this definition, Cullen introduced four areas that make up social support, including: perceptive or objective, emotional or instrumental, micro or macro, and formal or informal. Cullen argued that these differing elements impact individuals in unique ways, and thus suggests that social support is not a singular measure, but rather, is made up of different types, namely—emotional, instrumental, and formal.

Using this definition, Cullen laid out 13 propositions to establish social support's relationship to crime. These propositions ranged from predicting social support's role in

the reduction of individual involvement with crime, increases in social control, and a reduction in victimization. While it was not the intent of this study to test all propositions of Cullen's theory, a focus on Cullen's third proposition relative to family was examined. Cullen's third proposition stated:

*The more support a family provides,
the less likely it is that a person will engage in crime.*

With an understanding of the often varying dynamics that occur between the formerly incarcerated individual and their supporting family, this study sought to also gain a better understanding of how *positive* and *negative* family dynamics and support impact an individual's likelihood to remain crime free. A growing body of research has suggested that not all family support has a positive impact on individuals, and that instead, negative family dynamics can affect the potential buffering impact that social support can have on an individual (Braman & Wood, 2003; Breese, Ra'el, & Grant, 2000; Cottle, Lee, & Heilbrun, 2001; Wallace et al., 2014). Still, however, there is a limited amount of research examining negative family dynamics and social support. As an expansion on the social support literature, this study sought to examine both positive and negative emotional family support.

Positive emotional family support was meant to capture the extent to which the formerly incarcerated individual felt loved and valued by their family (Sarason, Levine, Basham, & Sarason, 1983). Alternatively, negative family support was meant to better understand the degree to which formerly incarcerated individuals report feeling that they do *not* feel loved or valued (Sarason et al., 1983). Specifically, the negative emotional

family support measure consists of the degree to which individuals in the sample reported feeling as if they disappoint their family members, feel criticized by their family members, and fight with their family members. Positive and negative emotional family support were examined independently among controls and instrumental support as well as together in the same model in order to understand not only their individual, but also collective impact on recidivism.

Contextualizing the Research Questions

The following section will discuss the results from Chapter 5 relative to the research questions and hypotheses presented in Chapter 3 in an effort to provide context as to what the results may indicate. In particular, Cullen's 3rd proposition forms the basis for the five hypotheses that were tested, and examine the effect that the more support an individual receives, the less likely they will recidivate. After findings for each of the research questions are discussed, other results and findings from Chapter 5 are discussed and contextualized as well.

Positive emotional family support and recidivism.

The first research question sought to examine positive emotional family support, and whether or not it is inversely related to an individual's likelihood to recidivate. Results supported the hypothesis that positive emotional family support would have an inverse relationship with an individual's likelihood to recidivate. That is, individuals that self-reported higher levels of positive emotional family support during Wave 2 or Wave 3, were more likely to have been reincarcerated at Wave 3 or Wave 4. The addition of other support measures—instrumental family support and instrumental peer support—

appeared to strengthen the effect that positive emotional family support had on decreasing the individual's likelihood to recidivate.

Overall, the results support the extant research that found that positive emotional family support—or the extent to which an individual feels loved or valued—is inversely related to negative outcomes (Alzheimer, 2008; Breese, Ra'el, & Grant, 2000; Cohen, Underwood, & Gottlieb, 2000; Markson, Losel, Souza, & Lanskey, 2015; Pratt & Godsey, 2003; Semmer et al., 2008; Singer, 2012; Taylor, 2012). Although family relationships are essential to a successful transition from prison to the community (Cid & Marti, 2017; Clear, 2007; La Vigne & Travis, 2004; Martinez & Abrams, 2013; Martinez & Christian, 2009; Naser & Visher, 2006; Visher & Courtney, 2006), it is also intrinsic that not all family relationships are created equal or contribute to a successful transition (Markson et al., 2015). With a positive emotional environment and positive emotional support from family, this study finds support for a decreased likelihood that a formerly incarcerated individual will recidivate. That being said, this finding also signals that more research examining “positive” emotional family support as an independent measure is needed.

Positive emotional family support change and recidivism.

The second research question sought to examine changes in positive emotional family support, and how changes in an individual's reported levels of positive emotional family support affect their likelihood to recidivate. Results revealed that changes in positive emotional family support did not have a significant effect on recidivism. These findings were not consistent with the hypothesis laid out. Despite not being significant,

the estimates from results were in the hypothesized direction. That is, though not significant, results indicated that increased changes in emotional family support *decreased* an individual's likelihood of recidivating.

Descriptive statistics in Table 12 revealed that changes in levels of positive emotional family support were minimal, though not static. While research supports that changes in levels of family social support varies over time (Breese, Ra'el, & Grant, 2000; Pettus-Davis, Doherty, Veeh, & Drymon, 2017), other research has also shown that very little changes in levels of family social support occur during the first six months after an individual is released from custody (Visher et al., 2004). Specifically, Breese and colleagues discuss family dynamics upon an individual's return from custody. The authors refer to a period of time following a formerly incarcerated individual's return as a "honeymoon phase" in which family members, whom are happy to have their loved one home, provide high levels of support. Following this phase, the authors note that a number of factors affect family dynamics, and support levels may change more substantially. Because this study only contained data consisting of a 15-month post-release period, it is possible that the "honeymoon phase" was prevalent over this period of time, especially among highly supportive family members. Additionally, and given that the study sample consists of serious and violent offenders with extensive criminal histories, family members may be accustomed to the challenges faced upon the return of their formerly incarcerated family member. This may result in family members willing and able to provide a consistent amount of positive emotional family support despite the challenges faced upon their family member's return.

Negative emotional family support and recidivism.

The third research question sought to examine the extent to which individuals do *not* feel loved and valued by their family members, and whether or not this negative emotional family support is directly related to an individual's likelihood to recidivate. Results supported the hypothesis, and indicated that negative emotional family support was significantly related to an individual's likelihood to recidivate. Results indicated that an individual that reported high levels of negative emotional family support during Wave 2 or Wave 3, increased their odds of having been reincarcerated at Wave 3 or Wave 4 by an astonishing 146 percent. The addition of all other support measure and controls increased the magnitude of the estimate.

Results support the extant literature. While there is limited research that directly connects negative emotional family support and recidivism, the literature does reveal that there is a distinction between positive and negative family support, which have separate effects on individual outcomes.. For instance, a large percentage of individuals returning from prison reside with their family members, and family dynamics may sometimes conflict with the levels of positive support that a family can and does provide (Braman & Wood, 2003; Cottle, Lee, & Heilbrun, 2001; Nelson & Trone, 2000; Travis, Solomon, & Waul, 2001). Negative family dynamics are reflective of the negative emotional family support measure used in this study, and captured the extent to which the returning individual experienced negative family dynamics upon their return from prison. These findings indicate that negative emotional family support has a highly significant effect on

an individual, so much so that other competing variables do not impact their likelihood to recidivate as strongly as negative family dynamics.

Negative emotional family support change and recidivism.

The fourth research question sought to examine changes in negative emotional family support, and how changes in an individual's reported levels of negative emotional family support affect their likelihood of recidivating. Results supported the hypothesis as it was revealed that individuals who experienced increased changes in negative emotional family support were also found to significantly increase their likelihood of recidivating compared to individuals whose levels of negative emotional family support remained static or decreased. That is, individuals who reported increases in negative emotional family support from Wave 2 or Wave 3 were more likely to have been reincarcerated at Wave 3 or Wave 4. Results indicated that greater changes in negative emotional family support increased an individual's odds of recidivating by about 45 percent. The addition of other control variables increased the magnitude of the effect of negative emotional family support change.

The results support the literature in that, while families are supportive of their returning family member, family dynamics are complicated and may impact their transition period from prison to community (Breese, Ra'el, & Grant, 2000; Pettus-Davis, Doherty, Veeh, & Drymon, 2017). Any increases in negative emotional family support should increase the individual's likelihood of recidivating. Living environments have been found to worsen difficulties faced by the returning individual (Travis, Solomon, & Waul, 2001). These difficulties may leave the returning family member feeling defeated,

especially if there is a family history of domestic abuse (Braman & Wood, 2003) and likely to resort back to criminal behavior.

Positive and negative emotional family support and recidivism.

Research questions 1-4 examined positive and negative emotional family support and changes in these types of support independently among controls. Research question 5 sought to examine the effect of positive and negative emotional family support on recidivism while entered as covariates in the same model. It was hypothesized that negative emotional family support would have a greater direct influence on an individual's likelihood to recidivate.

Results supported the hypothesis. Negative emotional family support was found to have a highly significant direct effect on an individual's likelihood to recidivate. It was found that net controls and in the same model as positive emotional family support, an individual reporting high levels of negative emotional family support at Wave 2 or Wave 3 was about 2.4 times more likely to report being reincarcerated at Wave 3 or Wave 4. Alternatively, it was found that positive emotional family support did *not* have a significant effect on an individual's likelihood to recidivate, and instead, was found to slightly *increase* an individual's likelihood of recidivating.

While positive emotional family support and negative emotional family support were found to have independently significant effects on an individual's likelihood to recidivate, it was also hypothesized that individuals could have high levels of positive emotional family support and also high levels of negative emotional family support. The results support the literature and the notion that although formerly incarcerated

individuals can have an otherwise positively supportive family, they can also experience negative family support, each having differing effects on the returning family member (Mowen & Visher, 2016; Pettus-Davis et al., 2011; Pettus-Davis, Doherty, Veeh, & Drymon, 2017; Travis, Solomon, & Waul, 2001). In particular, Pettus-Davis and colleagues (2017) found that among emerging adults, social support remains relatively stable, however, negative effects of social support are also prevalent. Pettus-Davis and colleagues (2011) argue that strained relationships increase stress levels among the returning family member, which can lead to their relapse to negative behavior.

Results also revealed that positive emotional family support—though not significant—was found to increase an individual’s likelihood of recidivating. It may be possible that in the transition period from prison to community, families providing *any* type of support can have a negative effect on the returning individual (Pettus-Davis et al., 2011; Seal et al., 2007; Shinkfield & Graffam, 2009). For example, positive emotional family support within a highly strained relationship where negative emotional support is high, may cause the returning individual increased stress and anxiety because families may be perceived as controlling (Martinez & Abrams, 2013; Seal et al., 2007). Similarly, research has found that among formerly incarcerated individuals, positive social support was at times perceived as being too overwhelming (Pettus-Davis et al., 2011; Seal et al., 2007). This may not only contribute to an already strained family relationship, but cause the returning individual to withdraw from positively influential people in their lives, and instead associate with individuals that may be negatively influential (Seal et al., 2007).

Overall, results support the hypotheses for the study and Cullen's third proposition. Here, positive emotional family support was independently found to reduce an individual's odds of recidivating, controlling for multiple other factors. Still, however, results also revealed that family support needs to be further investigated as negative emotional family support was found to also be a contributing factor into an individual's likelihood to recidivate. And further, negative emotional family support was found to be a more salient factor in an individual's likelihood to recidivate, cancelling, and reversing the effect that positive emotional family support had when included in the same model as negative emotional family support.

Other findings.

Among other findings from analyses were those relative to housing instability, and formal support. While results indicated that much of the effect on recidivism was consumed by support variables, a few noteworthy exceptions were apparent. With regard to housing instability, results indicated that housing instability was significantly related to an individual's likelihood to recidivate in two particular models—those examining *changes* in support. That is, when entered into a model with positive emotional family support change *or* negative emotional family support change, individuals that reported having moved a greater number of times post-release were more likely to have been reincarcerated by Wave 3 or Wave 4. Among positive emotional family support, housing instability results indicated an individual's odds of being reincarcerated by Wave 3 or Wave 4 increased by 25.3 percent. Similarly, among negative emotional family support,

a n individual's odds of being reincarcerated by Wave 3 or Wave 4 increased by 30 percent, net of controls.

Because a change in either positive or negative emotional family support can also indicate an instability in support, it may be that a change in support coupled with more frequent moves upon release result in an unstable transition. It is possible that at times, negative dynamics may be cause for the returning individual moving from one place to another. This may be indicative of the end of a “honeymoon phase.” These negative dynamics may cause increased stress and uncertainty, and the returning individual may resort to moving, and associating with individuals that are negatively influential, but may provide a sense of stability. Housing instability may also indicate an unstable family relationship, consisting of a living environment that is not conducive to a stable transition, forcing the returning individual to find housing elsewhere. This may also cause the individual to resort to old habits to cope. Additionally, the place in which the returning individual moves to may be a criminogenic environment in and of itself, and may provide the individual with access to drugs or other criminal resources (see Cao, Burton, & Liu, 2018; Fontaine & Biess, 2012; Martinez, 2006; Martinez & Abrams, 2013; Martinez & Christian, 2009; Naser & La Vigne, 2006). Cao and colleagues (2018), for example, found other correlates; for example, high residential mobility was found to be correlated with illicit drug use. Lastly, the returning individual may find it frustrating to find stable housing, which may also cause them to return to old habits or crime to cope with the stress, or to meet the economic necessity of finding housing (Fontaine & Biess, 2012; Markson, Losel, Souza, & Lanskey, 2015).

Another unexpected finding involved formal support. Among results, formal support was found to significantly increase an individual's likelihood of recidivating.⁵ This finding was prevalent net of controls and evident among all other types of social support—positive, negative, instrumental family, and instrumental peer support. The estimates for formal support were increasingly high when negative emotional family support was included in the same model. For example, Table 17 presents the results for research question 5, examining positive and negative emotional family support and recidivism in the same model. Net of controls, formal support was significant ($p < .10$) and estimated to increase an individual's of recidivating by 104.7 percent (2.047). That is, individuals that reported receiving SVORI programming were more likely to have been reincarcerated at Wave 3 or Wave 4.

In the overall SVORI evaluation, it was found that selection into the experimental group—or the receipt of additional reentry planning and programming—varied among study sites. For example, only two sites—Iowa and Ohio—randomly assigned participants to the SVORI group. Other sites used varied criteria to include individuals in the SVORI group. Criteria could include age, criminal history, risk level, post-release supervision, transfer to pre-release facilities, and county of release (Lattimore & Steffey, 2009). It is possible that, through selection bias, the individuals that made up the SVORI group whom were adverse to receiving programming, had a larger criminal history affecting their experiences with failed attempts at programming,. Alternatively, it could

⁵ SVORI was an indicator of whether or not the individual received SVORI programming, which served as the experimental condition in the original impact evaluation (Lattimore & Visser, 2009)

be possible that though assessments, these individuals were provided with services that were not useful to the individual.

The literature around formal support among incarcerated and formerly incarcerated individuals is limited, and findings have not been consistent (see Jiang & Winfree, 2006; Pratt & Godsey, 2003; Reisig et al., 2003; Woo et al., 2016). For example, Pratt and Godsey found that lower homicide rates were connected to economic welfare programs, and Reisig and colleagues found that lower levels of support through community welfare programs influenced recidivism among females. Jiang and Winfree, however, found that formal support provided both in-prison and external to prison did not have any significant effect on individual misconduct. Woo and colleagues (2016), however, found that formal support had either weak or opposite relationships with prisoner misconduct. In their study, the authors found that particular types of formal support increased self-injury and prisoner misconduct. The authors argued that this finding was among psychological or cognitive behavioral supports and that it may be a result of the individual's mental status of those in the study receiving this type of support. On another note, formal support that is provided through the criminal justice system, or as part of a community supervision plan may be viewed as additional surveillance, or increased control over the formerly incarcerated individual. This increased surveillance/supervision may be cause for an increased likelihood that the individual will recidivate (see Foucault, 1977). While it was found that formal support was significantly related to recidivism in this study, the connection between formal support and recidivism needs to be explored further. For instance, this study did not examine specific types of

programming that each individual participated in, nor whether or not programming was completed successfully.

As may have been the case with positive emotional family support being positively related to recidivism, interactions with those providing formal support may be complex as well. Research suggests that returning individuals may not be receptive to the support being provided because either the support provider lacks the skills and understanding to provide the necessary service(s), or there may be a mismatch between the needs of the returning individual and what is being provided (Pettus-Davis et al., 2011; Taxman, 2004). Additionally, research has also found that formerly incarcerated individuals preferred incarceration over intermediate sanctions, such as community-based programming (see May & Wood, 2010; Morris & Tonry, 1990; Taxman, 2004). Lastly, it may also be the case that the returning individual, because of the reasons noted above, is simply not receptive to the support being provided, thereby creating a null or opposite effect of what was intended. According to Taxman (2004), the role of the offender in programming traditionally focuses on formerly incarcerated individuals as active recipients of services, and to a lesser degree, formerly incarcerated individuals as active participants, especially in the development of reentry programming. In order to avoid a mismatch in needs of returning individuals and a negative effect of reentry programming, returning individuals should be actively involved in the decision-making around program development.

Limitations

The results and findings of this study are not without limitations. First, while the study maintained a large number of participants across the entirety of the study, attrition was also evident. In the evaluation of SVORI, 50 percent of those who participated pre-release (wave 1) did not complete the first post-release survey (wave 2). This in mind, however, retention among participants in the study was high and stable across all post-release waves. As discussed in Chapter 4, the evaluators found that the attrition post-release was at random and did not affect their findings (Lattimore & Visher, 2009). In the current study, only static variables were utilized from wave 1, and time-varying variables were utilized post-released, and thus it is unlikely that attrition biased the results. Along the same lines, participation among respondents varied throughout the SVORI study, and it is possible that individuals were not interviewed in all waves (Lattimore & Visher, 2009). To address this issue, only two sequential waves of data were utilized for analyses. Additionally, by utilizing discrete-time hazard modeling, changes in participation rates were accommodated for by using person-periods as the unit of analysis, while also controlling for each wave of data within a longitudinal data file.

Second, because the data utilized in this study consists of multiple waves of data with varying time periods in which data were collected, timing of responses were not exact. This created time lags such that an individual's responses during Wave 2 could have taken place from 0-3 months post-release, at Wave 3 could have taken place from 3-9 months post-release, and at Wave 4 could have taken place from 9-15 months post-release. Results are indicative of these time lags, however, to address this issue, data

were lagged such that only the individual's responses to a prior wave were taken to estimate recidivism in the next wave. For example, Wave 2 responses were used to estimate recidivism at Wave 3, and Wave 3 responses were taken to estimate recidivism at Wave 4. Lagging the data ensured that perceptive data were used to measure recidivism appropriately.

Third, the data were only gathered until 15-months post-release. The majority of individuals in the sample did not recidivate, and it is not known of their success in the community beyond the 15-months study period. This did not affect results, however, as data were right censored to account for individuals that did not recidivate during the time period examined.

Fourth, this study is based on data collected from 14 different states, and the sample consisted of a specialized group of individuals—serious and violent males—with extensive experience with the criminal justice system. The results may not be generalizable to a national population or other offender populations, including females or juveniles that have committed less serious offenses or with less extensive of a criminal history. The sample of this study, however, is appropriate for examining social support as these individuals are also more likely to have served longer sentences there by creating more complicated relationships with families. This in turn may necessitate higher levels of social support as a buffering effect to criminal activity. Despite the limitations discussed above, the results of the study indicate that not only is there much more to explore around social support as a theoretical concept, but also its effect on formerly incarcerated individuals and their families.

Fifth, this study did not include any indicators of contact between family members and the incarcerated individual. It is possible that levels of emotional family support in the community are connected to the frequency of the individual being visited by family members. While the focus of this study was on levels of family support and changes that took place while the individual was in the community, future studies should include measures of family contact in-prison as a control when family social support in the community.

Implications

Overall, this study found that positive emotional family support *reduced* a formerly incarcerated individual's likelihood of recidivating, negative emotional family support and formal support *increased* the likelihood of recidivating, and both instrumental family and instrumental peer support had *no effect* on recidivism. These findings have very important theoretical, correctional programming, and correctional policy implications.

Criminological theory.

Although this study was not a complete test of Social Support Theory, some implications for criminological theory were found. First, while not measured directly, the findings in this study support the criminological concepts relative to social bonds (Gottfredson & Hirschi, 1990; Hirschi, 1969; 2002; Hirschi & Gottfredson, 1983), and as discussed in Laub and Sampson's age-graded theory of informal social control (2003). Again, these theories posit that the greater social bond between family members, the more likely support is provided to the individual. Family bonds were not measured

directly in this study, however, the provision of strong bonds between family members and the returning individual may be presumed when positive emotional family support is high and negative emotional family support is low.

Specific to Social Support Theory, this study illustrated the difficulty in examining social support as a theoretical perspective. For one, social support is made up of numerous elements, takes on a number of different forms, and can be provided by a number of different individuals. Results from this study support the notion that not all social support is created equal and that different forms of social support have independent effects on outcomes, including negative forms of social support. Specifically, negative emotional family support was found to have a strong connection to an individual's likelihood to recidivate.

Results also support the extended definition of social support laid out by Cullen (1994). Here it was found that different outcomes were prevalent among formal forms of support than informal forms of social support. For example, in models where positive emotional family support was not found to be significant, formal support was found to have a significant effect on an individual's likelihood to recidivate. Future studies should continue examining the independent effects of not only different *forms* of social support, but also different *providers* of social support.

Additionally, the finding that negative emotional family support was significantly related to an individual's likelihood of recidivating supports Colvin, Cullen, and Vander Ven's (2002) theory of differential social support and coercion. Colvin and colleagues (2002) posit that an individual's likelihood of recidivating is reduced if the support that

they receive from family is non-coercive in nature. In their theory, there are two competing concepts: social support and coercion. Social support represents the crime-preventative mechanism and coercion represents the crime-generating mechanism.

Correctional programming.

Research examining the importance of family ties both in-prison and upon release for justice involved individuals is well established (Martinez, 2006; Martinez & Christian, 2009; Mowen & Visser, 2016; Petersilia, 2003; Taxman, Byrne, & Young, 2003). More specifically, research that examines the reentry of formerly incarcerated individuals suggests that support from family members is an essential component to the reentry process (Berg & Huebner, 2010; Martinez, 2006; Martinez & Christian, 2009; Mowen & Visser, 2016; Naser & La Vigne, 2006). Given the results of this study, it would be amiss to not highlight the necessity of future research to focus on the varied dynamics that can affect a returning individual's success upon release. In particular, this study highlights the connection between individuals that have high levels of positive and negative emotional family support and recidivism. These forms of support draw attention to the degree to which individuals feel they are loved and valued by their families. Correctional programming for individuals returning from a prison sentence should emphasize these family dynamics and draw upon research to develop mechanisms to not only focus on *enhancing* the positive emotional family support provided by family, but also, more importantly, *reducing* the negative emotional family support experienced by returning individuals from their families. In particular, the development of correctional programming should include family members with direct experience in

providing support to a returning family member in order to cultivate best practices that are both inclusive and supportive of formerly incarcerated individuals as well as family members.

Drawing on programs, such as Support Matters, support programming should not only emphasize the positive support relationships in the returning individual's life, but help the returning individual to develop skills to improve and sustain these relationships. This is especially important because research also indicates that positive family social support deteriorates over time (Pettus-Davis, Doherty, Veer, Drymon, 2017) Further, future programming can build on Support Matters by extending programming to family members. Doing so may help family members of returning individuals develop a knowledge base of why positive social support is vital to the reentry process, and to also increase their knowledge of risk factors for relapse to crime. More importantly, support programming should be extended to family members to provide them with the necessary support to help maintain their own sense of value during their returning family member's transition period between incarceration and return to the community. Research indicates that not only are family members mostly excluded from the development of reentry programming, but also that little, if any, attention is given toward the development of programming that focuses on family members themselves (see Pettus-Davis, Dunnigan, Veeh, et al., 2016; Sullivan et al., 2002; Wilson et al., 2005).

Aside from programming that focuses on the returning individual and their family members, this study also highlights the importance of improving formal support. In particular, it was found that the receipt of formal support resulted in an increased

likelihood that an individual recidivated. Support provided through formal avenues should include programming that was developed among individuals with lived experience. This should include individuals that have committed a serious offense, served time in an institution, and returned to the community. Doing so may not only provide context to the program for the returning individual, but also transition the individual from a recipient to what Taxman (2004) refers to as an active participant. Lastly, programming should also be voluntary, and should be provided by individuals with lived experience. Programming that is provided by individuals with prior/lived experience with the criminal justice system may ensure that the returning individual can relate to their provider (Pettus-Davis, et al., 2011; Wilson et al., 2005).

Criminal justice policy.

This study highlights the importance of policies that are aimed at maintaining positive family relationships, by also reducing negative family dynamics. While the focus of this study was on post-incarceration family relationships, the extant literature highlights the importance of maintaining strong family relationships while the individual is incarcerated as well (Berg & Huebner, 2010; Martinez, 2006; Martinez & Christian, 2009; Mowen & Visher, 2016; Travis, 2002; Visher, 2007; Visher & Travis, 2012). Mandatory minimum sentences have arguably been a large contributing factor to mass incarceration that has been experienced in the United States (Ewald, & Uggen, 2012; Simon, 2012; Travis, Western, & Redburn, 2014). Specifically, mandatory minimum sentences lead to an increase in sentence lengths by minimizing the discretion that judges have when sentencing individuals convicted of a crime (Clear, 2007; Gendreau, Goggin,

& Cullen, 1999). One unintended consequence of longer sentences is the breakdown of family relationships that occur while a family member is incarcerated (Braman, 2004; Western et al., 2015). For example, Western and colleagues (2015) utilized data collected from the Boston Reentry Study to examine integration among formerly incarcerated individuals. In their study, the authors found that material hardship was a huge factor in hardships faced once the individual is released from prison. This material hardship created anxiety and feelings of isolation that were also responsible for weakening of family ties. This further highlights the importance of policies that are aimed at maintaining and strengthening family relationships among the formerly incarcerated (Martinez & Christian, 2009; Mowen & Visser, 2016). Maintaining family relationships while an individual is incarcerated may create a smoother transition to the community upon their release as their expectations of support may match the actual receipt of social support (Martinez, 2006; Martinez & Christian, 2009; Pettus-Davis et al., 2017).

While sentencing policy is outside the scope of this study, it would be remiss to not advocate for the reduction or elimination of mandatory minimum sentences—especially for drug offenses. Doing so may also reduce the length of sentences that individuals convicted of a crime face, and reduce the odds that family relationships will experience deterioration while the individual is incarcerated, thereby making the prevalence of high levels of negative family dynamics less likely. One way this may be possible would be through legislation that changes classifications for certain types of offenses. In the State of California, for example, voters overwhelmingly approved Proposition 47 in 2014 that reclassified all drug possession offenses from a felony to a

misdemeanor. Doing so meant that individuals convicted of a felony drug possession offense would be incarcerated for a shorter period of time, allowing them to return to the community with potentially less disruption to their family relationships and support system. To date, four other states have joined California with similar initiatives and referendums—Utah House Bill 348), Connecticut (House Bill 7104), Alaska (Senate Bill 91), and Oklahoma (State Question 780; Elderbroom & Durnan, 2018). In California, the savings the State experienced from this classification change opened up millions of dollars that were earmarked for reentry programming, specifically for mental health and substance use disorder treatment, but also inclusive of programming that highlights family reunification (Bird, Lofstrom, Martin, Raphael, & Nguyen, 2018).

Aside from sentencing policy, institutional policies that increase efforts to help maintain family relationships should become an integral part of the incarcerated individual's programming needs. Similarly, these efforts should be continued when the individual is released into the community, and while being supervised on probation or parole. One way in which policy can reflect these efforts is by improving the degree to which family members are able to visit their incarcerated family member from a distance by eliminating the barriers that family members face (Beckmeyer & Arditti, 2014; La Vigne, Naser, Brooks, & Castro, 2005; Martinez & Christian, 2009; Visher, 2013). Research has found that visitation frequency between the incarcerated individual and their family members is correlated with the level of closeness that families report (Beckmeyer & Arditti, 2014). Reducing visitation barriers, such as strict visitation rules and supporting families struggling with the costs of travelling to visit their incarcerated

family member, are ways to help maintain family ties and positive emotional support once the individual is released into the community (Mowen & Visser, 2016; Petit, 2012). Additionally, virtual forms of visitation—as an alternative to face-to-face visitation—may also assist in reducing travel barriers for families, while also ensuring contact and ties are maintained with their incarcerated family member (Crabbe & Immarigeon, 2002; Christian, 2005)

Similar to programing, community corrections policies should also aim to *enhance* positive family support for formerly incarcerated individuals, while also *reducing* negative family support. One way of doing so would be for community corrections policies to increase positive family support for individuals who report high levels of negative emotional family support (Colvin, 2000; Cullen et al., 2002). How to create policy that addresses this is difficult, however, it is vital that legitimate sources of positive social support are enhanced, and criminal networks that promote antisocial or negative social support are disrupted (Bowman & Mowen, 2017). For example, parenting classes should be continued to take place within the community as part of programming for formerly incarcerated parents. Doing so may help enhance and maintain the strength of family ties while the formerly incarcerated individual is in the community (see Mowen & Visser, 2016). Additionally, employment and housing support should be provided to formerly incarcerated individuals and their families as material insecurities have been found to add to negative family dynamics and a breakdown of family ties (Berg & Huebner, 2010; Western et al., 2015). While positive family support is enhanced, it is also vital that negative family dynamics as well as

influence from antisocial peers is diminished (Bowman & Mowen, 2017). Community corrections policy should continue to restrict the formerly incarcerated individual from associating with identified antisocial peers (Bowman & Mowen, 2017).

Future Research

With an understanding that this study faced limitations, but also provided for some important implications, there are key directions to take and gaps to fill for future studies examining social support. First, this study used Cullen's (1994) social support theory as a guiding framework. Future studies should examine all aspects of Cullen's Social Support Theory. In particular, Cullen's social support consisted of 13 propositions revolving around social support's connection to a reduction of crime or criminal involvement. Future studies should examine all of these 13 propositions as a complete test of Social Support Theory.

Second, the data utilized in this study consisted of self-report data that contained individual perceptions of social support from family and peers. While the literature finds that perceptive support is more intrinsic than objective support (See Barrera, 1981; Lakey et al., 2010; Sarason et al., 1987), gaining an understanding of objective or the actual receipt of support is vital to the overall understanding of social support. Future research should develop measures that capture the effect to which formerly incarcerated individuals verify the emotional or instrumental support they receive from family or peers. Doing so will also allow for an investigation into the effect that *differences* between the *perceived* levels of support, versus the level of support that was actually *received*. Numerous outcomes can be attached to these differences, including recidivism.

Third, measures of social support should continue to be calibrated and improved. To date, there are a limited number of social support measures, of which combine different types and forms of social support into one measure. Future research should work to improve these measures so that meaningful scales are developed to understand complex topics like social support. Pettus-Davis and colleagues (2017) suggest that one way that measures in changes in social support can be improved is by including a “breakdown of subconstructs and quality of support to help better understand trends” (p. 1243). It is when effective measures are created that our understanding of social support can be implemented into tools meant to identify an individual’s risks and needs (RNR) in the community

Fourth, and consistent with the limitations of this study, future studies should examine a myriad of other offender groups, like low-level offenders, or a mix of high- and low-level offenders. Future studies should also examine female and juvenile offenders. Females and juveniles have different needs than do males both in-prison, and post-release, and certain types of support may be more impactful than those for males (Reisig et al., 2003; Woo et al., 2016; Wright, 1995; Wright et al., 2001). Additionally, often missing from criminological research is the Lesbian, Gay, Bisexual, Transgender, Queer (LGBTQ) perspective (Ball, 2016; Panfil & Miller, 2014). Examining the perspectives of LGBTQ individuals may offer a broader perspective into social support, especially potentially highlighting important differences in how “families” are defined and relied upon (Elizur & Ziv, 2001). This area of research is lacking. The current research surrounding the LGBTQ perspective and social support comes out of health-

related literature (gay men) as well as youth perspectives in school (see for examples: Hayes, Turner, & Coates, 1992; Munoz-Plaza, Quinn, & Rounds, 2002). Taken together, examining social support among different offender groups as well as females, juveniles, and LGBTQ persons will increase the generalizability of results found in this study. Additionally, the data for this study was limited to 15-months. Future studies should examine social support over an extended period of time. This is important as research indicates that social support changes over time, decreasing around 6-months post-release (see Fontaine et al., 2012; Pettus-Davis et al., 2017; Seal et al., 2007).

Lastly, and most importantly, future research should examine support *providers* and their experiences in providing social support to their returning family member. A mixed-methods approach that includes a qualitative inquiry into family dynamics that lead to a breakdown would advance our knowledge of social support. Examining support *providers* and their experiences providing support should then be examined relative to any effect this has on recidivism among the returning family member. Given the results of this study, negative emotional family support or other negative family dynamics should be included as a control in any study examining social support. The significant effect of negative emotional family support on individual outcomes necessitates further exploration, especially relative to support providers. Future research should examine characteristics of support providers and not only their ability to provide support to a returning individual, but also any negative effects that result. Doing so will expand our knowledge of social support and the true effect of negative emotional family support

Conclusion

In the development of social support as a theoretical perspective to crime, Francis Cullen has continually pushed this perspective as “good criminology” that has the potential to reduce crime in a common sense manner (Cullen, 1994; Cullen, Wright, & Chamlin, 1999). Although research findings—including those of this study—surrounding social support has have varied in their connection with crime, Cullen and colleagues (1999) argue that the transfer of this knowledge to policy makers is vital.

Specifically, these scholars argue that:

[...] policies do not hinge merely, or mainly, on what is empirically accurate but on whether they make sense to people. The appeal of common sense, of course, is that courses of action seem self-evident, given what ‘everyone knows.’ A public idea becomes compelling and able to direct a policy agenda when it somehow resonates with citizens’ shared understandings of how the world operates (p. 195)

With extensive literature that focuses on the families of formerly incarcerated individuals, and the necessity of strong family relationships, social support from family is the common sense practice that “everyone knows.” Throughout this study, various forms of social support were examined, but all within the context of recidivism among those returning from a prison term. It was argued that while an individual could experience high levels of positive emotional family support, they could also experience high levels of negative emotional family support, with negative emotional family support having more of an impact on their likelihood to recidivate. Because this study focused on changes in levels of social support over a period of 15-months post-release, it would be remiss to not also point to the degree to which social support can, and does change over time. Again, this supports the notion that the maintenance of family support should

remain a priority of all reentry policy and community programming. This notion is further supported by recent research. In a 2017 study, Pettus-Davis and colleagues examined the deterioration of social support after an individual has been released from prison. The authors examined adults aged 18 to 25 years. Results indicated that individuals who served longer prison terms were more likely to experience a greater deterioration of social support post-release. Additionally, the authors found that social support among recently released individuals was met with negative and volatile effects. Taken together, along with the findings of this study, it is clear that social support is not always stable, and that other competing dynamics affect the extent to which positive social supports buffer an individual from negative outcomes, like recidivism.

Of course, our understanding of family dynamics is not complete, especially when varying and competing factors can result in a breakdown in family relationships, be it monetary reasons, housing instability, a toxic living environment, or the added stress and anxiety that may come from returning to a role as a parent. This list goes on. More research needs to focus on what causes these breakdowns and why the prevalence of negative emotional family support exists in the first place, rather than its direct connection to negative outcomes, like recidivism. Martinez (2006) argues: “We should not be concerned only about family support as a tool to prevent recidivism; rather, we should be trying to understand the family system in general” (p. 34). It is not until we better understand family dynamics that our understanding of family support can better inform effective reentry planning and policy.

Criminal justice programming and policies that focus on family ties and improving family relationships are often developed without theoretical backing, and more likely to meet the immediate, short term needs of the state and local community. A focus on “common sense” criminology and practices, such as social support, may resolve to build relationships among criminologists, policy makers, corrections professionals, and law enforcement that result in effective “courses of action” to reduce crime and improve the potential for success among the formerly incarcerated.

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