Anticipated Social Support Networks of Incarcerated Men Preparing for Reentry: Resource Diversity, Network Density, and Individual-Level Correlates

by

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ABSTRACT

Social support is a powerful organizing concept in in our understanding of health, well-being, and overall positive outcomes across the life-course. As such, social support is routinely applied to the prisoner reentry context to explain the post-release outcomes of formerly incarcerated individuals. Yet, there is very little is known about what social support looks like. This is partially because past research has yet to incorporate the innovations in measurement from network science to the study of social support during reentry to understand the resources and relational structure of social support and how these influence reentry outcomes. Rooted in the methodological advancements of social capital research, this dissertation measured the ego-centric anticipated social support networks of 85 men preparing for release from prison. The first empirical chapter of this dissertation begins by describing the resources available to individuals preparing for release and by whom. Next, potential correlates of network structure, specifically network density, are explored. The final empirical chapter examines the role of network structure in moderating the role of resource availability on individual outcomes such as health, flourishing, and the use of prosocial or maladaptive coping skills. Findings demonstrate that the relationship among these variables is complex and that further empirical investigation is warranted. The implication of these findings for policy and practice, and this approach more broadly, are also discussed at length.

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CHAPTER 1
STATEMENT OF THE PROBLEM

Research has consistently demonstrated the importance of social relationships for health and well-being across the life-course (see Holt-Lunstad et al., 2010; House et al., 1988; Umberson & Karas Montez, 2010). Intrinsic to these relationships is the exchange of various resources (e.g., information, affection, esteem), termed social support (Lin, 1986). Though taking on many conceptual definitions in research, social support is commonly defined as the "instrumental and/or expressive provisions supplied by the community, social network, and confiding partners" (Lin, 1986, p. 18), where emphasis is placed on the dimensions of instrumental and expressive support.

In this dissertation, I borrow the conceptual definitions of social support from sociologists. *Instrumental* support refers to tangible services or resources, such as "goods or money and... providing information, making suggestions, and clarifying issues," whereas *expressive* support refers to the "activity of sharing sentiments [and] ventilating frustrations" (Lin, 1986, p. 18). Individuals with relationships rich in social support are more likely to experience increased use of prosocial coping, greater opportunities for education and jobs, reduced involvement in crime and delinquency, and even lowered mortality risk, among other positive life outcomes (Caron et al., 1998; Cohen & Wills, 1985; Granovetter, 1974; Holt-Lunstad, 2018; Holt-Lunstad et al., 2010). At the same time, deficits in social support have been linked to delinquency and aggression in adolescence, as well as increased participation in and delayed desistance from crime in adulthood (Laub & Sampson, 1993; Loeber & Stouthamer-Loeber, 1986).

Despite the critical importance of social support and its proclaimed potential to become an organizing concept in the field of criminology (Cullen, 1994), we know very little about social support itself. This absence of knowledge is especially problematic within the context of prisoner reentry, where social support is routinely measured but rarely with the specificity required to craft meaningful solutions (Andrews et al., 2006; Chouhy et al., 2020; Martinez & Abrams, 2013; Pettus-Davis et al., 2014; Taylor, 2016). Our present knowledge on social support and reentry is that *"some people have more of it than others."* And that the more you have, the more likely you are to be successful during release. Yet, our solutions rarely go beyond the notion that returning citizens *"need more social support."*

This absence of knowledge stems from two major dilemmas in the study of social support and reentry today. First, criminologists rarely employ consistent and validated measures of social support across studies. This gap in knowledge becomes all the more pressing when we consider the many obstacles that individuals face during reentry. The reentry process is fraught with challenges related to finding housing and employment, as well as feelings of anxiety and overstimulation, all which individuals often rely on social support networks for assistance (Harding et al., 2019; Visher & Travis, 2003; Western, 2018). In turn, we know very little about the specific reentry-related resources that may or may not be available to individuals as they return home. As a larger consequence of these measures, we know very little about the diversity (or lack of diversity thereof) of various reentry-related resources individuals may have as they return home. This is because commonly used measures rely on Likert-scale responses that often group the

different types of social support together (e.g., Boman IV & Mowen, 2017; Fahmy & Wallace, 2019; Mowen et al., 2019; Skeem et al., 2009; Wallace et al., 2016). An individual with higher resource diversity (e.g., access to someone who will lend a listening ear, *and* provide transportation, *and* provide information about jobs) may outperform someone with lower resource diversity (e.g., e.g., access only to those who will provide transportation) because more of their reentry-related needs are being met (see Goodson, 2019; Lin, 1986; Lin et al., 2001).

The second major dilemma in this line of work today is that we have yet to take on a networked perspective to the study of reentry and social support. The study of social networks stems from graph theory and social network analysis. It is important to set a brief foundation for some network terms that will be used widely throughout this dissertation. An "ego" is a type of node that is the focus of a study or analysis. In this dissertation, "ego" is the individual beginning their reentry. An "alter" is also a node but is a node that with whom ego shares a tie (Perry et al., 2018). In this case, alters are the people ego knows and nominates as a part of their social support network (Wasserman & Faust, 1994).

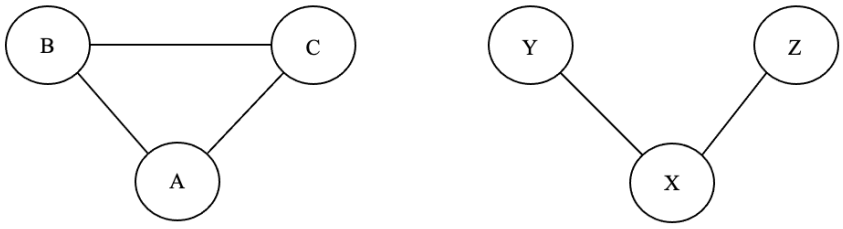
Because of this lack of networked perspective, we have little quantitative understanding of the relational structure of social support during reentry. Relational structure here refers to the structure of interpersonal relations that facilitate or constrict the flow of resources, novel information, and prestige (Wellman & Frank, 2001). These relational structures can also promote cooperation, trust, and reduce malfeasance (Portes & Sensenbrenner, 1993; Uzzi & Lancaster, 2004). From a measurement standpoint, this

information is garnered by asking the extent to which the individuals that make up one's social support network know each other. The makeup of these interpersonal relations then promote or hinder group cohesion. The more cohesive, or dense, one's social support network is, the more likely the actions of one individual will be regulated by the norms of the larger group structure (Coleman 1988; Granovetter 1985). In a resource network, this translates into group pressures to provide support the more one alter is connected to other alters. Conversely, alters who are disconnected from other alters are effectively free from any group pressures to provide support. Their support is not enforceable and subject to criticism or social punishment among their peers (Granovetter, 1985). An individual with high network density, or cohesion, may be at an advantage compared to an individual with low network density or cohesion during reentry. This is because the individual with a highly connected network has alters who can enforce the support of other alters unto ego during this challenging period of transition.

To illustrate the role of relational structure, consider two hypothetical networks (see Figure 1). The first consists of Person A, Person B, and Person C and the second consists of Person X, Person Y, and Person Z. Both Person A and Person Z need assistance. Both Person A and Person Z have two individuals they can call upon for support—they have the same number and same type of resources. However, these two individuals vary in the *relational structure* of their support network. In Person A's network, Person B and C know each other. In Person X's network, Person Y and Z do not know each other. Person A, then, is more likely to receive assistance than Person X from

either of their two network members.[1] This is because Person B is to Person C (as well as Person C is to Person B) is a "Simmelian third party who can punish" (Wellman & Frank, 2001, p. 236) the other for not providing support to Person A. Shared ties enforce the facilitation of resources because sharing network members increases cooperation and enhances mutual obligation to provide assistance (Portes & Sensenbrenner, 1993; Wellman & Frank, 2001).

Figure 1
Hypothetical Support Network



However, the relational structure of social support within criminology and criminal justice-related contexts has yet to be fully explored (see Goodson-Miller, 2022 for exception). The exclusion of relational structure within social support literature paints an incomplete picture of how enhanced social support leads to increased positive outcomes. This has led to an imperfect understanding of the relational mechanisms that

[1] It is important note that there are likely multiple network-level mechanisms at play in the reentry context. Cohesion is just one interpretation of increased network density or closure. Here, I emphasize the bonding nature of social capital, wherein network closure increases familiarity, trust, and reduces the costs of providing resources (Coleman, 2000). Alternative arguments for the role of closure include structural holes as social capital (Burt, 2000). This is also known as bridging capital.

may link enhanced social support to increased health and wellbeing, reduced stress, and increased use of prosocial coping (Caron et al., 1998; Cohen & Wills, 1985; Granovetter, 1974; Holt-Lunstad, 2018; Holt-Lunstad et al., 2010). From a policy standpoint, this also means we know little about which arrangements of one's social relationships are most beneficial and how these can be promoted in practice.

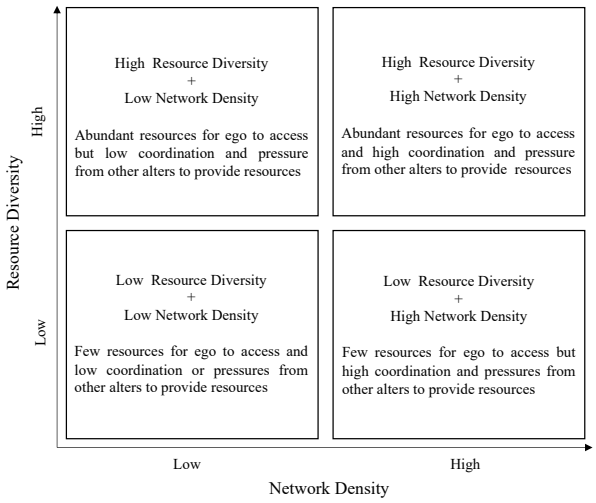
In this dissertation, I argue that that we can better understand the relationship between enhanced social support and positive outcomes if we view it as a function of resource diversity *and* network density (see Figure 2). Individuals can vary in their configuration of these two concepts. These different configurations can then produce variation in the outcomes of interest, such as health and well-being, stress, and coping, wherein some configurations are more beneficial than others. It is essential, then, that these are examined in tandem. This relationship can be assessed with resource-generated and network-informed measures and is the principal goal of this dissertation.

Individuals in the first cell of high resource diversity but low network density, have an abundance of diverse resources but little to no coordination among alters to provide these diverse resources. It may be, then, that the access to diverse resources is never realized because there is no group coordination or shared pressure to provide these unto ego. Individuals in the second cell of high resource diversity and high network density should outperform those in the other three cells (i.e., low resource diversity and low network density, low resource diversity and high network density, low network density and high resource diversity). This is because they both have the diverse set of resources needed for reentry and the high coordination among alters to successfully

provide the needed resources (Lin, 2001; Portes & Sensenbrenner, 1993; Wellman & Frank, 2001). Individuals in the third cell of low resource diversity and low network density are likely to perform more poorly than any of the other three cells (i.e., low resource diversity and high network density, low network density and high resource diversity, high resource diversity and high network density). This is because they lack access to much needed reentry resources and because any resources they do have in their network are unlikely to be facilitated due to the lack of cohesion among members. Here, group members feel little group pressure or incentive to provide. Finally, those in the fourth cell of low network diversity but high network density are likely to be able to coordinate their pooled resources well, but are unlikely to have all the resources necessary for a smooth transition. In this case, the network is cohesive but perhaps resource redundant (e.g., lots of access to job-related resources but no access to housing or transportation-related resources).

Figure 2

Hypothesized Relationship between Resource Diversity and Network Density



Current Study

Guided by the methodological innovations of network science, this dissertation uses network-informed measures to examine anticipated ego-centric social support networks of incarcerated men as they prepare for reentry. In line with social capital research, this project defines social support as the instrumental and expressive resources that are accessible in social networks and intended to be used accomplish various tasks. Defining and measuring social support in this way provides the operational specificity necessary to understand what social support looks like in this context and to unpack the role that social support, and its nuances, play in producing positive outcomes (Lin et al., 2001; Wasserman & Faust, 1994).

This dissertation aims to advance the literature on social support and reentry in three important ways. First, taking a resource-driven approach allows me to delineate between the different resources that are needed during reentry. This overcomes some shortcomings of past reentry and social support literature that often groups resources together or ignores resource diversity altogether and provides us with a clearer picture of what social support looks like. Formerly incarcerated individuals need a variety of resources as they reenter the community, such as transportation and immediate housing. By using network-level instruments that define ties by the resources exchanged through them, we can develop a better understanding of which resources are and are not available as they return home. This includes the distinction between the *types* of support (e.g., instrumental, expressive), and importantly, the specific resources that fit into each of the two categories (e.g., provide transportation, lend a listening ear). Through this I can

examine what specific resources are available, as well as create measures of resource diversity that provide a deeper understanding of whether individuals returning home have enough assistance for a successful reentry. I also examine how these indicators of resource diversity then correspond to the individual-level outcomes often associated with enhanced social support (e.g., health and wellbeing).

The second aim of this dissertation is to use ego-centric instruments to capture variation in the social support providers (e.g., sibling versus spouse). Since relations are defined by the resources provided, individuals can nominate any individual, or organization, who is providing that resource to them. This expands traditional understandings of social support from exclusively family and friends to wider social circles and institutions.

These improved measures also allow me to examine how social network composition elements, such as percent of resource providers who are female, in tandem with ego-level attributes (e.g., race) contribute to variation in resources. This is an important area of examination because prior literature often discusses how certain groups, especially justice-involved groups, are often disadvantaged with respect to resource access, but these studies often overlook network composition as an important part of the narrative (Goodson-Miller, 2022; Reisig et al., 2002). Indeed, past literature shows that overall network composition, such as percent female and percent kin, may have important implications for resource diversity and access (Cornwell, 2009; Cornwell et al., 2008; McPherson et al., 2006; McPherson et al., 2001; Suitor & Keeton, 1997; van der Gaag & Snijders, 2004; Wellman & Frank, 2001). Both ego and overall network composition are

examined in this dissertation to better understand whether certain individuals, and certain network features, contribute to resource diversity.

The third aim of this dissertation is to use the novelty of ego-centric network data to create a measure of network cohesion to examine the role of relational structure. Here, cohesiveness is measured as the density of ego's anticipated social support network. This measure serves as the primary network-level mechanism linking resource diversity to enhanced positive outcomes. Denser or more cohesive networks, in which many of ego's alters share ties with each other, may lead to more successful coordination of resources (Cook & Whitmeyer, 1992; Lin, 2001; Lin et al., 2001). It may also lead to a sense of felt obligation among alters to provide support to ego if they are mutual ties (Coleman, 1988; Portes & Sensenbrenner, 1993). This is a type of enforceable trust, wherein one's resource providing behaviors are contingent upon the larger social web in which they exist (Burt, 2001; Coleman, 1988; Portes & Sensenbrenner, 1993). Through this, I examine how this network density moderates the role of network diversity on individual-level outcomes associated with enhanced social support.

The current study uses originally collected data from 85 individuals who were incarcerated in a men's prison unit to answer the following questions:

1. To what extent are anticipated social support networks resource diverse?
    a. What characteristics of ego and their network predict resource diversity?
2. To what extent are anticipated social support networks cohesive?
    a. What characteristics of ego and their network predict network cohesion?

3. How does resource diversity predict individual-level outcomes such as health, stress, coping, and wellbeing?
    a. Is this relationship moderated by network cohesion?

Organization of Dissertation

The remainder of the dissertation will be organized into six chapters. Chapter 2 will further examine the literature on social capital and social support. In this chapter, I will emphasize how social capital measures can better inform our understanding of social support and reentry. Chapter 3 will provide an overview of the original data collection strategies employed in this dissertation, as well as the interviewing guide and sample characteristics. Chapter 4, the first empirical chapter, will begin by exploring resource diversity of anticipated social support networks of men preparing for reentry. The overarching purpose of this chapter is to examine the variation that may exist between individuals and to explore what ego and network characteristics are correlated with higher resource diversity. Chapter 5 will then explore the network-level cohesion or density in anticipated social support networks. As with the previous chapter, Chapter 5 also explores what ego and network characteristics are correlated with higher network density. Chapter 6, the final empirical chapter, will then explore how this resource diversity, as well as variation in network density, correspond to individual level outcomes, such as health and flourishing. In Chapter 7, I will provide a summary of the results from the three empirical chapters, situate their findings in the larger literature, and discuss the limitations, implications, and future directions for this research.

CHAPTER 2
REVIEW OF THE LITERATURE

Social Capital and its Early Applications

Some of the earliest scholarship on the benefits of social relationships can be traced to Durkheim's seminal *Suicide* (Durkheim, 1897, 1951). He writes that egoistic suicide, one of the four types of suicides proposed, is caused by a sense of unbelonging and detachment from the larger social group at a macro-level. Egoistic suicide is characterized by a lack of structure and norms, as well as a lack of social support (Durkheim, 1897, 1951). The detached individual, untethered to larger social structures and supportive others, is overwhelmed by their isolation to the point of suicide.

Durkheim's idea that social integration and social relationships were beneficial for reducing negative outcomes (e.g., suicide) and producing positive outcomes (e.g., increased health) remained a subject of study within sociology for decades. This line of work experienced a particular resurgence from the 1980s to the early 2000s, as the term social capital was coined (Bourdieu, 1986; Coleman, 1987, 1988, 1993; Portes, 1998, 2000). Social capital set itself apart from other forms of capital in important ways. As Coleman (1988) writes:

> "...If physical capital is wholly tangible, being embodied in observable material form, and human capital is less tangible, being embodied in the skills and knowledge acquired by an individual, social capital is less tangible yet, for it exists in the *relations* among persons" (p. 60).

Coleman (1988) elucidates the need for the empirical study of social capital in tandem with the other forms of social capital. Coleman uses children's educational attainment as an example. While the human capital of parents is essential to the educational attainment of their children, this human capital becomes less valuable if it is not complemented with sufficient social capital embedded in the relationships of the family. That is, human capital of parents becomes nearly irrelevant in the absence of the investment (e.g., social capital) to transmit such resources to their children (Coleman, 1988). The consequences of social capital, then, include enhanced resources, increased access to opportunities, group membership, as well as internalization of group norms and rules (Portes, 1998).[2]

Social capital researchers applied and examined the term social capital in a variety of different ways. From high-school drop-out rates (Coleman, 1987), to occupational prestige (De Graaf & Flap, 1988), social capital has been widely applied. Despite these variable definitions and outputs of social capital, "the principal explanation shared... [posits] that the investment and mobilization of capital will enhance the outcomes desirable to individuals or communities" (Lin, 2000, p. 786). Even still, the conceptual and operational definitions of social capital remained inconsistent across studies. The concept itself was losing its meaning—loosely being used to define anything social in a positive light (Lin, 2001). Social capital was widely discussed by sociologists but

[2] It is important to note that there can be negative consequences to social capital as well. While beyond the scope of this dissertation, it is important to acknowledge that enhanced social capital can also lead to strong demands on conformity that can then lead to problematic or deviant behaviors (e.g., gangs) (see Portes, 1998). This is often termed the "dark side" of social capital (Villalonga-Olives & Kawachi, 2017).

remained detached from any concrete conceptual or operational definitions. This had consequences for its progression as an organizing concept in sociology.

As Lin (2001) warned:

> "... the scientific viability of the notion of social capital depends on the development of an approach that integrates theory and measurement of the concept. Without a clear conceptualization, social capital soon became a catch-all term broadly used to reference anything that is social. Without a clear measurement, it will be impossible to verify positions or to accumulate knowledge" (p. 57).

The introduction of network science and network-informed measures heeded this concern and ultimately revitalized its study (Lin, 1999, 2001; Lin & Dumin, 1986; Lin et al., 2001). The following section will briefly summarize the basic principles of network science and how they have been applied to the study of social capital.

Network Science

Network science emerged from the mathematical discipline of graph theory—which emerged in the late 17th century. Network science argues that causal processes are found "not [only] in the intentions of individuals but in the structure of which the social environments in which they were embedded" (Borgatti et al., 1998, p. 892). This perspective focuses on the interdependence among relational units (Wasserman & Faust, 1994). Importantly, this perspective argues that the connections among people can serve as channels for the transmission of resources, behaviors and attitudes, information, and experiences (Papachristos, 2014). From the jobs people acquire (Granovetter, 1973,

1974), to police misuse of force (Wood et al., 2019), to political beliefs and voting habits (Boutyline & Vaisey, 2017), social network configurations, and the variation between these configurations, matter.

Within the social sciences, network science and network analysis have been used to examine group problem solving (Bavelas, 1950), consensus and social influence (Friedkin, 1986), and urbanization and well-being (Fischer, 1982), among other topics. Network science in the social context is concerned with how the structural relations between people, and their relations to the larger social structure, provide constraint to or opportunities for various outcomes (Wasserman & Faust, 1994). Network science recognizes the interdependence among people to each other and to the wider social structure. Network science also became integrated into the study of social capital (Lin, 1999, 2001; Lin & Dumin, 1986; Lin et al., 2001). Social capital became defined as the "resources embedded in the social structure which are accessed and/or mobilized in purposive actions" (Lin, 2000, p. 12). This new definition of social capital specified how people are helped, and hindered, by their access to resources available in their relative social structure and how individual acts of agency help generate productive returns on such resources.

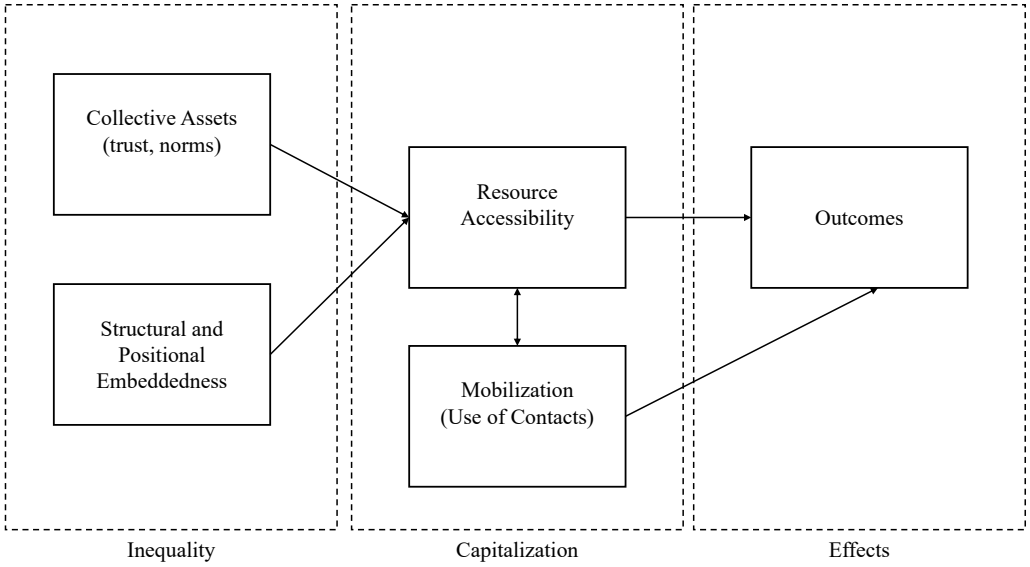
This network definition of social capital promoted an evolution of sorts within the discipline that led to significant advancements in our explanations of the social world. Burt (1992), for example, demonstrated the importance of one's structural location within the network. Individuals who exist between two groups can control the access of information from one group to another, thereby acting as a bridge or broker of valuable

information (Burt, 1997a, 1997b, 1998). Other social scientists focused more on the content of specific ties within the network. These studies often looked at what specific resources are available within one's network and how they are used to complete specific actions (e.g., job referrals). Others still have focused on the *nature* of the tie (e.g., Granovetter, 1973, 1974). Irrespective of the specific nexus in which social capital operated, these network-level definitions of social capital shared operational measures.

Social capital researchers began conceptualizing social capital as the a). resources embedded in social structure; b). accessibility of these resources; and c). mobilization of these resources to accomplish specific actions (Lin, 2001; Lin & Dumin, 1986; Molina et al., 2020). See Figure 1 for an illustration of this.

Figure 3

Lin's Model of Social Capital



Conceptual Benefits

Conceptualizing social capital in this way acknowledged two key areas of variation: inequality and capitalization. The first block in the causal structure is

inequality, which refers to the differential access to social capital between groups based on larger historical and institutional structures (Lin, 2000, 2001). Various social, cultural, and political inequalities between groups contribute to large differences in the ability to access social capital, as well as the types of capital available to them (Cleaver, 2005; Lin, 2000; McDonald, 2011). Acknowledging this disparity was critical because it advanced a research agenda that prioritized how the larger social structure contributed to perpetuate inequality between groups (Smith, 2003).

The second block in the causal structure is capitalization, which refers to both resource accessibility (i.e., the resources available in one's network as influenced by larger social structures) and mobilization (i.e., one's use or activation of the accessible resources), which can vary across individuals (Lin, 2000, 2001). These two areas can influence each other, as well as individual-level outcomes. The third and final block in the causal structure is outcome. This simply refers to the variable outcomes that are a consequence of the previous two causal blocks. Outcomes can include wealth and reputation, as well as physical and mental health, and improved life satisfaction (De Graaf & Flap, 1988; Holt-Lunstad, 2018; Holt-Lunstad et al., 2010; House et al., 1988). In sum, the final block represents the returns of social capital (Lin, 2000, 2001).

Operational Benefits

This new three step conceptualization that included inequality, capitalization, and the effects of both led researchers to employ specific network instruments that captured both the relational structure and agentic properties of social capital (Lin, 2001; Molina et al., 2020). The two instruments most frequently used today are position generators and

name generators. Both instruments require participants to list the names of individuals they know that fit certain qualifications (e.g., “those with whom you discuss important matters”, “those with whom you rely on for information about jobs”, or “teacher”, “lawyer”). Following these questions, participants are then asked to provide information about the individuals they nominated. Questions often include their closeness, type of relationship (e.g., family, friend, neighbor), as well as demographic characteristics of the individuals that were nominated (e.g., age, race, gender).

Participants are also then asked to gauge the extent to which the individuals that they nominated know each other. This is asked for each pair of alters. These types of measures complemented the conceptual definition of social capital with the operational specificity needed to advance the literature forward. These network measures were successful because they highlighted the *resources* available and mobilized by individuals through their social relationships (Lin, 1999; Lin & Dumin, 1986; Lin et al., 2001; Pena-López & Sánchez-Santos, 2017). For the social capital literature, these measures demonstrated that the structural properties of resource availability and mobilization—a facet of social capital that was not captured with previous measures—had meaningful, and sometimes counterintuitive, implications for individual outcomes.

Empirical Example: The Strength of Weak Ties. Granovetter’s 1973 article on the strength of weak ties, which emphasizes the role of bridging capital, represents one of the best and earliest advancements in knowledge using network science. Strong ties are characterized by emotional closeness, frequency of contact, duration of relationship, and reciprocity. Prior to its publication, most sociologists heralded the value of strong ties in

facilitating positive outcomes. This is rooted in the idea that denser and stronger networks will enable useful resources because there are more paths that information can travel from one person to another (Festinger et al., 1950; Granovetter, 2005).

Granovetter (1973) demonstrated, however, that weak ties facilitate more novel information. Individuals were more likely to have obtained information about work through ties they were only marginally connected to. This is because weak ties, such as acquaintances or friends of friends of friends, are more likely to have access to information different than what one would receive from their own strong ties (Granovetter, 1973, 1974). This demonstrated that occupying different places in the resource structure had different implications for job opportunities. The counter-intuitive discovery that novel information was passed through weak ties would not have been possible without the use of network science and network instruments. This line of work inspired numerous others that theorized, and importantly tested, the ways the relational structure of resource availability and mobilization matters for an array of diverse experiences and outcomes (Aral & Van Alstyne, 2011; Burt, 1997a, 2004; Stovel & Shaw, 2012). This work also demonstrated that some ties are more beneficial for some tasks that others. That is, the usefulness of a tie is both content and task specific. Weak ties are better for facilitating useful job information for blue-collar workers (Granovetter, 1973, 1974).

In sum, the shift to network-level concepts ultimately reframed social capital as a powerful organizing concept in sociology (Lin, 2001). Prior to the introduction of network science, social capital research suffered from a lack of conceptual and

operational specificity that hindered its advancement as an intellectual enterprise. Early researchers struggled to conceptually define social capital. For example, Coleman (1990) wrote that social capital can be conceptually defined by its returns. Specifically, that social capital was "defined by its function" (Coleman, 1990, p. 302). This definition is problematic, however, because it is tautological and presents a series of operational issues. The major problem is that this definition of social capital cannot measured in any meaningful way because it is not falsifiable (Lin, 1999). What is more, early social capital scholars discussed social capital as "a public good, along with trust, norms, and other 'collective' or public goods" (Lin, 2001, p. 9). Defining social capital in such broad terms muddied the conceptual waters of what exactly social support is. Social capital was equated with trust and norms and as a consequence, it was divorced of any concrete measures and social capital became a term used to loosely describe any kind of social phenomenon (Coleman, 1990; Portes, 1998).

By acknowledging these limitations and advancing the literature, social capital became defined by network terms and was then known as a *relational* asset rather than a collective or individual asset. This redefinition refined the causal arguments that could be made. Instead of collective assets such as trust and norms being an alternative or additional form of social capital, trust and norms became powerful antecedents (and outcomes) of one's relational social capital (Lin, 1999). By conceptualizing social capital as the resources embedded in social networks, scholars were able to operationalize social capital through specific network instruments (Lin 2001; Lin and Dumin 1986; see also Molina, Garcia-Macias, Lubbers, and Valenzuela-Garcia 2020). The introduction of

instruments such as name generators and position generators significantly advanced our knowledge on one of the most powerful, but previously less understood, ideas in the social sciences (see Lin 1999; Lin, Fu, and Hsung 2001; van der Gaag, Martin, and Snijders 2004).

The conceptual and methodological challenges social capital research faced decades ago mirror that of the limitations within the social support and reentry literature today. Indeed, social support is widely used among reentry scholars, but it remains devoid of any consistent and concrete conceptual definition. Research has yet to employ consistent operational measures of what social support is because of this lack of conceptual clarity. This dissertation aims to merge the innovative concepts and measures from social capital literature into the study of social support and reentry. By specifically defining social support under networked terms, this project can contribute to the reentry literature by providing a new way to look at the current definitional and methodological limitations of social support and reentry literature and demonstrate the value of examining previously unmeasured relational structures and how these may influence individual-level outcomes.

Social Support and Reentry

Successfully navigating the "moment of release" can be critical for ensuring successful reentry but these first moments are often fraught with challenges (Harding et al., 2019; Visher & Travis, 2003; Western, 2018). Immediate concerns post-release include finding a place to live, securing formal identification, and navigating the complexities of the high-risk communities individuals often return to (Visher & Travis,

2003). Individuals must also try and reestablish themselves within the community through work and reconnecting with family members and friends during this period (Visher et al., 2004).

The risk for recidivism during this time is high (Harding et al., 2019). These high recidivism rates are often linked with the challenges associated with reentry. Formerly incarcerated individuals are at an acute disadvantage compared to the general population when attempting to re-enter the labor market due to the stigma of their criminal record and degradation of marketable skills over the period of their incarceration (Giguere & Dundes, 2002; Pager, 2003; Visher et al., 2004; Visher & Travis, 2003). Formerly incarcerated individuals are also likely to experience poverty and material hardship, commonly returning to communities similarly situated in poverty and crime (Hagan & Dinovitzer, 1999; Visher et al., 2004; Visher & Travis, 2003). Housing insecurity and homelessness, as well as mental and physical health issues, also hinder successful reintegration (Bronson & Berzofsky, 2017; Holtfreter et al., 2004). Qualitative studies of formerly incarcerated individuals describe how the initial joy of returning home to the community is "quickly replaced with anxiety about what the future would hold" (Harding et al., 2019, p. 21). Many formerly incarcerated individuals feel overwhelmed by the change in structure and routine, as well as the additional pressures to connect with their supervising officer, find suitable housing, and secure employment shortly after release (Harding et al., 2019; Western, 2018).

Social support plays a critical role in these first few "moments of release" and beyond (Visher & Travis, 2003). Individuals who experience reentry successes often rely

on family members, friends, and even state agents for social support (Harding et al., 2019; Western, 2018). Increased levels of social support have been linked to improved mental and physical health, as well as reduced substance abuse and recidivism during reentry (Boman IV & Mowen, 2017; Fahmy & Wallace, 2019; Mowen et al., 2019; Skeem et al., 2009; Wallace et al., 2016). Many also rely on their social network for immediate housing and information on employment opportunities after release (Berg & Huebner, 2011; Harding et al., 2019). It is through this reception of resources that social support is thought to ensure successful reentry and promote desistance from crime.

Gaps in the Literature

While the extant literature has been critical in establishing the link between social support and enhanced reentry outcomes, it falls short of providing information about the various resource structures available during the reentry process (see Table 1 for examples of some recent measures of social support in reentry literature). This limitation is because past studies have relied on survey instruments that quantify social support by its presence or absence (e.g., high social support vs. low social support). What is more, these measures lack consistency across studies. For example, the Serious Violent Offender Reentry Initiative (SVORI) dataset, which has been used extensively to study the role of familial and peer social support on various reentry outcomes (Boman IV & Mowen, 2017; Fahmy & Wallace, 2019; Mowen et al., 2019; Wallace et al., 2016), has used coarse instruments to capture social support.

Some of the coarseness of these instruments can be identified in the wording of survey-items. Some measures of familial support include the extent to which individuals

feel *"close to [their family]," "want [their] family involved in [their] life," "[that their family would] provide help and advice finding a place to live," "have someone in [their] family to talk to about problems," "[their family would] provide financial support,"* and *"someone in my family who loves me."* Some studies opt for only using a handful of questions (Boman IV & Mowen, 2017), mixing these with questions pertaining to family dynamics (*"feels like a disappointment to family"*) (Mowen et al., 2019), or only including expressive support-related items (Fahmy & Wallace, 2019).

The operationalization of support received from peers is also at times problematic. Measures of peer support include a single item that ask participants the extent to which they agreed that they *"had a close friend who could help them find a job, provide positive substance abuse support, help the respondent find a place to live, provide transportation, or help the respondent with financial assistance."* Both familial and peer measures are answered using a 4-point Likert-scale. This operationalization of social support and response set is inherently limited in the research questions that can be asked because the possibilities for variation between individuals is small. These types of measures are not unique to the SVORI dataset (see also Chouhy, 2019; Chouhy et al., 2020). Indeed, most studies on reentry and social support use similar Likert-scale or binary measures (Hochstetler et al., 2010; Meyers et al., 2017). These traditional measures also miss the relational structure of social support, otherwise known as network cohesion or the alter-alter information.

Table 1
Operationalizations of Social Support

Source	Type of Support	Items
Boman IV and Mowen (2017)	Familial	I feel close to my family
		I want my family to be involved in my life
		I consider myself to be a source of support for my family
Fahmy and Wallace (2019)	Positive Familial Support	I feel close to my family
		I want my family to be involved in my life
		I have someone in my family to talk to about problems
		I have someone in my family to turn to for suggestions
		I have someone in my family who understands my problems
		I have someone in my family who loves me
Mowen et al (2018)	Interactional Familial Support	I have someone in my family to talk to about problems
		I have someone in my family to turn to for suggestions
		I have someone in my family who understands my problems
	Instrumental Familial Support	I have someone in my family to provide help/advice finding a place to live
		I have someone in my family to provide help or advice finding a job
		I have someone in my family to provide transportation to work/appointments
		I have someone in my family to provide me with financial support
	Emotional Familial Support	I feel close to my family
		I want family involved in my life
		I am a source of support for my family
Mowen et al (2019)	Familial	I feel close to my family
		I want my family to be involved in my life
		I consider myself to be a source of support for my family
	Peer Support	I have a close friend who could help me find a job, provide positive substance abuse support, find a place to live, provide

		transportation, or help with financial assistance
	Institutional Support	Whether the Individual was Participating in Substance/Drug Abuse Treatment During Reentry
Hochstetler et al (2010)	Instrumental and Expressive Support	Today, if I needed $500 in an emergency, I have friends or family that would loan me the money
		Today, I have a friend or a family member that I know I can share my problems with
		I have family members or friends that will help me stay out of trouble
Meyers et al (2017)	Instrumental Support	Do you expect to receive help from family or friends with money to pay your bills (e.g., rent, cellphone, electricity)?
		Do you expect to receive help from family or friends with buying basic items (e.g., clothing, food, gas)?
		Do you expect to receive cash from family or friends?
		Do you expect family or friends to let you stay for a period of time in their home?
		Do you expect to receive rides from family or friends to get where you need to be?
		Do you expect family or friends will help you get a job?
	Expressive Support	Do you think you will have family or friends that you can talk to about private matters?
		Do you think you will have family or friends that you will feel very close to?
		Do you think you will have friends or family that you can turn to for help or advice?
		when you have a personal problem?
Bares and Mowen (2019)	Parole Officer Instrumental Support	My parole officer provided them with correct information
		My parole officer acted in a professional manner
		My parole officer treated them with respect
	Parole Officer Interpersonal Support	My parole officer was helpful in their transition
Listwan et al (2010)	Social Support Questionnaire (Short Form)	My parole officer appeared trustworthy
		My parole officer did not listen to me
		My parole officer was too busy to help me
		How many can you count on to be dependable?

		How many can you count on to help you relax? How many accept you totally? How many can you count on to care about you? How many can you count on to help you feel better? How many can you count on to console you?
Fahmy (2018) - Doctoral Dissertation	Familial Emotional Support	You have someone in your family who is willing to help you make decisions You have someone in your family who really tries to help you You have someone in your family who can give you the emotional support and help you need
	Peer Emotional Support	You have a friend who you can share your joys and sorrows with You have a friend who you can count on when things go wrong You have a friend who you can talk to about your problems
	Familial Instrumental Support	You have someone in your family who would provide help or advice on finding a place to live You have someone in your family who would provide help or advice on finding a job You have someone in your family who would provide support for dealing with a substance abuse problem if you had one You have someone in your family who would provide transportation to work or other appointments if needed You have someone in your family who would provide financial support
	Peer Instrumental Support	You have a friend who would provide help or advice on finding a place to live You have a friend who would provide help or advice on finding a job You have a friend who would provide support for dealing with a substance abuse problem if you had one You have someone in your family who would provide transportation to work or other appointments if needed You have a friend who would provide financial support

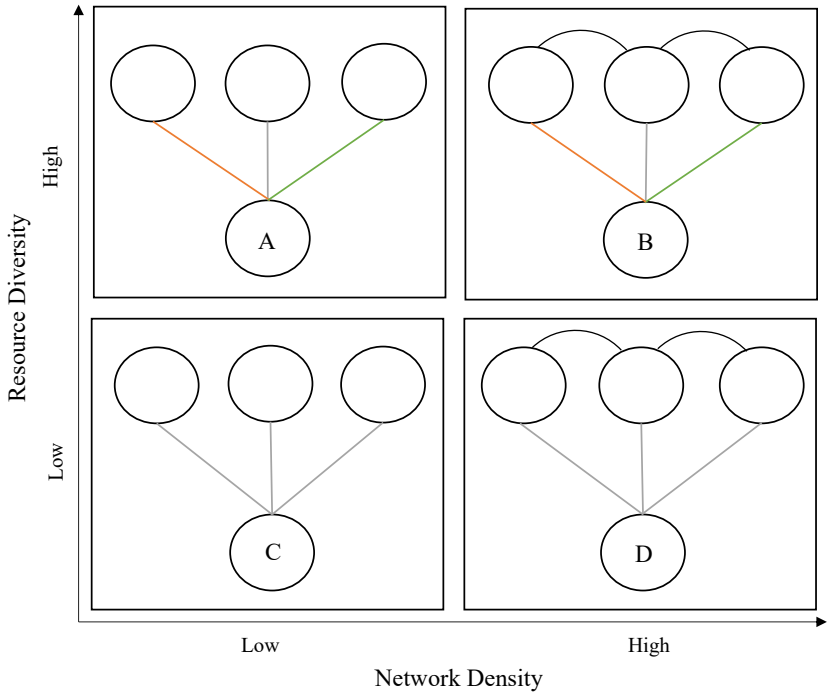
Taken together, these measures provide an incomplete understanding of the nature of social support for formerly incarcerated individuals because they do not appropriately assess its variation between people. This is in part because these studies have not employed network-level instruments, such as the name or position generator. These issues limit one's ability to make inferences about social support in the reentry context and the relational mechanisms that link enhanced social support to enhanced outcomes. Moreover, this creates issues with respect to reproducibility. Because of the inconsistency in measurement, findings cannot be easily compared across studies or other contexts.

I argue that taking a resource generated and network-informed approach to social support during reentry can provide us with a clearer picture of what social support looks like. The use of these instruments will help provide the discipline with the foundational knowledge necessary to begin to unpack the causal mechanisms by which social support may produce reentry success. To further elucidate the need for this approach, the following section provides a hypothetical example of what key areas of variation are missed in traditional measures of social support and what, in turn, resource guided and network-informed instruments can capture.

Example. Figure 4 illustrates hypothetical resource networks among four individuals. A housing resource is indicated by an orange line, a transportation resource is indicated by a gray line, and a money resource is indicated by a green line. Following the conventional measurement of prior research, these four individuals would score equally in response to questions that ask whether they know individuals that would help them with any three resources. However, as the figure shows, these individuals have

resource networks that differ in two important ways. In terms of *resource diversity*, Person A and Person B both have high resource diversity, meaning they have access to all three types of possible resources. Person C and Person D have low resource diversity, meaning they only have access to one of the three possible resources.

Figure 4
Hypothetical Resource Networks



	A	B	C	D
Resource Diversity	3	3	1	1
Network Density	0	1	0	1

In terms of *cohesion*, Persons B and D both have shared ties among their alters. This means that there is likely more coordination and pressure among alters to provide resources. Quantitatively, if we measure resource diversity as the count of unique

resources, Persons A and B would each have a score of 3. If we measure network density as the number of observed ties among alters over the number of possible ties among alters, Persons B and D would have a score of one (see Table 2). Even in this abbreviated hypothetical example, there is significant variation between people, but this variation is missed when traditional methods of social support are used.

Outline of Empirical Chapters

This dissertation serves as one of the first efforts to document the ego-centric support networks of incarcerated individuals preparing for reentry (for exception, see Goodson-Miller, 2022). This exploratory study examines three key questions and aims to enhance our understanding of social support during reentry. Each empirical chapter is guided by the prior literature, as well as the findings from the previous empirical chapters.

An Exploratory Analysis of Resource Diversity and its Correlates

The first empirical chapter begins by exploring key areas of variation within anticipated social support networks in a sample of incarcerated men as they prepare for reentry. Given the novelty of this investigation with reentry data, the first goal of this initial empirical chapter is to simply begin to describe and understand the data collected. Providing sufficient background here is critical because it will provide a basic descriptive account of where the variation in social support between people lies and how name generator instruments can show this variation.

Next, this chapter creates a measure of resource diversity in the data. This measure refers to the extent to which a participant anticipates they will have access to a wide array of reentry-related resources upon their release. Someone higher in resource diversity (e.g., access to transportation, housing, job information, venting frustrations) may be better suited during reentry than someone with low resource diversity or a redundance of a particular resource type (e.g., access to job information resources only). Describing resource diversity in the data is critical in building a foundation for the later empirical chapters. It is also important to understand where individuals may be consistently lacking reentry-related resources and how programs may deliver programs and services tailored to these needs.

Finally, this chapter explores what characteristics of ego and what network characteristics correspond with higher levels of resource diversity. Several ego-related characteristics are related to the receipt of social support (House, 1987; House et al., 1988). Certain personality traits (e.g., extraversion, high locus of control) are often associated with increased reporting of social support receipt (Lu, 1995). Education, age, and marital status are often linked to social support receipt. Past literature has also documented how race and class act as powerful antecedents to one's access to and success in mobilizing resources (Smith, 2003, 2005). Examining potential correlates is especially relevant as incarcerated and formerly incarcerated individuals already come from groups less rich with social resources (e.g., racial and ethnic minority, lower income). To this end, it is important to better understand what groups may be in more

advantaged or disadvantaged positions for resources given their membership in certain groups in the reentry context.

Alter-related characteristics, that are then summed up to the ego level, are also often considered in social capital and networks related research. Alter gender, race, and age are often examined, as well as the similarity between ego and alter on these various demographic characteristics (e.g., homophily versus heterophily), and the type of relationship between ego and alter (e.g., familial versus non-familial) (Cornwell, 2009; Cornwell et al., 2008; McPherson et al., 2006; McPherson et al., 2001; Suitor & Keeton, 1997; van der Gaag & Snijders, 2004; Wellman & Frank, 2001). For example, kin are typically more likely to provide support than non-kin, especially within the context of formerly incarcerated individuals (Simonds et al., 2021).

Tie characteristics, such as the average tie strength between ego and their alters, are also important when considering social support. Stronger ties are more likely to provide emergency and every-day support (Wellman & Frank, 2001). This may be contingent, however, on the type of support or resource provided. Recall that Granovetter (1974) found that it was weak, not strong ties, that better facilitated novel information in his study of blue-collar job referrals. It remains an empirical question whether the same is true for resource diversity in study of incarcerated men preparing for reentry.

An Exploratory Analysis of Cohesion in Anticipated Social Support Networks

The second empirical chapter explores the cohesion or density of anticipated social support networks during reentry. Group cohesion or density can be critical in successfully facilitating resources for ego through group pressures. The greater the group

cohesion, the more resources may be coordinated and successfully mobilized (Cook & Whitmeyer, 1992; Lin, 2001; Lin et al., 2001). In this chapter, I also examine which characteristics of ego and the network described above correlate with higher levels of network density. If, as hypothesized, higher resource density and thus higher network cohesion lead to greater coordination of resources, then understanding what configurations of ego and network produce the highest density is important moving forward.

The Correlates of Social Support

To further understand the role of social support during the reentry context, the goal of the third and final empirical chapter is to examine first, whether resource diversity predicts individual-level outcomes, such as health and wellbeing, coping, and stress, and second, whether this relationship is attenuated by network cohesion. Past literature widely documents that those with greater levels of social support are more likely to use prosocial coping strategies, experience less strain and stress, and have an overall improved quality of life (Caron et al., 1998; Cohen, 1992; Cohen & Hoberman, 1983; Cohen et al., 1993; Cohen & Wills, 1985; Pressman et al., 2005). Increased levels of social support in the reentry context include improved mental and physical health and even reduced substance abuse and recidivism (Boman IV & Mowen, 2017; Fahmy & Wallace, 2019; Mowen et al., 2019; Skeem et al., 2009; Wallace et al., 2016). It remains to be demonstrated, however, that these positive consequences of social support hold true when modeled with a more holistic measures of resource diversity, as well as network cohesion or density.

CHAPTER 3
DATA COLLECTION STRATEGY AND SAMPLE

The following section documents the data collection strategy for addressing the three empirical questions presented in the last chapter. This chapter also details the study setting, recruitment strategy, interviewing guide, and sample characteristics for the entire dissertation. Each of the three empirical questions has their own dedicated section in their own assigned chapter that describes the unique focus and precise analytic strategy.

Overview of Data Collection

The dissertation data consisted of a single semi-structured interview with individuals preparing for release from prison in Arizona. Participants were interviewed anywhere between one and eight weeks prior to their release date. All interviews were conducted in-person at the prison facility. Data collection began in September 2021 and concluded in January 2022.

Study Setting

The Arizona Department of Corrections, Rehabilitation and Reentry (ADCRR), and specifically the Lewis Second Chance Center, served as the study setting for this dissertation. ADCRR is comprised of 15 complexes, one of which is a female facility while the remaining 14 are men's facilities. As of February 2021, 36,975 individuals were incarcerated across these 15 facilities (Shinn, 2021). The sample for this study were recruited from ASPC-Lewis Second Chance Center. The Lewis Second Chance Center specifically houses and provide programs for individuals who fall within a medium-to-

high risk to recidivate category and who are approximately eight weeks away from their release date.

The center is programming intensive, and includes classes on job training, money management, self-control, and parenting, to list a few. Participants are also permitted, though not required, to take a single trade-training course. These courses include community kitchen, CDL training, and a computer coding. These trade classes are intensive and often feature buy-in from state partners and other stakeholders. The center also features several incarcerated peer facilitators who, in addition to residing with center participants, develop and teach all ADCRR-provided courses. The center has a consistent flow of individuals, with approximately 25 individuals entering these programs per center, per week. This provided a relatively consistent pool of potential individuals from which to sample each week.

The center also has several incarcerated peer mentors that facilitate and manage center activities and operations. These individuals facilitate their own classes, as well as manage day-to-day tasks related to the center. I conducted a small focus group with four of the incarcerated peer mentors to garner their feedback on a draft of the interviewing guide. The discussions with the incarcerated peer mentors during this focus group were critical to the development of the interviewing guide. They provided their feedback and recommendations for proper verbiage and language-use, what sections were confusing or unclear, as well as what additional questions I should be asking related to the reentry experience. The interviewing guide was then revised per their recommendations. This

step also helped increase the legitimacy of the project within the prison yard, as their buy-in to the project likely helped increase the buy-in from participants.

Recruitment

Participants were recruited for the project one of two ways. The first method included attending the weekly orientation of new Second Chance Center participants.[3] Here I described the purpose of the research study, what some of the questions would look like, as well briefed potential participants on the voluntary and confidential nature of the project. Interested participants then signed up on a sheet of paper and were instructed to see me following their orientation for scheduling.

The second method of recruitment was through flyers that were placed around the center describing the study and the opportunity to participate. Recruitment was conducted on a rolling basis. Participants could join the project at any point during their eight-week stay the reentry center, keeping in mind logistical constraints of the organization and its staff. This rolling recruitment was intended to avoid any perceived coercion to participate in the study (Whichard et al., 2020). Providing multiple opportunities to participate can also yield higher participation rate as individuals may choose to participate after hearing about fellow participants' experiences with the project. All study procedures were approved by Arizona State University's Institutional Review Board (see Appendix B).

[3] New center participants are oriented on the program every Wednesday. All center participants are required to attend this first orientation.

In-Prison Interview

The interview protocol and survey instrument were created and collected using the open-source software Network Canvas (Complex Data Collective, 2016). This software is designed to collect network data with the assistance of an interviewer and has been used successfully with other high-risk and hard to reach populations and has been shown to be a more efficient method of capturing equivalent quality network data than other, more traditional techniques (Hogan et al., 2016). It features a visual interface, where the participants can see the network created in response to question prompts. This leads to lower response burden on the part of the participant. The interview guide took approximately 45 minutes to complete on average, but some participants took shorter and longer amounts of time—with some interviews taking only fifteen minutes while others took well over an hour.

Stage One

The in-prison interview was divided into four sections. The first stage included a series of name generators. These asked participants to think about and provide first the names of individuals they believed will provide them with social support upon their release. The resources asked about are guided by prior literature on social support and reentry and included key areas of assistance often needed by formerly incarcerated individuals (Denney et al., 2014; Harding et al., 2019; Mowen et al., 2019; Western, 2018). Some resource prompts were also recommended by the incarcerated peer facilitators during the focus group portion of the project on what they believed they needed on their first release or what they were thinking about for their upcoming release.

The survey prompted participants to name individuals who they believe would (1) *"help them with transportation, such as rides to a job interview or parole office,"* (2) *"provide them with information about jobs that are hiring or other employment opportunities,"* (3) *"help them get basic items like acquiring a cellphone, clothing, food, and groceries,"* (4) "*loan them money if asked,"* (5) *"let them stay at their place for a period of time if asked,"* 6 *"give you any advice you might need on how to navigate reentry?"* and (7) *"let you 'vent' to them about any frustration or anxiety you might be having."*

Stage Two

Following the identification of their anticipated social support networks, the second section of the interview included a series of name interpreter questions that gleaned important characteristics of everyone nominated in their anticipated social support networks. While each question was asked of every individual named by the participant, they were not be asked to repeat the information for individuals who were listed multiple times, such as when individuals were nominated multiple types as providing different types of social support.

Participants were be asked to identify the type of relationship (e.g., parent, child, spouse, significant other, etc.) they have with everyone nominated in their network. Participants were be asked a single open-ended question, *"What type of relationship do you and this person have?"* Distinguishing between different agents of social support is essential if we are to understand which agents are the most salient in delivering social support (Chouhy et al., 2020). Different agents of support may, for example, fare

differently in the extent to which they deliver social support and the effect of that social support on behavior. Moreover, agents of social support may be differentially important depending on where the returning citizen is in the life-course (Chouhy et al., 2020).

The type of relationship shared between ego and alter was garnered with a single question. Of each resource provider a participant nominated, they were asked *"What type of relationship do you and this person have?"* Participants could select that the individual they nominated was a (1) spouse, (2) significant other, (3) parent, (4) sibling, (5) friend, (6) cousin, (7) aunt/uncle, (8) grandparent, or (9) child. Participants were also allowed a write-in option if none of the above categories seemed appropriate to them. For brevity and considering the low frequencies among these categories, cousins, aunts/uncles, and grandparents were all collapsed into a single "other kin" category. An "agency/organization" category was created for instances in which individuals nominated correctional officers and the Department of Corrections more generally, parole agents and parole offices, as well as transitional housing facilities and rehabilitation programs as resource providers. Basic demographic characteristics were also gathered about each nominated individual. These characteristics include race and ethnicity, gender, age, education, and occupation.

Aside from demographic characteristics, participants were asked to rate their frequency of contact with each alter. This was gauged using a single question that asked, *"how frequently have you had contact (e.g., phone, visits, mail, and/or email with this person since your incarceration?"* Participants could select one of four categories: (1) none, (2) every few months, (3) every month, (4) every week, or (5) every day.

Participants could also select a "Not Applicable" category. This was often used rating their nominations to rehabilitation services or correctional agencies. Participants were also asked to rate their relative closeness to each nominated alter. They were asked, *"how close are you to this person?"* and could select either (1) not at all close, (2) a little close, (3) moderately close, (4) very close, or (5) extremely close. A "Not Applicable" category was also provided for this question.

Stage Three

Participants were also asked the about the density of their social support network. Recall that density here refers to the extent to which the individuals that make up one's social support network know each other. The cohesiveness of one's social support network has important implications for behavior. The more cohesive it is, the more one's actions are likely to be regulated by the norms of the larger group structure (Coleman, 1988; Granovetter, 1985). For example, a participant may be unwilling to engage in antisocial behavior because the likelihood that one member of their network will tell other members of their network of their behavior is high (Granovetter, 1985). To measure network density, participants completed a network a series of interrelater questions. For this, participants were simply asked to identify which of the individuals they previously nominated know each other by connecting their nodes together in the interviewing software.

Stage Four

Participants were next asked to answer a series of closed-ended Likert-scale questions capturing constructs commonly associated with social support (Caron et al.,

1998; Cohen & Wills, 1985; Granovetter, 1974; Holt-Lunstad, 2018; Holt-Lunstad et al., 2010). Specifically, they were asked about their current stress, coping strategies, physical and mental health, and flourishing. Current stress was measured using the four-item global scale as derived from Cohen and colleagues (1983). These questions asked participants to rate how frequently they had "*felt that they were unable to control the important things in [their] life"* (Cohen et al., 1983). Coping was assessed along 13-dimensions, as garnered from 28 questions. Coping strategies assessed include, for example, self-blame, acceptance, humor, and denial (Carver, 1997). Self-blame was assessed with two questions which asked participants how much they had been *"criticizing [themselves]"* and *"blaming [themselves] for things that happened."*

Physical and mental health was assessed with one question each, which was simply *"would you say that in general your physical health/mental and emotional health is poor, fair, good, or excellent"* (Fahmy, 2018; McHorney et al., 1994). Well-being was assessed using the eight-item flourishing scale created by Diener and colleagues (2010). These questions ask participants to rate, from Strongly Disagree to Strongly Agree, whether *"people respect [them],"* if they are *"engaged and interested in daily activities,"* for example. Finally, participants were asked to provide their own demographic information, such as race and ethnicity, age, highest level of education, and their current relationship status. This type of demographic information has proven meaningful in the understanding of social capital and its distribution across persons (Holtfreter et al., 2004; Reisig et al., 2002; Song & Lin, 2009).

Study Sample

Ego Descriptive Statistics

The sample average of study participants was just over 37 and a half years old, with an age range of 21 to 60 (see Table 2). Whites made up the largest proportion of participants (32.94%), followed by Hispanic (31.76%), and Black (18.82%). Those who identified as Asian American or Pacific Islander (2.35%), Native American or Alaskan Native (3.53%), Mixed Race (8.24%), or an "other" race (8.24%) made up much smaller proportions of the sample. With respect to highest level of education, many of the participants had earned at least a high school diploma or GED (32.94%) and another sizable portion had completed some college (32.94%). Those with less than a high school diploma (16.48%) and those with more advanced degrees (e.g., Bachelor's or Master's 3.53%) made up smaller proportions of the sample. Most participants identified as single (76.19%), followed by those who were in a relationship (11.90%), those who were married (5.95%) or divorced (2.38%). 1.19% of participants identified as widowed and the remaining 2.38% reported some "other" type of relationships status. Finally, over half of the participants identified that they were working prior to their incarceration (65.88%).

Alter Descriptive Statistics

A total of 417 people or organizations were nominated as anticipated providers of social support by the participants through the name generator questions at the outset of the interview. Several relationship types were represented among alters (see Table 4). Children (2.88%), and spouses or significant others (4.57%) made up the smallest proportions of the sample. Agencies and organizations made up a significant portion of

the population (17.31%), as well as parents (15.62%), siblings, (14.42%), friends (16.35%). Other kin made up a non-trivial portion of the sample (10.34%). This includes aunts/uncles, grandparents, cousins, and nieces and nephews. Finally, 18.51% of resource providers fell under an "other" type of relationship. This included individuals that participants reported as mentors, "Brothers in Christ," sober sponsors, and other types of relationships. There were too few instances of each individual type of relationship, so for brevity they were collapsed into a single "other" category.

Table 2

Participant Descriptive Statistics

	N	%	M	SD	Range
Age	85		37.55	9.78	21 - 60
Race					
White	28	32.94			
Black	16	18.82			
Hispanic	27	31.76			
Asian American or Pacific Islander	2	2.35			
Native American or Alaskan Native	3	3.53			
Mixed Race	7	8.24			
Other		8.24			
Highest Level of Education					
10th Grade or Less	2	2.36			
Less than HS Diploma or GED	12	14.12			
HS Diploma or GED	28	32.94			
Associate's Degree	6	7.06			
Technical or Vocational Training	6	7.06			
Some College	28	32.94			
Bachelor's Degree	2	2.35			
Master's Degree or Higher	1	1.18			
Relationship Status					
Single	64	76.19			
In a Relationship	10	11.90			
Married	5	5.95			

Divorced	2	2.38			
Widowed	1	1.19			
Other	2	2.38			
Working Prior to Incarceration					
Yes	56	65.88			
No	29	34.12			

Table 3

Alter Descriptive Statistics

	N	%	M	SD	Range
Relationship Type					
Spouse/Significant Other	19	4.57			
Parent	65	15.62			
Sibling	60	14.42			
Other Kin	43	10.34			
Child	12	2.88			
Friend	68	16.35			
Agency/Organization	72	17.31			
Other	77	18.51			
Gender					
Man	140	47.3			
Woman	156	52.7			
Age	281		45.33	15.62	5 - 81
Race					
White	102	36.30			
Black	67	23.84			
Hispanic	89	31.67			
Asian American or Pacific Islander	1	0.36			
Native American or Alaskan Native	0	0			
Mixed Race	22	7.83			
Other	0	0			
Frequency of Contact	360		3.08	1.44	1 - 5
Emotional Closeness	328		3.73	1.23	1 - 5
Currently Working					
Yes	228	79.72			
No	58	20.72			

Women made up the largest proportion of alters (52.70%). The average age of alters, when provided, was approximately 45.33, with a range of five years old to 81 years old. Participants most commonly identified their alters as Hispanic (31.67%), followed by White (36.30%), and Black (23.84%). Mixed race alters came in fourth most common, at 7.83% of the total alter sample. Only one alter (0.36%) was identified as being Asian American or Pacific Islander. The average frequency of contact for alters was 3.08 (SD = 1.44, range 1-5). The average self-reported closeness between ego and later was 3.73 (SD = 1.23, range 1-5). Finally, ego's reported that most of their alters were working (79.72%).

Network Descriptive Statistics

Two participants reported that they had no individuals or agencies who could provide them any of the reentry resources. Network size is thus calculated from the 83 individuals with valid network responses by simply adding up the number of resource providers participants nominated (see Table 5). The average number of resource providers (i.e., alters) in these data is 5.02 (SD = 2.78; range 1 – 15). Network density is then calculated for each participant by first determining the number of potential ties in their respective network (see Equation 1).[4]

Equation 1

Potential Number of Ties in a Network

$$Potential\ \#\ of\ Ties = \frac{N * N - 1}{2}$$

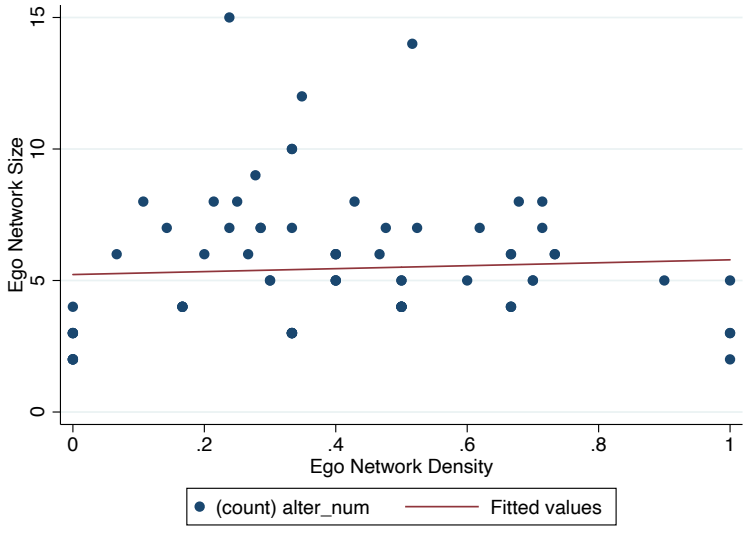
[4] One is subtracted by the network size because alters cannot nominate themselves. It is then divided by two because the network is undirected (i.e., no distinction between ingoing and outgoing ties).

Where *N* represents the *network size* (i.e. the number of nominated alters). *Density* is then calculated dividing the total number of observed ties among alters by the number of potential ties in a network. Density is normalized to range from 0 to 1. Individuals whose alters all know each other have a density of 1. Individuals whose alters are all completely isolated from one another have a density of 0. Individuals in these data have an average density of 0.41 (*SD* = 0.26). This means that for the average respondent, 41% of potential ties in their networks were observed in the data (see Table 4). The correlation between network size and network density is trivial, at 0.06. The relationship between network size and network density is also shown in Figure 5.

Table 4
Network Characteristics

	N	M	Median	SD	Range
Network Size	83	5.02	5	2.78	1 - 15
Density	75	0.41	0.4	0.26	0 - 1

Figure 5
Scatterplot of Network Size and Network Density



CHAPTER 4
RESOURCE AVAILABILITY AND RESOURCE DIVERSITY

The importance of social support for health and well-being across the life course is well documented (see Holt-Lunstad et al., 2010; House et al., 1988; Umberson & Karas Montez, 2010). The same is true in the reentry context, wherein enhanced social support often leads to more positive outcomes (Andrews et al., 2006; Martinez & Abrams, 2013; Pettus-Davis et al., 2014; Taylor, 2016). Yet, very little is known about what types of specific resources individuals do and do not have as they prepare for release. Moreover, past literature can speak very little of who is providing this support.

There are three goals to this chapter. First, I describe the reentry-related resources incarcerated men anticipate will be available to them upon their release. Improving on past measures, these data distinguish between the different types of resources needed during reentry. The name generator instruments used in this dissertation represent an important departure from past methods that often pool resource types together into single item questions or series of questions. This chapter will include a discussion of what types of resources are commonly perceived as available and unavailable to individuals and who is providing these resources to them (e.g., parents, spouses, organizations). Second, I create a measure of resource diversity with these data and explore variation in this diversity across participants. Third, I explore what characteristics of ego, such as their race and age, and network properties (e.g., proportion of kin) correspond to higher levels of resource diversity in these data. Prior sociological research consistently demonstrates the inequality of social resources across persons and network structures. This variability

is notably seen in resource access across different groups, particularly for Black and other racial and ethnic minority groups (de Souza Briggs, 1998; Smith, 2000, 2003, 2005). Support networks also tend to vary by age, with older individuals often reporting larger networks with more close relative connections who could help them in times of need (van Groenou & van Tilburg, 1996; Van Tilburg, 1998).

In addition to ego-level variability, various alter characteristics aggregated to the network-level have also been shown to predict social support. The gender of alter, their age, kinship status, emotional closeness, and similarity to ego (especially in terms of race and ethnicity) are meaningful across different social support dimensions (Plickert et al., 2007; Roberts et al., 2009; Wellman & Wortley, 1990; Wood & Robertson, 1978). Women, for example, are more likely to be providers of social support, as are kin (Lu, 1995). Given these findings, it is important to consider what aspects of the ego, and the average of their alters, produce variability in resource diversity in the reentry context (Goodson-Miller, 2022).

Goal One: Description of Social Support

This section begins by describing the types of social support individuals in the sample anticipated having during reentry and who they believed would provide it to them.

Measures

Social Support

Social support is assessed through the seven name-generator questions at the frontend of the interviewing guide. Participants were asked to provide the names of

individuals who they believe would (1) *"help them with transportation, such as rides to a job interview or parole office,"* (2) *"provide them with information about jobs that are hiring or other employment opportunities,"* (3) *"help them get basic items like acquiring a cellphone, clothing, food, and groceries,"* (4) *"loan them money if asked,"* (5) *"let them stay at their place for a period of time if asked,"* (6) *"give them advice they might need on how to navigate reentry,"* and (7) *"let you 'vent' to them about any frustration or anxiety they might be having."*

Type of Relationship

The type of relationship between ego and alter was assessed with a single question. Participants were asked of each of their resource alters, *"what type of relationship do you and this person have?"* Participants selected whether the individual they nominated was a (1) spouse, (2) significant other, (3) parent, (4) sibling, (5) friend, (6) cousin, (7) aunt/uncle, (8) grandparent, or (9) child. As with the descriptive statistics above, cousins, aunts/uncles, and grandparents were collapsed into a single "other kin category." The "agency/organization" category is again used to categorize the individuals nominated correctional officers and the Department of Corrections more generally, parole agents and parole offices, as well as transitional housing facilities and rehabilitation programs as resource providers.

Results

Table 5 below outlines the availability of specific reentry-related resources as garnered by the network generator instruments. A "no" indicates that the participant did not identify any individuals that could provide them with the specific resource. A "yes"

indicates that the participant nominated at least one individual who could provide them with the specific resource. Across all resource types, many participants reported having at least one person who could provide them with that specific resource. Nearly 70% of participants reported that at least one person could provide them with, at least one, specific resource listed below.

Some resources were more likely to be available than others. This indicates differential access to resources across individuals. For example, 86.5% of participants nominated at least one person or one organization in their life who could *"give them advice about how to navigate reentry."* In contrast, only 67.47% of participants nominated at least one person who could *"help them with transportation such as rides to a job interview or parole office."* A series of one sample test of proportions were used to determine if these differences are statistically significant. Indeed, the proportion of those who had a transportation resource and those of who had an advice resource were meaningfully different ($p < 0.001$). The difference in proportions between transportation and job information ($p < 0.01$), basic items ($p < 0.05$), a money loan ($p < 0.05$), housing ($p < 0.01$), and having someone to vent to ($p < 0.001$) were all statistically significant. Transportation appears as a slightly more difficult resource to anticipate for the men in the sample when compared to some of the other resources listed. Acquiring basic items, as compared to reentry advice ($p < 0.05$) and having someone to vent to ($p < 0.05$), also proves more challenging for the men in this sample. The same is true for having someone to loan you money, such that having a money resource is less common than a reentry advice ($p < 0.05$), or venting resource ($p < 0.05$).

Table 5 provides a breakdown of, for those who anticipate the resource at all, how many individuals they anticipate being able to provide them with this resource. Having more than one person you can call upon for a specific resource may be beneficial in the event someone is unavailable or the relationship dissolves. It may also be beneficial to have the ability to call upon three people for $20 as opposed to asking one individual for $60. Of the participants who reported that at least one person could *"loan money if asked,"* they also reported on average that approximately 2.5 (*SD* = 1.88) people in their network who could provide this resource. Some participants reported that they had up to eight people who could provide this specific resource if needed. Of those who nominated at least one person who could *"provide them with information about jobs that are hiring or other employment opportunities,"* the average number of individuals nominated was 1.71 (*SD* = 1.29).

Looking to who is providing these resources, Table 6 provides a description of the type of alters who are providing the specific resources. Siblings (*n* = 192) and parents (*n* = 187) were frequently reported as the providers of social support across all its dimensions. Spouses and significant others were reported much less frequently as potential providers of support (*n* = 68), though it is important to remember that few individuals in the sample reported being in a relationship or married.

Table 5

Resource Availability and How Many Alters Can Provide It

		No		Yes				If Yes, How Many?
Variable	Variable Description	N	%	N	%	M	SD	Range
1. Transportation	Help with transportation, such as rides to a job interview or parole office	27	32.53	56	67.47	1.91	1.32	1 -7
2. Job Info	Provide them with information about jobs that are hiring or other employment opportunities	16	19.28	67	80.72	1.71	1.29	1 - 8
3. Basic Items	Help get basic items like acquiring a cellphone, clothing, food, and groceries	19	22.89	61	77.11	2.02	1.46	1 - 6
4. Loan Money	Loan money if asked	19	22.89	64	77.11	2.5	1.88	1 - 8
5. Housing	Stay at their place for a period of time if asked	14	16.87	69	83.13	2.46	1.75	1 - 8
6. Reentry Advice	Give advice about how to navigate reentry	11	13.25	71	86.75	2.08	1.56	1 - 8
7. Venting	"Vent" to them about any frustration or anxiety you might be having	12	14.46	71	85.54	2.34	1.81	1 - 7
Any Resource		1	1.18	84	98.82	-	-	-

Table 6

Z-Scores for Test of Proportions Between Resource Types

	1. Transportation	2. Job Info	3. Basic Items	4. Loan Money	5. Housing	6. Reentry Advice	7. Venting
1. Transportation	-	-	-	-	-	-	-
2. Job Info	**-2.96****	-	-	-	-	-	-
3. Basic Items	**-2.16***	0.65	-	-	-	-	-
4. Loan Money	**-2.16***	0.65	0	-	-	-	-
5. Housing	**-3.88****	-0.73	-1.46	-1.46	-	-	-
6. Reentry Advice	**-4.99*****	-1.58	**-2.36***	**-2.36***	-0.79	-	-
7. Venting	**-4.52*****	-1.27	**-2.04***	**-2.04***	-0.51	0.26	-

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

A series of chi-square tests supported the notion that the distribution of all the resources was not uniform across all types of people. For example, agencies were frequently listed by participants (n = 119), especially for employment related assistance (n = 38) and assistance in acquiring basic items (n = 31). Agencies were listed much more frequently as the potential providers of these two resources than any other relationship type. This indicates that individuals preparing for reentry appear more likely to rely on agencies for job and material assistance than personal contacts in their first few weeks of release. Children were not often nominated as resource providers. No participants reported that their children could *"provide them information about jobs," "help them acquire basic items," "loan money,"* or *"stay at their place for a period of time."*

Summary

Almost 70% of all participants reported that they had at least one person or organization who could provide them the specific reentry-related resources. While this is high, it is important to acknowledge that this still means that nearly a third of the sample reported no anticipated access to a specific resource. For example, although 77.11% of the entire sample reported that they had at least one person who would providing them with housing if they asked, this still means that 16.87% of the sample believed they had no one who they could provide them with housing if they asked and needed it. It is also important to acknowledge that one person in the sample (1.18%) reported that they had no access to any of resources.

The results of this exploratory look into social support also showed that some resources were more challenging to access than others. The percentage of those who had

someone to provide transportation (67.47%), when compared to the proportion who had those who could provide job information (80.72%), basic items (77.11%), a loan of money (77.11%), housing (83.13%), reentry advice (86.75%), and venting (85.54%), was statistically significant. The lack of access to transportation through informal contacts is especially troubling considering the relationship between transportation and reentry outcomes. Indeed, one study of 400 women on probation and parole found that increased access to transportation attenuates the relationship between criminogenic needs and re-arrest, reconviction, and supervision violation (Bohmert, 2014). Those who have little access to informal means of transportation (i.e., through friends and family) may then have to rely on public transportation to get around but often, formerly incarcerated individuals report "discomfort in being in public transport or crowded public place" (Western et al., 2015, p. 1534). This lack of access to transportation may lead to greater feelings of anxiety and overall discomfort in the transition from prison to community life.

With respect to who is providing these resources, siblings provided the greatest proportion of resources (19.28%), followed closely by parents (18.78%). The combined percentage of resources provided from children, significant others and spouses, and other types of kin was 18.57%. This demonstrates that certain individuals (i.e., siblings and parents) are bearing the brunt of the resource provision. The finding supports the notion that these individuals may need additional supports of their own to continue supporting their formerly incarcerated loved one (Pettus-Davis, 2021).

Table 7

Description of Social Support Across Resource Dimensions (N = 417)

Variable	Variable Description	%	If Yes, From Whom? Spouse/Significant Other	Parent	Sibling	Other Kin	Child	Friend	Agency/Organization
			N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
1. Transportation	Help with transportation, such as rides to a job interview or parole office	25.66	7 (6.54)	20 (18.69)	27 (25.23)	11 (10.28)	2 (1.87)	15 (14.01)	9 (8.41)
2. Job Info	Provide them with information about jobs that are hiring or other employment opportunities	27.34	5 (4.39)	6 (5.26)	11 (9.65)	9 (7.89)	0 (0.00)	13 (9.03)	38 (33.33)
3. Basic Items	Help get basic items like acquiring a cellphone, clothing, food, and groceries	30.94	11 (8.52)	24 (18.60)	28 (21.71)	6 (4.65)	0 (0.00)	17 (13.18)	31 (24.03)
4. Loan Money	Loan money if asked	38.37	10 (6.25)	41 (25.63)	44 (27.50)	19 (11.88)	0 (0.00)	34 (21.25)	0 (0.00)
5. Housing	Stay at their place for a period of time if asked	40.77	14 (8.24)	46 (27.06)	40 (23.53)	27 (15.88)	0 (0.00)	32 (18.82)	0 (0.00)
6. Reentry Advice	Give advice about how to navigate reentry?	35.97	6 (4.00)	21 (14.00)	18 (12.00)	9 (6.00)	7 (4.67)	30 (20.00)	34 (22.67)
7. Venting	"Vent" to them about any frustration or anxiety you might be having.	39.81	15 (9.04)	29 (17.47)	24 (14.46)	16 (9.64)	11 (6.63)	48 (57.83)	7 (4.22)
	Total		68	187	192	97	20	189	119
	%		6.83	18.78	19.28	9.73	2.01	18.98	11.95

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

[a] This is the total number of resources, across all alters, for the entire sample.

Agencies and organizations were overwhelmingly nominated as potential providers of job resources and basic items (33.33% and 24.03%, respectively), as compared to the other alter categories. Chi-square tests revealed that the distribution observed is not equal across all types of alters. This was true for all resource types. This finding lends greater credence to using a resource-based approach to assessing social support in the reentry context. For example, survey-item questions on social support that ask whether someone has friends and family who might be able to help them find a job (Fahmy & Wallace, 2019; Mowen et al., 2019) would miss the important and large portion of individuals who anticipate receiving this assistance from agencies and organizations.

Goal Two: Creating a Measure of Resource Diversity

This section of the chapter creates a measure of resource diversity. Returning citizens often require assistance on a variety of resource dimensions as they return home. Challenges related to housing, employment, and mental and physical health are frequent in the reentry experience and diversified assistance from others can aide in this process (Harding et al., 2019). In turn, understanding whether individuals have a diverse array of reentry-related resources as they prepare for release is essential.

Resource Diversity

Resource diversity is calculated simply as the count of unique resources available in an individual's anticipated social support network. It is important to note that these scores do not reflect the number of times a particular resource is observed (e.g., three "loan money" resources are counted as 1, not 3). Scores range from one to seven, with a score of one indicating that an individual only has access to one type of resource.

Conversely, a score of seven indicates that the individual anticipates having all seven types of reentry-related resources. An individual who reports that they have individuals in their lives who could provide (1) transportation, (2) housing, and (3) advice about reentry would have a score of three, regardless of how many times transportation, housing, or advice resources, appears in their network. The average basic resource diversity score for the sample was 5.59 (*SD* = 1.52). On average, this means that participants anticipated having over five unique reentry-related sources (see Table 8 and Figure 5).

Table 8

Measure of Resource Diversity

	M	SD	Range
Resource Diversity	5.59	1.53	1 - 7

The arrangement of these resources vary across participants alter greatly (see Figure 7).[5] Person A has only three alters but plans to call upon two of them for three unique resource each. Person B, in contrast, has a greater number of alters but the same score on resource diversity. This is because some of their ties provide redundant resources. Person C has four unique resources in their network but only two individuals in their social support circle as a whole, while Person D also has four unique resources but instead has these resource spread out over six alters.

[5] This figure excludes ties among alters to focus principally on the resources that are anticipated to be provided unto ego.

Figure 6

Distribution of Basic Resource Diversity

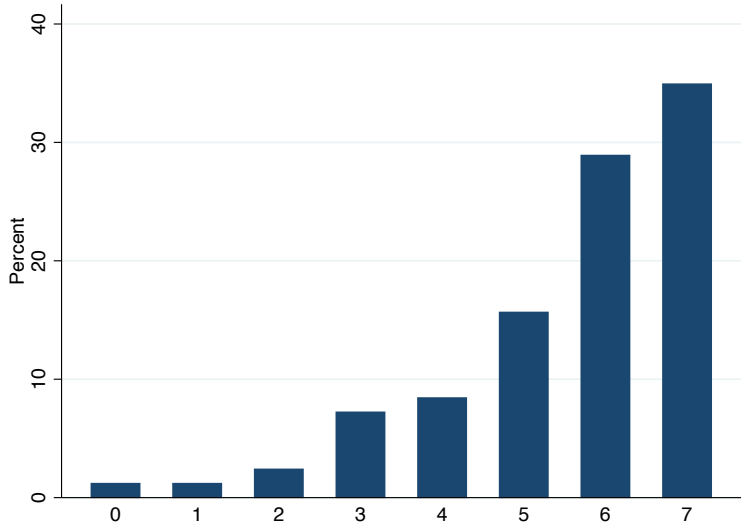
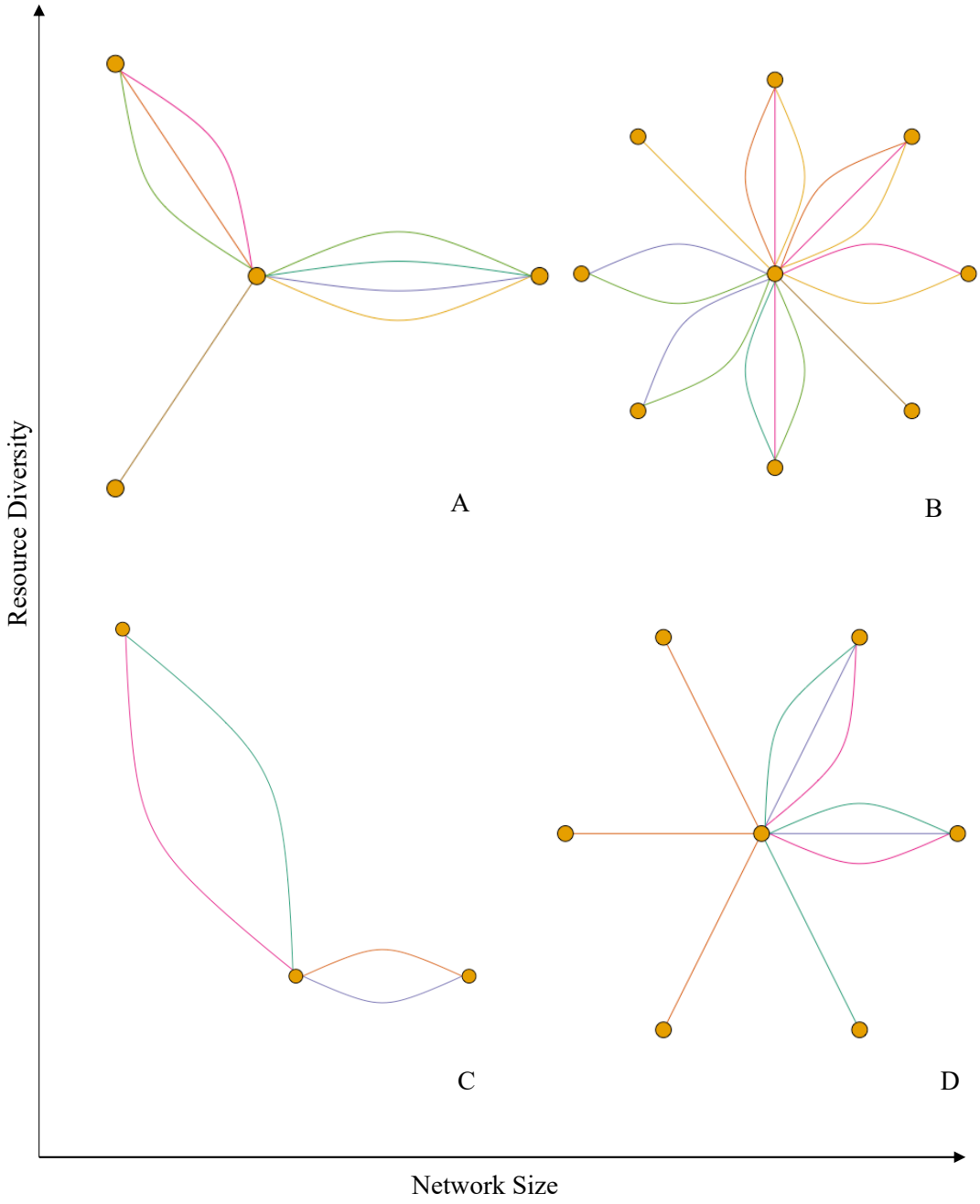


Figure 7

Visualization of Selected Observed Networks by Resource Diversity and Size



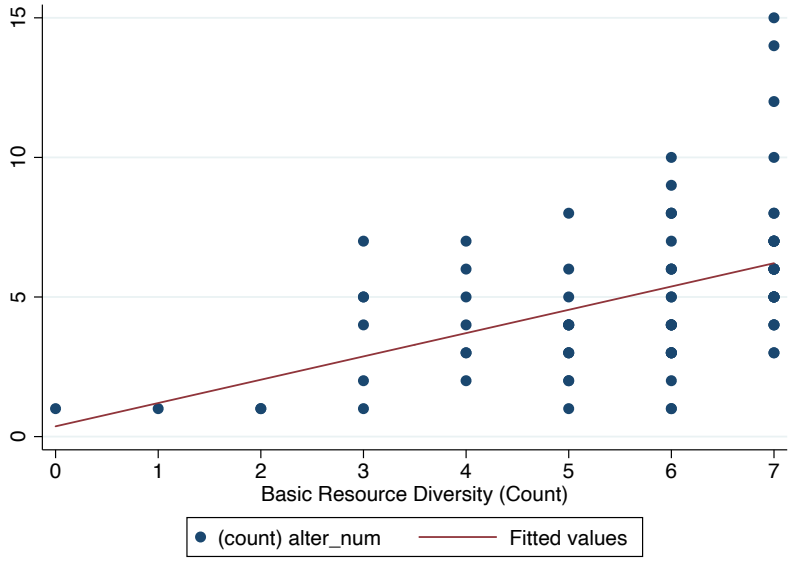
	A	B	C	D
Resource Diversity	7	7	4	4
Network Size	3	8	2	6

Summary

When using this measure of resource diversity, participants report a high count of diverse resources (M = 5.59, SD = 1.53). Despite this relatively high number of resources across the sample, there is still much variation in how the networks look across individuals (see Figure 7). It is also important to note that this measure of resource diversity is sensitive to one's network size (r = 0.47), such that those with larger networks will likely have greater resource diversity (see Figure 8). Indeed, there were no individuals in the sample who had a resource diversity score of seven but fewer than three alters. The average number of alters for those with all seven reentry related resources was 6.66 (SD = 2.89).

Figure 8

Scatterplot of Resource Diversity and Network Size



Goal Three: Correlates of Resource Diversity

The third and final goal of this chapter is to determine what ego and alter-level characteristics are correlated with resource diversity.

Ego-Level Independent Variables

Several characteristics of ego, or the participant, are used for the following analyses. Ego demographic characteristics (shown in Table 2) are also included.

Network Level Independent Variables

Characteristics of ego's alters (i.e., ties) are also examined and then aggregated up to each ego's whole network level. Table 9 reflects these characteristics that are then averaged across all egos to provide summary statistics for the entire sample. The average age of ego's alters, averaged across all egos, in this sample is 47.15 years old (*SD* = 11.63). Also included is a measure indicating the proportion of their network that is made up of women (0.56), kin (0.47), and currently working individuals (0.79).

A measure of the proportion of racial and ethnic similarity between the ego and their alters is also included. This measure is calculated by first creating a new variable for each alter in ego's network. Alters who are the same race or ethnicity as their ego are coded as 1 while those who are a different race or ethnicity as their ego are coded as 0. These scores are then summed to the ego level, such that the scores indicate the proportion of ego's network that are racially and ethnically similar. Scores closer to one indicate a more racially or ethnically homogenous network while score closer to zero indicate a more racially or ethnically heterogenous network. The average score for this measure across participants is 0.77, indicating that the 77% of ego's alters are racially or ethnically the same as them. The average frequency of contact (*M* = 3.16, *SD* = 0.98) and emotional closeness (*M* = 3.77, *SD* = 0.94) was also calculated for each participant. I also include a measure of network size to account for the relationship between number of

alters and resource diversity. The average number of alters individuals in the sample had was 5.02 (*SD* = 2.78), with some having as few as one and others having as many as 15.

Table 9

Aggregate Network Characteristics Averaged Across Sample

	M	*SD*	Range
Age	47.14	11.63	22.5 - 78
Racial/Ethnic Similarity	0.77	0.35	0 - 1
Proportion Women	0.56	0.31	0 - 1
Proportion Kinship	0.47	0.27	0 - 1
Frequency of Contact	3.16	0.98	1 - 5
Emotional Closeness	3.77	0.94	1 - 5
Currently Working	0.79	0.29	0 - 1
Network Size	5.02	2.78	1 - 15

Results

Table 10 presents the correlation matrix between the resource diversity measure and the predictor variables. As anticipated, the number of alters one has in their network is correlated with resource diversity ($p < 0.01$). Ego's prior to incarceration employment status and their average frequency of contact to their was indeed significant ($p < 0.05$). No other predictor variables emerge as bivariate correlates of resource diversity though Ego's age emerged as a significant correlate of network size ($p < 0.05$). The lack of statistically significant findings at the bivariate level do not warrant the presentation of additional multi-level analyses, though these were run and no model achieved statistical significance. It appears, that few individual or network level characteristics are associated with resource diversity in the sample.

Table 10

Correlation Matrix for Resource Diversity and Predictor Variables

	1	2	3	4	5	6	7	8	9	10	11
1. Resource Diversity	1.00	-	-	-	-	-	-	-	-	-	-
1. Number of Alters	**0.36****	1.00	-	-	-	-	-	-	-	-	-
3. Ego Age	-0.17	-0.08	1.00	-	-	-	-	-	-	-	-
4. Ego Race	0.15	0.09	-0.09	1.00	-	-	-	-	-	-	-
5. Ego Education	-0.01	**0.27***	0.17	-0.16	1.00	-	-	-	-	-	-
6. Ego Prior Employment	**-0.24***	0.11	-0.03	0.14	0.22	1.00	-	-	-	-	-
7. Ego Relationship Status	0.07	0.00	0.18	-0.15	0.07	0.09	1.00	-	-	-	-
8. Alter Age	-0.23	-0.18	**0.36****	0.02	-0.09	-0.02	0.06	1.00	-	-	-
9. Ego/Alter Racial/Ethnic Similarity	-0.04	-0.21	-0.13	**-0.45*****	-0.12	-0.20	-0.13	-0.03	1.00	-	-
10. Proportion Women	0.14	-0.16	0.02	-0.10	**-0.27***	-0.22	0.02	0.12	0.01	1.00	-
11. Proportion Kin	0.08	-0.17	**-0.25***	-0.07	-0.22	-0.01	-0.21	-0.08	0.23	**0.26***	1.00
12. Frequency of Contact	**0.27***	-0.15	-0.07	-0.05	-0.15	-0.13	0.05	-0.22	0.04	**0.37****	0.19
13. Closeness	-0.02	-0.22	0.13	-0.08	**-0.26***	-0.09	-0.19	-0.03	-0.06	0.23	0.20
14. Currently Working	0.12	0.10	-0.19	-0.07	0.07	0.10	0.16	**-0.42*****	0.19	**-0.38****	-0.16

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Summary

The goal of this third section of the chapter was to examine any potential individual- or network-level correlates of resource diversity. I did not find any meaningful correlates of resource diversity. This finding is surprising given that a prior study investigating similar resource-like measures in a sample of justice involved women did find important correlates at the individual- and network-levels (Goodson-Miller, 2022). Though this study's sample size may be a limitation on finding statistically significant results, the lack of relationship between resource diversity and many of the anticipated predictor variables at the bivariate level did not support theoretical expectations.

Chapter Summary

This chapter provided one of the first explorations into the ego-centric resource networks of currently incarcerated men who are preparing for release. It represents an important first step in broadening the understanding of social support in the reentry context. Resource-based name generator questions were used to elicit the individuals or organizations who the participants expected receiving support from after their release. Improving on prior measures, the ones used in this dissertation distinguished between the different types of resources: (1) transportation, (2) job information, (3) help with basic items, (4) money, (5) housing, (6) reentry advice, and (7) letting them vent.

Participants in the sample reported varying access to the resources asked about above. The proportion of those who expected any kind of assistance with transportation was significantly lower than those the proportion of those who expected advice on how to

navigate reentry, have help with housing, and having someone to vent to. These findings indicate the potential challenges individuals may have in securing transportation-related resources during reentry. This finding is especially salient when considering that formerly incarcerated individuals often do not possess a valid driver's license (Cammett, 2010). Individuals must then rely on social support networks to provide this transportation to meet community supervision requirements if they are mandated to meet their officer in person and get to their place of work (Harding et al., 2019; Western, 2018).

This chapter also demonstrated that a significant portion of the men releasing from the sample reported that they had no one they could rely on for resources during release. Anywhere from approximately 13% to 33% of the men reported that they did not anticipate receive a particular support type. Of those who did report having at least one person who could provide a particular type of support, there was a significant range in how many alters they named. This indicates that there is a significant amount of variation in the anticipated resources of social support that is missed in traditional measures. Findings from this chapter also demonstrated the variability in resource providers. Siblings and parents provided the greater proportion of resources. This is consistent with qualitative findings that discuss the importance of these relationships during reentry (Harding et al., 2019; Western, 2018). What is more, the distribution of resource providers was not consistent across resource types. Individuals reported relying on agencies and organizations more frequently for job resources and basic items as compared to the other types of alters.

Contrary to expectation, none of the individual or network-level attributes emerged as statistically significant correlates of this measure of resource diversity. As previously noted, the small sample of this data is likely causing this finding but again, the lack of meaningful results at the bivariate level do not necessarily support this.

The larger implications and overarching limitations of this chapter are explored in greater detail in Chapter 7 of this dissertation.

CHAPTER 5

NETWORK COHESION AND ITS CORRELATES

This chapter takes an important departure from the last in that it focuses specifically on the relational structure of social support networks. The last chapter focused on resource availability and how resource diversity and resource provision could be distributed differently over egos and alters. This chapter focuses specifically on the alter-alter relationship structure of the data. This is otherwise known as the density of the network. In an undirected network, network density is calculated as the observed ties among alters divided by the number of possible ties among alters (Wasserman & Faust, 1994). Network density is an operationalization of the concept group cohesion, which has its roots in early sociological tradition (Festinger et al., 1950; Frank & Yasumoto, 1998; Friedkin, 2004).

Scholars have argued that the more cohesive a social network is, the more they are able to enforce group norms and conformity (McGloin & Piquero, 2010; Veenstra et al., 2013). Cohesion is the classical argument of network closure as social capital made by Coleman (1988, 1994) and later extended by Putnam (1993) and others. Because these networks are more insular, cohesive networks can better ensure coordination among group members. For example, Coleman explores how higher density between parents and teachers facilitates better cooperation in child monitoring (1990, 1998). Cohesive networks better facilitate standard expectations for behavior and enforcement of sanctions for group members who do not behave in ways according to the larger group (Connidis et al., 1996; Peng, 2010; Portes & Sensenbrenner, 1993). Group cohesion, and generally

more shared ties among individuals, also leads to a type of structural embeddedness, wherein trust is more likely among people with mutual ties (Buskens & Raub, 2002; Granovetter, 1985; Young & Haynie, 2020).

This cohesion and its relationship to trust among network members has been studied widely in sociological contexts. Proponents of group cohesion as a public good argue that sharing mutual ties leads to enhanced trust because information can be shared between alters on their mutual positive experiences with an ego. As Buskens and colleagues (2010) write, "one prefers to hire a nanny with good references from a friend over a nanny without such references" (p. 172). Increased cohesion reduces malfeasance, as the possibility for sanctioning through a third party increases as the number of shared ties increase (Buskens & Raub, 2002; Buskens et al., 2010). Indeed, the more opportunities for sanctions within buyer-supply transactions often leads to less problematic supplier behaviors and improved supplier performance (Rooks et al., 2006).

Within the reentry and social support context, denser networks may translate into better facilitation of resources given the group expectation that such resources will be provided (see Wellman & Frank, 2001). The shared connections among alters, then, enforce the provision of resources to ego because alters can share information with one another about one alter not "pulling their weight" or following the group expectation of support provision. However, the alter-alter information required to construct these network measures of network cohesion are rarely gathered in the reentry and reintegration literature (see Goodson-Miller, 2022 for exception), so knowledge is sparse on how currently and formerly incarcerated individuals differ in their network cohesion

and how network cohesion can then produce positive outcomes for these groups. What is more, little is known about the potential antecedents to network cohesion are for justice-involved populations. Prior literature acknowledges the role of kin, for example, on network density but fewer still have focused on this network feature as a dependent variable (Van Duijn et al., 1999). Understanding the correlates of network cohesion is a critical first step in better understanding how this cohesion later contributes to positive outcomes down the line. With this in mind the goals of this chapter are twofold. First, I describe the variation in network cohesion in the sample. I provide a series of network visualizations to aide in this discussion. Second, I analyze the correlates of network cohesion in a sample of currently-incarcerated men preparing for release.

Goal One: Describing Network Cohesion

This first section of the chapter begins by describing a measure of network cohesion and its variation in these data.

Measures

Density

Recall from above that network cohesion is operationalized as network density, which is calculated by dividing the total number of observed ties among alters by the number of potential ties in a network (see Equation 2 in Chapter 3 above above). This was assessed in the survey by asking participants, of each pair of alters, whether they knew each other. Density ranges from 0 to 1 where individuals whose alters all know each other have a density of 1 and individuals whose alters are all completely isolated from one another have a density of 0.

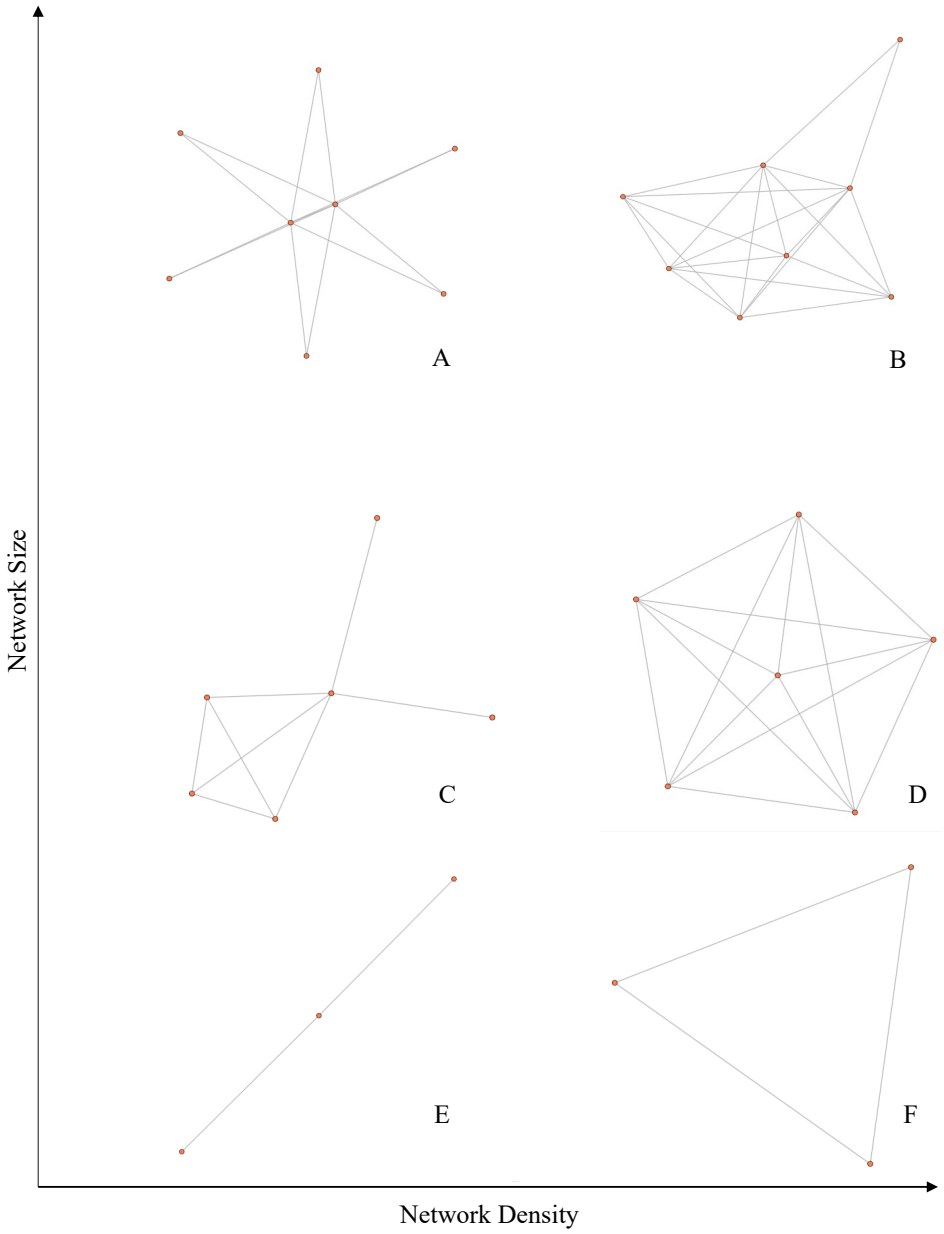
Results

The average density of participants in this sample is 0.41 (*SD* = 0.26). This means that for the average respondent, 41% of all potential ties among alters were realized in their ego network (see Table 4 in Chapter 3). Figure 9 is provided below. It shows nine different networks within the data at varying levels of network density and network size, wherein the x-axis represents increases in network density and the y-axis represents increases in network size. In this plot, ego is removed so as to show the links between alters. This visualization helps illustrate the variability in network density across participants. Moreover, it shows how individuals with the same metric of network density can still have different overall network configurations (e.g., two people can have a network density score of 0 but one could have two alters and the other could have 10).

Person E in Figure 9 has a network density score of zero. Here, the participant is the middle node connecting their two social support alters together. An estimated 12% of the total sample had a network density of zero. Proponents of network cohesion and closure would argue that these individuals, in the instance of social support, lack the bonding capital necessary for the formation of trust and cooperation (Coleman, 1988, 1990). Persons F and D both have a network density score of one. Approximately 5.33% of the sample had a network density score of one. This means that all the potential ties among their alters were observed in the data. However, Persons F and D vary in the number of alters they have. Person F only has two nominated alters while Person D has five. These visualizations demonstrate that while two people can have identical scores on one measure, the overall structure of their network can look very different.

Figure 9

Visualization of Selected Observed Networks by Size and Density



	A	B	C	D	E	F
Network Density	0.29	0.71	0.30	1	0	1
Network Size	7	7	5	5	2	2

Persons A and B both have seven alters. However, Person A has a network density score of 0.29. This means that only 29% of the ties among their alters that could be realized actually were. In contrast, Person B has a network density score of 0.71, meaning that 71% of the potential ties in their network were realized. Despite having the same number of alters, the networks of Person A versus Person B vary significantly in the number of shared ties within their network.

Summary

The first goal of this chapter was to simply describe network density in these data. Participants varied significantly in their network cohesion and importantly, could score the same on measures of network density but vary greatly in their network size and vice versa. Though on average, participants had 41% of the potential ties in their network observed, the range between participants was quite large. Nine participants (12%) reported no connections among their alters. Isolated alters in these networks may find it challenging to coordinate resources and they will likely not feel any social pressure to provide any support given their lack of shared connections. In contrast, four participants (5.33%) reported that all the potential connections in their network of alters were realized, though these varied across network size. In sum, there is much variation in the relational structure of social support in the reentry context. This section highlighted this variation and the importance of asking alter-alter-level information in studies on reentry and what important areas of variation are missed in traditional survey measures.

Goal Two: Correlates of Network Cohesion

The second goal of this chapter is to better understand the correlates of network cohesion in a sample of currently-incarcerated men preparing for release.

Ego-Level Independent Variables

The participant or ego-level independent variables used in the following analyses are the same as the independent variables for the previous chapter (see Table 2). These include age, highest level of education, race, relationship status, and whether they were working prior to their incarceration.

Network-Level Independent Variables

The network-level independent variables are also the same as the ones used in the previous chapter (see Table 9). Age, ego-alter racial and ethnic similarity, proportion women, proportion kin, frequency of contact, emotional closeness, and the proportion of alters who are currently working, are included in the following analyses. Table 11 presents a correlation matrix between network density and the predictor variables. As anticipated, proportion of the network that is kin is significantly correlated with network density ($p < 0.001$). Both ego and alter's age was also significantly correlated with network density, such that increases in ego and alter's age reduces the density in their network ($p < 0.05$). No other predictor variables at either the ego (e.g., race, education) or network-level (e.g., mean closeness, proportion of women in network were significantly correlated with network density).

Table 11

Correlation Matrix for Network Density and Predictor Variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Network Density	1.00	-	-	-	-	-	-	-	-	-	-	-	-	-
2. Number of Alters	0.01	1.00	-	-	-	-	-	-	-	-	-	-	-	-
3. Ego Age	**-0.29***	-0.08	1.00	-	-	-	-	-	-	-	-	-	-	-
4. Ego Race	-0.05	0.09	-0.08	1.00	-	-	-	-	-	-	-	-	-	-
5. Ego Education	0.10	0.19	0.19	-0.16	1.00	-	-	-	-	-	-	-	-	-
6. Ego Prior Employment	0.08	0.11	-0.02	0.11	**0.26***	1.00	-	-	-	-	-	-	-	-
7. Ego Relationship Status	0.03	-0.01	0.19	-0.16	0.06	0.08	1.00	-	-	-	-	-	-	-
8. Alter Age	**-0.26***	-0.19	**0.35****	0.04	-0.10	0.02	0.08	1.00	-	-	-	-	-	-
9. Ego/Alter Racial/Ethnic Similarity	-0.05	-0.18	-0.13	**-0.45*****	-0.09	-0.21	-0.13	-0.04	1.00	-	-	-	-	-
10. Proportion Women	0.06	-0.05	0.01	-0.10	-0.19	-0.23	0.03	0.13	-0.04	1.00	-	-	-	-
11. Proportion Kin	**0.48*****	-0.03	**-0.29***	-0.07	-0.11	0.00	-0.22	-0.10	0.20	0.15	1.00	-	-	-
12. Frequency of Contact	0.07	-0.07	-0.07	-0.03	-0.11	-0.11	0.06	**-0.24***	0.01	**0.31***	0.09	1.00	-	-
13. Closeness	0.13	-0.16	0.14	-0.07	-0.23	-0.07	-0.19	-0.03	-0.10	0.18	0.13	0.29*	1.00	-
14. Currently Working	0.04	-0.02	-0.16	-0.11	-0.06	0.06	0.14	**-0.41*****	**0.27***	**-0.33****	-0.03	0.07	-0.09	1.00

* = $p < .05$; ** $p < 0.01$; *** $p < 0.001$

Summary

Very few anticipated predictors of network density were correlated with its variation across participants. Only the proportion of ties that were kin and age, both at the ego and alter-level, were significantly related to network density. This elucidates the need for additional variables to better understand the correlates of network density in a sample of incarcerated men.

Chapter Summary

There were two overarching goals of this chapter. The first was to examine the variation in network density across participants. Participants did indeed report varying numbers of mutual ties among their alters, with 41% of the ties that could have been realized in a network actually were realized. The second goal of this chapter was to examine any correlates of network density in this sample of incarcerated men. Understanding the precursors to network density is important, as density is often touted as an important network-level characteristic of resource facilitation (Plickert et al., 2007; Wellman & Frank, 2001). It is because these dense networks are more cohesive that they can set standard expectations for behavior and trust (Connidis et al., 1996; Peng, 2010; Portes & Sensenbrenner, 1993).

However, the alter-alter information necessary to create density measures are rarely gathered in the reentry literature (see Goodson-Miller, 2022 for exception) so there is little knowledge on what the potential correlates of this key network variable are or how it may contribute to individual-level outcomes. The former was the second goal of

this empirical chapter. Only three variables, proportion of one's network who are kin, and age of ego and the average age of their alters, was statistically significant.

The first finding is consistent with prior literature that demonstrates the closely knit nature of familial and kinship ties (Dawkins, 2006; Wellman, 1992). The lack of significant findings for the other individual and network-level predictors suggests that the correlates to network density were not captured in this study and future studies should examine this more in-depth with justice involved and reentering populations. Alternatively, it may be that network density cannot be understood in these data as a simple causal process. A full discussion on the findings of this particular chapter are discussed in Chapter 7.

CHAPTER 6

RESOURCE DIVERSITY, NETWORK DENSITY, AND INDIVIDUAL-LEVEL OUTCOMES

This final empirical chapter puts together findings from the previous two chapters to model the relationship between resource diversity, network density, and individual-level correlates of social support. Specifically, this chapter combines additional information garnered with resource-generated measures of social support *and* the information on alter-alter relational structure to examine if they are correlated with individual-level outcomes.

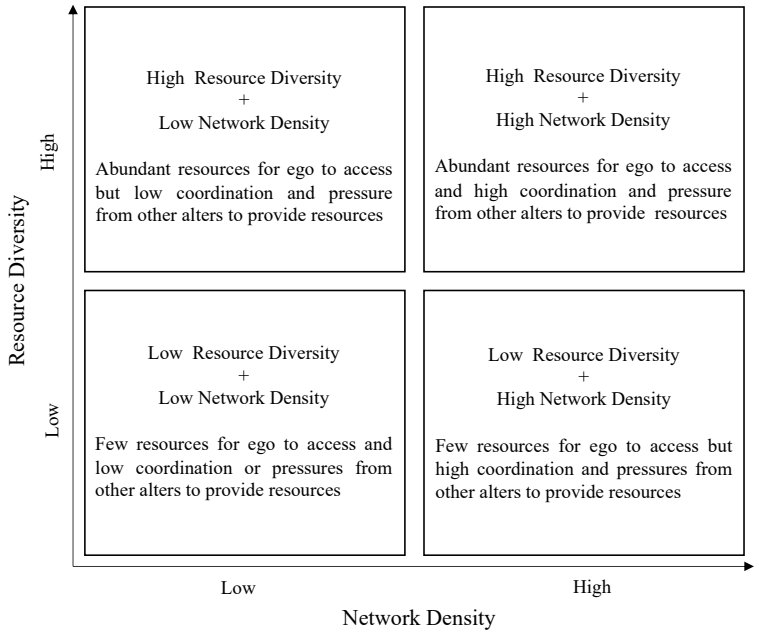
This chapter is motivated by past literature that widely discusses the benefits of social support, particularly in the reentry context. Increased social support for those returning home is linked to improved mental and physical health, and reduced instances of substance abuse and recidivism (Boman IV & Mowen, 2017; Fahmy & Wallace, 2019; Mowen et al., 2019; Skeem et al., 2009; Wallace et al., 2016). Qualitative studies often regard family members and friends as critical for formerly incarcerated individuals as they seek housing and employment information (Berg & Huebner, 2011; Harding et al., 2019). The provision is not exclusive to family members, however, as both the results of Chapter 4 and prior literature has shown—many rely on state agents for specific types of support (Harding et al., 2019; Western, 2018). Yet, this literature rarely employs a network based perspective on this relationship (Goodson-Miller, 2022). This means that key areas of variation are overlooked in studies of social support and its relational structure.

The measures used in this dissertation improve upon previous ones by more specifically considering the variety of resources needed during reentry and accounting for the potential of network structure in facilitating positive outcomes in this population. I hypothesize a moderating relationship between resource diversity and network cohesion. Such that the positive effect of resource diversity for health, well-being, stress, and coping-related outcomes is amplified when there are higher levels of network cohesion. This is because individuals who are high in diversity and density have both the novelty of the resources they have access to *and* the cooperation among their alters (Burt, 2001; Coleman, 1988). Figure 10 depicts the hypothesized relationship and anticipates that individuals with both high resource diversity and network density will have better individual-level outcomes related to health, stress, well-being and coping because they have the both the access to diverse resources and the cooperation among their alters to facilitate their use.

There are several individual-level outcomes examined in this chapter. These individual-level outcomes are also an important departure from prior work in reentry and social support work in that they focus on outcomes unrelated to recidivism or misconduct and instead focus on health and well-being. Indeed, increased social support is linked to increased use of prosocial coping, improved mental and physical health, reduced stress, and greater overall well-being and life satisfaction in the general population and in turn, these are the outcomes used in this chapter (Caron et al., 1998; Cohen & Wills, 1985; Granovetter, 1974; Holt-Lunstad, 2018; Holt-Lunstad et al., 2010).

Figure 10

Hypothesized Relationship between Resource Diversity and Network Density



There are three goals to this chapter. First, I examine whether the measure of resource diversity created and explored in Chapter 4 is associated with any individual-level outcomes of prosocial coping, improved mental and physical health, reduced stress, and greater overall well-being and life satisfaction. Despite the expansive literature on the relationship between social support and improved reentry, this has yet to be studied with a resource-based measure. Second, I examine whether network cohesion, as created and explored in Chapter 5, predicts these same individual-level outcomes. This alter-alter structure is often overlooked in reentry literature despite its importance in the wider sociological and social capital traditions. Indeed, increased cohesion among networks is often correlated with increased well-being and life satisfaction. The aim of this section of

the chapter, then, is to explore whether enhanced cohesion among alters leads to improved outcomes for individuals in this sample.

Apart from increased network density being linked to increased well-being and happiness alone (Huang et al., 2019; Zou et al., 2015), network density in this dissertation is thought to moderate the relationship between resource diversity and individual-level outcomes. This is the third goal of this final empirical chapter. Specifically, I explore whether the relationship between individual-level outcomes is correlated with resource diversity and network cohesion. I anticipate that network cohesion will moderate the relationship between resource diversity and individual-level outcomes.

Analytic Strategy

I begin this empirical chapter by assessing the measurement properties of each individual-level outcome. This is accomplished using principal components analysis for each of the assessed scales. Correlation matrices are then run to examine the bivariate relationships between the individual-level outcomes and each resource diversity and network density. To accomplish the third goal, a series of ordinary least-square regressions for the continuous outcomes (e.g., flourishing, stress) and ordered logistic regressions are estimated for the ordinal outcomes (e.g., mental health, physical health) (Long & Freese, 2006). An interaction term is included for each model to explore the potential for a moderating relationship between resource diversity and network density.

Goal One: Individual-Level Outcomes and Resource Diversity

This first section of the chapter explores the relationship between individual-level outcomes and the measure of resource diversity. A detailed description of the dependent variables, their coding, and their descriptive statistics is also provided.

Measures

Physical Health and Mental Health

Physical and mental health are each assessed with a single item each (McHorney et al., 1994). These items have previously been used in a sample of formerly incarcerated men to examine health outcomes (see Fahmy, 2018). These questions read, *"would you say that in general your physical health is poor, fair, good, or excellent?"* and *"would you say that in general your mental and emotional health is poor, fair, good, or excellent?"* Responses were coded such that higher responses indicated better physical or mental health, with scores ranging from one to four. Participants overall reported relatively high physical and mental health, with means of 3.08 (*SD* = 0.74) and 3.12 (*SD* = 0.81), respectively (see Table 12).

Stress

Stress is assessed using a global measure of perceived stress that was created by Cohen and colleagues (1983). This includes four questions that asked participants how often they had *"felt that you were unable to control the important things in your life," "felt confident about your ability to handle your personal problems," "felt that things were going your way,"* and *"felt the difficulties were piling up so high you could not overcome them."* Participant responses ranged from 1 = none of the time to 4 = all of the

time. The second and third items were reverse scored such that higher values indicate greater instances of stress.

Principal components analysis was used to assess the measurement properties of the stress scale. Using the K1 rule (Kaiser, 1960), three of the four items loaded onto the hypothesized component (eigenvalue > 1.0). The first question that asked whether participants had *"felt that they were unable to control the important things in your life,"* loaded poorly onto this factor (loading = 0.26). The wording of this question may have not been appropriate given the lack of autonomy individuals have in the prison environment. Indeed, participants did note during the interviewing process that they had "little control" over their life simply given the conditions of their confinement and lack of ability to set their schedule. Because of this, this item was removed from the stress scale in the following analyses. Removing this single item improves the overall internal consistency of the item from poor to fair (from $\alpha = 0.57$ to $\alpha = 0.64$). The remaining three items were summed then averaged to create a single scale. Participants reported low stress overall, scoring an average of 2.17 ($SD = 0.60$, range = 1 - 4).

Flourishing

Individual flourishing and overall well-being is assessed using a eight item scale (Diener et al., 2009). These items tap into how individuals rate themselves and their relationships to other people. Questions included asking participants the extent to which they agreed with the statements, *"people respect me," "my social relationships are supportive and rewarding," "I am engaged and interested in my daily activities," "I actively contribute to the happiness and well-being of others," "I am competent and*

capable in the activities that are important to me," "I am a good person and live a good life," "I lead a purposeful and meaningful life," and *"I am optimistic about my future."* Responses were coded so that 1 = strongly disagree and 5 = strongly agree.

Principal components analysis again using the K1 rule was used to assess the measurement properties of this scale. The items indeed loaded onto a hypothesized single component (eigenvalue > 3.0, loadings > 0.50). The scale also achieved satisfactory internal consistency ($\alpha = 0.82$). All eight items were then summed and averaged for each participant, such that higher values indicate greater flourishing and well-being. Participants reported high levels of flourishing, with a mean sample score of 4.02 (*SD* = 0.50, range = 2 – 5).

Coping Strategies

Coping is assessed using the 28-item brief coping scale (Carver, 1997). Thirteen different 2-item coping strategies are assessed in the original brief coping protocol. These questions assess several behavioral and cognitive coping strategies: self-distraction, active coping, denial, substance use, emotional support, behavioral disengagement, institutional support, self-blame, positive reframing, planning, humor, acceptance, and religion. It would be incorrect to assume, however, that these 13-coping strategies are invariant across all groups. That is, these 28-items may not always align to the 13-coping strategies initially anticipated by the scale creator (Carver, 1998; Steinhardt & Dolbier, 2008). In response, a principal components analysis was run for all 28-items to assess the scale properties in these data. Two factors emerged in the data.

The first (eigenvalue = 5.20) consists of 10-items with loadings > 0.50. This factor included items from the original instrumental support, emotional support, positive reframing, and planning subscales. These variables achieved good internal consistency (α = 0.82) and were used to create the scale termed *Prosocial Coping.* Questions in this scale included the extent to which participants agreed with the statements, *"I've been getting emotional support from others," "I've been getting help and advice from other people about what to do," "I've been trying to see it in a different light, to make it seem more positive," "I've been trying to come up with a strategy about what to do," "I've been getting comfort and understanding from someone," "I've been looking for something good in what is happening," "I've been accepting the reality of the fact that it has happened," "I've been trying to get advice or help from other people about what to do," "I've been learning to live with it,"* and *"I've been thinking hard about what next steps to take."* Participants reported fairly high instances of prosocial coping with a mean score of 3.15 (*SD* = 0.58, range = 1 – 4).

The second factor (eigenvalue = 3.95) consists of seven items with loadings > 0.50. This factor included items from the original substance abuse, denial, self-blame, and behavioral disengagement subscales. These items also achieved good internal consistency (α = 0.80) and were summed and then averaged to create a *Maladaptive Coping* scale. Questions in this scale included, *"I've been using alcohol or other drugs to make myself feel better," "I've been giving up trying to deal with it," "I've been refusing to believe that it has happened," "I've been using alcohol or other drugs to help get me through it," "I've been criticizing myself," "I've been giving up the attempt to cope,"*

and *"I've been blaming myself for things that happened."* Participants scored fairly low on this measure with a mean score of 1.68 (SD = 0.65, range = 1 – 4).

Table 12
Descriptive Statistics for Dependent Variables

	N	M	SD	Range
Physical Health	85	3.08	0.74	1 - 4
Mental Health	85	3.12	0.81	1 - 4
Stress	85	2.21	0.53	1 - 3.25
Flourishing	85	4.02	0.50	2 - 5
Coping Strategy				
Prosocial Coping	85	3.15	0.58	1 - 4
Maladaptive Coping	85	1.68	0.65	1 - 4

Resource Diversity

The principal independent variable in this first chapter section is resource diversity. A full description of this variable can be found in Chapter 4.

Results

Table 13 presents the correlation matrix between the individual-level outcomes described above and resource diversity. Only the measure of prosocial coping is significantly related to resource diversity. That is, higher levels of resource diversity are correlated with higher levels of prosocial coping. Indeed, no individual with a prosocial coping score one standard deviation above the mean had a resource diversity score lower than three (see Figure 11). There were, however, individuals with high resource diversity score with low values on prosocial coping as operationalized as one standard deviation below the mean (see Figure 12). It is difficult to assess any meaning between these differences due to the small sample size.

Table 13

Correlation Matrix for Resource Diversity and Individual-Level Outcomes

	1	2	3	4	5	6	7
1. Resource Diversity	1.00	-	-	-	-	-	-
2. Physical Health	0.04	1.00	-	-	-	-	-
3. Mental Health	0.14	**0.36*** **	1.00	-	-	-	-
4. Stress	-0.13	-0.21	**-0.54*** **	1.00	-	-	-
5. Flourishing	0.14	**0.32** **	**0.48*** **	**-0.61*** **	1.00	-	-
6. Prosocial Coping	**0.25***	-0.04	0.12	-0.10	**0.42*** **	1.00	-
7. Maladaptive Coping	-0.05	-0.19	**-0.29** **	**0.64*** **	**-0.38*** **	0.10	1.00

* $p < .05$; ** $p < 0.01$; *** $p < 0.001$ (two-tailed test)

Figure 11

Distribution of Basic Resource Diversity for 1 SD Above the Mean of Prosocial Coping

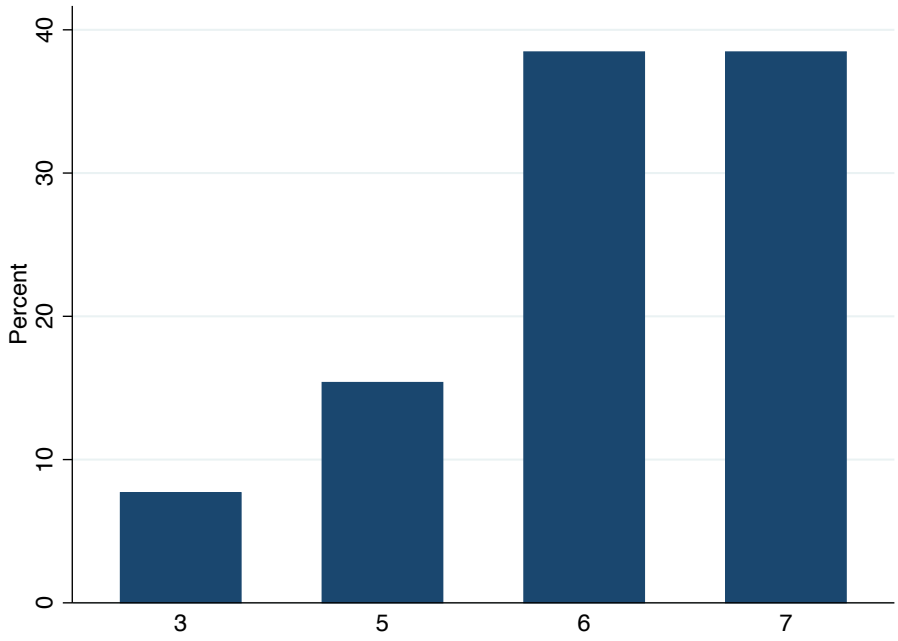
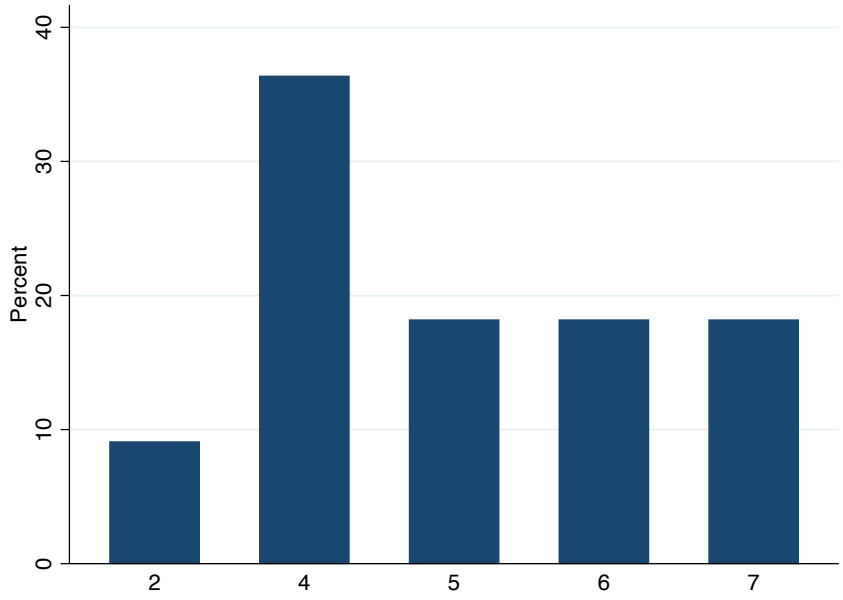


Figure 12

Distribution of Basic Resource Diversity for 1 SD Below the Mean of Prosocial Coping



Associations between the resource diversity and the other outcome variables are marginal and not statistically significant, though always in the expected direction (i.e., higher resource diversity associated with decreased stress, higher resource diversity associated with increased flourishing).

Summary

Only prosocial coping was significantly correlated with resource diversity. Though all in the expected direction, none of the other individual-level outcomes were meaningfully correlated with resource diversity in these data.

Goal Two: Individual-Level Outcomes and Network Cohesion

Network Cohesion

The principal independent variable for this portion of the chapter is network cohesion, which is calculated as the density of one's overall network. A full description of this variable is provided in Chapter 5.

Results

Table 14 presents the correlation matrix for the independent variables of interest and the network cohesion measure. Here, we see that none of the anticipated outcomes were significantly associated with network cohesion. This indicates little effect of this particular network characteristic on these outcomes as they are measured in the current data. The relationships are, however, largely in the expected direction, such that increased network diversity is associated with increased mental health and flourishing. Contrary to expectation, the direction of the relationship between network cohesion and prosocial coping is negative. However, given the lack of overall statistical significance between these associations, it is not possible to say whether this is meaningful.

Table 14

Correlation Matrix for Network Density and Individual-Level Outcomes

	1	2	3	4	5	6	7
1. Network Density	1.00	-	-	-	-	-	-
2. Physical Health	0.08	1.00	-	-	-	-	-
3. Mental Health	0.16	**0.36*** **	1.00	-	-	-	-
4. Stress	-0.00	-0.21	**-0.54*** **	1.00	-	-	-
5. Flourishing	0.14	**0.32** **	**0.48*** **	**-0.61*** **	1.00	-	-
6. Prosocial Coping	-0.04	-0.04	0.12	-0.10	**0.42*** **	1.00	-
7. Maladaptive Coping	-0.10	-0.19	**-0.29** **	**0.64*** **	**-0.38*** **	0.10	1.00

* $p < .05$; ** $p < 0.01$; *** $p < 0.001$ (two-tailed test)

Summary

None of the anticipated correlates of network cohesion were significantly related. This is surprising given the network closure and bonding capital argument made by Coleman (1988) and others. He argues that network closure has value because there are more channels by which information, or in this case resources, can flow (Baker, 1984). Additionally, network closure facilitates greater cooperation through norms and sanctions on behavior. As Burt (2001) writes, "reputation cannot arise in an open-structure" (p. 38). This network closure then ensures compliance and a type of "status-quo" among resource providers. The lack of association between network cohesion and individual-level correlates is also surprising given that this feature of the network is often linked to individual-level outcomes on its own. Specifically, network cohesion is commonly linked to outcomes such as life-satisfaction and well-being in general populations (Huang et al., 2019; Zou et al., 2015).

Goal Three: Individual-Level Outcomes as a Function of Resource Diversity x Network Cohesion

The third goal of this chapter is to examine whether variations in individual-level outcomes are a function of both resource diversity and network cohesion. To accomplish this, a series of ordered logistic regression and ordinary least squares regressions are estimated for each of the dependent variables. The small sample size precludes the use of additional controls. Accordingly, these models only feature the two independent variables

of interest and a term for their interaction. In turn, they should be interpreted with caution.

Results

Table 15 presents the results from a series of ordered logistic and ordinary least squares regression models that included an interaction term between resource diversity and network density.

Table 15

Interaction Models for Resource Diversity x Network Cohesion on Individual-Level Outcomes

	Physical Health	Mental Health	Stress	Flourishing	Prosocial Coping	Maladaptive Coping
	coef (se)	coef (se)	coef (se)	coef (se)	coef (se)	coef (se)
Resource Diversity	0.10	0.36	-0.03	0.11	0.24	-0.22
	(0.38)	(0.37)	(0.20)	(0.10)	(0.11)	(0.13)
Network Density	-0.01	1.11	1.00	1.05	1.27	-1.85
	(4.08)	(4.26)	(1.32)	(1.07)	(1.20	(1.44)
Resource Diversity x Network Density	0.06	0.05	-0.16	0.14	-0.26	0.29
	(0.70)	(0.73)	(0.23)	(0.18)	(0.21)	(0.25)
χ^2 or F-Statistic	0.73	7.44	1.20	0.90	2.21	1.35
N	75	75	75	75	75	75

* $p < .05$; ** $p < 0.01$; *** $p < 0.001$ (two-tailed test)

None of the interaction terms achieve statistical significance.[6] However, it is challenging to substantively assess an interaction from the *p*-value alone, as there may be a range in

[6] I refrain from interpreting the constituent (non-interactive estimates) presented in Table 15 as I cannot meaningfully interpret these constituent terms as the average effect of those variables on the outcome. This is because the constituent coefficient of resource diversity only reflects effects resource diversity on each individual level outcome when network cohesion is zero. Conversely, the constituent coefficient of network cohesion only reflects the effect of network cohesion on each individual level outcome when resource diversity is zero.

which the variations of each variable are meaningful that goes undetected. I instead present a series of predicted probabilities for each variable of interest.

Figure 10 shows the predicted probability for each outcome of the physical health variable ("poor," "fair," "good," or "excellent"). The x-axis represents the network density variable, such that increases in the x-axis indicate increases in network cohesion. The y-axis is the predicted probability of that particular outcome of the physical health variable. A blue line indicates those who are predicted to have a resource diversity score of one, the minimum for the sample. A red line for those with a score of 5.58, which is the mean for the sample. A green line is used for this with a resource diversity score of seven, the maximum for the sample. The predictions are shown with 95% confidence intervals.

The plots show that there is very little variation in the slope of the lines for any of the physical health outcomes. Indeed, the lines are largely parallel to each other as they cross the x-axis and increase in network density. This indicates no moderating relationship between resource diversity and network density on physical health outcomes in this sample. Figure 14 shows the same predicted probabilities but for each of the mental health outcomes. As with physical health, the predicted probabilities for the "poor," "fair," and much of the "good" mental and emotional health outcomes are largely parallel to each other and the x-axis. This indicates no moderating relationship between the two variables of interest for either of these two outcomes. However, the red and green lines appear to deviate from the blue line as they increase in network cohesion for "excellent" mental and emotional health.

Figure 13

Predicted Probabilities for Each Physical Health Outcome

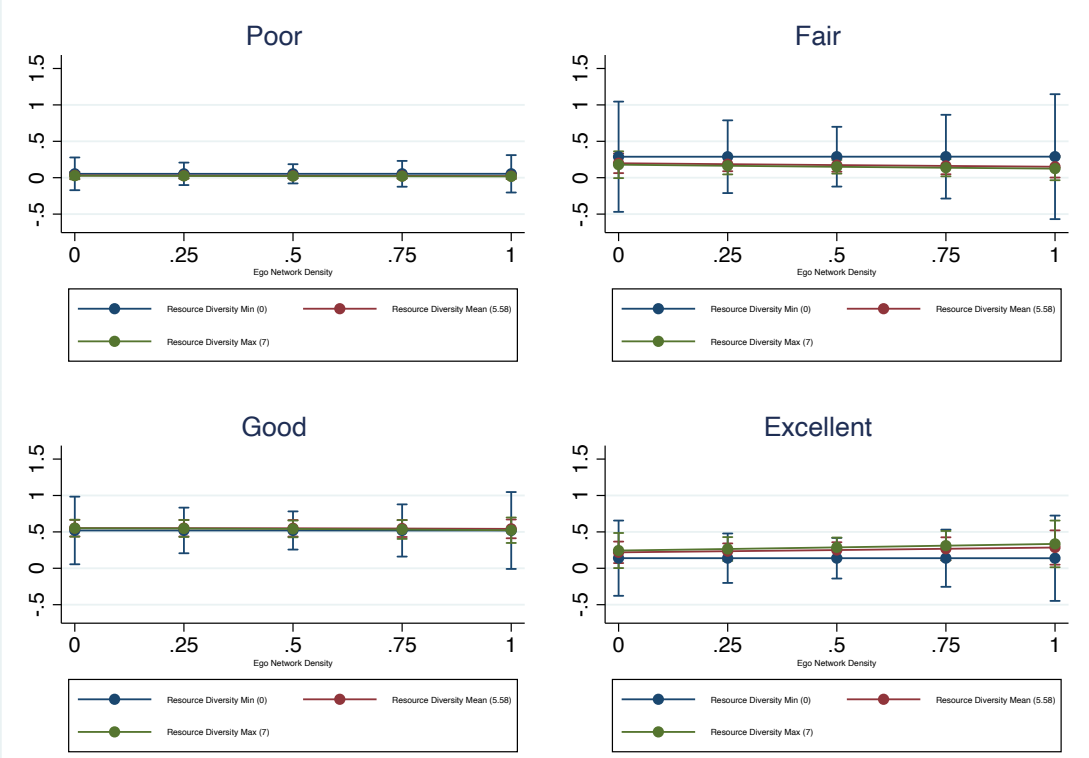
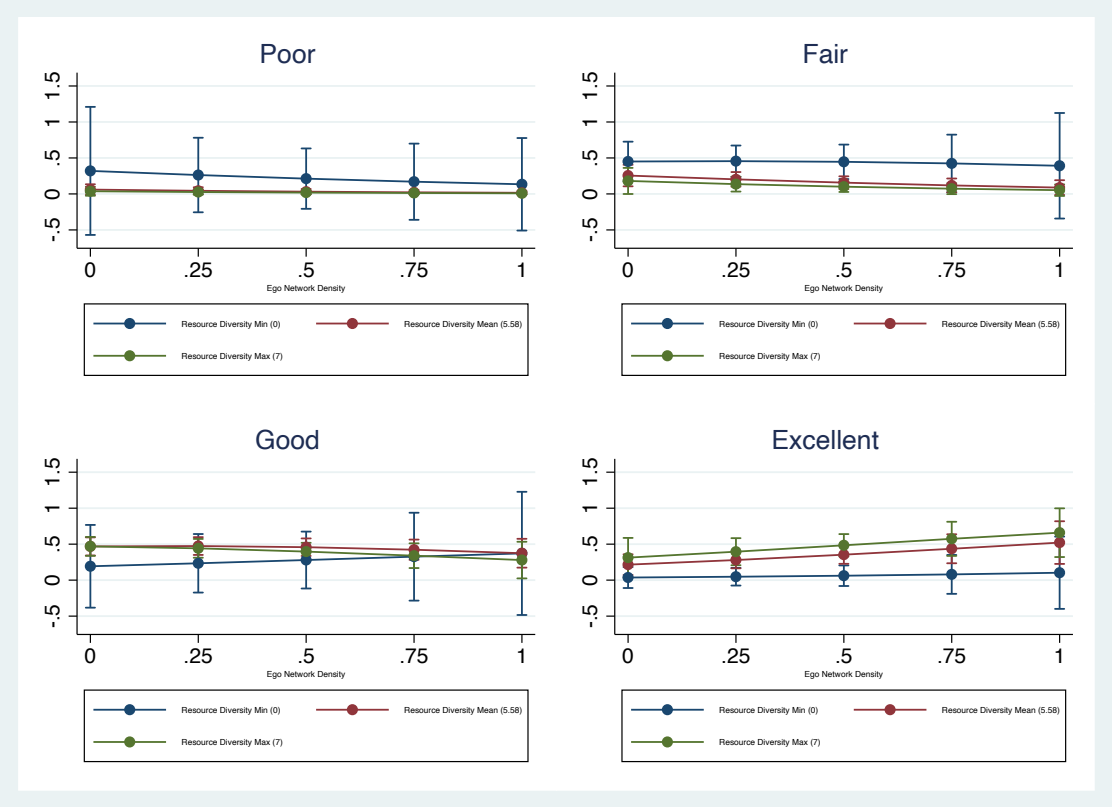


Figure 14

Predicted Probabilities for Each Mental Health Outcome



Increases in network density correspond to increases in the predicted probability of scoring "excellent" on this outcome for those with a resource diversity at the mean and maximum value. While consistent and promising for the hypothesized relationship between resource diversity and network density, the overlapping confidence intervals do not provide statistical support for this notion in these data.

Turning next to the stress, scale Figure 15 shows the predicated probabilities for this variable at different levels of each of the independent variables. Recall that higher scores on this variable indicate greater levels of stress. The predicted probability for stress increases among individuals with a resource diversity of zero increase in their

network cohesion. The slope of the red and green, the mean and maximum values for resource diversity, appear trivial as they move along the x-axis.

Figure 15

Predicted Probabilities for Stress Scale

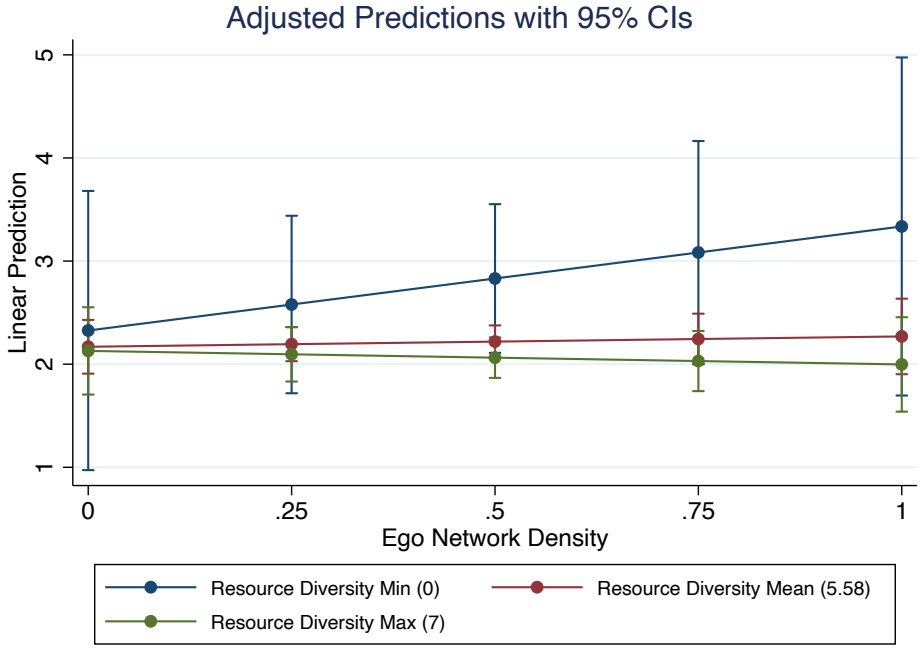
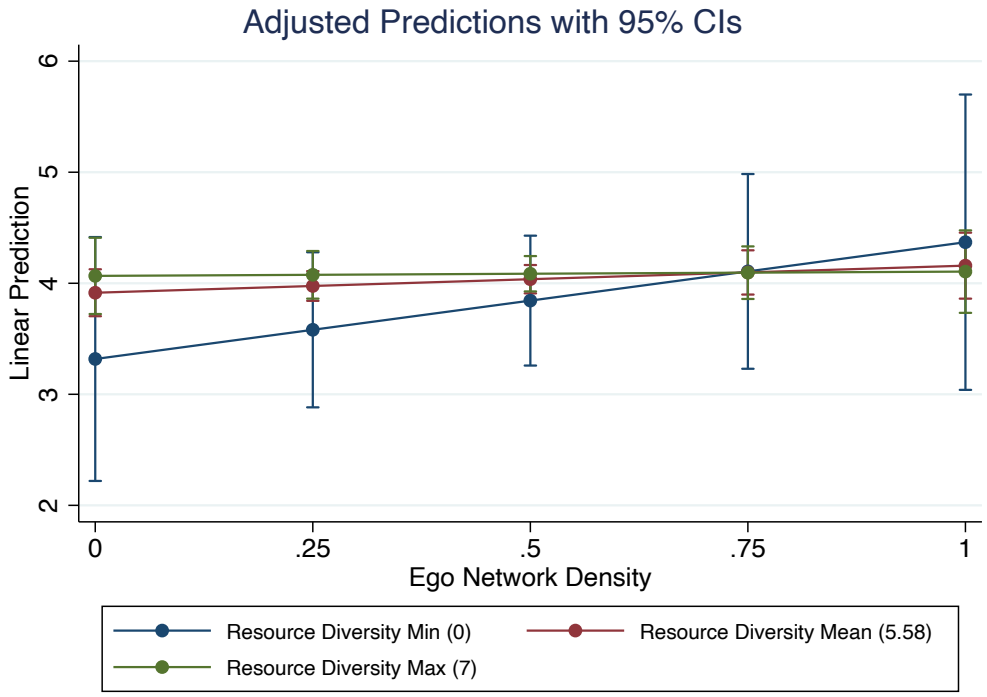


Figure 16 depicts the predicted probabilities for the flourishing variable. Very little difference is seen here between the predicted probabilities for the mean and maximum values. However, those with a resource diversity score of zero angle slightly upwards as they move across the x-axis. This is unexpected, as it was anticipated that increasing in network cohesion would have an amplification effect for those with already high resource diversity. It may be that those with little resource diversity benefit more from having a cohesive and closely knit network. The large confidence intervals make it difficult to assess the strength of this relationship.

Figure 16

Predicted Probabilities for Flourishing Scale



Figures 17 and 18 depict the interaction for the prosocial coping and maladaptive coping variables, respectively. Turning first to the use of prosocial coping, Figure 17 shows a slight decrease in the use of prosocial coping as those with resource diversity scores of at the mean and maximum values increase in network cohesion. This effect seems relatively small. However, those with the lowest resource diversity score appear to increase in their use of prosocial coping as their network cohesion increases. This is similar to the effects for the flourishing variable: network cohesion appears most beneficial for those with low access to resources. The effect of network cohesion on those with already high access to resources is null or even slightly negative.

Figure 17

Predicted Probabilities for Prosocial Coping Scale

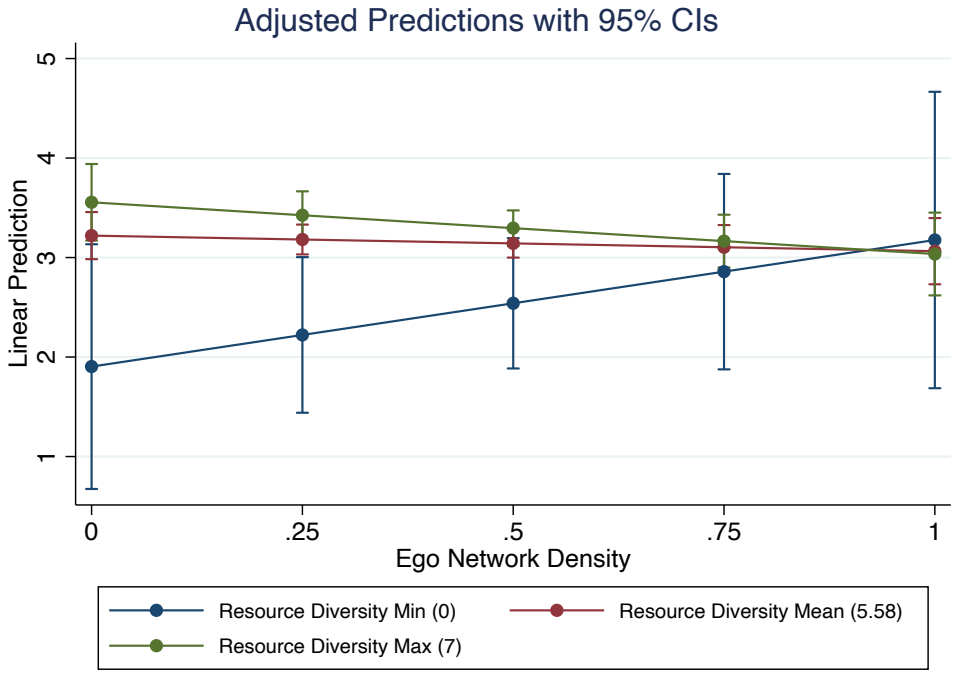
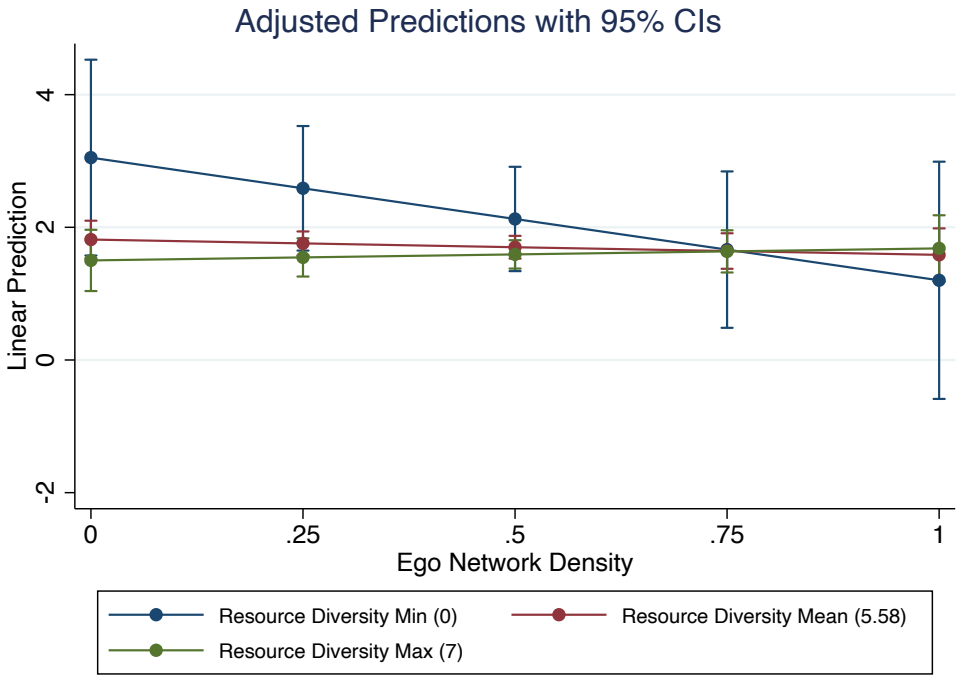


Figure 18 shows the predicted probabilities for the use maladaptive coping. Again, those with the of zero benefit the most from increases in network cohesion. Specifically, as individuals with zero resource diversity move along the x-axis, their predicted probability of using maladaptive coping strategies lessens. There appears to be small differences for those with the mean and maximum values of resource diversity on this variable. It is again important to note the overlapping confidence intervals in all these graphs. No argument can be made that these relations are statistically significant.

Figure 18

Predicted Probabilities for Negative Coping Scale



Summary

The findings on the moderating relationship between resource diversity and network density were largely contrary to what I had anticipated but nonetheless important. Only for scoring "excellent" on mental and emotional health was there a potential for an amplification effect of increased network density on resource diversity. Interestingly, those with the lowest scores on resource diversity appeared to be the most affected by network density on certain outcomes, such as flourishing, use of prosocial coping, and use of maladaptive coping. Increased network density almost appeared to have a buffering effect of the potential negative impact of having low resource accessibility. However, this was not consistent across outcomes as it led to greater predicted probabilities of increased stress.

Chapter Summary

There were three overarching goals to this final empirical chapter. The first was to assess whether variation in individual-level outcomes could be attributed to variation in one's access to diverse resources. The second was to assess whether these individual-level outcomes were correlated with variation in network cohesion. The third and final goal of this chapter was to examine whether there was a moderating relationship between resource diversity and network density, such that the effect of resource diversity is moderated by the level of cohesion within the network. With respect to the first goal, only use of prosocial coping was significantly associated with increased levels of resource diversity ($p < 0.05$). None of the other individual-level outcomes proved meaningful at the bivariate level, though all relationships were in the expected direction.

The third goal was to examine the potential for a moderating relationship between resource diversity and network density. A series of ordered logistic and ordinary least square regressions were run featuring interactions between these two variables. Predicted probabilities were then used to get a clearer picture of the relationship. Overall, these plots showed inconsistent support for the hypothesized relationship between resource diversity and resource density. For example, those with an already high resource diversity score of seven, and less so at the mean, are predicted to increase in their probability of scoring "excellent" on their mental and physical health as they increase in their network cohesion. However, there is no observed relationship for the physical health outcome.

The findings related to stress are more curious. There appears to be no real relationship between the higher resource diversity scores on this variable but for those with diversity scores of zero, their stress appears to go up as their network cohesion increases. The findings for flourishing, prosocial coping, and maladaptive coping are clearer: individuals with the lowest resource diversity scores appear to benefit most from enhanced network cohesion. This is contrary to expectation but nonetheless important and suggests a potentially different type of moderating relationship between these two variables. The small sample size and little variation in this sample likely increased the confidence intervals in these estimates and made it challenging to assess the relationship more concretely. A full discussion of these findings and how they fit within the broader reentry and social support literature will be included in the following discussion chapter.

CHAPTER 7
DISCUSSION

The value of social relationships, and the social support exchanged through them, for human well-being and success across the life-course cannot be understated. Indeed, a large body of research within psychological, sociological, and criminological traditions provide lofty evidence for its value (see Holt-Lunstad et al., 2010; House et al., 1988; Umberson & Karas Montez, 2010). It is no surprise, then, that increased social support has been linked to increased positive outcomes within the context of prison reentry solutions (Andrews et al., 2006; Chouhy et al., 2020; Martinez & Abrams, 2013; Pettus-Davis et al., 2014; Taylor, 2016). Yet, social support had yet to meet its promise of becoming an organizing concept within the reentry and desistance literature, as well as criminology more broadly because of the inconsistency in its measurement and lack of understanding of its relational structure (Chouhy et al., 2020; Cullen, 1994). This dissertation sought to move social support closer to meeting its full potential by taking a resource-based approach to social support that overcomes some methodological shortcomings of past work and exploring the alter-alter structure of social support.

This dissertation is the first study to take a resource-based approach to social support in the reentry context in a study of incarcerated men. This resource-based approach expanded and improved upon past methodological limitations of traditional survey methods of social support and began to incorporate theoretically and empirically grounded, and importantly reproducible, measures of social support during reentry. This dissertation also sought to explore the relational or alter-alter network structure of

incarcerated men preparing for reentry. This dissertation then combined these two features together to examine whether they correlate independently, and in tandem with common correlates of increased social support.

Resource Availability and Resource Diversity

The resource availability and resource diversity chapter (Chapter 4) began by summarizing the resources individuals anticipate being available to them as they return home. This first chapter sought to provide novel, albeit early, descriptions of the specific reentry-related resources individuals may have access to and from whom. Research documents the value of social support for individuals returning home from prison, but typically cannot specify what types of assistance they have due to the nature of past operationalizations of social support (Andrews et al., 2006; Martinez & Abrams, 2013; Pettus-Davis et al., 2014; Taylor, 2016). This is because the findings from past research can only adopt an "increase more social support" policy approach. This approach is problematic because it lacks the necessary details for efficient and effective policy and program implementation.

Summary of Key Findings and Contributions

The findings from this chapter demonstrated that people returning home from prison are more likely to have some types of reentry-related resources than others. One of the more striking findings and contributions from this chapter is that individuals in this sample had a challenging time anticipating who would provide them with transportation upon their release. Only 67.47% of the sample reported having someone or some agency

to count on to help them with transportation. This means that 27 men in the sample anticipated no assistance with transportation upon their return home.

This lack of access to transportation is problematic within the context of prison reentry. Individuals without informal contexts to rely on for transportation may then have to rely on public transportation. From a routine activity standpoint, transit stops and public transportation at large can be conduits for criminal activity (Brantingham & Brantingham, 1995; Kooi, 2013). Late evenings and early mornings are particularly problematic for crime near transit stations, and past research has shown that older individuals and those of lower income are at a heightened risk of victimization (Block & Davis, 1996). The need for formerly incarcerated individuals to rely on public transportation may expose an already vulnerable group to risky situations and potential victimizations.

Irrespective of the routine activity standpoint, public transportation is often unreliable. This further complicates an individual's ability check in with their parole or probation office, in addition to being able to go to work, school, or their treatment and rehabilitative classes (Nordberg et al., 2021; Ward & Merlo, 2016). Public transportation also comes at a cost, further complicating this group's often financial precarity given their exclusion from higher paying jobs and lack of wealth more generally.

The stakes for making it to their scheduled parole or probation check in are paramount not making it to a scheduled appointment puts individuals at risk for receiving a violation and even returning to prison. Indeed, studies have shown the importance of

transportation in attenuating the relationship between criminogenic needs and re-arrest, reconviction, and supervision violation (Bohmert, 2014).

Encouragingly, however, large portions of the sample did report they had assistance across other dimensions—namely, 86.75% of the sample (n = 71) reported having at least one person or organization they could count on for reentry advice, 85.54% (n = 71) had someone they could "vent" to, and 83.13% (n = 69) had someone who would let them stay at their place for a period of time. These relatively high numbers do not overshadow the fact that individuals in this sample still reported no individuals or organizations they could count on for assistance. Aside from transportation, anywhere from 11 to 19 participants nominated no individual or agency who could help them with one of the named resources. One individual in the sample reported no assistance on any of the resource dimensions.

This chapter also documented *how much* assistance individuals anticipate having. Specifically, since individuals were asked to nominate any number of people who could help them with a particular resource, we can examine how many people or organizations they anticipate receiving it from. This indicates a type of depth of resources, wherein having an abundance of contacts for a particular resource may be beneficial as you can count on more individuals. Men in the sample reported the greatest number of contacts with respect to housing assistance, with an average of 2.46 (SD = 1.75) contacts listed for those who anticipated having this resource at all. This was followed closely by having someone to "vent" to with an average of 2.34 (SD = 1.81) contacts listed and having someone to give advice about reentry with an average of 2.08 (SD = 1.56).

This chapter also laid out *who* is providing these resources. Participants in the sample reported that siblings provided the greatest proportion of resources, followed closely by parents. The assistance expected from children, significant others or spouses, and other types of kin was relatively low. However, much of this seemed to be resource specific. Agencies and organizations were overwhelmingly nominated as potential providers of job resources and basic items as compared to the other alter categories. This expands traditional understandings of resource provision to extend to non-familial and personal contacts. Indeed, researchers are beginning to examine the benefits of social support as provided by parole officers and other state agents (Bares & Mowen, 2020; Hughes & ten Bensel, 2021).

Chapter 4 next sought out to create a measure of resource diversity in these data. This measure was created by simply taking the count of each unique resource available to them in their support network. The average basic resource diversity score for the sample was 5.59 (*SD* = 1.52). This means that participants anticipated having over five unique reentry-related sources on average (see Table 8 and Figure 5). This measure of resource diversity was also found to be correlated with network size, wherein those with more network members also report more resource diversity. Next, this chapter examined what, if any, ego and alter-level characteristics were correlated with the created measure of resource diversity. Only ego prior to incarceration employment status and their average frequency of contact among all of their alters emerged as statistically significant. The lack of meaningful correlation among ego's demographic characteristics is surprising given the sociological research on access to resources being differently distributed over

groups (Lin, 2000; Lin et al., 2001; Smith, 2000, 2003). This is consistent with findings the findings from Goodson (2019). She found that only educational strengths (e.g., graduating from high school, attending college) was meaningfully associated with access to resources among a sample of women on community supervision. The correlates of resource diversity, then, remain open to exploration in future studies.

Network Cohesion and its Correlates

The network cohesion chapter (Chapter 5) took an important departure from the previous empirical chapter because it focused on the alter-alter structure of social support networks. This chapter moved beyond individual-level factors and extended it to the larger social structure in which the individual existed (Wellman & Frank, 2001). Stated differently, this relational structure approach acknowledges that individuals are, most often, not isolated but instead exist within a larger social structure with its own features that are worthy of scholarly study. However, these relational structures are not often examined in the reentry context despite its importance in the wider sociological literature. What is more, we know very little about the factors related to network cohesion for justice involved-individuals (see Goodson, 2019; Goodson-Miller, 2022). This absence of knowledge was troubling because understanding the correlates of network cohesion is a critical first step in better understanding how this cohesion may later contribute to positive outcomes.

Summary of Key Findings and Contributions

One of the key findings and contributions from this chapter was that individuals could score the same on the indicator of network density but could still have significantly different looking networks and vary significantly on other network characteristics. For example, this chapter provided a series of selected networks within the data to demonstrate that two people could both have a network density score of one, but Person D's network could comprise of five people and Person F's network could comprise of only two. The key finding here is that individuals can vary significantly in their alter-alter structure. More broadly, the findings from this first section of Chapter 5 demonstrated that there was quite a bit of variation in the network cohesion variable. Participants had 41% of the potential ties in their network observed. This finding is consistent with prior findings on a sample of justice involved women (Goodson, 2019; see also Zwecker et al., 2018). Nine participants (12%) in this sample still reported no connections among their alters and four participants (5.33%) reported that all their alters were connected.

This chapter also sought to examine some potential correlates of network density and included variables at the ego-level and the network-level. Consistent with expectation, the proportion of kin within the network was significantly related to network density (Goodson, 2019; Van Duijn et al., 1999; Wellman, 1992). Though outside the scope of the current study, this finding may have important implications for individual success down the line. This is because closely knit kinship relations are often better able to mobilize other individuals outside the family (e.g., friends, neighbors, agencies) for

assistance, especially in times of need such as during illness or emergency (Coe et al., 1984; Soldo et al., 1986).

Both the age of the participant, and the average age of their alters, were negatively correlated with network density. Such that, increases in age for either were related to decreases in network density. Individual social support networks are expected to change and adapt as individuals age (Connidis et al., 1996; Fischer & Beresford, 2015; Li et al., 2011; Stoller & Pugliesi, 1988; Thompson & Heller, 1990). Indeed, the average network density of this sample of incarcerated men aged is significantly lower than in a prior study with a sample of justice involved youth (Zwecker et al., 2018). This finding related to the age of the participant, however, is noteworthy because older individuals are especially vulnerable to mental health related crises as a result of their shrinking support network (Pilisuk & Minkler, 1980). No other variables included in this particular study were correlated with network density. This finding, like that of the fourth chapter, is interesting in its own right and suggests that the processes of network density are more complex than what was captured in this dissertation.

Resource Diversity, Network Density, and Individual-Level Outcomes

As both the findings from both Chapter 4 and Chapter 5 demonstrated, there are several key areas of variation in resource accessibility and relational structure that are missed when traditional and non-networked measures are used. The third and final empirical chapter of this dissertation (Chapter 6) examined the potential for a moderating relationship between resource diversity, network density, and individual-level outcomes. Though the relationship between positive reentry outcomes and increased social support

is well established (Boman IV & Mowen, 2017; Fahmy & Wallace, 2019; Mowen et al., 2019; Skeem et al., 2009; Wallace et al., 2016) it had yet to be established whether individuals who score higher in a resource-specific measure of social support (i.e., resource diversity) fare better than those with a lower score and whether this relationship was moderated by the amount of cohesion within their network.

Summary of Key Findings and Contributions

The initial findings from this chapter did not provide support for a meaningful relationship between either resource diversity or network density and the individual outcomes measured in this study. Only resource diversity and the use of prosocial coping were significantly related at the bivariate level. Network density was related to none of the measured dependent variables.

A more complicated story emerges when these two items are put in as interaction terms. The most novel finding from this chapter is that the relationship between these two variables is inconsistent across outcomes. For example, as individuals with a resource diversity score of seven, and to a lesser degree at the mean, increased in their network cohesion, so does their predicted probability of reporting “excellent” mental and emotional health. A different story emerges for the stress variable. Increased network cohesion was associated with an increased predicted probability of stress for those with the minimum resource diversity score of zero. However, when we turn to flourishing and the use of prosocial and maladaptive coping, those with the lowest resource diversity scores appear to benefit the most from more closely knit networks. These findings are

unexpected, as I anticipated a type of amplification effect for those with already high network diversity. It appears there is a sort of buffering effect, however, of closely knit networks on a lack of resources for certain outcomes. There is much inconsistency in these findings, however, as increased network cohesion was related to enhanced stress among those with lower resource diversity scores. This is unexpected as I did not anticipate any sort of negative effects of network density.

This finding present the need to further examine the potential for negative effects of certain structural characteristics on individual-level outcomes in justice involved populations (see Song et al., 2021). This work has traditionally looked at how densely knit and cohesive negative or delinquent contacts can facilitate further deviant or criminal involvement (i.e., gangs) (Haynie, 2001, 2002; McGloin & Piquero, 2010) but this work could be expanded to how positive and social support-related contacts can facilitate poor outcomes themselves. Indeed, scholars have discussed how demanding ties, unsolicited support, asymmetric resource exchanges (i.e., ego not being able to reciprocate support unto an alter) can have negative impacts on individuals such as increased depression, poorly-rated self-health, and stress (Birditt & Antonucci, 2008; Nahum-Shani et al., 2011; Uchino et al., 2015). This findings from this final empirical chapter elucidate the need to look at both the potential positive and negative effects of social support, its content, and its structural forms for individuals returning home.

Limitations and Directions for Future Research

All empirical studies have limitations, and this dissertation is no exception. These limitations can be organized into three overarching themes: selection bias and sample,

temporal ordering, and minimal variation. Next, I will discuss how some of these limitations can be transformed into new avenue for this line of research.

Selection Bias and Sample

The participants in this dissertation come from one prison unit at a particular point in time. This prison yard from which participants were sampled is programming heavy and although individuals are required to be of medium-to-high risk to recidivate to be eligible, individuals must still select into the program. This brings in certain selection effects to the sample in addition to selection effects for participation in the study. That being said, prison research is notoriously challenging and studies of this kind will never fully get around issues related to selection and a lack of generalizability in their samples (Whichard et al., 2020).

Another limitation of this dissertation is that the sample included only men. Women currently represent one of the largest growing correctional populations though until recently, have only represented a fraction of empirical studies. This is problematic because there is good reason to believe that their experiences with social support differ from that of their male counterparts (Holtfreter et al., 2004; Pettus-Davis et al., 2018; Reisig et al., 2002). In studies with the general population, men and women both have differential access and differential mobilization strategies of resources (Burt, 1998; McDonald, 2011; Smith, 2000). In turn, assessing the gendered pathways in which social support operates is imperative to moving this line of research forward.

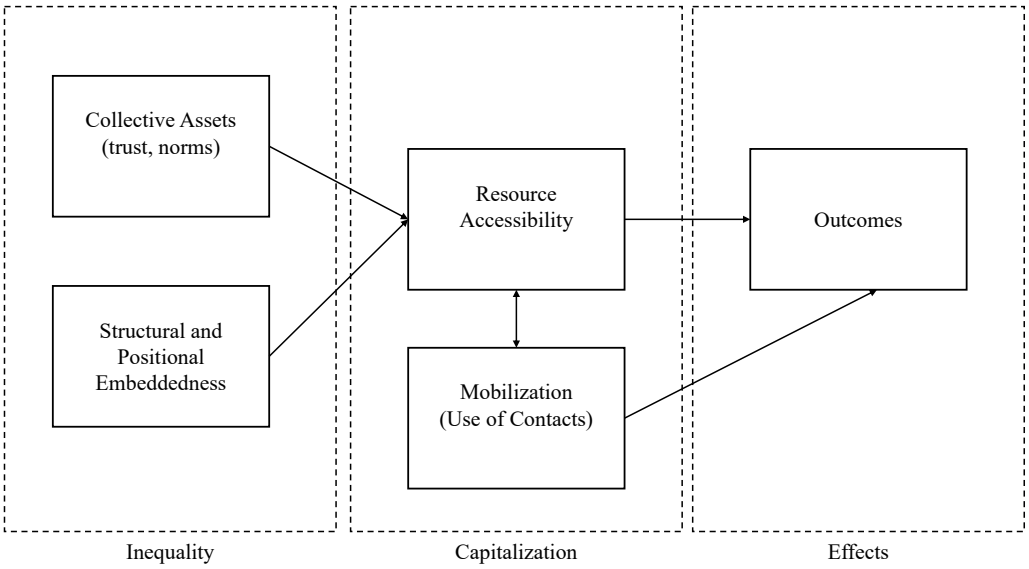
Temporal Ordering

The cross-sectional nature of the data used in this dissertation is also a limitation. To this end, no causal arguments can be made about the relationships assessed in this dissertation. Though 1-month follow-up interviews were planned for this study, these data are still being collected at the time of writing. The completion of follow-up interviews with this group has proved challenging throughout the study period. Participants completed a "contact card" that collected information on the participant's phone number, release address, and e-mail address where they can be contacted after release (Fahmy et al., 2019; McCuller et al., 2002). They were also asked to provide the contact information of up to five collateral contacts who can be called in the event the participant cannot be reached. However, many phone numbers were disconnected or did not have a voicemail inbox set up. There were also no financial incentives for individuals to participate. Past research has demonstrated that financial incentives significantly improve respondent retention rates for hard-to-reach populations in longitudinal research (Bolanos et al., 2012; Lindquist & Fahrney, 2011; McKenzie et al., 1999).

Because of these challenges, I am only able to presently examine a small portion of the causal model outlined by Lin (2001). Recall that Lin's model includes three steps: inequality, capitalization, and effects (see Figure 19). This dissertation was only able to appropriately measure resource accessibility within the middle capitalization stage, which leaves several steps in the causal model unmeasured. Moreover, what was measured in this dissertation only represent the men's anticipations or perceptions of support within

their network. It does not assess their mobilization or use of such resources or how they contribute to outcomes later down the road (Chouhy, 2019; Chouhy et al., 2020).

Figure 19
Lin's Model of Social Capital



A more complete measure of the causal model outlined by Lin is needed. This could include measuring individual's anticipations for resource accessibility and their later strategies and successes with resource mobilization. This would be particularly valuable to assess across demographic characteristics, as certain groups often fare better in their mobilization of contacts than others (Smith, 2005, 2018). Future research should also address the first section of inequality in Lin's causal model. For instance, the lack of association between resource diversity and individual demographic characteristics is surprising given the widespread acknowledgement that certain groups sit in disadvantaged resource positions (Lin, 2000; Lin et al., 2001; Smith, 2000, 2003). This lack of variation may have been because certain groups are overrepresented in

incarcerated populations (e.g., racial and ethnic minorities, those with minimal education, those with low socioeconomic standing) and thus there was little within-group variation in this sample.

Minimal Variation

Related to the point above, there was little variation in many of the variables measured in this dissertation. This coupled with the small sample size made it challenging to reliably estimate results. For example, there were so few cases in the lower end of the resource diversity variable distribution. Only ten people (12.05%) in the sample had a resource diversity score of three or less. Relatedly, there were few low scores on the lower end of many of the individual-level outcomes. Physical health, mental and emotional health, flourishing, and the use of prosocial coping were all relatively high for the entire sample, with means of 3.08, 3.12, 4.02, and 3.15, respectively. Levels of stress and use of maladaptive coping were also relatively low for the entire sample, with means of 2.21 and 1.68, respectively. This relates back to the selection issues related to the sample, in that individuals in this study may be different on important variables than those from other units.

Directions for Future Research

These three limitations help us better understand some of the null and lack of statistically significant findings in this dissertation, as well as guide future directions for research. For one, the lack of significant findings across the three empirical chapters is likely due to the small sample size and the sample from which participants were drawn. Recall that the overall variation on the variables of interest across participants was rather

small, as participants anticipated just over five reentry related resources on average. As previously noted, the sample was drawn from one particular prison unit that is heavily focused on programming and reentry preparedness. It is likely that these men are qualitatively different than those from other prison yard—these individuals are likely more motivated for release and reentry planning, as well as inclined towards programming in general, with better health, well-being and coping strategies from the outset. Additionally, because this was largely an employment preparedness yard, those who already have jobs set up on the outside or who have robust support systems from friends and family, may not have chosen to participate in the program. This significantly limits the types of people who could have been sampled for this study and likely contributed to the lack of variation within the sample.

The limitations of this dissertation provide a potential roadmap for researchers who aim to adopt this approach this approach in the future. First, it would be fruitful for future research to explore the social support using a network lens on different custody yards and different prisons, particularly those residing in higher custody yards. The indexes that assign custody levels are typically composites of an individual's history, such as offense, background characteristics, and affiliation or membership with a gang, among other factor (Shermer et al., 2013; Young et al., 2006). Those with a higher composite of these risk factors are typically then assigned to higher custody yards. Sampling individuals from these higher custody yards would likely produce more variation the variables of interest given these characteristics. Moreover, the experience of living in a higher custody yard itself are different than lower custody yards . Individuals

have less movement and freedom, which may limit access and ability to anticipate social support, irrespective of any background characteristics (Camp & Gaes, 2005; Santos, 2007).

Second, future research could examine two groups of people—one of which received some type of incarceration and one who received some type of alternative or community supervision. These individuals could be matched on all important characteristics with respect to demographics and crime type. From here, a regression discontinuity analysis could (see Mitchell et al., 2017). The goal of this line of work would be to examine whether the experience of incarceration produces any changes in one's social support network when examined next to a comparable group of individuals. This would be important as this research could more closely isolate whether the experience of incapacitation indeed severs and inhibits social supports or whether both these groups simply have pre-existing deficits in social support. This would be important moving forward, especially given the relatively high appraisals of support in this sample.

Policy Implications

Limitations notwithstanding, the findings of this dissertation still have important implications for correctional policy and practice. I begin by first discussing the overarching novel policy implications from the approach that this dissertation has taken to the problem of reentry and social support. This will be followed by a discussion on how this approach fits into the findings of this dissertation.

The Value of a Resource Based Approach

The approach undertaken in this dissertation presents a new way to look at an old problem (see Papachristos, 2014). This approach of focusing on the resources embedded in structural locations is valuable from an empirical and research standpoint for the reasons mentioned throughout this dissertation. However, the value of this approach also extends to the policy and practice realm. Specifically, a resource and networked based approach is valuable because of its three-part conceptualization (see Figure 16 above). This model created by Lin (2001) provides guidance on where specific interventions can be created. This middle section on capitalization holds some of the most promise for intervention.

Recall that capitalization refers to both resource accessibility (i.e., the resources available in one's network as influenced by larger social structures) and mobilization (i.e., one's use or activation of the accessible resources) (Lin, 2000, 2001). The resources available to one in their social structure is partially dependent on how they view it. One's ability to identify and recognize resources that they can call upon in times of need may be critical to their success (Bhagavatula et al., 2010). This is consistent with work done on entrepreneurship, wherein individuals and organizations who can properly identify resources that may be beneficial to them perform better than those who cannot identify such resources (Cohen & Levinthal, 1990; Marvel et al., 2016; Zimmer & Aldrich, 1987). This is irrespective of the fact that they may in actuality be available to both parties had one had the ability to view it as such. One of the most widely cited quotes in sociology

summarizes this problem well: “if men define their situations as real, they are real in their consequences” (see also Merton, 1948; Smith, 1995; Thomas, 1938, p. 527).

Interventions could be crafted to teach individuals to effectively identify reentry related resources available to them. This has proven successful in other contexts, wherein consulting firms advise businesses on how to identify opportunities (Haynie et al., 2009; Ucbasaran et al., 2008). Formerly incarcerated individuals could be given the skills and practice to appraise the resources within the community. However, identification of accessible resource is only one part of the capitalization stage. Successful interventions must also include enhancement of the skills related to resource mobilization and agency. Some individuals are better at mobilizing resources than others (Lin, 2000, 2001). A holistic intervention that is informed by this approach would also include teaching currently and formerly incarcerated individuals how to effectively mobilize and call upon resources during times of need.

The challenge of this policy recommendation is identifying who will be providing such an intervention during reentry. Reentry is not a single event that simply includes the act of returning home. Rather, reentry is a continuous process that fundamentally includes an individual’s pre-prison, during prison, and post-prison life (Visher & Travis, 2003). In turn, the intervention process described above should begin the moment one enters prison and continue well into their time into the community. Parole holds the potential for this type of intervention. However, parole’s history of facilitating success in the reentry process is complicated. While some earlier goals of parole were aimed a facilitating

rehabilitation—irrespective of how successful they actually were—the function of parole later shifted to enhanced coercion and control (Petersilia, 2003; Simon, 2020).

Despite its complicated history and faults, parole's functions could be organized around the idea 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" (Cullen, 1994, p. 527). A small but growing line of social support literature argues that parole officers can be important catalysts for change and their support can be influential in facilitating successful reentry (Bares & Mowen, 2020; Blasko et al., 2015; Chamberlain et al., 2018; Vidal et al., 2015). In this vision, parole officers become coaches for their charges by getting to know them and by understanding "what motivates them... their skills, and... their developmental stage" (Lovins et al., 2018, p. 14; Wright & Cesar, 2013) to more completely understand and support them. One of the challenges with this parole-centered approach is that not all individuals are paroled after their release. Many are instead released with probation or without any community supervision at all. Parole and other community supervision agents are also already tasked with many responsibilities, and it is unrealistic to continue to expand their job requirements (Mack & Rhineberger-Dunn, 2021).

Insights from the Maine Prisoner Reentry Network

An additional organization could be created that helps facilitate these interventions during reentry and begin while individuals are still incarcerated and continue well into their release. The Maine Prisoner Reentry Network (MPRN) is an

example of what such an institution could look like (Block, 2022). In the midst of the pandemic, MPRN began facilitating virtual meetings with soon to be released individuals to discuss their reentry. On these virtual calls were "potential employers, college access counselors, and people who operate recovery residences...family members of the releasing individual [were] also sometimes present at the meetings" (Block, 2022, p. 28) to discuss the reentering citizen's goals and needs. Participants interviewed in the evaluation of this program responded largely positively, particularly because of their new knowledge on potential resources and resource providers. As one respondent put it:

> "There's a lot of things that are available to individuals that you wouldn't normally know… I felt like I had the information there for me so I suppose it would've been a lot worse if I didn't have anything, to have come out blind" (p. 48).

MPRN presents a unique blueprint for what an organization centered around social support during reentry could look like. The meetings with soon to be released individuals could be expanded to include additional lessons related to honing their resource identification and mobilization skills as described above.

Programs such as MPRN could also attend to some of the more specific policy and practice recommendations guided by the findings of this dissertation. For example, this dissertation showed that certain reentry-related resources are more accessible than others. Transportation was particularly problematic for individuals to anticipate in this study. Holding such meetings as individuals prepare for reentry would help individuals

identify what resources they are missing in their support network and what service providers and other agents can step in to supply this assistance.

The findings from this dissertation also showed that some types of alters bear the brunt of the social support provision as compared to others. Siblings, and to a lesser extent parents, were widely cited as being the anticipated support providers over any other type of alter. This can be problematic if one or few individuals are expected to bear the weight of resource provision, as it can lead to burnout and negative feelings (Rook, 1987; Van Tilburg et al., 1991). Family members of formerly incarcerated loved ones have also reported experiencing hardship and stress in response to their resource provision, especially as it related to financial support (Naser & Visher, 2006). This has been linked to the instability of social support provision by family members over time (Grieb et al., 2014; Pettus-Davis et al., 2017). To this end, the discussions held with the individual preparing for reentry can also help identify the additional community supports that are needed by the family if they are to maintain their own support throughout their loved one's reentry. Solutions would then focus on creating a release plan that diversifies the provision of resources across one's social support network to additional friends, family, and community partners or agents to "lessen the load" and increase the longevity of their support networks over time and ultimately improve their opportunities for success.

In light of these recommendations, is it important to acknowledge that enhancing skills at the individual-level, while beneficial, does not supersede larger structural considerations. Indeed, the first stage of Lin's model is inequality, which refers to the

varying access to resources between groups based on larger historical and institutional structures (Lin, 2000, 2001). People of color, women, and those from lower socioeconomic standings will likely differ in the resources available to them due to historical and contemporary discrimination (Cleaver, 2005; Lin, 2000; McDonald, 2011). Moreover, some groups may experience differential challenges in how their mobilization of resources are received by others (Burt, 1997a, 1998; Smith, 2005, 2018). For these reasons, it is unlikely that the program described above would not meet its full potential without changes at the structural level. In the end, it is important to acknowledge such structural conditions that may limit the ability of organizations to effectively enact the policies and practices outlined above.

Conclusion

Social support explicitly focuses on "supportive actions made by humans" (Chouhy 2019, p. 214), and in turn the work produced under this paradigm will inherently seek to make communities and broader institutions more supportive rather than coercive (Cullen, 1994). This focus has the potential of reaffirming the rehabilitative ideal and directing us to policies and practices that seek to provide safe and equitable solutions for formerly incarcerated individuals and ultimately herald the value of positive social relations. By focusing on solutions that strengthen social support networks for formerly incarcerated individuals, as well as their families and communities, this dissertation aimed to take the first step in exploring the ego-centric support networks of men returning home from prison.

This dissertation demonstrated that the social relationships among justice-involved populations are complex, and much of its correlates and consequences remain to be explored under this networked perspective. Taken altogether, this dissertation and its approach contributed to the larger body of reentry literature that aims to lend support for policies that foster opportunities for successful reentry by focusing on the value of social relationships.

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APPENDIX A

IN-PRISON INTERVIEW GUIDE

SECTION ONE – OPENING QUALITATIVE

I'd like to begin by asking you a few questions about your upcoming reentry and your time since you've been incarcerated.

1. What are you looking forward to most about your upcoming release?
2. What expectations do you have for yourself and your reentry after your release?
3. Who do you think you might have to do some rebuilding with, relationship-wise, after your release?
4. How would you describe your personal and social relationships since you've been incarcerated?

SECTION TWO – ANTICIPATED SOCIAL SUPPORT

Here, I'd like to ask you some questions about people that you expect will be in your life to help you with various things ***upon your release.*** *You can list the same people for multiple questions and these people can be the same as those you listed for the questions above. Please list no more than six people for each question.*

1. Who are the people who will help you with transportation, such as rides to a job interview or parole office?

2. Who are the people who will provide you with information about jobs or places that are hiring or other opportunities?

3. Who are the people who will help you get basic items like clothing, food, and groceries?

4. Who are the people who will loan you money if asked?

5. Who are the people who will let you stay at their place for a period of time if you asked?

6. Who are the people who will give you advice you might need about navigating reentry?

7. Who are the people who will let you "vent" about any frustration or anxiety you might have?

8. Who are the people you expect to spend the most time with?

9. Is there anyone else whom you are particularly close with that you did not mention in any of the above questions?

SECTION THREE – NAME INTERPRETER

Next, I'd like to ask you some questions about the individuals you previously named. I'm going to ask you about each person individually, but I won't ask you to repeat the information for people you have listed multiple times.

10. What type of relationship do you and this person have (e.g., parent, friend, neighbor)?

    Spouse Significant other Parent Sibling Friend

    Cousin Aunt/Uncle Grandparent Child

    Other: _____

11. What is this person's race or ethnicity?

    White or Caucasian Black or African American Hispanic or Latino/a

    Asian or Pacific Islander Native American or Alaskan Native

    Other: _____

    Don't Know

12. What is this person's gender?

    Man Woman Prefer not to say

13. How old are they?

14. How long have you known this person?

15. How frequently have you had contact (e.g., phone, visits, mail, and/or email) with this person since your incarceration?

    None Every few months Every month Every week Every day

16. What methods do you use to talk to this person (e.g., phone, visits, mail, and/or email)?

Phone Mail Visits Email Other: _____

17. How close are you to this person?

Not at all close A little close Moderately close Very close Extremely close

18. What is this person's highest level of education?

8th grade or less 10th grade or less

High school diploma or GED Associate's Degree Technical School/Vocational Some college Bachelor's Degree

Master's Degree or Higher Don't Know

Other: _____

19. Is this person currently working?

No Yes Don't Know

20. If yes, what occupation do they have?

21. How likely is it that this person will help you stay straight after your release?

Very unlikely Somewhat unlikely Somewhat likely Very likely

SECTION FOUR – NAME INTERRELATER

In this section, I'd like to ask you about which individuals you named know each other. We can do this by linking their circles together with a line.

[Network Canvas allows the interviewer and participant to view all the nominated individuals on one screen and click the nodes that know each other].

SECTION FIVE – NETWORK REVIEW

Here, I'd like to show you a visualization of the network we created based on our conversation.

22. Looking at this graphic, do you see anything wrong with it? Are there any people missing that we should add?
23. How does seeing your network impact your feelings about reentry?

[Network Canvas allows the interviewer and participant to view the entire graphic of the individuals nominated and go back and add people if needed]

SECTION SIX – HEALTH

We're going to switch gears here for a bit and I'm going to ask you more about yourself and how you are doing. I'd like to begin by first asking you about your physical and mental health.

24. Would you say that, in general, your physical health is poor, fair, good or excellent?

    Poor Fair Good Excellent

25. Would you say that, in general, your mental and emotional health is poor, fair, good or excellent?

    Poor Fair Good Excellent

SECTION SEVEN – STRESS

*This section will ask you about any stress that you may or may not have felt **since your incarceration.** Please indicate how frequently you may or may not have felt these things in response to the statements below.*

26. How often have you felt that you were unable to control the important things in your life?

None of the time Sometimes Most of the time All of the time

27. How often have you felt confident about your ability to handle your personal problems?

None of the time Sometimes Most of the time All of the time

28. How often have you felt things were going your way?

None of the time Sometimes Most of the time All of the time

29. How often have you felt difficulties were piling up so high you could not overcome them?

None of the time Sometimes Most of the time All of the time

SECTION EIGHT – SELF-CONTORL

Here, I'd like to read you a series of statements about how some people may feel and think and ask you how well you feel each statement applies to you.

30. I often act in the spur of the moment without stopping to think.

Strongly disagree Disagree Neither agree nor disagree Agree

Strongly agree

31. I often do whatever brings me pleasure here and now, even at the cost of some distant goal.

Strongly disagree Disagree Neither agree nor disagree Agree

Strongly agree

32. I frequently try to avoid projects that I know will be difficult.

Strongly disagree Disagree Neither agree nor disagree Agree

Strongly agree

33. I try to look out for myself first, even if it means making things difficult for other people.

Strongly disagree Disagree Neither agree nor disagree Agree

Strongly agree

34. I lose my temper pretty easily.

Strongly disagree Disagree Neither agree nor disagree Agree

Strongly agree

35. When I'm really angry, other people better stay away from me.

Strongly disagree Disagree Neither agree nor disagree Agree

Strongly agree

SECTION NINE – FLOURISHING

In this section, I'd like to read you a few statements about how people may feel about themselves and their relationships with other people. Please indicate how much you feel that the statements below apply to you.

36. People respect me.

Strongly disagree Disagree Neither agree nor disagree Agree

Strongly agree

37. My social relationships are supportive and rewarding.

Strongly disagree Disagree Neither agree nor disagree Agree

Strongly agree

38. I am engaged and interested in my daily activities.

Strongly disagree Disagree Neither agree nor disagree Agree

Strongly agree

39. I actively contribute to the happiness and wellbeing of others.

Strongly disagree Disagree Neither agree nor disagree Agree

Strongly agree

40. I am competent and capable in the activities that are important to me.

Strongly disagree Disagree Neither agree nor disagree Agree

Strongly agree

41. I am a good person and live a good life.

Strongly disagree Disagree Neither agree nor disagree Agree

Strongly agree

42. I lead a purposeful and meaningful life.

Strongly disagree Disagree Neither agree nor disagree Agree

Strongly agree

SECTION TEN – COPING

*People respond to difficult or **stressful events** in many ways. This section will ask you to answer what you generally do and feel when you experience stressful events. Of course, different events bring out somewhat different responses, but think about what you usually do when you are under a lot of stress.*

43. I've been turning to work or other activities to take my mind off things.

Not at all A little bit A medium amount A lot

44. I've been concentrating my efforts on doing something about the situation I'm in.

Not at all A little bit A medium amount A lot

45. I've been saying to myself "this isn't real".

Not at all A little bit A medium amount A lot

46. I've been using alcohol or other drugs to make myself feel better.

Not at all A little bit A medium amount A lot

47. I've been getting emotional support from others.

Not at all A little bit A medium amount A lot

48. I've been giving up trying to deal with it.

Not at all A little bit A medium amount A lot

49. I've been taking action to try to make the situation better.

Not at all A little bit A medium amount A lot

50. I've been refusing to believe that it has happened.

Not at all A little bit A medium amount A lot

51. I've been saying things to let my unpleasant feelings escape.

Not at all A little bit A medium amount A lot

52. I've been getting help and advice from other people.

Not at all A little bit A medium amount A lot

53. I've been using alcohol or other drugs to help me get through it.

Not at all A little bit A medium amount A lot

54. I've been trying to see it in a different light, to make it seem more positive.

Not at all A little bit A medium amount A lot

55. I've been criticizing myself.

Not at all A little bit A medium amount A lot

56. I've been trying to come up with a strategy about what to do.

Not at all A little bit A medium amount A lot

57. I've been getting comfort and understanding from someone.

Not at all A little bit A medium amount A lot

58. I've been giving up the attempt to cope.

Not at all A little bit A medium amount A lot

59. I've been looking for something good in what is happening.

Not at all A little bit A medium amount A lot

60. I've been making jokes about it.

Not at all A little bit A medium amount A lot

61. I've been doing something to think about it less, such as watching TV, reading, daydreaming, sleeping, or exercising.

Not at all A little bit A medium amount A lot

62. I've been accepting the reality of the fact that it has happened.

Not at all A little bit A medium amount A lot

63. I've been expressing my negative feelings.

Not at all A little bit A medium amount A lot

64. I've been trying to find comfort in my religion or spiritual beliefs.

Not at all A little bit A medium amount A lot

65. I've been trying to get advice or help from other people about what to do.

Not at all A little bit A medium amount A lot

66. I've been learning to live with it.

Not at all A little bit A medium amount A lot

67. I've been thinking hard about what steps to take.

Not at all A little bit A medium amount A lot

68. I've been blaming myself for things that happened.

Not at all A little bit A medium amount A lot

69. I've been praying or meditating.

Not at all A little bit A medium amount A lot

70. I've been making fun of the situation.

Not at all A little bit A medium amount A lot

SECTION ELEVEN – DEMOGRAPHICS

I'd like to begin to wrap up our interview by asking you some questions about yourself.

71. What is your race or ethnicity?

White or Caucasian Black or African American Hispanic or Latino/a

Asian or Pacific Islander Native American or Alaskan Native

Other: _____

Don't Know

72. How old are you?

73. What is your relationship status?

Single Married In a relationship Divorced Widowed Don't Know

Other: _____

74. Do you have any children?

No Yes Don't Know

75. If yes, how many children do you have?

76. How many of these children are under 18?

77. Prior to your incarceration, were you working?

No Yes Don't Know

78. If yes, where were you working/what occupation did you have?

79. What is your highest level of education?

8th grade or less 10th grade or less

High school diploma or GED Associate's Degree Technical

School/Vocational Some college Bachelor's

Degree

Master's Degree or Higher Don't Know

Other: _____

80. Is there anything else you'd like me to know about yourself or reentry?

81. Is there anything you wish I had asked that I didn't?

82. And what is the answer to this question?

SECTION TWELVE – FOLLOW-UP INTERVIEW

I have a few final questions for you today. I'm conducting follow-up interviews with people after they have been released. If you would like to be contacted for a future interview, please provide some information on how best I can reach you.

83. What is the best phone number to reach you?

84. What is the best email address to reach you?

85. What is the best mailing address to reach you?

In case you can't be reached at any of the contacts you just listed, I'm going to ask you to provide the same information for up to five collateral contacts that I can reach out to if I can't get ahold of you.

86. What is your collateral contact's name?

87. What is their relationship to you?

88. What is the best phone number to reach them?

89. What is the best email address to reach them?

90. What is the best mailing address to reach them?

APPENDIX B

INSTITUTIONAL REVIEW BOARD APPROVAL

APPROVAL: MODIFICATION

Jacob Young
WATTS: Criminology and Criminal Justice, School of -
Jacob.Young.1@asu.edu

Dear Jacob Young:
On 2/1/2022 the ASU IRB reviewed the following protocol:

Type of Review: Modification / Update	
Title:	The Structure of Social Support Networks of Formerly Incarcerated Individuals
Investigator: Jacob Young	
IRB ID: STUDY00013906	
Funding: None	
Grant Title: None	
Grant ID: None	
Documents Reviewed:	• Simonds_Dolny_Approval_IRB.pdf, Category: Other; • Study_Protocol, Category: IRB Protocol;

The IRB approved the modification.

When consent is appropriate, you must use final, watermarked versions available under the "Documents" tab in ERA-IRB.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

REMINDER - Effective January 12, 2022, in-person interactions with human subjects require adherence to all current policies for ASU faculty, staff, students and visitors. Up-to-date information regarding ASU's COVID-19 Management Strategy can be found here. IRB approval is related to the research activity involving human subjects, all other protocols related to COVID-19 management including face coverings, health checks, facility access, etc. are governed by current ASU policy.

Sincerely,

IRB Administrator

cc: Raven Simonds Raven Simonds