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MAKING THE CASE FOR PLACE: AN EXPLORATION OF URBANIZATION
MEASURES ON A MODEL OF SOCIAL CAPITAL AND U.K. CRIME RATES

by

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ABSTRACT

MAKING THE CASE FOR PLACE: AN EXPLORATION OF URBANIZATION MEASURES ON A MODEL OF SOCIAL CAPITAL AND U.K. CRIME RATES

Kyshawn K. Smith
Old Dominion University, 2016
Director: Dr. Ruth A. Triplett

Studies of social capital and crime have become quite popular in recent history, and a plethora of empirical tests have sought to clarify relationships between the two variables. However, most of these studies center on communities in the United States, and often overlook the many differentiating features between urban and rural communities that would affect such models. Reasons offered for such skew in the past and current research on this subject are middling at best, and largely cite either a lack of availability in data for crime and social capital in non-urban communities, or questionable accuracy for what data is accessible.

This dissertation sought to address both the lack of research on social capital effects on crime rates in communities outside of the U.S., and the lack of consideration of urbanization level in such research. Hypotheses derived under these general goals were tested using a combination of multivariate regression analyses and structural equation modeling on datasets provided by the Office of National Statistics (U.K.) and the British Social Attitudes Survey.

Findings revealed social capital and crime models vary between urban and rural communities. It was also revealed that models of social capital and crime are contingent upon crime type and urbanization level.

Conclusions and implications from this research suggested social capital is relevant in social capital-crime discourse in the U.K., but not always in the ways that current literature suggests it would be. Additionally, it was clear that greater specificity in social capital-crime models in the U.K. is warranted as the data revealed such models are only relevant for a limited combination of crime and community types. Future research should expand towards clarifying the relationship between social capital and crime rates in rural U.K. areas, incorporate more definitions of social capital driven by the idiosyncratic features of urban and rural communities, and consider more exploration of these models in countries typically underrepresented in the literature.

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This dissertation is dedicated to Robert Llewelyn Smith, Sr.

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essence of all that is good in the world as I know it. Daddy
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CHAPTER I
INTRODUCTION

In the social sciences, residential neighborhoods have long held a distinct significance as key domains for organizing and understanding social life. Since the latter 19th century, of particular interest for social scientists has been the connection between structural mechanisms in residential neighborhoods, the ecological processes of life in such communities, and crime. Scholars interested in explaining crime in these neighborhoods have turned to a number of theoretical concepts, with social disorganization, collective efficacy and social capital prominent among them. Recent work has sparked a keen interest in social capital and an increasing number of studies consider the role of social capital in crime.

Though definitions vary, social capital is generally thought to be the commodity comprised of relationships and behavioral norms rooted in social cohesion between individuals and/or institutions. It allows access to certain valued benefits (e.g., poverty relief, employment opportunities, family stability) and the attainment of goals often unreachable through alternative means (Coleman 1988; Coleman 1990; Halpern 2005; Neal 2011; Portes 1998; Putnam 2000; Woolcock 2010). It encompasses an array of qualities like trust, reciprocity, volunteerism, and civic engagement between individuals within a

collective (e.g., residents in a neighborhood, inmates in a prison, students within a school). The last 30 years of ecological studies in the social sciences have been especially fruitful in framing the current sentiment that areas high in social capital are advantaged in a number of ways.

Seminal research from Robert Putnam revealed how traditions of civic engagement – a vital correlate of social capital – facilitated democracy in Italy and the U.S. alike (Putnam 2000; Putnam, Leonardi, and Nanetti 1993). In East Asia, social capital has been shown to partially explain economic growth, while lower levels have marked the downfall of former Soviet republics (Portes and Landholt 1996). Miles (2012) observed the benefits of urban ecological designs in certain communities of Istanbul, where social capital exchanges are heavily promoted, and concluded similar planning could benefit urban communities in his native Australia.

One rationale for the positive gains resulting from social capital is that the bonds of cohesion formed under social capital decrease social transaction costs in a community. This, in turn, allows for more peaceful conflict resolutions. Another cited advantage of social capital is the enhancement of social bonds between community members. In turn, this leads to a suppression of the “free-rider problem” of collective action – individuals receiving the benefits of collective action without

contributing to its establishment or maintenance (Lederman, Loayza, and Menendez 2001).

In recent criminological literature, there has been considerable focus in neighborhood research on the absence of social capital, its components and the related concept of collective efficacy. By and large, this literature has shown the absence of these commodities leads to more crime. Specifically, communities with higher social capital generally possess stronger social networks and support. These enhance overall well-being via neighborhood satisfaction and high collective efficacy among those incorporated into the neighborhood and said networks (Ferguson 2007). In such highly supportive communities, residents are more inclined to adopt both formal and informal measures to preserve their safety and those close to them, which in a high social capital community often accounts for an extensive matrix of individuals. Conversely, communities low in social capital typically lack these networks and the associated capacity to prevent harm from criminal and otherwise deviant activity.

It is worth noting that social capital is not conceptually tied to any particular type of neighborhood or geographic place; it is arguably found in all types of communities across the globe where people reside (i.e., urban, suburban, or rural). Yet, much of the prevailing literature on social capital and its

effects in residential communities is limited by an almost exclusive development and testing in Western industrialized nations (particularly the United States) and urban areas. Woolcock (2001), for example, noted how social capital has tended to be exported wholesale from Western settings with little regard for the relevance of cultural context in its conceptualization:

All ideas are grounded in language and history, and for whatever reason, we find ourselves living at a time when most of the best social science departments in the most prestigious (and well-funded) universities happen to reside in the Western world. For better or worse, "social capital" is an idea that has emerged from this milieu...(Woolcock 2001:17)

As the social capital discourse outside of traditional Western settings has lagged, questions have emerged about the generalizability of the concept and theories derived from it. Similar concerns have been raised about research on neighborhood crime in general. As renowned criminologist Robert Sampson (2008) once remarked concerning the overall state of community crime discourse:

A third concern I have about extant community research is its seeming disregard for the establishment of generality in causal mechanisms. The prime example is that most of our knowledge has been gained from U.S. cities and only a few of them at that...our comparative knowledge base is, unfortunately, limited – very few multi-level studies have been carried out with the explicit goal of cross-national comparison of crime rates and community social mechanisms. (Sampson 2008:161)

Aside from recognition of the limited exploration of social

capital and neighborhood crime respectively outside the U.S., most research into these matters is done in urban areas. A number of scholars have voiced concern over this problem in studies of crime (Cancino 2003; Cancino 2005; DeKeseredy, Donnermeyer, Schwartz, Tunnell, and Hall 2007; Osgood and Chambers 2000; Petee and Kowalski 1993; Reisig and Cancino 2004; Sampson 2008). They argue that in the U.S., two enduring perceptions are related to the lack of attention given by criminologists to non-urban areas.

The first is that crime is not common outside of large cities (Weisheit and Donnermeyer 2000; Weisheit, Falcone, and Wells 2006). Accordingly, crime in rural areas has often been thought to be more predictable, easier to explain, and thus less urgently in need of explanation (Weisheit, Falcone, and Wells 2006). The second is that the crime that does occur is fundamentally incongruent with the seminal ecological theories of community crime.

Alternatively, Laub (1983) argued that the extent of urbanization is an important determinant of criminality despite receiving comparatively little attention in empirical work. He also added that theories of crime originally developed and tested in urban areas are just as applicable to rural settings. His argument is that the supposed differences between metropolitan and nonmetropolitan neighborhoods have waned

substantially since the genesis of early ecological crime theories (Osgood and Chambers 2000; Petee and Kowalski 1993). Thus, if patterns of urban and rural crime were shown to be similar (even when the respective crime levels vary between urban and rural neighborhoods), then those theories originally formulated in urban research could and should still apply to rural settings (Laub 1983).

Ecological crime studies in countries outside of the U.S. (i.e., those comprising the United Kingdom) reveal similar skewing towards urban neighborhoods. This may be the result of heightened difficulty noted in obtaining data from non-urban communities overseas. For instance, Ashby and Longley (2005) observed that suburban and rural neighborhoods in the U.K. tend to be geographically wider and less densely populated than urban communities. Thus, these communities are harder to cover for law enforcement officials and report fewer incidents of crime for formal authorities to respond to.

Lack of police coverage and breadth of crime data obtainable for research are inextricably linked in the U.K. This is because in the U.K. crime data often originates at the *local authority* level – a popular geographic standard for defining territories and studying communities throughout the U.K. These definitions are predicated on the extent of police coverage available in communities throughout each of the U.K.'s four

countries. As data volume and reporting accuracy have traditionally suffered in less urban areas, data collection agencies and researchers alike have been less inclined to pay attention to these communities.

Advancements in data coverage and sophistication in recent history have reduced some of these concerns about non-urban communities. Concurrently, scholars have increasingly begun to acknowledge that crimes common to urban settings do occur in rural and suburban communities. While generally less frequent in comparison to urban criminal activity, there is notable work highlighting non-urban crime as a significant problem worth detailed exploration (Kposowa and Breault 1993; Kposowa, Breault, and Harrison 1995; Osgood and Chambers 2000; Smith and Huff 1982; Spano and Nagy 2005; Weisheit, Falcone, and Wells 2006).

For instance, illicit use of cocaine, amphetamines, alcohol, and inhalants are all more common among rural residents, and rural domestic violence rates are also comparable to urban areas (Websdale 1995; Weisheit, Falcone, and Wells 2006). Gangs and gang-related violence have become increasingly problematic in smaller, less urbanized communities as well (Bouley and Wells 2001). A number of studies confirm homicides and other violent crimes occur in nonmetropolitan neighborhoods at rates similar to urban neighborhoods when structural forces like poverty,

marital discord and population change are accounted for (Barnett and Mencken 2002; Kposowa and Breault 1993; Kposowa, Breault, and Harrison 1995; Lee, Maume, and Ousey 2003).

Yet, despite such insights, scholarship on crime in less urbanized settings is still comparatively limited. This is no less the case within the literature that considers social capital's role in explaining criminal activity. However, it is particularly curious that social capital has been so often overlooked in light of the supporting evidence of social capital's general relevance in studies in nonmetropolitan, foreign settings (Castle 2002; Coleman 1988; Coleman 1990; Halpern 2005; Hofferth and Iceland 1998).

In light of the narrow international scope and lack of attention on nonmetropolitan communities where criminological concerns are forefront, research on social capital and crime in areas outside of the U.S. that vary in level of urbanization is clearly warranted. Therefore, the intent of this study is to perform such an examination. Specifically, this study proposes to gather and analyze data from nationally syndicated sources covering crime and social attitudes in England and Wales, with the following questions to be addressed:

- Is social capital the same concept between urban and rural communities in the U.K.? Specifically, do traditional indicators of social capital (friendship bonds, trust, and

organizational participation) vary significantly in their levels across rural and urban communities in the U.K.?

- Do structural factors (e.g., poverty, residential stability) similarly influence crime across both rural and urban areas in the U.K.?
- To what extent does social capital mediate the effects of structural characteristics on crime?

The next chapter starts with a brief overview of the history of social capital scholarship, including the key figures in social capital theory development and their various interpretations of the concept. This section will also highlight the various definitions, components, and causes of social capital commonly cited in the literature, along with the problems resulting from inconsistency in these definitions. In an effort to reconcile the divergence in definitions, this continues by presenting a definition of social capital drawn from the literature that can be applied to the data available for this dissertation. The chapter then proceeds to review two related concepts drawn from criminology – social disorganization and collective efficacy – and concludes with a discussion of the ways in which social capital and crime may vary across rural and urban areas.

CHAPTER II

SOCIAL CAPITAL, CRIME AND THE URBAN/RURAL DIVIDE

An important area of criminological theory and research explores why neighborhood crime rates vary. Both theory development and testing on this subject stems from work done in urban communities in Western industrialized nations, and predominantly those within the U.S. In this chapter, social capital – a key concept in some theories of neighborhood crime – will be examined with particular attention to its history, its definition, its causes/components and its relationship to neighborhood crime. As with neighborhood crime discourse overall, the discussion in this chapter will show that social capital's presence in this discourse is also largely developed from U.S. scholarship and has been applied mainly to urban settings. The chapter will end with a discussion of how it may or may not apply to crime in rural areas as well.

HISTORY OF SOCIAL CAPITAL

The concept of social capital and theories surrounding it are traceable to some of the earliest discourse in social science. Observations from Emile Durkheim illustrated how individual anomie and ensuing self-destructive tendencies could be quelled through developing strong community connections (Durkheim 1968; Durkheim 2008 (1893)). The earliest recorded

application of social capital theory, however, is often credited to 18th century Progressive reformer Lyda J. Hanifan (Putnam 2000).

Among Hanifan's main interests was improving educational opportunities and quality in suburban and rural West Virginia. Hanifan observed how the best schools and brightest students were most often situated in communities where residents actively participated in local school affairs. He believed that effective educational institutions were an outcome of community involvement rather than singular efforts, and that individuals were socially "helpless" if left to survive solely by their own hand (Hanifan 1916). Beyond its educational advantages, Hanifan believed that a host of individual interests were best served when the good of the community was addressed. He further argued that social capital carried the potential for compound earnings in the form of positive interactions extending beyond the family household. The core precepts of his definition of social capital consisted of goodwill, fellowship, mutual sympathy and social intercourse (Hanifan 1916:130).

Modern conceptual expansion of social capital can be partially attributed to renowned French sociologist Pierre Bourdieu. For Bourdieu, social capital is "the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized

relationships of mutual acquaintance or recognition" (Bourdieu 1985:248). He understood social capital as both the connections between social actors that provide mutually beneficial resources, and the quality of these resources. Bourdieu also believed that the resources "which accrue from membership in a group are the basis of the solidarity which makes them possible" (Bourdieu 1985:249). Consider for example the kinship between members of a neighborhood civic league. Such kinship is grounded in and strengthened by the availability of resources made possible through the connections formed between league members. An example would be awareness of lucrative employment opportunities, where such awareness is acquired initially through interactions with fellow league members.

American economist Glen Loury (1976, 1981) made an indelible mark of his own on social capital theory by way of his research on race-based income inequality. Sparked by a belief that traditional economic theories were unable to explain America's racial divide in income categories, Loury turned to social capital. Early on, he defined social capital mainly as intergenerational mobility and strength of inheritance. Embedded within this work is the observation that African-Americans experiencing poverty and disenfranchisement have traditionally been deficient in the qualities that comprise social capital. Of particular importance here are the social

linkages or "bridges" to resources in social settings normally inaccessible to African American audiences; such bridges provide crucial knowledge of and access to employment opportunities (Fernandez and Fernandez-Mateo 2008). In *A Dynamic Theory of Racial Income Differences* (Loury 1976; Portes 1998), Loury cites differential access to social connections for minorities and nonminority youth as a critical component to how racialized income inequality functions.

While not exclusively a scholar in social capital, Loury would expound upon the subject in later years. In a 1985 issue of *Black Enterprise* magazine, he defined social capital as the set of social institutions that inhere in family relations and community social organizations, and are useful in generating economic benefits by affecting the cognitive and social development of individual actors in a given social setting (Loury 1985). These resources can constitute an important advantage for children and adolescents in the development of their human capital, and thus improve employment prospects and wage-earning potential.

Under Loury's (1985) perspective, social capital is also considered to be those social relationships that come into existence when individuals attempt to make the best use of their personal resources. He has argued these resources need not be seen solely as components of social structure, but also as

resources for the individual within said structure. As a precursor to more recent social capital scholarship, Loury's contributions were particularly influential to one of the most prominent voices on social capital in recent history: American sociologist James Coleman.

In *Social Capital in the Creation of Human Capital* (Coleman 1988) and *Foundations of Social Theory* (Coleman 1990), Coleman sought to expand upon Loury's original work by arguing that social capital is a multidimensional concept. In Coleman's perspective, social capital exists in three basic forms. The first is the combination of established obligations, expectations, and trustworthiness. Collectively, these are common source for producing social credits and debts useful in mobilizing community residents to action. Second is information channels; more specifically, social ties capable of producing or enhancing information and goal attainment. Coleman argued that the third form of social capital is established norms and sanctions of behavior supported by neighborhood residents, which also undergird effective social control (Coleman 1988; Coleman 1990; White 2006). These forms of social capital share the quality of being linked to social structure and capable of inciting specific actions from individuals within said structure (Coleman 1990; Portes 1998). Coleman further emphasized the importance of *closure*, or the presence of enough social ties

between actors to guarantee norm observance, in his conceptualization of social capital (Coleman 1990).

Widely considered responsible for reaffirming social capital's relevance in contemporary social science discourse, Coleman made an indelible impression upon numerous scholars to follow. Arguably the most prominent voice among them is American social and political philosopher Robert Putnam, whose description of American civic life drew significant and widespread attention to the concept of social capital.

As one of the most resonant voices in contemporary social capital theory today, Putnam defines the concept as the connections between and across groups of social actors that facilitate survival and/or advancement within social settings, along with the norms of generalized trust, reciprocity, and collective action that arise from such connections (Putnam 2000). According to Putnam, social capital usually manifests itself as either social bonds or social bridges. Bonding social capital refers to those ties between members of the same social group that lead to more exclusive connections amongst relatively homogenous groups such as family members, close friends, and fraternal/sororal members.

Social bridges, on the other hand, unite individuals from separate enclaves. Bridging social capital, therefore, is a product of the social connections that crosscut internal

networks to connect members of different non-familial groups (Beyerlein and Hipp 2005; Putnam 2000). The connections formed through social capital bridges tend to be weaker than those found under bonding social capital. They are more diverse, however, and conducive towards social advancement or “getting ahead” – a la Granovetter’s “weak ties” thesis (Granovetter 1973) – than those formed under bonding social capital. These tend to be stronger but less accommodating to heterogeneity between individuals and groups (Beyerlein and Hipp 2005).

Putnam, Leonardi, and Nanetti’s (1993) earliest research into the civic traditions of residential communities in Italy and their impact on the effectiveness of democracy is considered a benchmark in social capital theory development. In that research, they concluded that those communities most demonstrative of the democratic ethos were also the ones most populated with citizens high in social capital. Here, social capital was represented via higher frequencies of meaningful social interactions, shared norms, and networks useful in resolving conflicts. It is a position he would revisit several times more in subsequent analyses, of which the most prominent is his turn-of-the-century opus on the status of civic life in America, *Bowling Alone: The Collapse and Revival of American Community* (Putnam 2000).

Bowling Alone synthesized Putnam’s hypothesis that the

stability of residential community life in America has suffered on numerous fronts due to declines in social capital. Marked decreases in voter participation, activity in professional organizations, volunteerism, social trust, altruism, and religious activity stand prominent among the supporting evidence he offered. Putnam also remarked in subsequent analysis that social capital does vary with wealth and prosperity. Poorer communities found in predominantly urban settings are disproportionately more deficient in social capital. He also argued that as a result there are negative outcomes like crime and violence.

Putnam's suppositions have sparked considerable debate and criticism. Particularly contested has been his interpretation of Alexis de Tocqueville's *Democracy in America*, a seminal piece of observational literature undergirding the main hypotheses expounded in *Bowling Alone*. DeFilippis (2001) argued Putnam erroneously diminishes the complexity of de Tocqueville's original thesis by conflating civil society with social capital on the grounds that social capital is comprised of the norms and networks of civil society that lubricate cooperative action among both citizens and their institutions. DeFilippis (2001) also maintained Putnam narrowly presents social capital as a primarily positive concept enabling people to act towards mutual goals fostered through trust and shared norms. It is true,

according to DeFilippis (2001), that the propensity of Americans to develop trust networks and volunteer their time to support civic leagues and other local social organizations was a staple of America's culture at the time of de Tocqueville's analysis. de Tocqueville also believed, however, that civil society was only one of a number of factors defining America's democratic and social identity – a controversial one at that. Thus, isolating it as Putnam does for the sake of supporting his stance on social capital is perceived by DeFilippis and fellow scholars as highly selective and myopic (DeFilippis 2001; Foley and Edwards 1997).

Moreover, Putnam is said to adhere to a somewhat antiquated, oversimplified notion of organizational participation wherein it is thought that people voluntarily join associations mainly to pursue common objectives. DeFilippis argues that this notion enables Putnam to compare in equal light everything from trade unions to PTAs to bowling leagues when discussing where social capital stems from and why it is dropping (DeFilippis 2001). Here again, an important objection garners some attention.

In the advent of major societal changes across the U.S. wrought by Industrialism and Post-Industrialism (e.g., greater complexity in social classes, disparities in income and institutional power), present-day voluntary associations are not nearly so homogenous in the goals of their members nor in their

effect on communities as to justify conceptualizing them all together (DeFilippis 2001). Instead, DeFilippis (2001) states that access to social capital and related benefits members may reap are differentially skewed towards those organizations and networks higher in social status and/or wielding greater power (i.e., access to resources deemed vital for the organization's existence). While quick to identify the importance of voluntary associations and activity in the formulation of social capital, DeFilippis (2001) argues that Putnam offers far less insight into the influence of class and power in the existence of such organizations.

Other criticisms levied against Putnam's assessment of social capital in America include a lack of consideration for alternative forms of networking and civic engagement (DeFilippis 2001; Portes 1998; Portes and Landholt 1996). Putnam has been cited for adhering to a biased view that economically depressed, inner-city neighborhoods are deficient in producing social capital (DeFilippis 2001; Portes 1998; Portes and Landholt 1996). He is also cited for failing to account for a number of idiosyncrasies in relationship development and interaction that – while not necessarily captured under his definition of social capital – are nonetheless illustrative of the concept (DeFilippis 2001). Ethnographic research from Elijah Anderson (2007 (1994)) supports the notion that, rather than an outright

lack of social capital, relationships amongst residents in impoverished ghetto neighborhoods result in forms of social capital not easily measured by self-reports of trust or participation in voluntary social organizations.

The critiques of social capital stemming from such work as Putnam's can be delineated into three broad areas. First, the concept "social capital" is defined differently across different theorists. As demonstrated from the earliest origins with Hanifan, each of the preeminent scholars of the concept offers a unique perspective. While some theorists define social capital as the process of developing resources into social ties, others say it is better understood by the results of such processes. There are also scholars that would contend it is best conceptualized as both the process and the results.

Secondly, it is not always easy to identify where social capital resides and thirdly, nor is it easy to determine its causes. While Loury, Bourdieu, and Coleman all concluded social capital is embedded in relationships, Putnam has staunchly defined it is a commodity residing in individuals (DeFilippis 2001; Portes 1998; Portes and Landholt 1996). He has further argued it is a commodity that can publicly or privately held (DeFilippis 2001; Putnam 2000). In some respects, this conceptual ambiguity has been attributed to a flaw in Coleman's initial reintroduction of the term. In that work, social

capital is simultaneously defined as a mechanism, thing, and/or an outcome (DeFilippis, 2001; Portes, 1998).

DEFINING SOCIAL CAPITAL AND ITS STRUCTURAL CAUSES

Given the various criticisms of social capital in both theory and application, it is important before proceeding to clarify the definition and causes of social capital to be used in this research. Similar to Bourdieu's perspective, the definition of social capital preferred for this study emphasizes two elements. The first is the connections between people. The second is the impact of these connections, including the mutually embraced norms created through such bonds and the informal sanctions levied against behaviors that threaten to undermine those bonds (Cancino 2005; Coleman 1990; Halpern 2005; Putnam 2000). As with other forms of capital (i.e., human, financial), this definition also acknowledges social capital can grow through investment, be spent wisely or carelessly, be applied to the benefit or detriment of another's cache of resources, or enhanced when combined with other forms of capital (Burt 1992).

Several more scholars have recognized that social capital is difficult to pin down to a single indicator, and thus have tended to favor definitions that aggregate several known components (Forrest and Kearns 2001; Grootaert 2006; Lederman,

Loayza, and Menendez 2001; Research 2000b; Stone 2001).

Noteworthy among such efforts to operationalize social capital is the Social Capital Community Benchmark, or SCCB (Research, 2000). This work presents social capital as an amalgamation of social trust, racial trust, civic participation, friendship network diversity, group involvement (formal and informal), faith-based social capital, organized group interactions and informal social activity. Easily among the largest recognized analyses of social capital, few other studies match the SCCB in breadth of factors tested. Several subsequent studies confirm the relevance of factors initially vetted through the SCCB as benchmark social capital measures (Brown and Ferris 2007; de Souza Briggs 2007; Subramanian, Kim, and Kawachi 2002; Thoresen and Harris 2002; Uslaner 1999; Uslaner 2002).

For instance, the World Bank surmised social capital to be the product of six dimensions – groups/networks, trust/solidarity, collective action/cooperation, information/communication, social cohesion/inclusion, and empowerment/political action (Grootaert, Narayan, Jones, and Woolcock 2004) – similar to variables presented in the SCCB. Stone (2001) posited a similar framework of network characteristics that featured trust norms and reciprocity. Forrest and Kearns (2001) offered a dynamic layout of social capital dimensions that included trust, supportive reciprocal

networks, and associational activity towards common purpose. Across these studies, three key components tend to encompass social capital above all others: trust, informal friendship connections, and organizational participation (Cancino 2005; Grootaert 2006; Messner, Rosenfeld, and Baumer 2004; Rosenfeld, Messner, and Baumer 2001; Sampson, Morenoff, and Earls 1999; Stone 2001; Woolcock 2001; Woolcock 2010). More specifically, a functional, generalizable definition of social capital incorporates the informal social connections stemming from local friendship networks, attitudes such as trust that hold the networks together, and the resources and action that arise from the networks (i.e., diverse, structured organizational activity).

For instance, informal friendship networks and the social bonds that bind them together hold a significant place in the traditions of civic life and identity of American communities (Kasarda and Janowitz 1974; Putnam 2000). A well-structured system of friends has long served as a main conduit towards social capital in the U.S., and data from the Social Capital Index – a proprietary aggregate measure of social capital derived by Putnam and his colleagues – reveals that many people who score high the measure tend to socialize more often with friends (Putnam 2000). Bonds between friends tend to endure across both urban and rural settings, and thus the frequency and

breadth of visitations with friends stands as a popular measure of social capital (Putnam 2000).

Concerning criminal activity and deviance on the whole, the relevance of quality friendship connections is documented in the seminal literature from Sampson and Groves (1989) on systemic models of neighborhood crime. Their research maintains that informal friendship bonds are the most basic form of social connections constituting a community's relationship infrastructure, and are a key resource for residents in exacting internal social control over deviance (Sampson and Groves 1989). Consequently, systemic theories of crime contend that when residents of a community form strong local ties by way of these friendship networks, social control within the community is enhanced. There is an increased capacity to recognize strangers and create additional structural constraints on deviant behavior and other sources of predatory victimization (Sampson and Groves 1989).

Building from the original social disorganization model (Shaw and McKay 1942, 1949), and with important clarification added by Kasarda and Janowitz (1974) on the significance of friendship bonds, Sampson and Groves (1989) found friendship networks had the second largest effect on burglary, and the extent of friendship ties in a community inversely correlated with street robbery, burglary, and total victimization.

Conversely, communities characterized by sparse friendship networks, along with unsupervised teenage peer groups and low organizational participation, held disproportionately higher rates of crime and delinquency in their research (Sampson and Groves 1989). In sum, to the extent that residents in a community develop close friendships with fellow neighbors, they can be said to possess social capital.

Along with friendship ties, trust is a frequently cited component of social capital (Cancino 2005; Portes 1998; White 2006). It is the main attitudinal component of social capital and regarded by some to be its most predictive factor (Neal 2011). Trust reduces the transaction costs associated with volunteerism and minimizes the number of resources required to ensure alignment between the behavior of individuals and groups within a community and the community's best interests (Putnam 2000; Uslaner 1999). The attention to common interests and community welfare corresponding with social capital develops when trust is generalized in such a way as to allow people in a community to perceive that fellow residents hold values and behavioral standards similar to their own, and will tend to act in the community's best interests (Coleman 1990; Jung 2003; Putnam, Leonardi, and Nanetti 1993; Vermeij 2007; Wollebek and Selle 2007).

Finally, there is collective organizational participation –

a third commonly recognized feature of social capital. It is thought that such activity does not flourish if trust is non-existent (Coleman 1990; Fukuyama 2001; Putnam 1993; Taylor 1997; Vermeij 2007). The conclusion then has been that trust produces an environment conducive for collective action (Putnam 1993; Putnam 2000; Putnam 2002).

Yet, it has also been argued conversely that widespread trust, friendship networks, and the ensuing social norms enabling collective community efforts are often learned and strengthened through memberships and participation in voluntary organizations like church groups, labor unions and parent-teacher associations (Jung 2003; Putnam 2000; Putnam 2002; Putnam, Leonardi, and Nanetti 1993; Vermeij 2007). This is true, particularly when such activity generates positive, tangible outcomes like reduced deviance and crime. In short, it may be the case that collective organizational participation breeds trust (Brehm and Rahn 1997; Jung 2003), and perhaps proximally more extensive networks of friends.

Ultimately, whether collective organizational participation is a cause or a consequence of the friendships and trust defining social capital is left unresolved in the literature. Scholars do not seem perturbed by the directional uncertainty here either, as little effort has been made to address it. However, what is clear is that when collective organizational

participation thrives it embodies the resources and actions that produce "good" social capital (Dowla 2006; Grootaert 2006; Narayan and Pritchett 1999) within high trust, network-dense communities.

Social capital then is clearly defined by friendship networks, attitudes like trust that bond members of a network, and the resulting collective resources and actions. But, what of its structural causes? There is lesser discussion in the extant literature, and considerable bifurcation in theoretical perspectives when it is discussed. Four area structural factors are commonly identified as keys to understanding the development, or lack thereof, of social capital: economic status, ethnic heterogeneity, residential stability, and population density.

Economic status, and poverty status in particular, is prominent in discourse on the causes of social capital. Scholars identify status deficiencies like low household income and unemployment in a community as among the more disruptive variables to social capital development. The daily hardships encountered in pursuit of basic necessities when financial means are lacking drains residents of the will and energy to invest in social trust and civic activism (Sampson, Raudenbush, and Earls 1997; White 2006). The urban poor are especially challenged in developing social capital as a resource for addressing issues

like crime victimization (Williamson, Ashby, and Webber 2006).

However, social capital is also among the commodities that help poorer households mitigate the effects of resource deprivation. It can provide alternative means of "getting by or getting ahead" in the absence of other useful commodities (Putnam 2000). Research predating Coleman's confirmed reciprocal social networks are vital for the urban poor to cope with hardships in their lives (Perlman 2006). Among residents of poverty-stricken Roma communities, networks imbued with social capital have proven vital in the decision for Roma to migrate (Pantea 2013). Geleta (2014) notes how in certain communities poorer individuals rely heavily on social capital-based credit as an alternative means of financial exchange.

Social capital literature further shows that the extent of ethnic heterogeneity in a community is important for social capital. Increasingly diverse ethnic communities tend to be associated with decreasing caches of social capital (Briggs 2010; Putnam 1993), which is argued to be at least partially attributable to a lack of trust. Individuals and groups within ethnically diverse communities experience more obstacles in discovering common values and behavioral norms that would engender such trust (Collier 1998; Knack and Keefer 1997). Conversely, greater ethnic homogeneity is thought to minimize trust barriers and ease the path towards reaching common ground

among fellow community members, which ultimately stimulates social capital.

Yet, there are again conflicting theoretical perspectives here. While ethnic heterogeneity is widely viewed as correlated with social capital, whether it increases or decreases social capital is debated. In fact, when levels of civil unrest and rebellious activity are used as indicators of social capital, Collier (1998) maintains *both* outcomes are possible. He specifies that among disaffected ethnic groups in African countries, the diversity across these groups can stimulate social capital via organizational activity necessary for civil rebellion. This occurs when such diversity is moderate and government disapproval among the groups is largely congruent. However, as the number of dissatisfied ethnic groups swell, coordination of rebellious activity becomes increasingly difficult and thus the increased diversity results in a diminishing capacity for such capital to develop (Collier 1998).

Where residential stability/mobility is concerned, social capital is widely seen to benefit from stability in a community's population. The importance of such stability to social capital is explained by Putnam (1995) in his "repotting hypothesis". Here he argues root systems undergirding social networks in a community take time to develop much in the same way strong roots in a plant need time to mature. Constant flux

in neighborhood population results in a disruption of these root systems at the expense of social capital, and particularly civic engagement (Putnam 1995). This observation is echoed by other scholars (Temkin and Rohe 1998; Warner and Rountree 1997; White 2006).

In determining causes of social capital, population density factors into the mix given how vital resources like food, shelter, and education are differentially distributed in most stratified social settings (Massey 2007). A number of perspectives maintain that as population density increases, so too does demand for and subsequent depletion of such resources (Cho and McLeod 2007; Durkheim 2008 (1893); Ladbroke 1988). Consequently, higher density results in more groups contending for greater power and access to resources, with a result of more opportunities for social capital via interaction and participation recruiting (Cho and McLeod 2007).

The competition for resources characteristic of high-density neighborhoods can foster exclusionary practices. Residents in such communities can rally together in the effort to either unfairly deny others access to these resources (e.g., racial exclusion in prosperous housing markets) or otherwise position themselves more favorably to acquire them (DeFilippis 2001). This hyper-competitive environment also breeds a certain brand of individualism in disposition and behavior, and thus helps

clarify why urban dwellers interact less and seemingly generate less social capital (Morenoff, Sampson, and Raudenbush 2001). Such "downside outcomes" to social capital exposes how population density has equal propensity to foster divisive and inclusive versions of social capital, as well as how the benefits of social capital are tied to power-laden institutions and advantaged individuals/groups more so in high density urban areas (DeFilippis 2001).

Having now reviewed the history and more recent development of social capital theory, as well as established a working definition of social capital that acknowledges some of its more prominent causes, the next section examines one possible consequence when social capital is lacking – neighborhood crime. Beyond the literature on social capital itself, this discussion draws heavily on two criminological theories – social disorganization and collective efficacy – whose core precepts bear a striking similarity to those found in social capital theory.

SOCIAL CAPITAL AND CRIME

Central to this dissertation are the premises that criminal activity in a community is linked to the level of social capital within it, and that crime is generally lower in communities with larger caches of social capital. But, how exactly does social

capital reduce crime? While there is plenty of evidence that social capital reduces crime, theoretical explanations for these observations has not always been so apparent. When efforts have been made to explain the connection, emphasis has tended to focus on the nature, quality and density of social networks.

For instance, according to Putnam (2000), social networks form the infrastructure of social capital. Thus, when those networks are weak, social capital is weak; when they are strong, social capital thrives (Messner, Rosenfeld, and Baumer 2004; Putnam 2000). In turn, social capital's capacity to reduce crime is commensurate with the strength of social networks. Network-rich communities are more adept at reducing crime through exertion of social control (especially over young people) in the community (Messner, Rosenfeld, and Baumer 2004; Rosenfeld, Messner, and Baumer 2001).

It is specifically the networks related to *bridging* social capital that tend to lower crime, however. Bridging social capital is a product of volunteerism within communities and efforts to reach beyond the immediate community's borders to form alliances with groups and institutions in more distant locales (Akcomak and Weel 2011; Cancino 2005). These efforts result more often in an expansion and enhancement of a community's social network system. In turn, crime reduction efforts are expanded because these network lines tend to funnel

in knowledge and resources from more distant communities, such as best practices in crime reduction efforts. Extended lines of trust are also fostered through bridging social capital, and trust is vital to safer, stable communities.

For instance, the inclination of residents in a community to support bridged networks by looking out for the welfare of residents in distant neighborhoods along with their own is bolstered when there is trust that those distant residents are reciprocating such concern (Rosenfeld, Messner, and Baumer 2001). With the broadened trust that is forged from such cohesive social bridges, there is an increase in radii of surveillance, citizen participation with formal law enforcement, and heightened risk for offenders of being caught. Thus, trust across communities will tend to reduce crime by increasing the likelihood of identifying and arresting offenders (Akcomak and Weel 2011; Sampson 1988).

Additionally, social capital increases the likelihood of arrest and the costs of committing crime by enhancing mechanisms of informal social control and civic engagement (Akcomak and Weel 2011). Particularly concerning the latter, civic engagement is cited as a dimension of social capital (Akcomak and Weel 2011; Guiso, Sapienza, and Zingales 2004), and civically engaged citizens are more inclined to look out for the safety and comfort of their neighbors. They are more likely to

look after one another's children and property, and feel comfortable in calling upon fellow neighbors to do the same. For at least these reasons, community residents perceive social capital as valuable and those possessing and willing to offer it develop a positive reputation and gain acceptance within their community (Akcomak and Weel 2011). Consequently, social capital further reduces crime by discouraging residents within such communities from committing crime at the risk of losing their own cache of social capital and the aforementioned benefits that come with it (Akcomak and Weel 2011).

Liu's (2005) research into prisoner reentry highlights yet another way in which social capital reduces crime. Social capital is largely defined by way of the presence and integrity of cohesive social networks, as well as the deeply embedded trust underlying such networks. Both are invaluable resources to an ex-offender seeking reintegration back into a law-abiding collective. This is because, conjointly, these resources undergird a conduit between ex-offenders and legitimate social activities like steady employment, education attainment, and marriage that help build or rebuild the trust of the community.

The rationale for the importance of a community's trust is that citizens typically need trust to warrant reaching out to ex-offenders. As citizens gain trust that an ex-offender has been sufficiently punished for his/her transgression(s) and is

sincere about wanting to reintegrate into the community, they will be more inclined to support ex-offenders' efforts to enter legitimate social institutions by extending their own connections to such reforming criminals. A community's residents are also more likely to support ex-offenders if the ex-offenders' families are trustworthy. Such support may come by way of offering general life advice, or more specific examples such as insight on job opportunities, emotional support while reintegrating back to the community, and/or encouraging fellow residents to offer similar support.

Steady work and family development represent stability and security in a neighborhood (Sampson 1987; Sampson and Groves 1989). There are also notable recidivism-reducing effects of being connected to formal institutions like stable employment and marriage (Liu 2005). Thus, access to the types of networks and trust that define social capital are vital towards lowering crime by helping to facilitate viable pathways for previous offenders to those institutions representative of a law-abiding lifestyle.

Importantly, insight into how social capital impacts neighborhood crime does not draw exclusively from social capital literature nor does it always use the language of social capital (Beyerlein and Hipp 2005). Early social disorganization models from Shaw and McKay (1942, 1949), as well as modern systemic

(Bursik 1999; Bursik and Grasmick 1992) and collective efficacy models (Sampson, Raudenbush, and Earls 1997) impart important criminological theories of neighborhood crime. All of them include many ideas and concepts similar to those found in the social capital literature. In fact, Sampson, a major figure in both social disorganization and collective efficacy, has discussed social capital. He writes "...lack of social capital is one of the primary features of socially disorganized neighborhoods" (Sampson 1992:78). Any discussion then of the role of social capital in understanding neighborhood crime must include discussion of this extended literature.

Social Disorganization

The theory of social disorganization was developed from work done in Chicago. It contends juvenile delinquency and other forms of deviance occur more often in communities where residents fail to realize common values and maintain control over their surroundings – thus, becoming socially disorganized (Sampson and Groves 1989; Shaw and McKay 1942, 1949). Factors predictive of social disorganization in the literature include low economic status, ethnic heterogeneity, and high residential mobility (Sampson and Groves 1989; Shaw and McKay 1942, 1949). Communities high in these factors are marked by anonymity among neighbors, sparse local organizations, and young people

disconnected from adult supervision (Amato 1993; Anderson 2007 (1994); Bursik 1999; Bursik and Grasmick 1993; Wirth 1938).

With these qualities present, socially disorganized communities lack the capacity to engineer the types of social ties and norms proven to assist in regulating negative behavior and resolving problems between residents (Bursik 1999; Bursik and Grasmick 1993). Chief elements of social capital like trust and civic engagement are closely aligned with well-organized neighborhoods (Rosenfeld, Messner, and Baumer 2001), and thus it should be expected that lower levels of such attributes also characterize socially disorganized residential settings. Lower civic engagement undermines the development of interpersonal connections that foster informal social control useful in preventing criminal and violent behavior (Rosenfeld, Messner, and Baumer 2001). Similarly, trust is argued to be critical in maintaining the type of informal social connections that lead to a civically engaged populace capable of effective social organization and thus better management of crime rates (Rosenfeld, Messner, and Baumer 2001; Sampson, Morenoff, and Earls 1999; Sampson, Raudenbush, and Earls 1997).

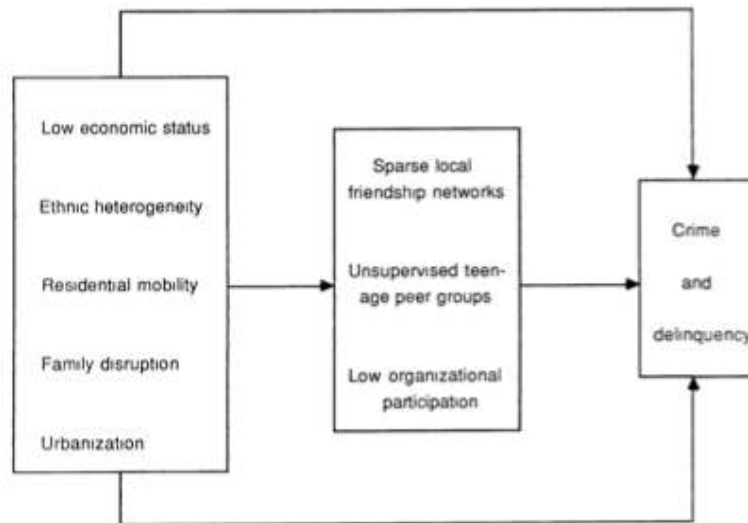
Albeit popular as a framework for community crime analyses, Shaw and McKay's original social disorganization model garnered its share of criticisms. Included among them was an overreliance on past crime data from official records and the

inappropriateness of using Census data to address effects between community structure and crime (Sampson and Groves 1989). Their work has also been cited for its inability to test the theory beyond the effects of median income, racial composition, and residential mobility due to limitations in the available data (Sampson and Groves 1989). Further noted was the inability of the original model to separate social disorganization's causes from its consequences (Sampson and Groves 1989).

In light of these criticisms, a number of contemporary scholars sought to improve upon the Shaw and McKay model. Noteworthy among these revisionists were Robert Sampson and W. Byron Groves (1989). They drew from the systemic model of Kasarda and Janowitz (1974) which contends length of residence is the "key exogenous factor influencing community behavior and attitude". They further stated that "the major intervening variables are friendship and kinship bonds and formal and informal associational ties within the local community" (Kasarda and Janowitz 1974:330). In attempting to clarify the concept of social disorganization and separate it from its causes and its effect, Sampson and Groves argued that organization can be found in a community's local friendship networks, participation in local organizations, and management of unsupervised youth (informal social control). In turn, as demonstrated in Figure 1, broken or missing friendship networks, unsupervised teens and

low organizational participation lead to higher rates of crime:

Figure 1. Sampson and Groves' Model of Social Disorganization



Importantly, they also discussed the factors that led to social disorganization. Economic status, ethnic heterogeneity, and residential stability were key as argued in earlier work. They also included urbanization – identified and dummy-coded as communities located in central-city locations – with the hypothesis that urbanization weakens local kinship and friendship networks and impedes participation in local affairs.

Collective Efficacy

Sampson's original attempt with Groves to refine Shaw and McKay's model also had its share of flaws. For instance, it has been noted for low variance explained as well as limitations in

number and operationalization of community organization variables. In addition, the dubiousness of the organizational participation measure employed was also cited.

Noting these flaws, Sampson sought to advance social disorganization theory and earlier efforts to improve it as one of the chief architects of collective efficacy. Sharing quite a bit in common conceptually with social capital (Cancino 2005), collective efficacy theory offers insight into many of the same pathways that connect social capital to crime. Collective efficacy is defined as the presence of interpersonal social cohesion among neighbors and willingness to intervene on behalf of the common good (Sampson, Raudenbush, and Earls 1997).

Sampson and colleagues (1997) contend increases in collective efficacy lead to less crime. The theory further states that much of the variation in collective efficacy is attributable to residential stability (homeownership + residential tenure), concentrated disadvantage (poverty + resource deprivation), and ethnic heterogeneity (racial diversity + segmentation). Accordingly, collective efficacy within a community decreases with concentrated disadvantage and increases when residential stability is high. Ultimately, it mediates the relationships neighborhood disadvantage and residential instability maintain with interpersonal violence.

Implicit within the theory is the notion that in communities

where residents own and maintain homes, a desire to protect the value of such property and maintain social control in the surrounding community is cultivated, as are beliefs that fellow neighbors should behave similarly. In this way, a communal understanding between residents is fostered in which trust and civic reciprocity become valued commodities. Social unity is fortified under such conditions, as residents collectively conclude that crime and other forms of social disorder are detrimental to the community's prosperity. Through socially-sanctioned community investments, residents become more trusting of fellow neighbors and more inclined to act to uphold positive behavioral norms.

The kind of social trust and reciprocal norms embedded within collective efficacy take time to mature. As White (2006) articulated, the development of ties may require time spent with neighbors in such endeavors as helping neighbors work on their cars, supervising children or watching over their property when they are away. Thus, the longer residents live and invest in their communities (the higher residential stability is), the stronger and more expansive collective efficacy is expected to be. Conversely, resource deprivation by way of limited educational opportunities, inequities in political representation and employment scarcity robs a community of assets conducive to developing collective efficacy.

Concentrated disadvantage, in conjunction with weak collective efficacy produces neighborhood crime and disorder (White 2006).

Thus far the discussion has centered around the role that social capital, and the related concept of collective efficacy have in reducing neighborhood rates of crime. Before concluding a discussion of the role of social capital in neighborhood crime however acknowledgement should be made of the possibility that an individual's or neighborhood's social capital could be used to increase crime. There is some thought that criminals vary in their capacity to succeed in illicit enterprises based upon the breadth and quality of their social collaborations with lucrative offenders (Nguyen and Bouchard 2013). Not all offenders are equally capable of forging and maintaining such connections. Those who are usually achieve greater prosperity in crime precisely because they can leverage those networks into resources like knowledge about new illicit opportunities, strategies for avoiding incarceration, and general social support/encouragement of their involvement in criminal endeavors (Burt 2000; Hansen 1995; Lederman, Loayza, and Menendez 2001; McCarthy and Hagan 2001; Nguyen and Bouchard 2013).

Some scholars have argued social capital – even just the capacity for producing it – tends to increase exponentially with the size of an offender's networks. The chances for prosperity in illicit behavior grow then as their networks grow (McCarthy

and Hagan 2001; Nguyen and Bouchard 2013). Furthermore, where violent criminals are active participants with law-abiding citizens in the types of exchanges that produce and/or are produced by social capital, the influence of such criminal elements may result in propensity for further violent offending within the community (Lederman, Loayza, and Menendez 2001). When tightly bonded, these community members may also become prone to perceive criminal behavior (violent or otherwise) as a necessary means of goal achievement, offer protection for criminals and possibly even revere some law-breaking behavior as aspirational (Lederman, Loayza, and Menendez 2001).

Distinguishing between social capital and collective efficacy. Throughout the literature, a common perception is that social capital and collective efficacy are very similar. Given the similarity in their basic components and precepts, it can be difficult to distinguish between them. In fact, White (2006) posits that social capital *is* collective efficacy. More specifically, collective efficacy entails positive social capital via relationships forged through strong cohesion and trust between neighbors (White 2006).

Further implied throughout the literature is the notion that social capital and collective efficacy similarly aid in minimizing both minor incivilities and more serious disruptions of civic order. The two constructs are unified by an emphasis

on social cohesiveness and trustworthiness between neighbors as key components of safe and stable communities. Also shared is the belief that such attributes generally strengthen and are strengthened by a commitment to mutually beneficial exchanges between neighbors over time. However, for all their similarities, social capital and collective efficacy are distinguishable from each other with respect to their effects on criminal and other disorderly conduct.

Social capital refers to the potential resources derived from social networks cohering a community's residents that are available to address disorder in the community (Brehm and Rahn 1997; Cancino 2005; Morenoff, Sampson, and Raudenbush 2001). Collective efficacy is regarded as the application of specific resources like trust and willingness to intervene in order to address such disorder and related social ills (Cancino 2005; Sampson, Raudenbush, and Earls 1997). The latter is an outcome in communities where social capital is abundant (Cancino 2005; Morenoff, Sampson, and Raudenbush 2001; White 2006). This is especially so when the social bonds symbolic of social capital allow for the process of turning those bonds into desired outcomes (Morenoff, Sampson, and Raudenbush 2001).

While in theory a community could possess social capital without necessarily producing collective efficacy, the latter is unlikely to exist without the prerequisite social capital needed

to spark it. The relationship then between social capital and collective efficacy is not unlike that which is found in physics between potential and kinetic forces of energy. In this case, social capital serves as the potential force available for communities to address crime and social disorder; collective efficacy is the kinetic force that is the efforts made to reduce crime and disorder when the potential force of social capital is activated.

Social Capital, Crime and the Rural-Urban Divide

Much of the work on social capital, and the equally compelling research on social disorganization and collective efficacy, stems from scholars based in Western industrialized nations largely centered in the U.S. As a consequence, their foci has typically overlooked rural communities. The lesser focus on rural spaces in both general ecological literature on crime and that which specifically incorporates social capital suggests that either rural areas are not as prone to crime as urban areas, or that it is justifiable to simply take what has been learned in urban settings and apply them directly to their rural counterparts. But is this treatment of rural communities acceptable? Or is there a divide between urban and rural crime phenomena that requires more attention to rural communities?

In fact, a fair amount of literature contends the latter;

rural communities exhibit rates of criminal activity similar to urban neighborhoods, and in certain instances more so. Over half of the 30 U.S. counties with the highest homicide rates are categorized as nonmetropolitan (Weisheit, Falcone, and Wells 2006). In addition, amphetamine and cocaine usage are no less than 50% more likely among rural youth compared to urban youth (Weisheit, Falcone, and Wells 2006). Finally, access to drug treatment centers is often more problematic in rural neighborhoods due to greater distances and public transportation limitations (Weisheit and Donnermeyer 2000; Weisheit, Falcone, and Wells 2006). Internationally, we find that juvenile delinquency among boys in Portugal is largely consistent between urban and rural settings across 11 measured delinquent acts (Cardoso, Perista, Carrilho, and Silva 2013), and data on suicide in Australia reveals that nearly 45% of all suicides among men between 1990 and 2008 were from rural residents (McPhedran and Leo 2013).

Consider that smaller rural communities are characterized more with "bonding social capital" than larger urban communities due to the presence of rigid familial networks and friendship norms (Beggs, Haines, and Hurlbert 1996; Beggs, Hurlbert, and Haines 1996; Fischer 1995; Hofferth and Iceland 1998). This type of social capital has also proven to correlate with higher rates of sexual assaults, incidents of domestic violence, and

homicides (Beyerlein and Hipp 2005; DeKeseredy et al. 2007). Particularly with domestic violence, heightened rural patriarchy and norms of rural life breed complicity to such crimes (DeKeseredy et al. 2007). Rural communities have also been known to overlook or excuse the abuse of a domestic partner if the abuser is a member of one or more valued networks, if the abuse victim is excluded from such networks, or if the victim is considered to be of lower status compared to the abuser within those networks (DeKeseredy et al. 2007).

Yet, despite such data, a number of myths and misperceptions about rural communities abound. Consider that, when compared to urban neighborhoods, rural neighborhoods are thought to be more homogenous settings where residents are more likely to know each other's affairs, interact with one another regularly, and share core sets of values (DeKeseredy et al. 2007; Websdale 1995). Where such presumptions of similarity and cohesion are in play, it is not much of a stretch to imagine some scholars concluding the effects of social interaction and cohesion are already well understood in rural communities. Of course, even a cursory review of the current rural literature would reveal such presumptions are deeply flawed. While rural neighborhoods may be relatively homogenous, rural communities are far from universally the same. There are, in fact, numerous types of rural communities and each is distinguishable by such factors as

level of industrialization, trends in population shifts, and socioeconomic characteristics (DeKeseredy et al. 2007; Jobes, Barclay, Weinand, and Donnermeyer 2004).

Be that as it may, the myth of homogeneity persists. Thus, when national crime data (i.e., the FBI Uniform Crime Reports) routinely show urban crime rates as higher than rural crime rates, all or nearly all rural communities are believed to be relatively crime free (DeKeseredy et al. 2007). Weisheit et al (2006) noted how many people assume crime rarely occurs in the rural U.S., and both mass media and crime literature greatly perpetuate this assumption (Donnermeyer, Jobes, and Barclay 2006; Jones 1995; Lichter, Amundson, and Lichter 2003).

Limited data collection and low consensus on findings, along with weaknesses in measurement validity and reliability stemming from disagreement over the conceptualization of rurality in criminological research (DeKeseredy et al. 2007; Donnermeyer, Jobes, and Barclay 2006; Weisheit, Falcone, and Wells 2006) adds to the confusion. Social science has not often identified units of analyses in rural communities that match up with urban communities in such a way that would allow for comparable assessment of the effects of community crime models derived from social disorganization and social capital (Petee and Kowalski 1993; Reisig and Cancino 2004). Furthermore, while social interactions are important to quality of life in both urban and

rural communities, social science scholars have also had trouble discerning the processes through which social ties develop in the latter (Reisig and Cancino 2004). This hampers comprehension of social phenomena like crime in rural settings.

The argument for disentangling urban and rural communities in this discourse is strengthened when considering the structural and cultural nuances separating the two area types. For example, one school of thought stemming from Durkheimian literature is that urban communities are more prone to structural pressures conducive to law-breaking activity and a diminished capacity to restrain citizens from behaving deviantly (Durkheim 2008 (1893); Ladbroke 1988). As Durkheim observed, the nature of urban life differs remarkably from rural living, and certain pressures on social life in large cities stem from a combination of forces commensurate with rapid industrialization in urban communities during the late 19th century and ever since. Chief among these forces are heightened individualism and diminished cohesion with neighbors resulting from greater competition for resources and hierarchical positioning of occupations (Durkheim 2008 (1893); Ladbroke 1988).

Durkheim argues city dwellers tend to feel less connected to their fellow citizens under such conditions, viewing them more as obstacles towards success in the hyper-competitive environment associated with the newer industrial way of life

(Durkheim 2008 (1893); Ladbroke 1988). Furthermore, compared to lower density rural areas, Durkheim says cities are governed more by what is morally correct at an individual level versus the moral good of the community. Thus, interpretation of laws in urban communities are more likely to seek protection of individual rights, and the legal enforcement of social behavior is relegated almost exclusively to formal institutions.

Indeed, the difference between urban and rural communities is vividly illustrated when considering evidence on the impact of structural factors like population density (Cho and McLeod 2007; McCulloch 2003), residential stability (Putnam 1995; Putnam 2000), and poverty (Collier 1998; Halpern 2005) on neighborhood-level crime patterns. Weisheit (2006) notes the enduring belief that while rural communities carry the capacity to enforce rules of conduct through informal measures, higher density urban communities have typically made such measures less practical. Accordingly, formal measures of social control (i.e., law enforcement agencies, state-governed court systems) have become more relevant and relied upon to police urban areas. Ladbroke (1988) noted in these denser urban communities that the anonymity and social schism characteristic of such settings also allows for lower probability of detection for those engaging in criminal activity and less harm to one's reputation as a result of such behavior.

Aside from high population density, another structural feature – the mobility of residents – has been a constant in major cities since the late 19th/early 20th centuries (Kasarda and Janowitz 1974; Wirth 1938). Much of this activity is traceable back to the Industrial Revolution, where migrations away from rural communities into large and complex metropolitan neighborhoods were a frequent occurrence (Wirth, 1938). The constant influx of jobseekers from non-urban locales both foreign and domestic into sprawling urban neighborhoods during this period often entailed an abandonment of preexisting ideals conducive to rural life. Shifts in favor of those more appropriate to city living such as social obligations shifting to individual rights and material values supplanting ancestral ones occurred. Such transition was rarely easy, and in instances of failure to adopt urban ideals and practices, illicit alternative opportunities and behaviors often became more viable as a means for certain newcomers to cope (Ladbrook 1988).

Consideration of another structural component distinguishing urban and rural communities, poverty, is also necessary. It reveals shifting residency trends among middle- and upper-income classes away from large dense cities, and the subsequent emergence of resource-deprived ghetto communities within these cities. Particularly over the last 40 years,

deindustrialization trends endemic to large cities have spurred an exodus of employers and non-poor residents alike to suburban enclaves peripheral to large urban cities and foreign markets. Both of these are less accessible to those too poor and/or ill-trained to maintain access to the newly-relocated employers and wealthier neighbors. The aftermath in U.S. neighborhoods has been a clustering of low-income residents severely crippled by widespread unemployment, low education status, and frayed social bonds (Anderson 2007 (1994); Kasarda 1989; Sugrue 1993; Wilson 1987; Wilson 1996).

Coupled with drastically lowered volume of job opportunities suitable to low-skilled labor employment and compensation for such employment in more urban neighborhoods (Chaskin 1997; Kasarda 1989; Sugrue 1993), the chances for lower-class citizens to pursue legitimate means of goal achievement have reduced dramatically (Lee, Maume, and Ousey 2003). Residents of these impoverished inner-city ghettos have often found themselves drawn to criminal endeavors and/or other alternative acts of deviance to alleviate the effects of such concentrated poverty (Ohmer, Warner, and Beck 2010; Wilson 2009). Yet, poverty is far from an exclusively metropolitan problem. Coverage and discourse in ecological social literature tends to favor larger cities. There is compelling evidence, however, that nonmetropolitan neighborhoods actually experience more damage

from neighborhood-scale poverty than metropolitan communities (Albrecht, Albrecht, and Albrecht 2000; Lichter and Eggebeen 1992; Tolbert and Lyson 1992).

Concerning the differences in cultural traits between urban and rural neighborhoods, the close-knit networks and exchanges with family and friends often associated with social capital are weighted more heavily in nonmetropolitan neighborhoods. This is due largely to an enduring characteristic of wide dispersion between neighbors and kin in such communities, as well as the presence of certain distinctions of rural living. Factors such as seasonal farming demands, less sophisticated road networks, and lack of public transportation make developing weaker social ties extending beyond those immediate connections less feasible (Weisheit, Falcone, and Wells 2006). This adherence to closer, more familiar networks is commensurate with a homogeneity in social life and disposition among neighbors in nonmetropolitan communities that lends itself to the bonding type of social capital (Crawford 2006). On the other hand, the cohesion and homogenous way of living associated more with nonmetropolitan neighborhoods tends to break down in larger metropolitan communities. This is also due to a combination of the emphasis on individualism over community orientation and structural pressures towards deviance (Crawford 2006; Putnam 2000). Typically comprised of more diverse population groupings as well

(Chaskin 1997; Wirth 1938), we should not expect to see the same type of social capital between urban and rural neighborhoods.

Nevertheless, while the nature of social capital between urban and rural communities may differ, the concept is just as viable no matter which end of the urbanization spectrum a community occupies. Acclaimed author and urban philosopher Jane Jacobs (1961) accentuated this point when discussing social capital. She stated specifically that one staple of nonmetropolitan communities, homogeneity or "togetherness" (the notion that sharing anything among fellow residents means sharing much), is a divisive force in urban communities (Jacobs 1961). She argued it need not be highlighted as a pivotal element to defining social capital in these settings. Jacobs' challenges previous interpretations of social capital highlighting the development of civic virtue through neighborhood homogeneity and kinship ties. Her contention was that neighbors need not be so similar along cultural or sociodemographic grounds for social cohesion to occur (Crawford 2006; Jacobs 1961).

This is not to say she devalued the role of social capital in creating safe communities; quite the contrary, Jacobs opined that social capital (or "togetherness", as she put it) is what most differentiated safety in neighborhoods (Jacobs 1961). Rather, her position was that the natural development of

informal social connections – not demographic homogeneity or level of urbanization – was the vital building block to creating the sort of social capital necessary for mitigating most community safety and health concerns like crime (Jacobs 1961). For this reason, metropolitan residential models were just as viable to Jacobs as nonmetropolitan models in the creation and maintenance of social capital. To her, urban communities were just as capable as rural or suburban neighborhoods of creating the neighborly connections necessary in sustaining such capital.

In conclusion, the history of social capital research reveals a concept that is a hotly debated and multifaceted. Nonetheless, social capital is consistently defined by trust and friendship networks, as well as the activities and resources accruing from collective participation in local social organizations. Numerous structural factors also influence both the presence and nature of social capital in a community – not the least of which are a community's density, residential mobility of residents, ethnic diversity and concentration of poor people – and one phenomena profoundly affected by its presence or lack thereof in light of these factors is crime. Even when not studied strictly as "social capital", informal social networks, trust and other enduring traits associated with social capital have proven relevant in congruent research from social disorganization and collective efficacy scholars.

Despite such gains in knowledge, theoretical advancement in social capital theory among crime scholars has been limited due to overemphasis in the empirical research on urban communities and overreliance upon data from neighborhoods in the US. Both of these trends become even clearer in the next chapter, which offers a current state of this discourse by considering evidence of the differences between urban and rural communities with respect to social capital, its causes, its relationship to crime, and the geographic settings from which such evidence originates. Particular attention is given to the evidence corroborating the relationship between social capital and crime in residential communities outside of the U.S., how scarce this evidence compares to U.S. data, and how the contextual effect of urbanization status in social capital literature is often ignored. The latter only becoming slightly more clear once social disorganization and collective efficacy literature is accounted for. The concludes with a statement of this dissertation's hypotheses, derived from the key argument that differentiating between urban and rural communities matters in investigations and applications of social capital-crime models in foreign settings like the UK.

CHAPTER III

EMPIRICAL LITERATURE

In this chapter, a close examination of research on both the causes of social capital and social capital's connection to neighborhood-level effects like crime reveals a variety of complex studies that occasionally contradict in findings. It is also clear that these studies are remarkably skewed towards urban areas predominantly in the U.S., and often overlooks the contextual impact of urbanization. Particularly concerning the effect of social capital on crime, while a fair amount of documentation stems from evidence outside of the U.S., such evidence is considerably limited when compared to data from American communities. Yet, there are indications that accounting for urbanization status more, and adding to the cadre of international studies would help clarify some of the confusion stemming from research into social capital's causes and its effects on crime.

CAUSES OF SOCIAL CAPITAL IN RURAL AND URBAN COMMUNITIES

Within social capital literature, several cited and often debated causes are implicated in determining how much social capital a community has available. One is *residential stability*, the length of residential tenure within a neighborhood and its level of population flux. Another is

population density, which is typically a composite construct of both population count and the relative spatial closeness or distance between residents in a neighborhood. The variance in ethnic backgrounds among residents in a community and the extent to which these residents peacefully coexist with one another, *ethnic heterogeneity*, is a third cause. Finally, the economic health of residents – economic disadvantage, or simply *poverty* – is also regarded as a significant cause. However, the literature wrestles with some challenges given that there has not always been agreement on whether these causes result in more social capital or less, and at times even fails to confirm any relationship with said causes.

For instance, the importance of residential stability in social capital development is supported by evidence indicating community ties are stronger and neighborhoods overall healthier when there is less residential turnover (Crutchfield, Geerken, and Gove 1982; Hagan, MacMillan, and Wheaton 1996; Putnam 2000). In particular, upon reviewing crime rates from the 65 largest Standard Metropolitan Statistical Areas in the U.S., Crutchfield, Geerkin, and Gove's (1982) determined high rates of residential mobility – the inverse of residential stability – and increasing population size place greater strains on social integration. Both factors are argued to be pivotal in weakening the ratio of time and space involved in developing and

maintaining meaningful social connections within a community. In turn, the effectiveness of informal social control measures is reduced and crime reduction efforts in high turnover neighborhoods are subsequently hampered.

Institutional continuity, social network strength and cohesion are undermined when residential stability is low (Coleman 1990; Sampson and Graif 2009). Sampson and Graif (2009) examined this using data from the Project for Human Development in Chicago neighborhoods (a large-scale survey of nearly 8,800 residents of Chicago, IL). Their findings revealed residential stability has a positive correlation with social network ties, net the effect of concentrated disadvantage and population diversity. Yet, observations of the positive effects of residential stability on social capital are not always so clear. For example, in the same study, Sampson and Graif (2009) observed instances where either residential stability failed to predict certain types of social capital (i.e., leadership involvement in parochial institutions like schools and religious organizations) or where significant relationships with commonly associated components like organizational involvement failed to appear at all (Sampson and Graif 2009).

Population density also holds an important place in social capital development. Its importance rests on similarly compelling and occasionally conflicting evidence as that which

is available for residential stability. A fair amount of research links high population density in metropolitan areas to increased exchanges of political knowledge, civic participation recruitment, and enhanced non-profit growth (Cho and McLeod 2007; Graddy and Wang 2009; Saxton and Benson 2005). In particular, a study of nearly 300 U.S. counties by Graddy and Wang (2009) noted how increasing philanthropy to community foundations could be observed in larger, denser communities.

Cho and McLeod's (2007) analysis of data from the SCCB revealed higher density areas are more likely to yield social capital by way of increased participation in civic life caused by greater competition for public resources in such areas (Cho and McLeod 2007). In addition, McCulloch (2003) observed population density was the sole predictive element of social capital. Here, social capital among men in households of Great Britain was measured with attitudinal statements for belongingness, orientation with informal associations, and neighborhood activity. However, as with Cho and McLeod's study, McCulloch's observance of the relevance of population density did not elaborate on whether the effects were consistent for both urban and rural neighborhoods.

Furthermore, there is significant evidence that the connection between density and social capital has some important qualifying factors. For instance, population density in

homogenous communities tends to be associated more with bonding social capital versus bridging social capital. Thus, connections to secondary and tertiary social networks are more inhibited (Granovetter 1973; Putnam 2000). Cho and McLeod (2007) also acknowledged supporting evidence that communal participation is lower in denser but more ethnically diverse communities. They explained this is due in part to diminished psychological ties observed between residents of diverse communities that inhibit such participation (Cho and McLeod 2007). Denser communities tend to have a higher propensity for citizens to observe communal life rather than actively participate in it (Cho and McLeod 2007), thus contributing to such weaker connections.

Freeman (2001) found that the connection between density and social ties involved yet another important but less cited qualifier: the proliferation of automobiles and pedestrian or mass transit culture. In a study of U.S. Census and supplemental survey data on urban inequality from Atlanta, GA, Boston, MA, and Los Angeles, CA samples, he showed that controlling for proliferation of automobile traffic in neighborhoods resulted in significantly fewer neighborhood social ties (Freeman 2001). In fact, density was no longer a significant predictor of social ties in the study once automobile dependency was controlled for.

A number of social capital studies further imply ethnic heterogeneity and social capital are negatively associated. These findings suggest ethnically homogenous groups share similar values and behavioral norms, thus making it easier for group members to find common ground and subsequently generate more trust and tighter social cohesion. Conversely, the more ethnically diverse a community is, the less effective it tends to be in generating social capital. When individuals fail to perceive such values or norms within each other, or when groups prove dissimilar along such attributes, it becomes much less likely that such trust and cohesion will be developed. Indeed, several studies confirm diverse ethnic composition negatively correlates with social capital by way of lower social cohesion and trust (Fieldhouse and Cutts 2010; Putnam 2007; Sturgis, Brunton-Smith, Read, and Allum 2011; Wickes, Zahnow, White, and Mazerolle 2015).

Notably, compared to studies featuring residential stability and population density as factors, a good deal more of the evidence for social capital's connections to ethnic heterogeneity can be found outside of the U.S (particularly in the U.K.). These are still lacking in attempts to offer clarity by considering additional factors like urbanization. However, the aforementioned study by McCulloch (2003) concluded social capital is significantly lower in ethnically heterogeneous

neighborhoods.

McCulloch (2003) argued that feelings of belonging and the social connections yielded through such feelings are weaker the higher ethnic diversity is in an area. McGhee (2003) and Goodhart (2004) respectively found social cohesion and civic participation tend to decline when ethnic diversity is high. Particularly in McGhee's (2003) study of the urban Bradford district in the U.K., he deduced such negative correlation stemmed largely from discord among many White residents. He argued that they felt their needs were often overlooked in favor of the residing non-White minorities competing for the same limited resources in the community.

Here again, contrary evidence warrants consideration. In particular, limited proof of social withdrawal in ethnically diverse neighborhoods (Lolle and Torpe 2011; Savelkoul, Gesthuizen, and Scheepers 2010; Wickes, Zahnow, White, and Mazerolle 2015) implies ethnic diversity does not inherently signify in all communities a lack of social capital by way of low cohesion. Rather, it may be that the type of social capital more often generated in homogenous communities is less of the bridging variety, and more of the bonding type. Bonding social capital flourishes more naturally when individuals of similar ethnic backgrounds meet (McGhee 2003; Putnam 2000).

This may especially be true of immigrant communities. Here

the decision to relocate and where to relocate to is often dependent on the amount of community and household social capital available for active and potential migrants alike (Palmer and Xu 2013). Zhou (2005) provided clarity to this very pattern among Chinese immigrant communities in New York City. He summarized that the social networks generated in homogenous ethnic communities nested within larger, multiethnic settings offered a comfort zone that members of such communities tended to prefer due to the various sociocultural factors like memories, customs, and language shared (Zhou 2005). Unfortunately, as the distinction between bridging and bonding types has not often been emphasized in previous efforts to examine the effect of ethnic diversity on social capital, the current research on this matter is largely speculative.

Furthermore, the operationalization of social capital seems to matter with regard to whether a relationship with ethnic heterogeneity is detected. For instance, rather than defining social capital as cohesion or trust, Vermuelen, Tillie and Walle's (2011) study of 96 neighborhoods in Amsterdam used number of private foundations (defined as non-governmental, non-membership, organizations recognized as a legal category with a purpose of general public interest) per 1000 residents as the main component. Implied is that with greater concentration of these foundations comes greater social capital in the

neighborhoods observed.

Defining social capital in this way, they determined ethnic diversity was positively correlated with density of social foundations in Amsterdam neighborhoods. It negatively correlated, however, with density of leisure associations (Vermeulen, Tillie, and Walle 2011). In addition, when considering contextual factors influencing the negative effect of ethnic diversity, Vermeulen et al (2011) noted the polarizing influence of fairly recent events like 9/11 and the ensuing immigration debates throughout the Netherlands. These are sources of neighborhood fragmentation influencing some of the breakdown in social cohesion and networks in more diverse neighborhoods.

Studies exploring poverty as a cause of social capital have typically found weak social capital to characterize communities of extreme impoverishment. For the most part, prevailing thoughts have been that in poorer communities there are fewer social connections and collaborative behavioral norms that could serve residents in acquiring resources necessary to negate such poverty (e.g., a quality education, lucrative employment opportunities, adequate healthcare). As with the literature on the causal effects of ethnic heterogeneity, when compared to residential stability and population density, there is somewhat more international data to draw upon as evidence for the effects

of poverty on social capital.

Among such findings, Heffernan's (2002) study of HIV trends among the urban poor in the U.K. illustrated how poorer neighborhoods routinely struggle to access social capital and health services that would allow for HIV treatment and safe sex education. This cycle is further compounded by a widespread lack of social resources and poor cohesion attributable to inner-city communities where the urban poor tend to reside (Heffernan 2002). Such factors make it even less likely for social capital to develop in these areas.

In explaining why higher income communities are able to generate more social capital, Narayan (1997) lays some foundation for understanding why the reverse is true of poorer communities. Using government data captured from roughly 6,000 inhabitants covering 87 villages in Tanzania, Narayan provided a rare glimpse into social capital trends within rural communities outside of the conventional Western and often U.S.-based settings. Just as important, she discovered a significant positive correlation between social capital and household expenditures. An increase in social capital by one standard deviation predicted a 20 – 30% increase in spending power per household resident in the study (Narayan 1997). The communities comprised of wealthier households tended to exhibit more social capital.

Narayan (1997) went on to present four main reasons likely behind the stark contrast in social capital she found based on wealth. First, from higher levels of social capital, as represented by activity in community associations, come more effective government services like schools, hospitals and road networks (Narayan 1997). This is important because high quality in such public services offer pathways leading away from the resource deprivation that so often plagues the poor. Communities can be defined as wealthy or poor based upon the quality of such services. Indeed, Narayan (1997) saw that the Tanzanian villages with higher associational activity and parental participation in local activities ultimately had the better public resources (i.e., schools).

Secondly, she observed social cohesion typically leads to the sharing of information that is of mutual economic benefit within communities (Narayan 1997). Thus, the more information is shared amongst residents in a community, the wealthier the overall community tends to be. In her study, households in villages with higher social capital were also households that tended to share more information – particularly of an agricultural nature – more frequently, and thus experienced higher crop efficiency and profit as a result (Narayan 1997).

A third factor Narayan mentioned was the ability of households within the villages to cooperate towards addressing

problems of community-wide concern. Villages with higher social capital were more likely to have engaged in community road building projects and other communal activities designed to maintain certain shared assets that impact the overall economic health of a community (Narayan 1997). Finally, she noted it has long been recognized that market transactions based on trust-laden associations lead to stronger economic performance. Accordingly, those villages in her study with higher social capital had significantly greater likelihood of agricultural lending and borrowing practices (Narayan 1997).

Renowned American sociologists William Julius Wilson (1996) and Glenn Loury (1976) indirectly offered some additional clarity to these observations. They noted that poverty is by definition the exclusion from social networks and institutions that could be leveraged to obtain vital resources like quality housing, employment and education. In short, irrespective of geography, it should come as no surprise that there is such evidence of lower social capital where poverty is high. This is quite unfortunate, as the literature also shows that communities infused with strong caches of social capital are able to address poverty and resolve disputes more effectively (Woolcock 2001).

In contrast, there is some rationale for the notion that poverty should be *positively* associated with social capital. Poor households often have few other resources to call upon for

economic survival and/or advancement aside from the relationships they forge with fellow poor community members or those advantageously positioned to help alleviate the effects of income deprivation. In fact, Woolcock (2001) noted being poor in an “unpredictable and unforgiving world” often requires reliance upon connections with family and friends as primary resources to leverage against the scarcities experienced in other important assets (e.g., money, advanced education, diverse employment opportunities) that earmark such impoverishment.

In particular, though noted for its absence of external social networks, bonding social capital is nonetheless relevant as a means of coping with poverty. Close social ties with friends and family serve to augment the lack of economic resources among the poor, as they can and often do use each other as assets (Portes and Landholt 1996; Woolcock 2001). Additionally, Cage’s (2014) multi-method research on poverty in Kenya revealed a pattern of how organizations in poor communities transfer bonding social capital between inhabitants of poor communities into bridging social capital. In this way, localized social networks are extended in relevance to connect with agents at higher levels of governance.

With such conflicting evidence in social capital literature on the effects of its proclaimed causes, greater clarity in the discourse is needed. This might be achieved by looking to less

explored covariates like a community's urbanization level. There is already literature confirming urban and rural communities are quite distinctive along the causal factors cited. For instance, many geographic definitions of urbanity and rurality use population density as a distinguishing quality, where the denser a population is the more urban/less rural it is (Agency 2005; Pateman 2010/2011; Wilson, Plane, Mackun, Fischetti, Goworowska, Cohen, Perry, and Hatchard 2012; Wirth 1938). Excluding certain areas of the Southern U.S., it has also been found that rural areas typically carry less ethnic diversity (Hofferth and Iceland 1998). Rural areas also tend to be poorer than urban (Albrecht, Albrecht, and Albrecht 2000; Hofferth and Iceland 1998; Lichter and Eggebeen 1992), and rural children are considerably more income- and resource-deprived compared with their urban contemporaries (Lichter and Eggebeen 1992). Additionally, while residential stability has been of concern in both settings, it has typically been rural communities that have experienced residential instability via loss of their inhabitants to the draw of urban living. Indeed, from the 1940's through the 70's, rural populations dropped by over 50% (Albrecht, Albrecht, and Albrecht 2000; Beale 1978; Larson 1981), and today's rural communities are widely less populated compared to urban areas (Wilson et al. 2012).

Of particular importance to this proposal, the differences

between urban and rural areas are observable with respect to social capital and some of its composite parts as well. Denser communities have often been associated with lower social capital by way of less interpersonal social interaction, diminished civic participation, gaps in such participation, group conflict, and incivility (Cho and McLeod 2007; Crawford 2006; Morenoff, Sampson, and Raudenbush 2001). Higher density urban communities often exhibit reduced community integration and lower support of non-profit activities (Graddy and Wang 2009; Lincoln 1977). Urban residents have been found to possess lower levels of social capital in comparison to rural dwellers when density of social connections have been included as part of a conceptualization of social capital (Cairns, Til, and Williamson 2003; Morenoff, Sampson, and Raudenbush 2001). Rural residents also share strong bonds through tight friendship and kinship networks, and are often less tolerant of crime and more punitive-minded towards lawbreakers than urban residents (Cancino 2005; DeKeseredy et al. 2007).

Yet, as Jacobs (1961) so staunchly counterargued, social capital can and does exist in urban communities. Crawford's (2006) research in Leeds, one of the largest and most diverse cities in England, revealed that both community advocates known as neighborhood wardens and local volunteer-based organizations were critical in helping residents access important

institutional resources. Particularly with the wardens, theirs was a function that connected residents in various parts of Leeds to local services by harvesting trust from both the residents they serve and the institutions controlling access to those vital resources (Crawford 2006). In essence, these wardens served as conduits of social capital in a highly urbanized setting via the social cohesion and trust they forged between community constituents. Such capital allowed for smoother, more equitable flow of vital resources to citizens throughout the city.

Other examples throughout the literature confirm urban social capital is a relevant concept in both Eastern and Western settings. In the city of Scranton, PA, Rich (2012) observed how the appeal of Scranton neighborhoods to native residents and returnees alike, as well as recent efforts to revitalize the city, was rooted in social capital. The social capital was high stemming from strong social networks, close familiarity with neighbors, and participation in a variety of local institutions serving the public (e.g., local political offices). In Los Angeles, CA, homeless residents who were able to draw upon social capital by way of their connections to family, friends, and especially case workers and support staff in transitional housing organizations greatly improved their chances of exiting homeless status altogether (Marr 2012).

Reynolds (2013) examined data from inner-city Black youth throughout four main cities in England and found social capital to be both a positive and negative influence in their lives. On one hand, and similar to the observations from Cage's (2014) Kenya research, the reciprocal networks and trust Black youth build within their poverty-stricken and marginalized communities act as coping mechanisms for dealing with the deprivation and racial inequality they routinely confront. Such capital also serves as a resource for such youth in navigating their way out of their dire circumstances (Reynolds 2013).

Yet, Reynolds (2013) also found the type of bonding social capital poor Black youth in the study access occasionally restricts their expectations of and efforts towards social mobility. The "pulling effect" these impoverished youth seem to experience is a phenomenon Liu, Wang and Tao (2013) also noted in their research of poor migrant workers in urban China. The effect is described as a compulsion among the urban poor to remain in their impoverished settings. This results from a comfort level fostered from bonding with similarly poor community inhabitants, and even a sense of obligation towards those similarly deprived (Liu, Wang, and Tao 2013). However, given the idiosyncrasies of recent urban development and migration in China, the incarnation of bonding social capital they observed serves the poor in an another, more unique

capacity (Liu, Wang, and Tao 2013).

Relative to Western countries, China's rapid urban expansion resulting from economic growth and rural-to-urban migration is a newer phenomenon. Moreover, the country's household registration system (known as *hukou*) largely determines urban/rural status, and accordingly the level of access to urban housing and support services. Poorer migrant workers without permanent urban residency status are uniquely disadvantaged in the housing opportunities made available to them (Liu, Wang, and Tao 2013). Liu et al (2013) found that among those migrant workers lacking urban hukou status, social capital in the form of networks maintained with local residents *with* hukou status was a vital resource for improving both their chances of finding housing in their adopted cities and of obtaining higher quality in the housing acquired. As such, social capital ends up truly serving the "getting ahead" function Putnam often discusses in works like *Bowling Alone* (Putnam 2000).

Similarly, Palmer and Xu (2013) studied just over 3,000 laborers across seven cities in China (nearly all of whom originated from and still held ties to rural communities) and determined differential effects of social capital on worker health. Exploring both individual- and community-focused social capital, they discovered that individual measures like support from friends and presence of either children or older relatives

in the household positively correlated with self-ratings of health. Community measures like place attachment, community trust and overall community satisfaction also led to higher health ratings (Palmer and Xu 2013).

However, the research revealed that the measures *neighborhood networks* and *connections with formal organizations* were negatively associated with worker health. Palmer and Xu (2013) deduced this was a sign that certain Western notions of social capital (which tend to emphasize civic participation and formal social networks) may not be as relevant initially or at all in influencing positive outcomes like better health given China's more extensive history in using informal, individualized networks for social capital. These findings firmly point to the relevance of social capital in both urban and rural places, and that it does affect a variety of social phenomena in both types of settings.

Yet, the literature is far from exhaustive; there is still far too little known about the complexity of relationships involving social capital in different community settings (Crawford 2006). This is no less true of the literature pertaining to social capital and crime, and specifically how the interaction between the two varies by urban and rural classification. Lin (2001) suggested a key to the difference between urban and rural neighborhoods may lie in the demarcation

of weak and social ties commensurate with social capital, where the social cohesion and homogeneity of strong ties tends to be more appropriate for rural neighborhoods versus the weaker ties more befitting of urban neighborhoods that are less dependent upon such cohesion. At the very least, Crawford (2006) suggested such a possibility as Lin's hypothesis necessitates greater context specificity in social capital research. Controlling for factors like urbanization level would be a step in this direction.

Particular to crime, does the urban or rural status of a community matter with respect to social capital's effect on crime? If so, what sorts of variations are observed, and are those variations consistent with both national and international settings? To approach an answer, the criminological literature incorporating social capital requires closer examination.

Social Capital in Rural and Urban Communities - Social Capital and Crime

Several studies illustrate the connection between social capital and crime within the U.S. (Clear, Rose, and Ryder 2001; Coleman 1988; De Coster, Heimer, and Wittrock 2006; Messner, Rosenfeld, and Baumer 2004; Neal 2011; Putnam 2000; Rosenfeld, Messner, and Baumer 2001). The general conclusions struck is that social capital minimizes criminal offending, deviant

activity, and the culture of violence often associated with both. Messner, Rosenfeld, and Baumer (2004, 2001) provided particularly strong empirical support for social capital's crime-reducing effects through analysis of neighborhoods represented in the General Social Survey and the SCCB. Net the influence of common structural covariates (e.g., resource deprivation, population size, and Southern geographic orientation), they confirmed in two separate studies that social capital (measured via social trust and social engagement) reduces homicide rates (Messner, Rosenfeld, and Baumer 2004; Rosenfeld, Messner, and Baumer 2001).

Recalling that violence and economic disadvantage are common indicators of delinquency and adult crime, De Coster, Heimer, and Wittrock (2006) also found that family- and community-based social capital reduces both the chances of young people behaving violently and the effect of disadvantage on violence. They tested their hypotheses on several models of delinquency using data from the National Longitudinal Study of Adolescent Health. Here social capital was defined as network closure, parental participation in the community, collective supervision, and family cohesiveness. They discovered that nearly all of their family-based social capital measures play a significant role alongside neighborhood disadvantage in predicting violence among young people (De Coster, Heimer, and Wittrock 2006). Family

cohesiveness was shown to provide especially significant negative effects on violence in the observed models, and it remained significant even after controlling for street-level contextual factors conducive to crime (De Coster, Heimer, and Wittrock 2006).

Studies such as these illustrate a tendency in the research to corroborate social capital's connection with crime by drawing upon data from nationally representative studies. In these studies, community tends to be quite broad and little, if any, consideration is given to how the observed relationships vary by urbanization. Neighborhood crime literature in general, however, is much clearer in conveying that crime is higher and more troublesome in denser, metropolitan neighborhoods (Akcomak and Weel 2011; Barnett and Mencken 2002; Clinard 1964; Wolfgang 1968; Yamamura 2009). Despite some compelling evidence to the contrary (Bachman 1992; Liu 2005; Weisheit, Falcone, and Wells 2006), most studies conclude that densely populated metropolitan communities are more prone to criminal offending than nonmetropolitan ones (Blau and Blau 1982; Ladbroke 1988; Weisheit, Falcone, and Wells 2006; Wirth 1938).

A possible, albeit seldom tested explanation for this this observation draws from components of social capital theory. Crime in urban residential communities has been associated with high residential mobility (Bursik and Grasmick 1992; Kubrin and

Herting 2003; Stults 2010) and economic instability (Weisheit, Falcone, and Wells 2006). Both are variables related to weakenings in the social networks and cohesion characteristic of strong social capital and demonstrated to reduce criminal and deviant behavior (Ladbrook 1988).

Social capital and crime – international discourse. We know little in the U.S about the differences between urban and rural areas with respect to relationships between social capital and crime. So too are we limited in our knowledge of such relationships in communities internationally. Both foreign and domestic scholarship assessing the connection between social capital and criminal activity in residential communities have routinely failed to consider smaller and nonmetropolitan areas (Cancino 2005). Yet, when it has, social capital has shown itself to be an influential force in reducing crime, and producing safer and more productive communities.

In India, urban neighborhoods with little to no conflict have been characterized by sizeable numbers of strong civic institutions (e.g., trade unions, professional associations) that bridge gaps of discord between communities (Cairns, Til, and Williamson 2003; Varshney 2002). Studies of former Aboriginal gang members in inner-city Winnipeg, Manitoba, Canada have shown the effectiveness of social capital among the former

members. It helps them cope with socialization issues and obtain educational and employment opportunities upon exiting gang life (Bracken, Deane, and Morrissette 2009). In Northern Ireland, Cairns and colleagues (1986) identified positive correlations between strong associational networks and lower violence in inner city neighborhoods (Cairns, Til, and Williamson 2003; Darby 1986).

Social capital in the form of community organizations that operate government-subsidized programs aimed at preventing recidivism have yielded positive results in urban China for many years (Liu 2005). In urban neighborhoods throughout Paris, France, when riots erupted in 2005 between young Muslim immigrants and law enforcement, religious and community leaders were pivotal in quelling the violent discord. Mechanisms of bridging social capital (i.e., grassroots, localized efforts to negotiate peace terms) employed by these leaders were cited as invaluable commodities in the peace process (Judkins 2008).

Using survey data from Finnish schools stratified by residential density and geographic location, Salmi and Kivivuori (2006) found that a lack of social capital was associated with elevated juvenile delinquency. Here, they measured social capital as parental control, teacher control, parental support, teacher support, neighborhood control, trust, and time spent with the parents of their closest friends. They found that all

social capital factors tested were negatively correlated to juvenile delinquency. Parental support in these schools (a product of informal networks between parents) was particularly strong among the factors studied. When assessed as a full model, parental support, teacher control, and interpersonal trust remained relevant in the model net the effects of structural socioeconomic variables, self-control or scholastic achievement (Salmi and Kivivuori 2006).

Given the strong conceptual alignment between social capital and social disorganization, it is worth noting here Sampson and Groves' seminal re-exploration of social disorganization theory mentioned in the previous chapter. They tested their hypotheses in the U.K. and confirmed residential communities marked by sparse friendship networks, unsupervised teenage peer groups, and low organizational participation have disproportionately higher rates of crime and delinquency (Sampson and Groves 1989). In fact, each of these traits mediated many of the relationships between such rates and other common correlates of crime (e.g., low SES, residential mobility).

Sampson and Groves also revealed that urbanization (in conjunction with ethnic heterogeneity) negatively affects friendship networks and is positively correlated with the inability of a community to control its youth. Additional findings supported a large direct effect of residential

stability on local friendship networks (net the influence of urbanization, socioeconomic status, and ethnic heterogeneity). Positive correlations between family disruption and disorderly peer-group behavior by teenagers were also found. Finally, they found a large independent effect of unsupervised teenage peer groups on burglary, motor vehicle theft, and vandalism (Sampson and Groves 1989).

Making the case for expanding international studies of social capital effects on crime. For at least two reasons, Sampson and Groves' seminal social disorganization work serves as a viable indirect attempt to examine the influence of urban and rural variations on social capital's effect on crime in a setting outside the U.S. First, variables like organizational participation and friendship networks in Sampson and Groves' early social disorganization model also define social capital. Second, this model specifically incorporated urbanization.

However, as theirs was not a direct study of social capital, Sampson and Groves' social disorganization research is not nearly enough to address the uncertainty in international crime literature about the effects of social capital across levels of urbanization. Additionally, even if theirs was a more direct exploration of social capital, few concerted efforts to account for urbanization in studies of social capital have been made in the 25 years since Sampson and Groves (1989) research. In sum,

for communities in both domestic and international settings, there are virtually no ecological studies of social capital in crime literature where the full spectrum of urbanization is a focal point.

This void in the current research further fuels the growing sentiment in recent years that expanding international focus on social capital in crime literature is warranted. As Halpern (2005) articulated,

At present, we do not have easily to hand the same comprehensive collation of data [referring to the data Putnam and colleagues used to defend the position of declining social capital in the U.S.] on social capital trends in other nations, but the data we do have strongly suggest that the US story should not be taken as universally representative. (Halpern 2005:211)

Findings from those international studies that are available reveal complex correlations between social capital and crime, as well as contradictions similar to those found in the U.S. data highlighting the criminogenic aspects of social capital.

Gang research in China has revealed certain gang affiliations in large, densely populated cities offer considerable benefits to ex-offenders. The effect transpires via a strain of social capital that compensates for the advantages lost when positive social capital (i.e., strong interpersonal connections to legitimate institutions like education, employment and marriage) is unavailable (Liu 1999). Triad gang leaders within the country have also benefited at

times from the successful transference of social capital into economic gains via illegitimate stock market manipulation (Lo 2010).

In the favelas (slums) of Rio De Janiero, Brazil, the proliferation of violence committed by drug traffickers has long been linked to a perverse version of social capital. Here, social capital is in the form of collusion between major trafficking cartels, law enforcement and political officials (Arias 2002). Throughout these studies, and similar to what the U.S. literature has revealed, emphasis has either been exclusively on urban communities or no distinction has been offered between urban and rural settings. It is a glaring omission given that nonmetropolitan communities have traditionally been regarded as havens of peace, sociability, and neighborly cohesion (Hofferth and Iceland 1998; Smith and Huff 1982; Weisheit, Falcone, and Wells 2006). In addition, the relatively scant empirical evidence that is available supports the premise that neighborhood models of social capital and crime vary by urbanization level.

Lee and Bartowski (2004) found that faith-based associations and civic engagement were negatively correlated with juvenile homicide among young people in US rural neighborhoods. But the findings do not hold in urban areas (Lee and Bartowski 2004). They surmised that urban crime was influenced by a greater range

of covariates (e.g., socioeconomic disadvantage, drug activity) given that the model with those covariates was stronger than the social capital model tested (Lee and Bartowski 2004). They also observed that civic engagement bound by firm moral codes seemed to matter more for rural areas than urban ones due specifically to the higher proportion of rural residents affiliated with "civically engaged" religious denominations.

Faith-based associations and civic engagement were found to be negatively correlated with murders among young people in rural neighborhoods, but disconnected from such crime in urban communities (Lee and Bartowski 2004). This is likely because of the relative absence of covariates in rural areas believed to influence urban crime rates. This is verified through significantly higher estimations of model fit in urban areas for models with those covariates than for social capital-based models. But by and large, these studies are not common and a heavy skew towards urban settings characterizes crime literature where social capital is the main independent variable.

The lack of attention on urbanization in ecological crime discourse is not entirely surprising in light of evidence implying urbanization may not matter. Traditional notions of great disparity between urban and rural crime have begun to erode in recent years in light of data supporting the notion there is less distinction in crime rates between communities

along the urbanization spectrum (Weisheit and Donnermeyer 2000). Noted among possible factors influencing this diminishing disparity is the continuing decline in differences between metropolitan and nonmetropolitan communities due to standardization of and broader access to vital commodities like education, transportation, and employment (Fischer 1995; Luloff and Krannich 2002; Petee and Kowalski 1993; Reisig and Cancino 2004; Ritzer 2004, 2008).

Where ecological crime theories like social disorganization and collective efficacy are the concern, there is growing sentiment that urbanization holds little to no bearing on how most of these theories function (Cancino 2005; Osgood and Chambers 2000). Thus it can be presumed such theories are just as applicable to less urbanized settings (Laub 1983; Reisig and Cancino 2004). Further evidence highlights that social capital also functions similarly between urban and rural neighborhood types, generally flowing in a systemic fashion from private networks to parochial ones (Reisig and Cancino 2004). Therefore, in considering crime and crime theories specific to residential communities, where social capital is a focus, it could be argued that level of urbanization in a given community is not an important factor.

Be that as it may, contrary evidence still supports the notion that urbanization does matter and should be considered

more often in theories on community crime precisely because these theories are just as relevant in less urban settings. For instance, the main tenets of collective efficacy – mutual trust among neighbors and the willingness to act on behalf of the common good – are found to be characteristic of rural neighborhoods (Jobes 1999; Osgood and Chambers 2000; Petee and Kowalski 1993; Sampson and Bartusch 1998). Kinship and friendship networks associated with collective efficacy are also strong in these types of neighborhoods and rural residents have been found to be less tolerant of crime and more agreeable to harsh punishment for lawbreakers in comparison to city residents (Ball 2001; Bouley and Wells 2001; Cancino 2005; Donnermeyer, Jobes, and Barclay 2006; Weisheit, Falcone, and Wells 2006; Wilson 1991). Urbanization also matters in that rural communities have smaller populations and lower population densities (DeKeseredy et al. 2007). As noted previously, social capital tends to be higher and crime lower where population densities are lower (Akcomak and Weel 2011; Bourdieu 1985; McCulloch 2003; Putnam 2000).

Rural residents are also more likely to contribute to bonding social capital by way of preferential offerings of social support to family members and close friends (Amato 1993; Reisig and Cancino 2004) over individuals outside of such networks. Occasionally, this results in greater difficulty for

non-residents when victimized within rural communities in gaining assistance from local residents. The same structural constraints (i.e., poverty, poor education, homelessness/joblessness) found in urban locales contributing to crime can also be found in nonmetropolitan places and are similarly associated with higher rates of juvenile violence when gone unchecked (Cancino 2005; Osgood and Chambers 2000). Some research even contradicts prevailing theoretical assumptions in finding the presence of social disorganization within more rural communities, resulting in higher youth arrest rates for violent acts, homicide, and fear of crime (Barnett and Mencken 2002; DeKeseredy et al. 2007; Krannich, Berry, and Greider 1989; Lee, Maume, and Ousey 2003; Osgood and Chambers 2000; Petee and Kowalski 1993; Spano and Nagy 2005).

Hypothesis. Clearly, there is significant disagreement over how crime operates outside of urban communities, and specifically how versions of crime models influenced by social capital operate within these settings. One way to alleviate such confusion, and in doing so spark advancement in criminological theory, is by assessing how well the theory works across multiple settings (Reisig and Cancino 2004). In that respect, as well as to dispel some of the general confusion about how relational theories of crime like those incorporating social capital vary by country and urbanization status of

communities within each country, this dissertation proposes to explore urbanization as a key variable differentiating variations in residential community crime models influenced by social capital in the U.K. Despite compelling examples like Bursik and Grasmick's systemic work suggesting social networks and the process of developing those networks can mediate the effects of structural constraints related to crime (Bursik and Grasmick 1992; Bursik and Grasmick 1995), structural factors have tended to be favored over relational theories like social capital in explaining neighborhood-level crime (Albrecht, Albrecht, and Albrecht 2000; Barnett and Mencken 2002; Laub 1983; Smith and Huff 1982).

This dissertation will specifically seek to address the following questions:

1. Is social capital the same concept between urban and rural communities in the U.K.? Specifically, do traditional indicators of social capital (friendship bonds, trust, and organizational participation) vary significantly in their levels across rural and urban communities in the U.K.?
2. Do structural factors (e.g., poverty, residential stability) similarly influence crime across both rural and urban areas in the U.K.?
3. To what extent does social capital mediate the effects of structural characteristics on crime?

From these questions, the hypotheses to be tested are:

- Hypothesis 1 – Social capital is not the same between urban and rural communities given that the components vary. In particular, it is predicted trust and organizational participation effects are similar across urban and rural areas. Exclusive friendship bonds, however, are predicted to be significant in rural communities (bonding social capital) and inclusive bonds are predicted to be more significant in urban areas (bridging social capital).
- Hypothesis 2 – Concentrated disadvantage, residential stability, and ethnic diversity affect crime in similar ways across urban and rural communities.
- Hypothesis 3 – Net the effects of poverty, residential stability, and ethnic diversity, social capital negatively affects crime in U.K. communities. However, the effects are not uniform across levels of urbanization.

In the next chapter, the nature of the data and analytical steps needed to complete this dissertation research are specified. The operationalization and analytical challenges for the research are also reviewed.

CHAPTER IV

METHODS

This chapter discusses the data sources, units of analyses, variables, and analytical techniques used in this dissertation.

SOURCES

The Office for National Statistics (ONS) and the British Social Attitudes Survey (BSAS) provided the data for this dissertation. Both ONS and BSAS data were differentiated by *local authority code*, a geographic distinction common throughout the U.K. for distinguishing communities. Both datasets were also available for the last 30 consecutive years.

In particular, as the largest independent producer of official statistical data for the U.K. (Statistics 2016), the ONS is a major clearinghouse for a wide assortment of data captured at both individual and aggregate levels, and is also responsible for the decennial census of England and Wales. The BSAS is a quantitative study of long-term trends and perspectives among English and Welsh residents managed through the National Centre for Social Research since 1983. Employing a multi-methods data collection approach (i.e., interpersonal interviews and self-completed questionnaires), it annually captures citizens' attitudes on such issues as national defense, the economy, and the state of welfare in the region. Additional

questions address personal beliefs and behaviors along social, economic, political and moral domains, including a number of items capturing components of social capital. Variables from the 2001 BSAS were used in this dissertation to capture social capital; these variables were not available in later iterations of the survey. Specifically, there were three times as many measures of trust in the 2001/2002 BSAS in comparison to the more recent 2008/2009 iteration of the survey available at the time of this study. There were also twice as many measures of friendship connections when compared to the more recent data available.

Measures of social capital captured in the BSAS were merged with aggregate level crime data and covariates from the ONS using local authority code as the common geographic identifier. Thus, it was important to ensure ample local authority coverage in the BSAS sample selected. Fortunately, the 2001 BSAS sample encompassed 2,839^a respondents distributed across 41% (n=142) of the 345 local authority areas in England and Wales.

As BSAS respondents were selected through multi-stage stratified random sampling (Research 2000a), so to then were the local authority areas in which the respondents resided.

Additional shapefiles for the local authority areas deemed

^a Note: The original BSAS sample was 3,287 respondents. However, after accounting for missing data and eliminating Scottish respondents (*the Scotland BSAS questionnaire differed considerably from the version provided to England and Wales*), the final valid sample was 2,839.

necessary for calculating spatial autocorrelation (see *Section IV - Data Analysis*) were acquired via open source Internet content managed through the University of Edinburgh. Upon aggregating the BSAS and ONS data, and performing additional filtering for missing geographic location data, the final sample employed for this dissertation was 131 local authority areas (101 urban areas, with an average of 20 BSAS respondents per area; 30 rural areas, with an average of 18 respondents per area).

UNITS OF ANALYSES

The units of analyses in this dissertation was *U.K. counties* – a term coined for this study as a means of allowing for more direct, measurement units comparison with similar U.S.- based studies. It was derived from the aforementioned local authority code designations used throughout the U.K. These codes are a popular geographic classification and data reporting standard for official statistical data in the U.K. (Gibson 2008; Pateman 2010/2011). The counties/codes consist of nine digits identifying the country and place code of each area they are assigned to. Such coded areas are roughly the equivalent of counties in the U.S., as “wards” within local authority areas are the equivalent of census tracts. Thus, as U.S counties are composed of numerous census tracts, so too U.K. counties are

composed of numerous wards (Pateman 2011).

Admittedly, in studying neighborhood-based theories like social capital, a spatial definition of neighborhoods that approximates counties in the U.K. is challenging. For one thing, it is solely a material definition in spite of evidence that residents can and often do define their neighborhoods both in material and non-material terms (Bell 2007; Bell, Lloyd, and Vatovec 2010). A purely spatial, materialistic definition like U.K. county code thus overlooks the ideational or cultural aspect of a neighborhood's profile, the importance of which Bell (2007) noted in distinguishing "second rurality" from "first rurality". Furthermore, neighborhood literature in the social sciences often fluctuates between material and non-material definitions (Bell 2007; Bell, Lloyd, and Vatovec 2010).

Nonetheless, for a number of reasons, it made sense to apply a spatial definition via the U.K. county codes designation. First, a spatial definition like U.K. county code is consistent with the tendency in social science studies of aggregate units towards materialist notions of neighborhood (Bell, Lloyd, and Vatovec 2010). Second, these codes are also a standard that has traditionally offered distinctions by urbanization, which was vital attempting to distinguish varying effects of social capital on crime between urban and rural communities respectively. Third, county-level aggregation is consistent with

prevailing literature that tests social capital and related theories using similar units of analysis (Beyerlein and Hipp 2005; Messner, Rosenfeld, and Baumer 2004; Ousey and Lee 2010; Rosenfeld, Messner, and Baumer 2001), along with several works showing precedent that neighborhoods and communities can be approximated via broader macro-level interpretation (Lee and Ousey 2001; Lee, Thomas, and Ousey 2010; Markowitz, Bellair, Liska, and Liu 2001; Sampson and Groves 1989).

DEPENDENT VARIABLES

The dependent variables, mean rates of *violent* and *non-violent crime* per thousand residents, were captured from police recorded crime incidents between 2001 and 2002 supplied by the Office of National Statistics (ONS). Forty-three police agencies, along with the British Transport Police, record all reported crime in England and Wales. Though limited only to crime reported to police officials, and thus poor in estimating typically underreported crimes like sexual assault, this data was available for both violent and non-violent crimes, and was differentiated by U.K. county code (Statistics 2012).

Prior to final preparation and publication via the ONS, the data was checked for quality on a three month cycle by the Home Office Statistics Unit. Additional quality assurance came from calibration between the notifiable offenses reported and data

recording standards governed through the Home Office Counting Rules and the National Crime Recording Standard. The data were made available to the public through the Research Development & Statistics (RDS) Division of the U.K's Home Office – a major clearinghouse for national crime data in the U.K. – and the RDS Division's Crime Reduction and Community Safety Group provided such data across multiple years dating back to 1981.

Confirmatory factor analysis and reliability testing were used to determine how well ONS crime indicators measured uniform constructs of violent and non-violent crime. Specifically, four indicators were tested for violent crime (violence against the person, wounding or other act endangering life, other wounding, and common assault) and eight indicators for non-violent crime (harassment including penalty notices for disorder, robbery, theft from the person, criminal damage including arson, burglary in a dwelling, burglary other than a dwelling, theft of a motor vehicle, and theft from a motor vehicle). As per Table 1 below, both violent and non-violent crime variables showed high intercorrelation and confirmed the presence of uniform constructs for both types of crime:

Table 1: Reliability Analysis for Violent and Non-Violent Crime Measures

<i>Violent Crime</i>		
Reliability for 4 Items	<u>Alpha</u>	<u>Standardized Item Alpha</u>
	.825	.859
<i>Non-Violent Crime</i>		
Reliability for 8 Items	<u>Alpha</u>	<u>Standardized Item Alpha</u>
	.912	.938

INDEPENDENT VARIABLES

The main independent variable in this analysis was social capital. To measure social capital, there were three key components made available through the 2001 BSAS: trust, friendship bonds, and organizational participation.

As per the extant literature, trust is a key component of social capital. For this study, trust was initially represented via mean scores for three composite trust measures. These were derived from a series of ordinal inquiries addressing trust in the government (England and Wales, respectively), and across a broad spectrum of institutions with respect to whether financial resources under government purview were being spent in the best interests of the people (see *Appendix A* for specific BSAS variables used). Factor and reliability analyses (see Table 2) confirmed a scale fit of all trust measures into one of three categories – *trust in the U.K. government*, *trust in public institutions*, and *trust in private institutions* – explaining 64% total variation:

Table 2: Reliability Analysis for Trust Measures (BSAS)

Reliability Coefficients for Trust Measures	Alpha	Standardized Item Alpha
	.849	.848

Accordingly, mean scores for the three sets of trust variables were calculated for each BSAS respondent. Then, the cumulative average for all such respondents within each U.K. county was calculated to represent estimates of each dimension of trust in each county.

Concerning friendship bonds, even the most rudimentary social capital measure accounts for the volume and density of friendship networks residents maintain within their communities. Thus, these bonds were important to include in this study and were measured through self-reported volume of friends in two distinct spheres. Particularly, in order to measure *bonding* friendship networks, the following question from the BSAS was used: *"Think now of people who live near you – in your neighbourhood or district. How many of these people are close friends of yours?"* In order to measure *bridging* friendship networks, the following BSAS question was used: *"How many other close friends do you have – apart from those at work, in your neighbourhood, or family members? Think, for instance, of friends at clubs, church, or the like."* The number of friends reported in response to both questions was aggregated, with the

cumulative average taken to represent extent of bridging and bonding friendships networks in each U.K. county.

Membership and involvement in social organizations is a third well-recognized component of social capital. As scholars like Putnam argued, organizational activity typically results from a sense of belongingness and obligation to the community with which one affiliates (Putnam 1995; Putnam 2000; White 2006). However, organizational membership alone does not capture social capital; one could very well be a member of several organizations, but attend few meetings and/or avoid service to these institutions. Fortunately, BSAS variables under this construct reflected both the type and mean frequency of respondents' involvement across a variety of organizations within the last 12 months prior to survey respondents' participation (see *Appendix B* for specific BSAS variables used).

As illustrated in Table 3, and similar to the crime and trust measures, there was confirmation of construct uniformity and a significant scale fit between all seven organizational participation items:

Table 3: Reliability Analysis for Organizational Participation Measures (BSAS)

	<u>Alpha</u>	<u>Standardized Item Alpha</u>
Reliability for Organizational Participation Measures	.576	.598

Accordingly, one composite variable explaining 44% of data variation was distinguished from these items. Aggregate mean scores for each participation variable were calculated for each BSAS respondent. Then, the average respondent scores within each U.K. county was calculated to represent the community average for organizational participation in each county.

ADDITIONAL COVARIATES

In addition to the dependent and independent variables, a number of structural covariates and controls were incorporated into this study to determine the effect of social capital on correlations between such variables and U.K. crime rates. Specifically, concentrated disadvantage, residential stability, and ethnic diversity are all variables related to urbanization status, crime and social capital in residential communities. Therefore, by accounting for these variables in the crime models estimated, it could be determined if social capital mediated, moderated, or held no influence on crime rates when such covariates were accounted for. These variables were provided through the 2001 U.K. Census, and made available through the ONS.

Concentrated disadvantage for England and Wales was measured via deprivation indices calculated by Oxford University on behalf of the Office of the Deputy Prime Minister, and the Welsh

Office and Welsh Local Government Association respectively. Both were derived from the 2001 U.K. Census, which is the last cycle for which complete data is currently accessible. These indices offered a more robust conceptualization of disadvantage than income poverty alone by accounting for additional resource and opportunity deficiencies in employment/employable skills, health, education, job training, housing, access to social services, living environment and crime prevention measures reported in each U.K. county area.

Residential stability was captured via two measures – rate of population turnover per thousand residents and percent of homeowners – recorded in the 2001 U.K. Census for England and Wales. Ethnic diversity was derived from the percentage of respondents in each U.K. county recorded as being non-White and/or non-British. As with information for residential stability, ethnic diversity data is captured through the 2001 U.K. Census.

As a control for the two different countries represented in the data, country identification was represented through the dichotomous coding of England and Wales, where England was coded "1" and Wales as "0". While there was no specific theoretical literature specifying that relationships between crime and social capital should vary between the two countries, England and Wales did vary considerably by the crime and structural

measures in this study. Thus, the distinction of the two countries was included in the hypothesized models to determine if any model variation could be attributed to this factor, and if the affect of country identification varied once social capital was included.

In order to measure urbanization level, the ONS provided an ordinal scale differentiating urban/rural community status and population density (Agency 2005; Pateman 2010/2011). This scale built upon the ONS' Urban 50/Rural 50 scale, but added a clearer definition of population density in each category (Bibby and Shepard 2004; Pateman 2010/2011):

6 = Urban – Less Sparse

5 = Urban – Sparse

4 = Town & Fringe – Less Sparse

3 = Town & Fringes – Sparse

2 = Village, Hamlet & Isolated Dwellings – Less Sparse

1 = Village, Hamlet, Isolated Dwellings – Sparse

For this study, as per notes from Bibby and Shepard (2004), the scale above was dichotomized; categories 1 through 4 were treated as rural and coded as "2", while 5 and 6 were labeled "urban" and coded as "1". Thus, all U.K. counties in this study were classified into one of the two categories.

Additionally, given the relevance of both spatial and non-spatial attributes in defining neighborhoods, this sparsity-

derived dichotomy was compared with BSAS respondents' self-descriptions of the places they live. BSAS respondents further had the option of describing their neighborhoods as urban (i.e., "big cities", "small cities/towns") or rural (i.e. "country villages", "farm/country homes"); suburbs were excluded from the analysis.

When compared to the self-identified BSAS data for neighborhood type, the ONS-derived definition is slightly more conservative for urban and considerably more so for rural. Respondents in the BSAS data indicated 124 urban areas and 66 rural. However, the BSAS definitions also contained some overlap wherein certain respondents within the same U.K. county fluctuated between defining the county as urban and rural. Thus, for the purpose of maintaining mutual exclusivity, this study applied the spatial dichotomized definition of urban and rural derived from ONS data.

Finally, in addition to these measures, a test for spatial autocorrelation was performed to determine if contiguous counties exhibited greater similarity for any of the crime variables, and thus would require additional data weighting in any models tested. By and large, studies of spatial areas reveal such areas in close proximity tend to exhibit greater similarities than those further in distance (Rookey 2012; Tobler 1970). Particularly, in studies of both crime and social

capital, there is some precedence for spatial autocorrelation occurring when these concepts are studied at aggregate levels given that neighboring communities tend to exhibit similar structural and behavioral trends (Scribner, Theall, Ghosh-Dastidar, Mason, Cohen, and Simonsen 2007; Socia and Stamatel 2012; Takagi, Ikeda, and Kawachi 2012). Accordingly, it stood to reason that such correlation needed to be investigated, and managed if present, in order to avoid data inaccuracies and overall weaker analytical strength (Rookey 2012) in this study.

Moran's I – a common method used for illustrating spatial autocorrelation (Anselin 2005; Gunaratna, Liu, and Park) – revealed the following:

Table 4: Moran's I Estimates of ONS Crime Rates for U.K. Counties (N = 131)

Violent Offenses	Moran's I (sig)
Violence against person	.234 (.01)
Wounding/ other life-endangering act	.188 (.04)
Other wounding	.165 (.02)
Common assault	.233 (.03)
Non-violent Offenses	
Harassment	.207 (.02)
Robbery	.330 (.01)
Theft from the person	.200 (.01)
Criminal damage (e.g., arson)	.187 (.01)
Burglary (in dwelling)	.301 (.01)
Burglary (other)	.260 (.01)
Theft of motor vehicle	.394 (.01)
Theft from motor vehicle	.300 (.01)

As per Table 4, there were varying degrees of autocorrelation with certain counties for violent and non-violent crime rate estimates. Thus, additional weighting variables were incorporated into the path and regression models developed for this research.

DATA ANALYSIS

Data analysis in this dissertation entailed a combination of structural equation modeling (SEM) to test Hypotheses #1 and #3, and ordinary least squares (OLS) regression to test Hypothesis #2. Support for combining SEM and OLS multivariate regression

in this way can be found in similar macro-level research by Smith and Damphousse (1998). Given that SEM represents an effort to impose models upon existing data, OLS regression analyses also served as means to determining the models that the data did support in instances where the imposed SEM models fell short.

Structural Equation Modeling (SEM)

Model estimates generated via structural equation modeling (SEM) featured prominently throughout this study. SEM allows for testing of the equivalence of measurement components and structural models alike for different samples of a population (Byrne 2010). It has become especially popular in the last 20 years given its ability to detect direct, indirect, and total effects of variables on one another by allowing dependent variables in one equation to serve as explanatory independent variables in another (Liu, Wang, and Tao 2013; Smith and Damphousse 1998). A few studies even offer precedence that SEM can be a valuable technique in modeling crime estimates with aggregate U.K. data when respondents per sample unit are small (Kaylen and Pridemore 2013; Markowitz, Bellair, Liska, and Liu 2001), such as is the case in this dissertation.

Hypothesis 1 was tested by running two six-factor recursive measurement models – one for urban U.K. counties and one for

rural – where a single latent measure of social capital was estimated. The models consisted of three composite variables for trust, two for friendship bonds (one for bonding, one for bridging), and one for organizational participation as illustrated in Figure 2:

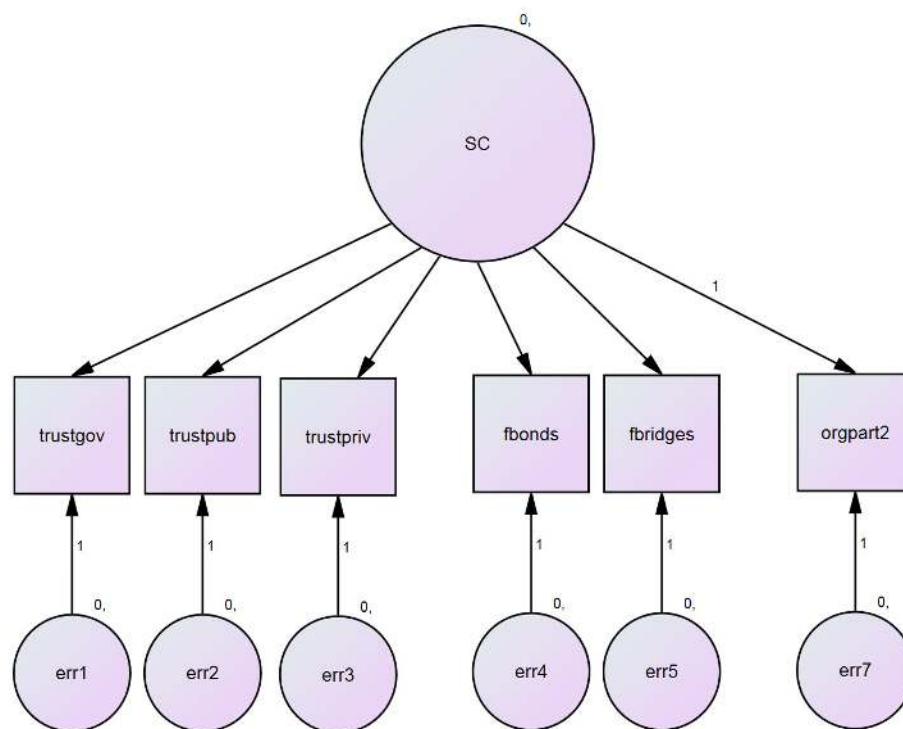


Figure 2: Model for Social Capital (Estimated Simultaneously for Urban and Rural U.K. Counties)

Results from these path models determined the composition of the social capital composite measures to be used in later stages of SEM analysis.

In order to address Hypothesis 2, multivariate linear

regression coefficients were estimated between concentrated disadvantage, residential stability, ethnic diversity, country identification and observed composite measures of crime rate while controlling for spatial autocorrelation for both urban and rural U.K. counties. In order to address the third hypothesis, full structural models for violent and non-violent crime rate were estimated using composite measures of social capital distinguished by urbanization, and incorporating the structural covariates (see Figures 3 & 4):

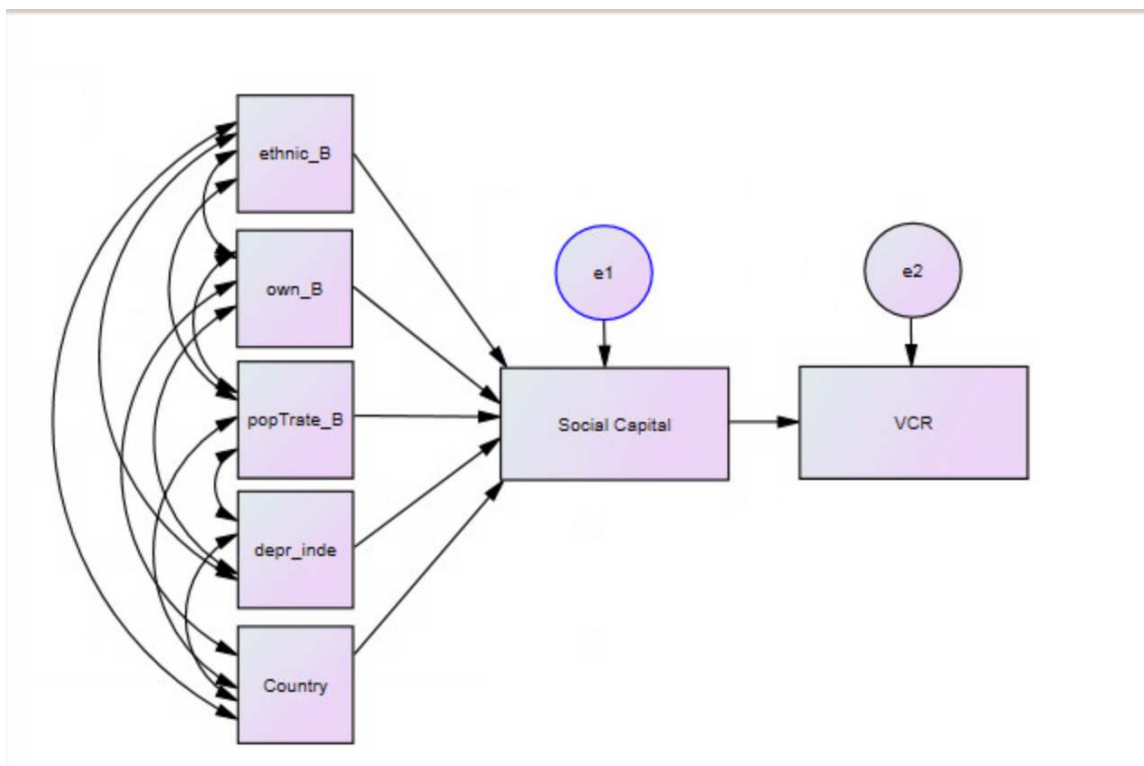


Figure 3: Full Structural Model for Social Capital and Violent Crime Rate (Estimated Simultaneously for Urban and Rural U.K. Counties)

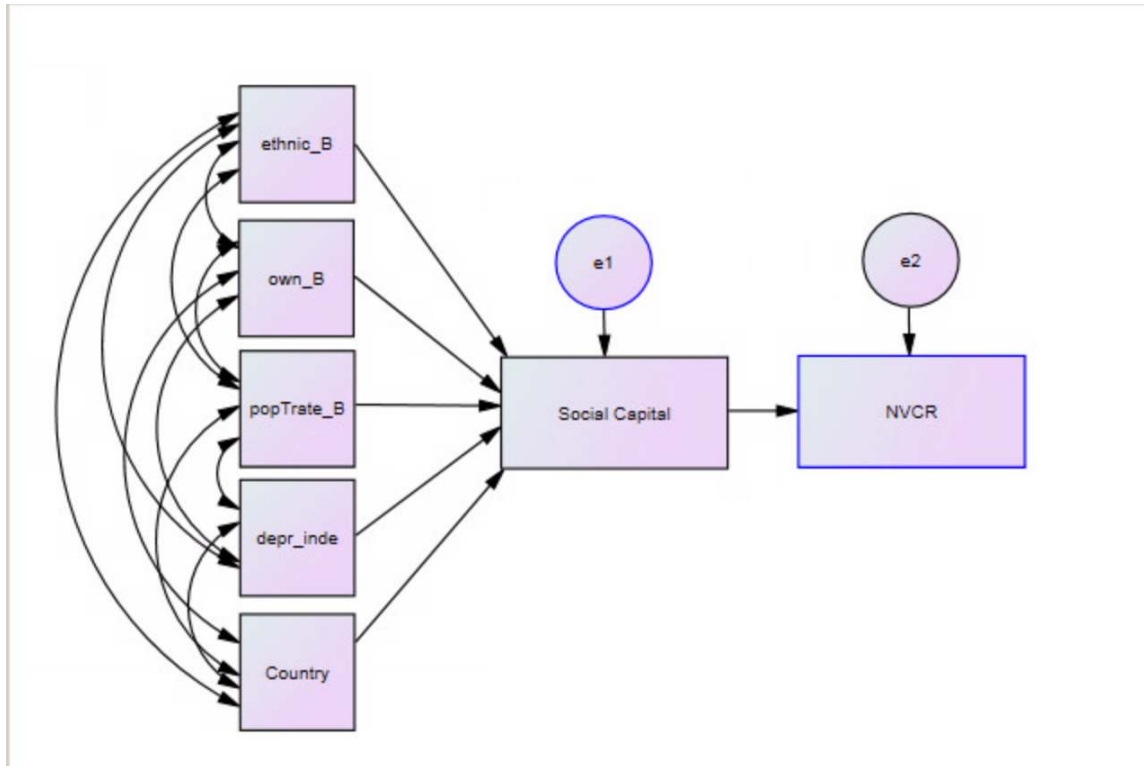


Figure 4: Full Structural Model for Social Capital and Non-Violent Crime Rate (Estimated Simultaneously for Urban and Rural U.K. Counties)

This dissertation proposed that each SEM model estimated would *reject* the null hypothesis of group equivalence. Thus, the argument of group variance between model estimates for urban and rural U.K. county samples would be supported.

CHAPTER V

FINDINGS

This dissertation builds upon the work of Pierre Bourdieu, James Coleman and Robert Putnam by both confirming that social capital is multidimensional, and that it is both influenced and influenced by a variety of social constructs. With respect to crime, numerous scholars have demonstrated the relevance of social capital as a factor in developing predictive community crime models. However, as findings from this study illustrated, social capital does not affect all crimes the same in all communities. In fact, at minimum this study offers support that the influence of social capital is largely a matter of which crimes are being considered, and whether or not the community is urban or rural.

In this chapter, results and implications from tests of all three hypotheses are discussed. Path models and goodness of fit indices are presented and explored, along with relevant OLS regression tables. For all variables exceeding normality parameters, the base-10 logarithm used.

DESCRIPTIVES OF URBAN AND RURAL COMMUNITIES

Consistent with the community-based literature on criminal offending and structural demographics, U.K. crime rates in this

study (see Table 5) were generally higher in urban communities, as was deprivation level and ethnic diversity:

Table 5: Variable Summary (All, Urban and Rural)

DEPENDENT VARIABLES –	<u>All</u>		<u>Urban</u>		<u>Rural</u>	
	<u>(N = 131)</u>		<u>(N= 101)</u>		<u>(N = 30)</u>	
Violent Crimes	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>
Violence against Person Wounding/Other Act	11.81	6.97	13.21	7.24	7.08	2.71
Endangering Life	0.30	0.30	0.36	0.31	0.12	0.10
Other Wounding	3.89	2.43	4.43	2.49	2.08	0.81
Common Assault	4.13	3.42	4.55	3.70	2.69	1.54
<i>Overall Violent Crime</i>	<i>20.14</i>	<i>12.05</i>	<i>22.56</i>	<i>12.53</i>	<i>11.97</i>	<i>4.51</i>
Non-Violent Crimes						
Harassment	2.08	1.40	2.29	1.48	1.40	0.82
Robbery	1.97	2.79	2.46	3.01	0.33	0.34
Theft from Person	2.18	5.09	2.69	5.71	0.49	0.38
Criminal Damage (incl Arson)	19.75	7.61	21.86	7.27	12.66	3.20
Burglary in Dwelling	7.61	5.00	8.83	5.03	3.50	1.43
Burglary Other than Dwelling	8.24	4.15	8.87	4.31	6.12	2.66
Theft of a Motor Vehicle	5.87	3.94	6.86	3.91	2.53	1.37
Theft from a Motor Vehicle	12.38	6.88	13.92	6.85	7.23	3.82
<i>Overall Non-Violent Crime</i>	<i>60.09</i>	<i>29.65</i>	<i>67.76</i>	<i>29.07</i>	<i>34.26</i>	<i>11.53</i>
COVARIATES						
Deprivation Level	23775	8502	25295	8191	18655	7585
Ethnic Diversity	0.12	0.14	0.14	0.15	0.05	0.03
Homeownership	0.70	0.10	0.69	0.11	0.76	0.03
Pop. Turnover Rate	6.10	5.03	5.62	4.97	7.71	4.96

Conversely, homeownership and residential turnover tended to be higher in rural settings. Concerning homeownership, this observation is consistent with past U.K. Census data reporting higher numbers of residents with owner-occupied status in rural

communities (Joshi, Dodgeon, and Hughes 2005; Joshi, Hughes, and Dodgeon 2006).

As for residential turnover, while higher turnover in rural areas might initially be surprising in light of historical trends showing urban residents are comparatively more transient (Dennett and Stillwell 2008), the contradictory evidence is not without some precedent. In fact, for the 2001 census year represented in this dissertation, demographic profiles of England and Wales revealed rural communities had higher population turnover than urban communities (Joshi, Dodgeon, and Hughes 2005; Joshi, Hughes, and Dodgeon 2006). This was especially noticeable after controlling for international immigration, which makes up a larger amount of the turnover occurring in urban areas (Joshi, Dodgeon, and Hughes 2005).

The life course transition of young U.K. residents – especially aged 20-29 – offers some explanation. For much of the internal migration that contributes to higher turnover in rural communities, the 20-something cohort tends to be more apt to leave their own families to start families of their own (Joshi, Dodgeon, and Hughes 2005). Amongst these young people, the more frequent pattern seems to be rural young people leaving to settle in urban areas.

TESTING HYPOTHESIS #1

With respect to components of social capital, urban and rural communities were remarkably similar. Table 6 illustrates that mean estimates of trust, friendship, and organizational participation were nearly identical for both urban and rural U.K. counties:

Table 6: Variable Summary – Social Capital (All, Urban and Rural)

	<u>All (N = 131)</u>		<u>Urban (N= 101)</u>		<u>Rural (N = 30)</u>	
SOCIAL CAPITAL	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>
Social Trust – Public	2.6	0.2	2.6	0.2	2.5	0.2
Social Trust – Private	2.8	0.2	2.7	0.2	2.8	0.2
Bonding Friendships	1.4	0.7	1.4	0.7	1.4	0.6
Bridging Friendships	2.3	1.4	2.3	1.4	2.2	1.3
Organizational Participation	1.6	0.4	1.6	0.4	1.7	0.4

However, SEM estimates revealed important nuances between urban and rural settings concerning how these components contribute to a composite model of social capital. For instance, while the proposed model produced path coefficients for the urban sample, it initially failed to run for rural U.K. counties. Exploratory factor analysis revealed that the variable associated with “trust in government” was accountable for this initial failure of the rural model.

Results for Hypothesis #1

Once omitted, coefficients for the rural model were successfully produced as well:

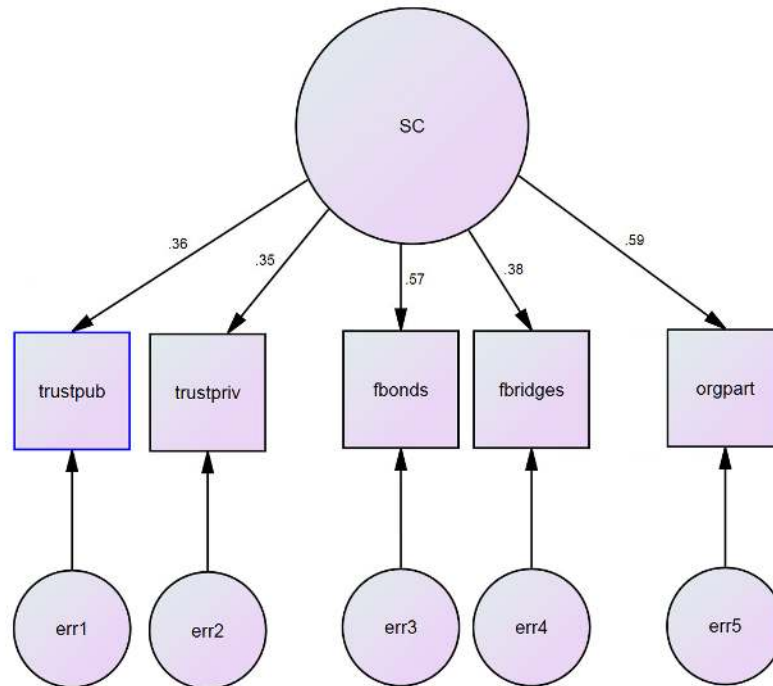


Figure 5: Estimates for Hypothesized Path Model of Social Capital (Urban Communities)

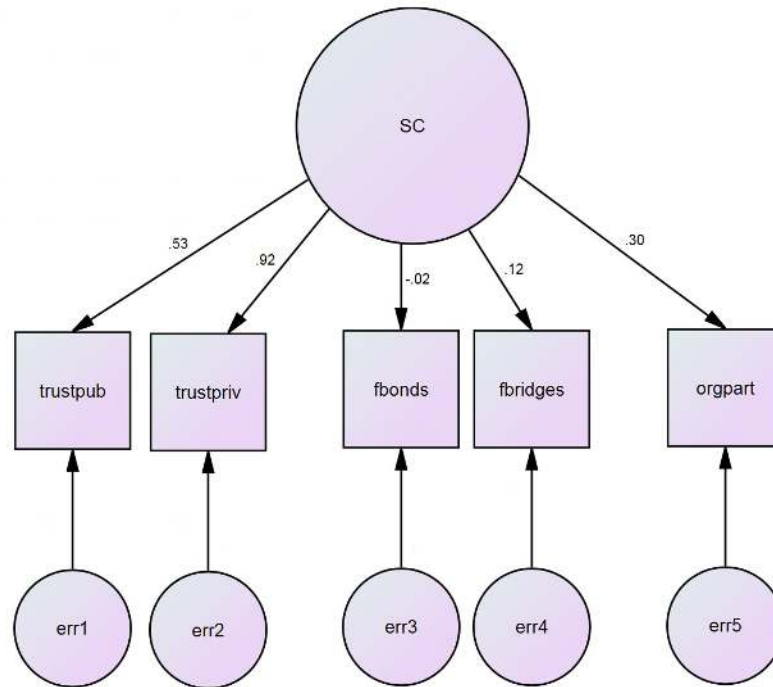


Figure 6: Estimates for Hypothesized Path Model of Social Capital (Rural Communities)

In both urban (see Figure 5) and rural (see Figure 6) versions of the model, organizational participation had a positive effect on social capital. This conformed with prevailing literature citing the relevance of membership and participation in formal community organizations as an important component of social capital. However, the effect was noticeably stronger in urban communities versus rural.

Though supporting literature on this finding specific to the U.K. is lacking, the stronger effects of organizational participation on urban social capital versus rural social

capital is not entirely absent of precedent or rationale. When compared to rural settlements, residents of urban and semi-urban communities in Nicaragua have displayed a higher propensity for reported affiliations with political parties and credit associations (Mitchell and Bossert 2007). Amidst their cache of social capital, rural migrant workers in China tend to refrain from including participation in urban organizations; reasons cited range from simple preference for social connections already established in their villages of origin to status marginalization in urban communities serving as obstruction from such participation (Palmer, Perkins, and Xu 2011).

Concerning friendship connections, both bridging and bonding friendship networks were also shown to be positive correlates with social capital in urban counties. Again, the literature offers support here. Scholars like Jane Jacobs (1961) have been quick to highlight the importance of friendships via contact opportunities in urban settings as an important precondition to social capital. In urban neighborhoods, noted for their higher population counts and diversity, it is not uncommon for residents to manage a large collection of friends and casual acquaintances towards various ends. Additionally, it may be that the pressures of urban living spotlighted by Durkheim, Wirth and others cause one to more aggressively seek out and maintain a

broader spectrum of primary and secondary friendship connections.

On the other hand, friendship connections contributed very little to social capital in the rural U.K. communities. Thus, with respect to friendships, this supports the hypothesis that social capital is not conceptually the same between urban and rural communities. One likely explanation for this difference between urban and rural social capital concerns the density-based measurement of friendship networks in the BSAS.

Consider that a feature of living in dense, urban U.K. settings is that social interactions are more likely to occur with a broader range of individuals due to lower spatial proximity and diversified travel options. This is especially true of elderly city dwellers who are often less susceptible to the social isolation experienced by their demographic peers in more rural communities (Drennan, Treacy, Butler, Byrne, Fealy, Frazer, and Irving 2008). Accordingly, the opportunities to build a broader network of friends are more plentiful in urban settings due to higher propensity for contact and structure features allowing for it versus rural areas.

Another possible explanation is that in more sparsely populated rural settings, while fewer friendship encounters occur, fewer friendships also need to be maintained in the cultivation of social capital. Mind you – this should not be

taken to mean that rural residents have less meaningful friendship bonds than their urban counterparts. Rather, it just may be that in conceptualizing social capital, a measurement of social capital via friendship network volume or density would be less appropriate for rural settings.

Finally, turning to trust measures, results here again support the prediction that social capital is different across urban and rural areas. For both types of communities, trust had positive effects. This was consistent with prevailing research that social capital tends to be higher in communities where residents express more trust.

However, trust measures were more significant in the rural model of social capital. Due to the spatial remoteness commensurate with many rural communities, trust – particularly that which develops through face-to-face interactions – is a major foundational element towards the realization of social capital (Townsend, Wallace, Smart, and Norman 2016). As for urban settings, it may be that a different kind of trust – perhaps one centered less around generalized trust in institutions and more akin with a personalized, context-specific trust in individuals and/or establishments – resonates more with the sort of social capital fostered in urban settings.

Jacobs implied as much when describing the custom among local residents in her Greenwich Village community of leaving their keys with trusted local business owners:

In our family, for example, when a friend wants to use our place while we are away for a weekend or everyone happens to be out during the day... we tell such a friend that he can pick up the key at the delicatessen across the street. Joe Cornacchia, who keeps the delicatessen, usually has a dozen or so keys at a time for handing out like this.

Now why do I, and many others, select Joe as a logical custodian for keys? Because we *trust* him, first, to be a responsible custodian, but equally important because we know that he combines a feeling of good will with a feeling of no personal responsibility about our private affairs. Joe considers it no concern of his whom we choose to permit in our places and why. (Jacobs 1961:60)

In this way, residents capitalize upon a constant source of nuanced social capital fostered with local businesses by way of continued guardianship over their property during extended time spent away from their residences.

TESTING HYPOTHESES #2 & #3

The next steps – testing the similarity of structural effects on crime for urban and rural communities (Hypothesis #2), and whether social capital affects crime negatively after controlling for these structural effects (Hypothesis #3) – entailed developing a full SEM model. Doing so required accounting for the finding that social capital, as measured by trust, friendships, and organizational participation, was not the same in urban and rural communities. As a result of this

finding, one uniform measure of social capital was created for urban communities by summing the mean estimates of trust, friendship and organizational participation measures into a rudimentary index score. The resulting index represented an approximation of each respective urban counties aggregate level of social capital investment as reflected by BSAS respondents within those counties.

For rural social capital, one construct measure was created using the composite measures for trust and organizational participation. As with urban settings, the sum of mean estimates for the composite variables created an index score as a valuation of each counties social capital. Friendship connections were omitted from the rural formula due to their aforementioned relative insignificance in a latent social capital model.

Results for Hypothesis #2

As per Tables 7 & 8, results here contradicted the hypothesis that ethnic heterogeneity, concentrated disadvantage and residential stability demonstrated similar effects on models of community crime. Specifically, the structural variables identified resulted in statistically significant models of violent and non-violent crime in urban areas of the U.K. However, this was not so with rural communities:

Table 7: Summary of Regression Coefficients for Urban Crime Models

	<u>Beta</u>	<u>Sig</u> (p-value)
Violent Crimes*		
Pop. Turnover Rate	.086	.175
% of Home Own.	-.247	.004
Ethnicity	.396	<.001
Deprivation Index	.788	<.001
Country	-.838	<.001
Autocorrelation	-.003	.964
Non-Violent Crimes**		
Pop. Turnover Rate	-.023	.654
% of Home Own.	-.240	<.001
Ethnicity	.234	<.001
Deprivation Index	1.142	<.001
Country	-1.041	<.001
Autocorrelation	.156	.003

*% of variation explained: 64%; $p < .001$

**% of variation explained: 76%; $p < .001$

Table 8: Summary of Regression Coefficients for Rural Crime Models

	<u>Beta</u>	<u>Sig</u> (p-value)
Violent Crimes*		
Pop. Turnover Rate	-.136	.476
% of Home Own.	-.129	.447
Ethnicity	.020	.915
Deprivation Index	1.192	<.001
Country	-1.282	<.001
Autocorrelation	-.067	.646
Non-Violent Crimes**		
Pop. Turnover Rate	-.091	.672
% of Home Own.	.084	.685
Ethnicity	.304	.175
Deprivation Index	1.039	.003
Country	-.677	.079
Autocorrelation	.112	.511

*% of variation explained: 49%; $p = .001$

**% of variation explained: 30%; $p = .025$

While the limited sample size of rural counties warrants some caution in interpreting these results, it was clear nonetheless that only a deprivation-based model was significant in the rural settings. The scarcity here of significant covariates for rural crime models may lie in the nature of rural living versus life in urban settings. It could be argued that the covariates in this study represented social forces found in a body of literature where urban crime is more commonly predicted. Thus, a poor fit to rural crime could be expected and it may be that predicting rural activity in U.K. crime demands shifting attention to a set of structural factors more befitting of less urbanized communities.

Additionally, it is important to acknowledge that concentrated disadvantage held significance in crime models for both community types. Poverty is a problem commonplace to both urban and rural communities throughout the U.K. (Layte, Nolan, and Whelan 2000; Leonard 2013; Pacione 2004). Concerning the connection between criminal behavior and economic disadvantage, Leonard (2013) observed how Ireland's historical failures to address the needs of its poorest population segments has routinely resulted in various transgressions from some of these same impoverished subgroups. It is paradigm common throughout the U.K.

More often than not, the debilitating effects of income and resource poverty serve as stimulus for criminal activity in the U.K. irrespective of urbanization level. In addition, the significance of the disadvantage variable in this study may imply the importance of the measure's comprehensiveness. That is to say, while such disparity was experienced at considerably higher levels in urban communities, the robustness of the measure seemed to tap into enough dimensions of disadvantage relevant to both urban and rural settings with respect to crime rates.

Results for Hypothesis #3

Estimating a full structural model of violent and non-violent crime in urban U.K. counties, with the aforementioned controls for spatial autocorrelation and urbanization distinction, suggested a weak and negative association between social capital and crime:

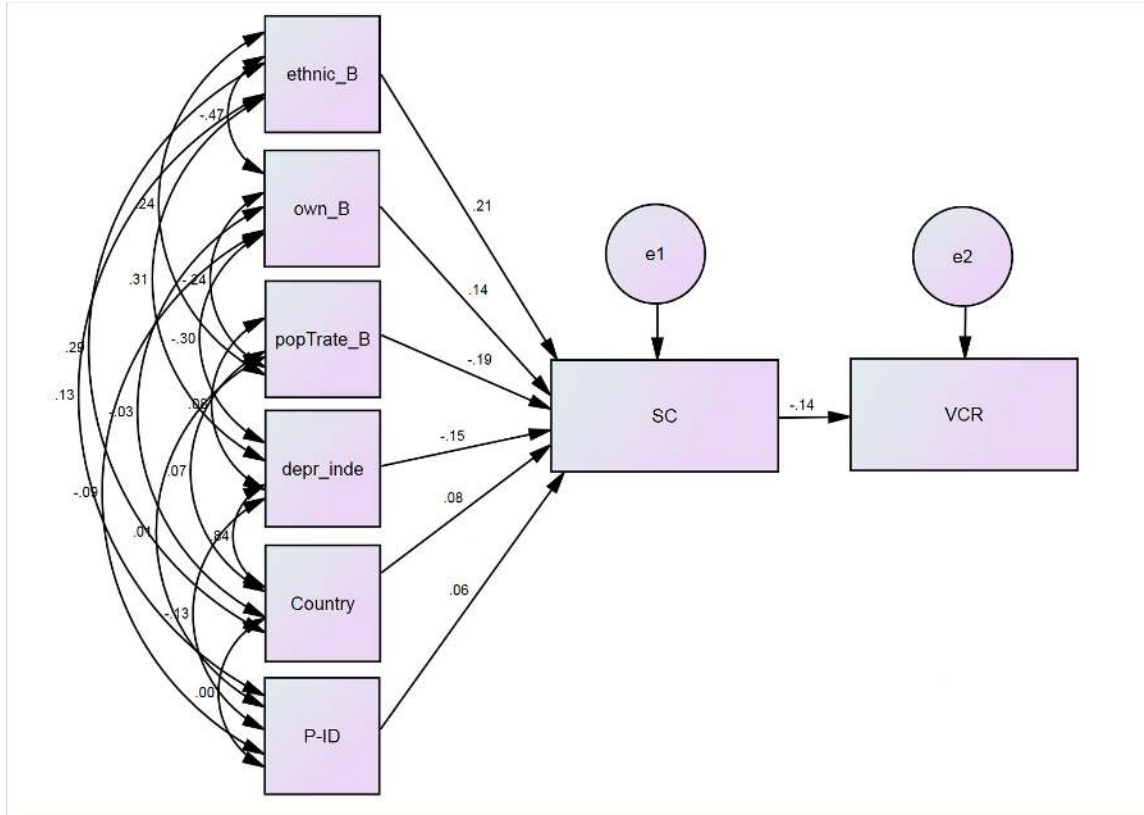


Figure 7: Estimates for a Full Structural Model of Violent Urban Crime Rates

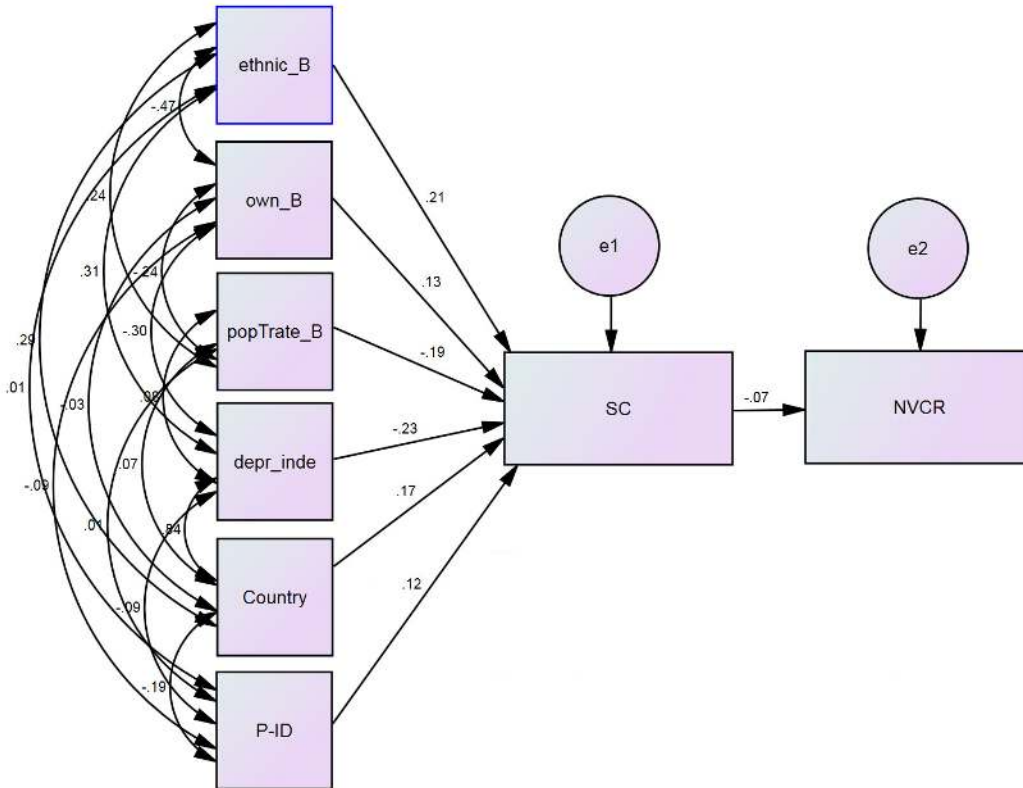


Figure 8: Estimates for a Full Structural Model of Non-Violent Urban Crime Rates

However, closer inspection of the model through OLS regression revealed the proposed model is not supported. Social capital did not hold any influence over U.K. crime rates independent of the other structural factors. As per Table 9, the introduction of social capital changed very little about how the crime models functioned in urban settings:

Table 9: Summary of Regression for Urban Crime Models (with Social Capital)

	<u>Original</u> <u>Model*</u>		<u>Model w/</u> <u>Social Capital**</u>	
	<u>Beta</u>	<u>Sig.</u> <u>(p-value)</u>	<u>Beta</u>	<u>Sig.</u> <u>(p-value)</u>
Violent Crimes				
Pop. Turnover Rate	.086	.175	.088	.176
% of Home Own.	-.247	.004	-.247	.004
Ethnicity	.396	<.001	.396	<.001
Deprivation Index	.788	<.001	.790	<.001
Country	-.838	<.001	-.839	<.001
Autocorrelation	-.003	.964	-.004	.955
Social Capital	N/A	N/A	.009	.883
*% of variation explained: 64%; p < .001				
**% of variation explained: 63%; p < .001				
Non-Violent Crimes				
Pop. Turnover Rate	-.023	.654	-.012	.821
% of Home Own.	-.240	<.001	-.241	<.001
Ethnicity	.234	<.001	.237	<.001
Deprivation Index	1.142	<.001	1.161	<.001
Country	-1.041	<.001	-1.061	<.001
Autocorrelation	.156	.003	.147	.004
Social Capital	N/A	N/A	.064	.205
*% of variation explained: 76%; p < .001				
**% of variation explained: 76%; p < .001				

While there was evidence of statistically significant models for both crime types, neither of those models seemed impacted by social capital. This contradicted much of the extant literature, but did support the premise that social capital is a force that needs to be weighed against a number of contextual variables in determining if and how it impacts U.K. crime.

By comparison, in rural communities, estimates from the proposed model implied social capital had a somewhat more significant effect on violent crime rates, but remained

insignificant for rates of non-violent crime:

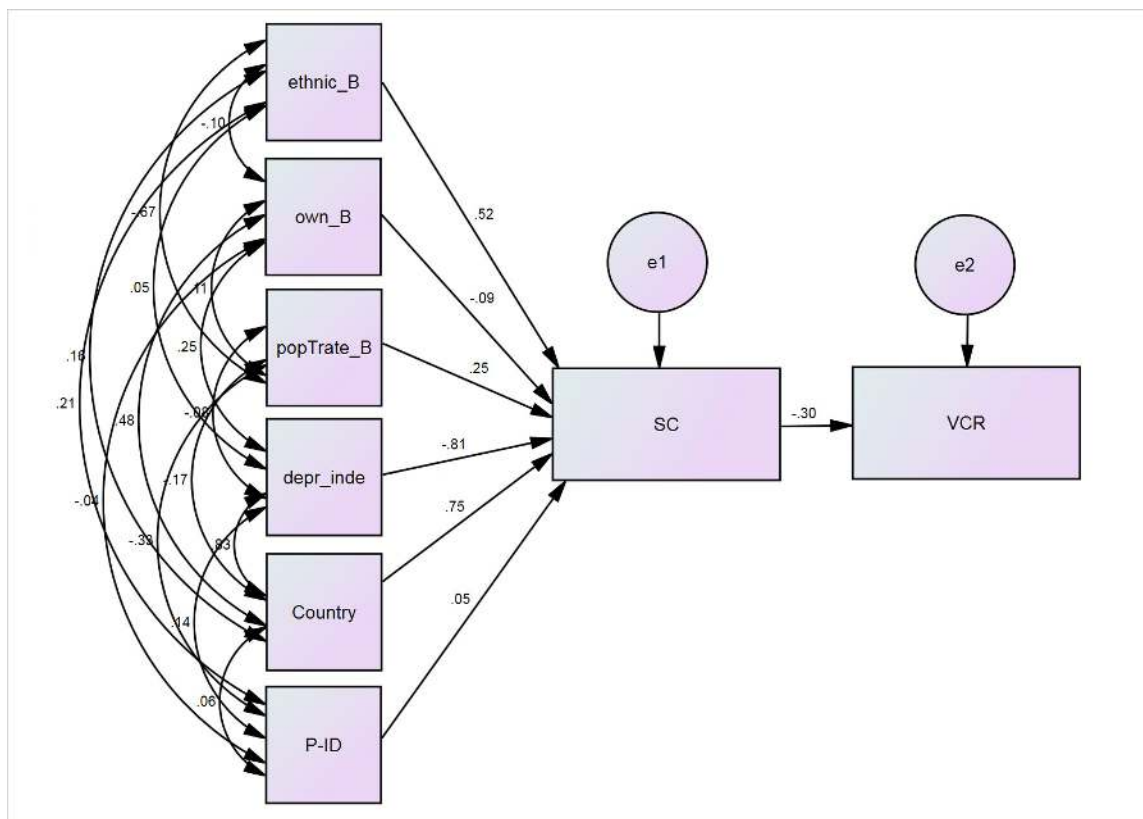


Figure 9: Estimates for a Full Structural Model of Violent Rural Crime Rates and Social Capital

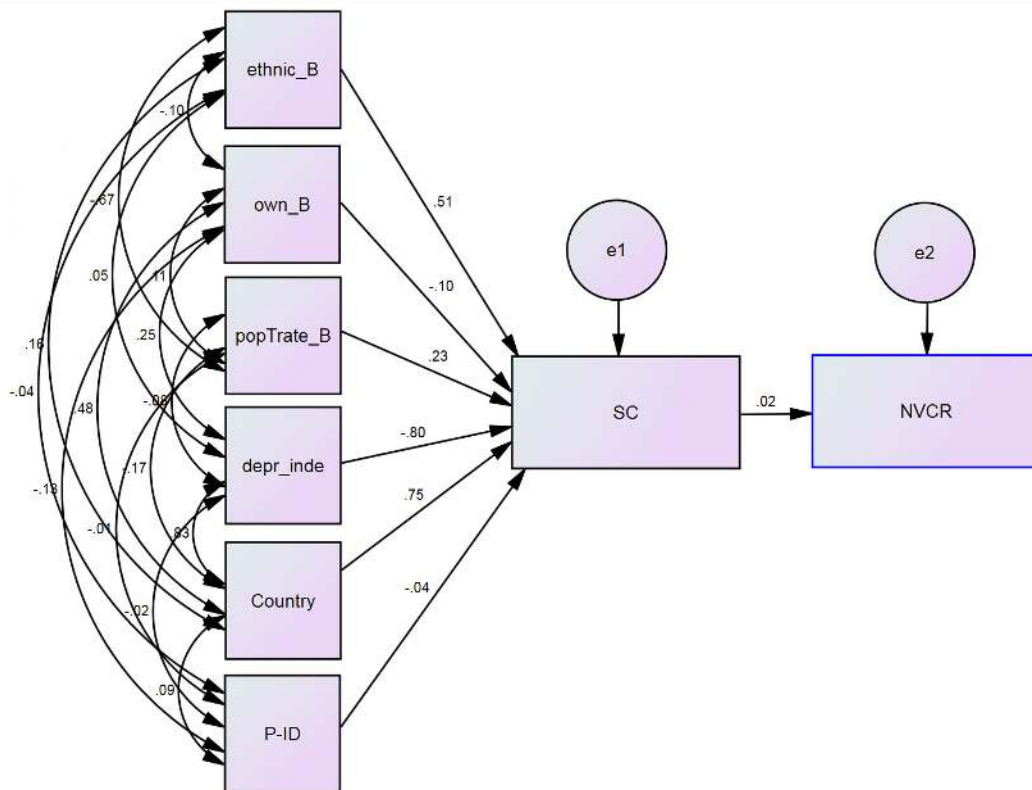


Figure 10: Estimates for a Full Structural Model of Non-Violent Rural Crime Rates and Social Capital

Yet again, OLS regression offers clarity here. While the urban data revealed a variety of effects of structural factors on crime, nearly all of those same factors were insignificant to rural county crime (see Table 10). The lone exception, level of deprivation, served to accentuate the premise that poverty has an enduring effect on crime no matter an area's extent of urbanization:

Table 10: Summary of Regression for Rural Crime Models (with Social Capital)

	<u>Original</u> <u>Model*</u>		<u>Model w/</u> <u>Social Capital**</u>	
	<u>Beta</u>	<u>Sig.</u> <u>(p-value)</u>	<u>Beta</u>	<u>Sig.</u> <u>(p-value)</u>
Violent Crimes				
Pop. Turnover Rate	-.136	.476	-.123	.523
% of Home Own.	-.129	.447	-.098	.570
Ethnicity	.020	.915	.020	.913
Deprivation Index	1.192	<.001	1.368	<.001
Country	-1.282	<.001	-1.455	<.001
Autocorrelation	-.067	.646	-.078	.595
Social Capital	N/A	N/A	.161	.342
*% of variation explained: 49%; p = .001				
**% of variation explained: 49%; p = .002				
Non-Violent Crimes				
Pop. Turnover Rate	-.091	.672	-.052	.801
% of Home Own.	.084	.685	.167	.411
Ethnicity	.304	.175	.313	.142
Deprivation Index	1.039	.003	1.441	.001
Country	-.677	.079	-1.082	.015
Autocorrelation	.112	.511	.155	.344
Social Capital	N/A	N/A	.356	.068

*% of variation explained: 30%; p = .025

**% of variation explained: 37%; p = .012

Moreover, goodness-of-fit estimates for the proposed models (see Table 11) further supported the conclusion that the initial models were of poor fit to urban and rural crime:

Table 11: Goodness of Fit (Full Models of Crime and Social Capital; Urban vs. Rural)

GOODNESS OF FIT	Urban (N= 101)		Rural (N = 30)	
	<u>Viol Crime</u>	<u>Non-Viol Crime</u>	<u>Viol Crime</u>	<u>Non-Viol Crime</u>
Overall chi-square	109.57	155.5	33.137	29.56
Degrees of freedom	7	7	7	7
Chi-square significance	<.001	<.001	<.001	<.001
Number of parameters	29	29	29	29
Root mean square residual	82.73	91.5	6.77	93.71
Goodness-of-Fit Index	.855	.831	.836	.849
Adjusted Goodness-of-Fit Index	.254	.131	.156	.225
Parsimony Goodness-of-Fit Index	.166	.162	.163	.165
Root mean square error of approximation	.383	.461	.359	.333

Scholars like Byrne (2006) have noted a well-fitting hypothesized model via chi-square testing is not that common. Rather, researchers typically see chi-square statistics substantially larger than degrees of freedom and low probabilities indicating a need to modify the model variables and/or increase sample size towards a better fitting model. As forementioned, this dissertation excluded slightly more than half of the counties existing in England and Wales between 2000 and 2001; it is reasonable to assume that more favorable chi-square estimates could have been produced if more counties were available for analysis.

RMSEA calculations also indicated the proposed model's fit with both community types was less than ideal, with estimates exceeding .10 for all datasets, whereas lower than .05 would be have been ideal. However, Byrne (2006) again revealed that RMSEA can tend to "overreject" models when sample sizes are small. Given what we know about counties that had to be excluded from this analysis, it may be plausible that a greater sample size would have resulted in more favorable RMSEA estimates.

Less stringent tests of model fit would seem more appropriate for this data. However, even then, most of the results in this study indicated a poor fitting model; only the GFI calculation indicated the model fit U.K. crime data reasonably well. Thus, the third hypothesis was rejected and an important question presented itself: exactly what kind of model(s) do support the data?

Hypothesis #3 Results by Type of Crime

Though overall violent and non-violent crime rates were the focus of this dissertation, studies of social capital and crime have found significant models in instances when *specific* types of crime were differentiated. Noteworthy here is the work Messner and Rosenfeld have pioneered in isolating the effects of social capital on homicide (Messner, Rosenfeld, and Baumer 2004;

Rosenfeld, Messner, and Baumer 2001). As such, while the third hypothesis test failed to show social capital as a significant factor in models of overall U.K. crime rates, there was reason to believe that social capital might fare better for models of specific crime types.

As it turned out, there indeed was no *one* overall model for violent or non-violent crime that was significant. Rather, as presented in Tables 12 – 14, supplemental analysis via multivariate OLS regression revealed a few different models where particular types of social capital significantly contributed to predictive models of U.K. crime rates – each model variant by type of crime and community:

Table 12: Summary of Regression Coefficients for *Urban Models of Harassment**

	<u>Beta</u>	<u>Sig.</u>
Pop. Turnover Rate	.125	.095
% of Home Own.	-.205	.036
Ethnicity	.358	<.001
Deprivation Index	.590	<.001
Country	-.922	<.001
Autocorrelation	-.006	.935
Social Capital	.140	.054

*% of variation explained: 51%; $p < .001$

Table 13: Summary of Regression Coefficients for *Urban Models of Burglary/Dwelling**

	<u>Beta</u>	<u>Sig.</u>
Pop. Turnover Rate	-.035	.557
% of Home Own.	-.113	.142
Ethnicity	.330	<.001
Deprivation Index	1.171	<.001
Country	-.898	<.001
Autocorrelation	-.139	.021
Social Capital	.138	.018

*% of variation explained: 69%; $p < .001$

Table 14: Summary of Regression Coefficients for *Rural Models of Motor Vehicle Theft**

	<u>Beta</u>	<u>Sig.</u>
Pop. Turnover Rate	-.067	.684
% of Home Own.	.326	.055
Ethnicity	.564	.003
Deprivation Index	1.352	<.001
Country	-1.123	.003
Autocorrelation	.094	.478
Social Capital	.508	.003

*% of variation explained: 59%; $p < .001$

The emergence of these models might explain why the initially proposed structural models for testing Hypothesis #3 fit so poorly. Those models were derived from assumptions of only two singular social capital pathways to comprehending overall crime rates varying by urbanization level. In fact, the Hypothesis #3 output suggested a few different models, and each nuanced by crime type and urbanization.

For example, two models revealed that social capital is significant and positively correlated with the rate of

harassment ($b = .140$; $p = .05$) and home burglaries ($b = .138$; $p = .018$) that occur in urban areas. Particularly when such crimes occur with high frequency in the community, and when the community features high levels of mistrust and spatially segmentation – common traits of large, densely populated city settings in the U.K. – it has been observed that efforts to control crimes like harassment and burglary will tend to suffer (Hope 2001). Within such communities, it is possible for residents to retain close contact with their neighbors (thus, displaying one type of social capital) while simultaneously failing to generate the type of social capital that would aid in implanting social control over these crimes (Hope 2001; Skogan 1990).

Importantly though, the positive effects of social capital here were small. There is also scant empirical support for social capital effects on specific crimes like harassment and home burglary in the extant urban literature. Thus, there is cause to question the strength of the effect illustrated here, along with the rationale for why only these crimes would be influenced by social capital in urban English and Welsh settlements but not in rural.

For the rural counties, a model of vehicular theft was the sole instance where social capital was of some significance ($b = .508$; $p = .003$). However, the effect of social capital here was

positive, relatively strong and thus worthy of some consideration. One plausible explanation for social capital's positive effect in this model may lie in the perceptual idiosyncrasies of rural communities versus urban settings with respect to theft security.

In rural settings, where camaraderie through reciprocal friendships, social trust, and community inclusiveness is commonplace, it would not be unusual to find social capital (particularly, bonding social capital) in abundance. Just the same, these rural qualities might lend to rural residents becoming too trusting of the security of their surroundings such that they become more susceptible to certain crimes like vehicle theft. Note the recent data and subsequent warnings from major rural insurance providers like NFU Mutual that prospective thieves are known to spy on the lifestyles of rural residents in order to find ideal opportunities for all manner of theft (Mutual 2015).

From its 2012 Rural Crime Survey, NFU Mutual determined theft of and from rural properties to be largely a matter of advanced planning and exploitation of opportunities where surveillance and safeguards of these properties are minimal (Mutual 2015). A prime opportunity to execute an automotive theft would be when farmers take lunch breaks during the day and are prone to leave their tractors or other farm vehicles

unattended for what they perceive to be too short a period of time for such theft to occur. Such theft is also known to occur during known periods when rural residents leave their vehicles and similar possessions unattended for extended periods of time (e.g., during "tea" times or end-of-week excursions into town), and police response times are anticipated to be slower (Mutual 2015).

Insurance data aside, there is little prior evidence from rural U.K. settings explaining why vehicular theft models would be so strongly affected by social capital, and the *positive* coefficient calculated does contradict much of the extant literature extolling negative relationships between social capital and crime. Nonetheless, irrespective of urbanization level, a positive correlation between social capital itself and/or components of it and various forms of criminal and/or deviant activity is not entirely unprecedented.

Certain delinquent peer groups (i.e., adolescent alcohol drinkers) have shown that their delinquency can serve as a key cohesive element lending to the group's existence (Kreager, Rulison, and Moody 2011). This work is further supported with evidence across multiple countries of social capital's pivotal role in the establishment and sustenance of organized crime syndicates (Koppen 2013; Lo 2010; Steffensmeier and Ulmer 2006).

Carson (2004) noted how social capital by way of strong social ties could be associated with higher crime and diminished informal social control in a community. In such settings, albeit typically urban, social ties that are geographically restricted can contribute to crime by discouraging collective responses to local community problems (Carson 2004; Morenoff, Sampson, and Raudenbush 2001). This, again, would serve to explain the positive association between specific crimes like vehicular theft and social capital in rural U.K. areas.

CHAPTER VI

CONCLUSION

As findings from this study suggested, social capital in the UK is not the same construct once urban and rural communities are distinguished from each other. It was also clear that structural variables known to influence UK crime rates vary in their effects due in part to a community's urbanization level. Finally, this dissertation demonstrated that social capital's effects on such rates are rather limited and warrant specification in the type of crime being measured along with urbanization level. While these findings from the study were clear, some limitations throughout the project should be recognized.

LIMITATIONS

First, in moving forward with research of this nature, significant efforts could be made to address a number of factors impacting the precision of the models proposed in this study. Concerning one such factor, sample size, certain constraints documented earlier in this dissertation resulted in only communities in England and Wales being studied, and only those with residents who had at least 10 respondents complete the 2001 BSAS study. This made for a less comprehensive analysis of both the two countries and of the U.K. as a whole. While these

limitations were understood in advance and unavoidable, they nonetheless serve as key points of areas for improvement. A greater sampling of counties – especially rural – would likely improve both the explained variance of data for the derived models and the strength of tests for spatial autocorrelation.

A second possible improvement would be to address the limited degrees of freedom in this study's SEM models by developing a more sophisticated structural model. While residential stability, ethnic heterogeneity and concentrated disadvantage are among the more common covariates influencing crime rates in U.K., additional variables are likely relevant. This is notable in light of the scarcity in variables that were statistically significant for rural crime rate models. Identifying more relevant structural covariates to crime in rural settings would almost certainly improve the estimation of social capital effects on crime.

Thirdly, the difficulty in measuring social capital in this study is not to be overlooked. While social capital literature generally supports using measurements for trust, friendship networks, and organizational participation, the BSAS instrument revealed some specific limitations that altered analytical strength in this research. In particular, a more robust, qualitative measurement of friendship measures apropos for assessing rural residents, as well as alternative definitions of

trust for urban dwellers, might prove well in determining a clearer measurement of social capital.

Limitations notwithstanding, there appears to be enough evidence to suggest that there are applicable models of crime in the U.K. that incorporate social capital, and that those models vary based upon the urbanization level of a community and the type of crime rate in question. However, failure to fit a proposed model of *overall* violent and non-violent crime rate to this data serves as both a caution against abiding too rigidly to preexisting notions of social capital-crime paradigms, and confirmation that further international scholarship in this area is warranted. While some of this dissertation's results may be attributable to methodological limitations, there is enough evidence to warrant future research in the U.K. and abroad towards building better crime models within the discourse of social capital.

FUTURE RESEARCH

Amidst the current context of social science discourse, heightened awareness of place dynamics and "community-mindedness" is undeniable. As Sampson notes:

Community has been prescribed for much of what allegedly ails modern society. Indeed, calls for a return to community values and neighborhood governance are being heard from across the spectrum. (Sampson 2004:106)

Similarly, concerning development of crime theory and policy in the modern era, ecological concepts like social capital are undoubtedly relevant. However, each attempt to apply social capital towards a community's crime problems must be weighed against the traits that define the community, which crimes are to be targeted through such efforts, and the nuances of how each crime is influenced by these traits. Great care must also be taken not to force notions of social capital into settings where it does not apply or where advanced specification is required. As this dissertation revealed, social capital models applicable in one geography (i.e., the United States) do not necessarily apply in another (i.e., the United Kingdom).

On the matter of variable clarification, there was some indication in the data of an underlying segmentation between organizational participation measures. Specifically, while scale reliability in this study ultimately supported aggregating the seven participation variables into one component, there were two conceptual areas of participation being measured in the BSAS: 1.) participation connected to a specific foundation of belief (e.g., a specific religion, ideology or doctrine), and 2.) organizational participation related to one or more activities one would be or want to be involved in largely or entirely unbound by any specific belief.

Captured under the former would be membership and activity in organizations political, religious, or charitable in nature that imply adherence to some core set of ideals that frame the activity of the organizations' members and fuel the desire for those to join and/or stay as members. Alternatively, the latter type of participation seems comprised of affiliation with trade organizations, sports clubs, and the like that seem comparatively more secular or apolitical in nature. With a robust dataset covering both more of the U.K. and additional measures of organizational activity, a more sophisticated exploration and possible implementation of participation measures would be feasible. Further studies of U.K. crime with social capital as primary variable would require such efforts.

Considering that an underlying premise of this dissertation was the notion that social phenomena like crime are rarely distributed randomly across geographic spaces, it was expected that crime rates at a community level would reflect some degree of congruency due to spatial proximity with structurally similar areas. Neighboring urban areas often exhibit greater similarity in crime rates between one another, and the same typically holds true for rural areas. Such spatial autocorrelation has been shown present across vastly different geographic settings – from violent crimes in urban Chicago neighborhoods (Morenoff,

Sampson, and Raudenbush 2001) to property crime in residential communities in Turkey (Erdogan, Yalcin, and Dereli 2013).

Yet, there was surprisingly little support for spatial autocorrelation in this research. Only non-violent crime in rural counties seemed marginally significant ($b = .156$; $p = .003$) when compared with the other structural covariates. Otherwise, English and Welsh counties illustrated no evidence of spatial clustering of crime in either urban or rural areas. Despite this lack of evidence, spatial clustering was important to explore and should remain a key consideration in future efforts modeled from this research.

Finally, with only England, and to a more limited extent Wales, covered in this dissertation, the discourse initiated in this study needs to expand to Scotland and Northern Ireland, as well as more countries with suitable data to support such aggregate-level analysis. Concurrently, applying the dissertation methodology to more recent data on crime, structural demographic activity, and social capital for communities in such countries would be ideal. For instance, presently there are variants of such measures available from nationally representative studies of social life in Scotland and Northern Ireland, but these studies vary considerably in how key variables like social capital and urbanization are measured. Thus, separate studies should be considered for these countries

with this dissertation serving as a point of reference. Scotland, as one example, administers the Scottish Social Attitudes Survey (SSAS), which has measures similar to the BSAS but with divergent sets of questions for items representing social capital. For Northern Ireland, while there is no national study that approximates social capital in the manner of the BSAS or the SSAS, a number of smaller localized studies – most notably, the doctoral work completed by Dr. Paul Surgenor through the University of Ulster-Coleraine (Surgenor 2004) – might be applicable. All such countries maintain a uniform database for crime rate and Census-level demographic data, as well as some layered structure for defining communities by urbanization level.

REFERENCES

- Agency, Northern Ireland Statistical Research. 2005. "Report of the Inter-Departmental Urban-Rural Definition Group: Statistical Classification and Delineation of Settlements." Northern Ireland Statistical Research Agency, Belfast, Northern Ireland, United Kingdom.
- Akcomak, I. Semih and Bas ter Weel. 2011. "The impact of social capital on crime: Evidence from the Netherlands." *Regional Science and Urban Economics* 42:323 - 430.
- Albrecht, Don E., Carol Mulford Albrecht, and Stan L. Albrecht. 2000. "Poverty in Nonmetropolitan America: Impacts of Industrial, Employment, and Family Structure Variables." *Rural Sociology* 65:87-103.
- Amato, Paul R. 1993. "Urban-Rural Differences in Helping Friends and Family Members." *Social Psychology Quarterly* 56:249-262.
- Anderson, Elijah. 2007 (1994). "The Code of the Streets: How the inner-city environment fosters a need for respect and a self-image based on violence." Pp. 393 - 402 in *Crime, Inequality, and the State*, edited by M. E. Vogel. New York, NY: Routledge.
- Anselin, Luc. 2005. "Exploring Spatial Data with GeoDa: A Workbook." Urbana, IL.

- Arias, Enrique Desmond. 2002. "The Trouble with Social Capital: Networks and Criminality in Rio de Janeiro." in *Annual Meeting of the American Political Science Association*. Boston, MA.
- Bachman, Ronet. 1992. "Crime in Nonmetropolitan America: A National Accounting of Trends, Incidence Rates, and Idiosyncratic Vulnerabilities." *Rural Sociology* 57:546-560.
- Ball, Carolyn. 2001. "Rural Perceptions of Crime " *Journal of Contemporary Criminal Justice* 17:37-48.
- Barnett, Cynthia and F. Carson Mencken. 2002. "Social Disorganization Theory and the Contextual Nature of Crime in Nonmetropolitan Counties." *Rural Sociology* 67:372-393.
- Beale, Calvin. 1978. "People on the Land." in *Rural U.S.A.: Persistence and Change*, edited by T. R. Ford. Ames, IA: Iowa State University Press.
- Beggs, John J., Valerie A. Haines, and Jeanne S. Hurlbert. 1996. "Revisiting the Rural-Urban Contrast: Personal Networks in Nonmetropolitan and Metropolitan Settings." *Rural Sociology* 61:306-325.
- Beggs, John J., Jeanne S. Hurlbert, and Valerie A. Haines. 1996. "Community Attachment in a Rural Setting: A Refinement and Empirical Test of the Systemic Model." *Rural Sociology* 61:407-426.

- Bell, Michael M. 2007. "The two-ness of rural life and the ends of rural scholarship." *Journal of Rural Studies* 23:402-415.
- Bell, Michael M., Sarah E. Lloyd, and Christine Vatovec. 2010. "Activating the Countryside: Rural Power, the Power of the Rural and the Making of Rural Politics." *European Society for Rural Sociology* 50:205 - 224.
- Beyerlein, Kraig and John R. Hipp. 2005. "Social Capital, Too Much of a Good Thing? American Religious Traditions and Community Crime." *Social Forces* 84:995 - 1013.
- Bibby, Peter and John Shepard. 2004. "Developing a New Classification of Urban and Rural Areas for Policy Purposes -- the Methodology." Rural Evidence Research Centre.
- Blau, Judith and Peter Blau. 1982. "The Cost of Inequality: Metropolitan Structure and Violent Crime." *American Sociological Review* 47:114 - 129.
- Bouley, Eugene E. and Terry L. Wells. 2001. "Attitudes of Citizens in a Southern Rural County toward Juvenile Crime and Justice Issues." *Journal of Contemporary Criminal Justice* 17:60-70.
- Bourdieu, Pierre. 1985. "The Forms of Capital." Pp. 241 -- 258 in *Handbook of Theory and Research for the Sociology of Education*, edited by J. Richardson. New York: Greenwood.
- Bracken, Denis C., Lawrence Deane, and Larry Morrissette. 2009. "Desistance and social marginalization: The case of

- Canadian Aboriginal offenders." *Theoretical Criminology* 13:18.
- Brehm, John and Wendy Rahn. 1997. "Individual Level Evidence for the Causes and Consequences of Social Capital." *American Journal of Political Science* 41:999 - 1023.
- Briggs, Daniel. 2010. "'True stories from bare times on road': Developing empowerment, identity and social capital among urban minority ethnic young people in London, UK." *Ethnic and Racial Studies* 33:851 - 871.
- Brown, Eleanor and James M. Ferris. 2007. "Social Capital and Philanthropy: An Analysis of the Impact of Social Capital on Individual Giving and Volunteering." *Nonprofit and Voluntary Sector Quarterly* 36:85 - 99.
- Bursik, Jr., Robert J. 1999. "The Informal Control of Crime Through Neighborhood Networks." *Sociological Focus* 32:85 - 97.
- Bursik, Jr., Robert J. and Harold Grasmick. 1992. "Longitudinal Neighborhood Profiles in Delinquency: The Decomposition of Change." *Journal of Quantitative Criminology* 8:247 - 263.
- Bursik, Jr., Robert J. and Harold G. Grasmick. 1993. Pp. 59 in *Neighborhoods and Crime*. Lanham, MD: Lexington Books.
- _____. 1995. "Neighborhood-Based Networks and the Control of Crime and Delinquency." Pp. 107 - 130 in *Crime and Public*

- Policy: Putting Theory to Work*, edited by H. D. Barlow.
Boulder, CO: Westview Press.
- Burt, Ronald. 1992. *Structural Holes, The Social Structure of Competition*. Cambridge, MA: Harvard University Press.
- _____. 2000. "The network structure of social capital." Pp. 345 - 423 in *Research in Organizational Behavior*, edited by B. I. Staw and R. I. Sutton. London and New York: Elsevier Science JAI.
- Byrne, Barbara M. 2010. *Structural Equation Modeling with AMOS: Basic Concepts, Applications, and Programming*. Ottawa, Ontario, Canada: Routledge.
- Cairns, Ed, Jon Van Til, and Arthur Williamson. 2003. "Social Capital, Collectivism-Individualism and Community Background in Northern Ireland: A Report to the First Minister and Head of the Voluntary and Community Unit of the Department for Social Development."
- Cancino, Jeffrey Michael. 2003. "Breaking From Orthodoxy: The Effects of Social Disorganization on Perceived Burglary in Nonmetropolitan Communities." *American Journal of Criminal Justice* 28:125-145.
- _____. 2005. "The Utility of Social Capital and Collective Efficacy: Social Control Policy on Nonmetropolitan Settings." *Criminal Justice Policy Review* 16:287 - 318.

- Cardoso, Ana, Heloisa Perista, Paula Carrilho, and Mario Jorge Silva. 2013. "Juvenile Delinquency School Failure and Dropout in Portugal: Drafting a Picture in Different Voices." *Journal of Criminal Justice and Security* 15:510 - 530.
- Carson, W.G. 2004. "Is Communalism Dead? Reflections on the Present and Future Practice of Crime Prevention: Parts One & Two." *The Australian and New Zealand Journal of Criminology* 37:192 - 210.
- Castle, Emery N. 2002. "Social Capital: An Interdisciplinary Concept." *Rural Sociology* 67:331-349.
- Chaskin, Robert J. 1997. "Perspectives on Neighborhood and Community: A Review of the Literature." *Social Service Review* 71:521 - 547.
- Cho, Jaeho and Douglas M. McLeod. 2007. "Structural Antecedents to Knowledge and Participation: Extending the Knowledge Gap Concept to Participation." *Journal of Communication* 57:25.
- Clear, Todd R., Dina R. Rose, and Judith A. Ryder. 2001. "Incarceration and the Community: The Problem of Removing and Returning Offenders." *Crime & Delinquency* 47:335 - 351.
- Clinard, Marshall B. 1964. "The Relation of Urbanization and Urbanism to Criminal Behaviour." Pp. 541-558 in *Contributions to Urban Sociology*, edited by E. W. Burgess and D. J. Bogue. Chicago: University of Chicago Press.

- Coleman, James. 1988. "Social Capital in the Creation of Human Capital." *American Journal of Sociology* 94:95 - 120.
- _____. 1990. *Foundations of Social Theory*. Cambridge, Massachusetts: Harvard University Press.
- Collier, Paul. 1998. "Social Capital and Poverty." The World Bank.
- Crawford, Adam. 2006. "'Fixing Broken Promises?': Neighbourhood Wardens and Social Capital." *Urban Studies* 43:957 - 976.
- Crutchfield, Robert, Michael Geerken, and Walter Gove. 1982. "Crime Rate and Social Integration." *Criminology* 20:467-478.
- Darby, John. 1986. *Intimidation and the Control of Conflict in Northern Ireland*. Dublin, Northern Ireland: Gill and Macmillan.
- De Coster, Stacy, Karen Heimer, and Stacy M. Wittrock. 2006. "Neighborhood Disadvantage, Social Capital, Street Context, and Youth Violence." *The Sociological Quarterly* 47:723 - 753.
- de Souza Briggs, Xavier. 2007. "'Some of My Best Friends Are . . .': Interracial Friendships, Class, and Segregation in America." *City and Community Journal* 6.
- DeFilippis, James. 2001. "The Myth of Social Capital in Community Development." *Housing Policy Debate* 2:26.

- DeKeseredy, Walter S., Joseph F. Donnermeyer, Martin D. Schwartz, Kenneth D. Tunnell, and Mandy Hall. 2007. "Thinking Critically About Rural Gender Relations: Toward a Rural Masculinity Crisis/Male Peer Support Model of Separation/Divorce Sexual Assault." *Critical Criminology* 15:295 - 311.
- Dennett, Adam and John Stillwell. 2008. "Population turnover and churn: enhancing understanding of internal migration in Britain through measures of stability." Office of National Statistics, London, England.
- Donnermeyer, Joseph F., Pat Jobes, and Elaine Barclay. 2006. "Rural Crime, Poverty, and Community." Pp. 199-218 in *Advancing Critical Criminology*, edited by W. S. DeKeseredy and B. Perry. Lanham, MD: Lexington Books.
- Dowla, Asif. 2006. "In credit we trust: Building social capital by Grameen Bank in Bangladesh." *The Journal of Socio-Economics* 35:21.
- Drennan, Jonathan, Margaret Treacy, Michelle Butler, Anne Byrne, Gerard Fealy, Kate Frazer, and Kate Irving. 2008. "The experience of social and emotional loneliness among older people in Ireland." *Aging & Society* 28:21.
- Durkheim, Emile. 1968. *Suicide: a study in sociology*. London: Routledge & Kegan.

- _____. 2008 (1893). "The Division of Labor in Society." Pp. 159 - 164 in *Social Stratification: Class, Race, and Gender in Sociological Perspective*, edited by D. B. Grusky. Boulder, CO: Westview Press.
- Erdogan, Saffet, Mustafa Yalcin, and Mehmet Ali Dereli. 2013. "Exploratory spatial analysis of crimes against property in Turkey." *Crime , Law & Social Change* 59:63 - 78.
- Ferguson, Kristin M., Charles H. Mindel. 2007. "Modeling Fear of Crime in Dallas Neighborhoods: A Test of Social Capital Theory." *Crime & Delinquency* 53:322 - 349.
- Fernandez, Roberto M. and Isabel Fernandez-Mateo. 2008. "Networks, Race, and Hiring." Pp. 587 - 595 in *Social Stratification: Class, Race, and Gender in Sociological Perspective*, edited by D. B. Grusky. Boulder, CO: Westview Press.
- Fieldhouse, Edward and David Cutts. 2010. "Does Diversity Damage Social Capital? A Comparative Study of Neighborhood Diversity and Social Capital in US and Britain." *Canadian Journal of Political Science* 43:289 - 318.
- Fischer, Claude. 1995. "The Subcultural Theory of Urbanism: A Twentieth-Year Assessment." *American Journal of Sociology* 101:543-577.

- Foley, Michael W. and Bob Edwards. 1997. "Escape from Politics? Social Theory and the Social Capital Debate." *American Behavioral Scientist* 40:550-561.
- Forrest, Ray and Ade Kearns. 2001. "Social Cohesion, Social Capital and the Neighbourhood." *Urban Studies* 38:2125 - 2143.
- Freeman, Lance. 2001. "The Effects of Sprawl on Neighborhood Social Ties." *American Planning Association Journal* 67:69-77.
- Fukuyama, Francis. 2001. "Social capital, civil society, and development." *Third World Quarterly* 22:7 - 20.
- Gibson, Pippa. 2008. "Defra Classification of Local Authority Districts and Unitary Authorities in England: An Introductory Guide." Department for Environment Food and Rural Affairs.
- Graddy, Elizabeth and Lili Wang. 2009. "Community Foundation Development and Social Capital." *Nonprofit and Voluntary Sector Quarterly* 38:22.
- Granovetter, Mark S. 1973. "The Strength of Weak Ties." *The American Journal of Sociology* 78:1360 - 1380.
- Grootaert, Christian. 2006. "Social capital, household welfare and poverty in Indonesia." The World Bank, Washington, DC.

- Grootaert, Christian, Deepa Narayan, Veronica Nyhan Jones, and Michael Woolcock. 2004. "Measuring Social Capital: An Integrated Questionnaire." The World Bank, Washington, DC.
- Guiso, Luigi, Paola Sapienza, and Luigi Zingales. 2004. "The Role of Social Capital in Financial Development." *The American Economic Review* 94:526 - 556.
- Gunaratna, Nilupa, Yali Liu, and Junyong Park. "Spatial Autocorrelation." Pp. 14.
- Hagan, John, Ross MacMillan, and Blair Wheaton. 1996. "New Kid in Town: Social Capital and the Life Course Effects of Family Migration on Children." *American Sociological Review* 61:368-385.
- Halpern, David. 2005. *Social Capital*. Malden, MA: Polity Press.
- Hanifan, Lyda Judson. 1916. "The Rural School Community Center." *Annals of the American Academy of Political and Social Science* 67:130 - 138.
- Hansen, E.L. 1995. "Entrepreneurial network and new organization growth." *Entrepreneurship: Theory and Practice* 19:7 - 19.
- Heffernan, Catherine. 2002. "HIV, sexually transmitted infections, and social inequalities: when the transmission is more social than sexual." *International Journal of Sociology and Social Policy* 22:159 - 176.
- Hofferth, Sandra L. and John Iceland. 1998. "Social Capital in Rural and Urban Communities." *Rural Sociology* 63:574-598.

- Hope, Tim. 2001. "Community crime prevention in Britain: A strategic overview." *Criminal Justice* 1:19.
- Jacobs, Jane. 1961. *The Death and Life of Great American Cities*. New York, NY: Random House and Vintage Books.
- Jobes, Patrick. 1999. "Residential Stability and Crime in Small Rural Agricultural and Recreational Towns." *Sociological Perspectives* 42:499 - 524.
- Jobes, Patrick C., Elaine Barclay, Herb Weinand, and Joseph F. Donnermeyer. 2004. "A Structural Analysis of Social Disorganisation and Crime in Rural Communities in Australia." *Australian & New Zealand Journal of Criminology* 37:114-140.
- Jones, Owain. 1995. "Lay Discourses of the Rural: Developments and Implications for Rural Studies." *Journal of Rural Studies*:35-49.
- Joshi, Heather, Brian Dodgeon, and Gareth Hughes. 2005. "The Social Profile of Rural England." Pp. 1 - 29 in *International Union for the Scientific Study of Population 25th International Population Conference*. Tours, France: Centre for Longitudinal Studies, Institute of Education, University of London.
- Joshi, Heather, Gareth Hughes, and Brian Dodgeon. 2006. "The Social and Demographic Profile of Rural Wales: Preliminary

- Insights from the Millennium Cohort Study." Rural Evidence Research Centre.
- Judkins, Benjamin N. 2008. "New Religious Movements and Social Capital: The Future of Civic Nationalism in Europe." *Journal of Muslim Minority Affairs* 28:17.
- Jung, Courtney. 2003. "Breaking the cycle: producing trust out of thin air and resentment." *Social Movement Studies* 2:32.
- Kasarda, John D. 1989. "Urban Industrial Transition and the Underclass." *The ANNALS of the American Academy of Political and Social Science* 501.
- Kasarda, John D. and Morris Janowitz. 1974. "Community Attachment in Mass Society." *American Sociological Review* 39:13.
- Kaylen, Maria T. and William A. Pridemore. 2013. "Social Disorganization and Crime in Rural Communities." *British Journal of Criminology* 53:905 - 923.
- Knack, Steven and Philip Keefer. 1997. "Does Social Capital Have an Economic Payoff." *Quarterly Journal of Economics* 112:1251 - 1288.
- Koppen, M. Vere van. 2013. "Involvement mechanisms for organized crime." *Crime , Law & Social Change* 59:1 - 20.
- Kposowa, Augustine J. and Kevin D. Breault. 1993. "Reassessing the Structural Covariates of U.S. Homicide Rates: A County Level Study." *Sociological Focus* 26:27-46.

- Kposowa, Augustine J., Kevin D. Breault, and Beatrice M. Harrison. 1995. "Ressessing the structural covariates of violent and property crimes in the USA: a county level analysis." *The British Journal of Sociology* 46:79-105.
- Krannich, Richard S., E. Helen Berry, and Thomas Greider. 1989. "Fear of Crime in Rapidly Changing Rural Communities: A Longitudinal Analysis." *Rural Sociology* 54:195-212.
- Kreager, Derek A., Kelly Rulison, and James Moody. 2011. "Delinquency and The Structure of Adolescent Peer Groups." *Criminology* 49:95 - 127.
- Kubrin, Charis E. and Jerald R. Herting. 2003. "Neighborhood Correlates of Homicide Trends: An Analysis of Growth-Curve Modeling." *Sociological Quarterly* 44:329-350.
- Ladbrook, Denis A. 1988. "Why Are Crime Rates Higher In Urban Than In Rural Areas? -- Evidence From Japan." *Australian & New Zealand Journal of Criminology* 21:81 - 103.
- Larson, Olaf. 1981. "Agriculture and the Community." Pp. 147 - 193 in *Nonmetropolitan America in Transition*, edited by A. H. Hawley and M. M. S. Chapel Hill, NC: University of North Carolina Press.
- Laub, John H. 1983. "Patterns of Offending in Urban and Rural Areas." *Journal of Criminal Justice* 11:129-142.
- Layte, Richard, Brian Nolan, and Christopher T. Whelan. 2000. "Targeting Poverty: Lessons from Monitoring Ireland's

- National Anti-Poverty Strategy." *Journal of Social Policy* 29:22.
- Lederman, Daniel, Norman Loayza, and Ana Maria Menendez. 2001. "Violent Crime: Does Social Capital Matter?" *Economic Development and Cultural Change* 50:509 - 539.
- Lee, Matthew R. and John P. Bartowski. 2004. "Love Thy Neighbor? Moral Communities, Civic Engagement, and Juvenile Homicide in Rural Areas." *Social Forces* 82:1001 -- 1035.
- Lee, Matthew R., Michael O. Maume, and Graham C. Ousey. 2003. "Social Isolation and Lethal Violence Across the Metro/NonMetro Divide: The Effects of Socioeconomic Disadvantage and Poverty Concentration on Homicide." *Rural Sociology* 68:107-131.
- Lee, Matthew R. and Graham C. Ousey. 2001. "Size Matters: Examining the Link between Small Manufacturing, Socioeconomic Deprivation, and Crime Rates in Nonmetropolitan Communities." *The Sociological Quarterly* 42:581 - 602.
- Lee, Matthew R., Shaun A. Thomas, and Graham C. Ousey. 2010. "Southern Culture and Homicide: Examining the Cracker Culture/Black Rednecks Thesis." *Deviant Behavior* 31:60 - 96.

- Leonard, Liam. 2013. "Cultural Criminology, Governmentality, and the Liquidity of the Failing State: The View from Ireland." *Critical Criminology* 22:15.
- Lichter, Daniel T. and David J. Eggebeen. 1992. "Child Poverty and the Changing Rural Family." *Rural Sociology* 57:151-172.
- Lichter, S. Robert, Daniel Amundson, and Linda S. Lichter. 2003. "Perceptions of Rural America: Media Coverage." The Center For Media And Public Affairs, Washington, DC.
- Lincoln, James R. 1977. "The Urban Distribution of Voluntary Organizations." *Social Science Quarterly* 58:472-480.
- Liu, Jianhong. 1999. "Social Capital and Covariates of Reoffending Risk in the Chinese Context." *International Criminal Justice Review* 9:39 - 55.
- _____. 2005. "Predicting Recidivism in a Communitarian Society: China." *International Journal of Offender Therapy and Comparative Criminology* 49:392 - 409.
- Liu, Zhilin, Yujun Wang, and Ran Tao. 2013. "Social Capital and Migrant Housing Experiences in Urban China: A Structural Equation Modeling Analysis." *Housing Studies* 28:1155-1174.
- Lo, T. Wing. 2010. "Beyond Social Capital: Triad Organized Crime in Hong Kong and China." *British Journal of Criminology* 50:851 - 872.

- Lolle, Henrik and Lars Torpe. 2011. "Growing ethnic diversity and social trust in European societies." *Comparative European Politics* 9:191 - 216.
- Loury, Glenn. 1976. "A Dynamic Theory of Racial Income Differences." Northwestern University, Evanston, IL.
- _____. 1985. "New Dividends Through "Social Capital"." *Black Enterprise*, pp. 36 - 37.
- Luloff, Albert E. and Richard S. Krannich. 2002. "Persistence and Change in Rural Communities: A Fifty Year Follow-up to Six Classic Studies." Pp. 208. Oxon, United Kingdom: CABI Publishing.
- Markowitz, Fred. E., Paul E. Bellair, Allen E. Liska, and Jianhong Liu. 2001. "Extending Social Disorganization Theory: Modeling The Relationships Between Cohesion, Disorder, and Fear." *Criminology* 39:293 - 320.
- Marr, Matthew. 2012. "Pathways out of Homelessness in Los Angeles and Tokyo: Multilevel Contexts of Limited Mobility amid Advanced Urban Marginality." *International Journal of Urban and Regional Research* 36:980-1006.
- Massey, Douglas. 2007. *Categorically Unequal: The American Stratification System*. New York, NY: The Russell Sage Foundation.

- McCarthy, Bill and Jacqueline Hagan. 2001. "When crime pays: Capital, competence, and criminal success." *Social Forces* 79:1035 - 1059.
- McCulloch, Andrew. 2003. "An examination of social capital and social disorganisation in neighbourhoods in the British household panel study." *Social Science & Medicine* 56:15.
- McGhee, Derek. 2003. "Moving to a common ground: a critical examination of community cohesion discourse in the twenty-first century Britain." *The Sociological Review* 51:376 - 404.
- McPhedran, Samara and Diego De Leo. 2013. "Miseries Suffered, Unvoiced, Unknown? Communication of Suicidal Intent by Men in 'Rural' Queensland, Australia." *Suicide and Life-Threatening Behavior* 43:589 - 597.
- Messner, Steven F., Richard Rosenfeld, and Eric P. Baumer. 2004. "Dimensions of Social Capital and Rates of Criminal Homicide." *American Sociological Review* 69:882 - 903.
- Mitchell, Andrew David and Thomas J. Bossert. 2007. "Measuring dimensions of social capital: Evidence from surveys in poor communities in Nicaragua." *Social Science & Medicine* 64:14.
- Morenoff, Jeffrey D., Robert J. Sampson, and Stephen W. Raudenbush. 2001. "Neighborhood Inequality, Collective Efficacy, and the Spatial Dynamics of Urban Violence." *Criminology* 39:517 - 560.

- Mutual, NFU. 2015. "Rural Thieves Get Smart - Security Measures recommended by NFU Mutual." in *The Smallholder Series: Practical Guides for the Serious Smallholder*.
- Narayan, Deepa. 1997. "Voices of the Poor: Poverty and Social Capital in Tanzania." The World Bank, Washington, DC.
- Narayan, Deepa and Lant Pritchett. 1999. "Cents and Sociability: Household Income and Social Capital in Rural Tanzania." *Economic Development and Cultural Change* 47:871 - 897.
- Neal, Danielle Lively. 2011. *Social Capital and Urban Crime*, Edited by M. McShane and F. P. W. III. El Paso, TX: LFB Scholarly Publishing.
- Nguyen, Holly and Martin Bouchard. 2013. "Need, Connections, or Competence? Criminal Achievement among Adolescent Offenders." *Justice Quarterly* 30:44 - 83.
- Ohmer, Mary L., Barbara D. Warner, and Elizabeth Beck. 2010. "Preventing Violence in Low-Income Communities: Facilitating Residents' Ability to Intervene in Neighborhood Problems." *Journal of Sociology and Social Welfare* 37:161 - 181.
- Osgood, D. Wayne and Jeff M. Chambers. 2000. "Social Disorganization Outside The Metropolis: An Analysis of Rural Violence." *Criminology* 38:81-115.
- Ousey, Graham C. and Matthew R. Lee. 2010. "Whose Civic Community? Testing Alternative Hypotheses Of The

- Relationship Between Civic Community And Racial Inequality In Arrest Rates." *Sociological Spectrum* 30:550 - 579.
- Pacione, Michael. 2004. "The Geography of Disadvantaged in Rural Scotland." *Journal of Economic and Social Geography* 95:375 - 391.
- Palmer, Neal A., Douglas D. Perkins, and Qingwen Xu. 2011. "Social Capital and Community Participation among Migrant Workers in China." *Journal of Community Psychology* 39:18.
- Palmer, Neal and Qingwen Xu. 2013. "Social Capital, Migration, and Health in the Urban Chinese Context." *Journal of Ethnic and Migration Studies* 39:31-50.
- Pantea, Maria-Carmen. 2013. "Social ties at work: Roma migrants and the community dynamics." *Ethnic and Racial Studies* 36:1726 - 1744.
- Pateman, Tim. 2010/2011. "Rural and urban areas: comparing lives using rural/urban classifications." Office for National Statistics.
- Perlman, Janice E. 2006. "The Metamorphosis of Marginality: Four Generations in the Favelas of Rio de Janeiro." *The ANNALS of the American Academy of Political and Social Science* 606:154 - 177.
- Petee, Thomas A. and Gregory S. Kowalski. 1993. "Modeling Rural Violent Crime Rates: A Test of Social Disorganization Theory." *Sociological Focus* 26:87-89.

- Portes, Alejandro. 1998. "Social Capital: Its Origins and Applications in Modern Sociology." *Annual Review Sociology* 24:1 - 24.
- Portes, Alejandro and Patricia Landholt. 1996. "The Downside of Social Capital." *The American Prospect* 26:18 - 22.
- Putnam, Robert D. 1993. "The prosperous community: social capital and community life." *American Prospect* 4:35 - 42.
- _____. 1995. "Bowling Alone: America's Declining Social Capital." *Journal of Democracy* 6:65 - 78.
- _____. 2000. *Bowling Alone: The Collapse and Revival of American Community*. New York, NY: Simon & Shuster.
- _____. 2002. "Democracies in Flux: The Evolution of Social Capital in Contemporary Society." Pp. 516. Oxford, United Kingdom: Oxford University Press.
- _____. 2007. "E Pluribus Unum: Diversity and Community in the Twenty-first Century (The 2006 Johan Skytte Prize Lecture)." *Scandinavian Political Studies* 30:137-174.
- Putnam, Robert D., Robert Leonardi, and Raffaella Y. Nanetti. 1993. *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton, NJ: Princeton University Press.
- Reisig, Michael D. and Jeffrey Michael Cancino. 2004. "Incivilities in nonmetropolitan communities: The effects of structural constraints, social conditions, and crime." *Journal of Criminal Justice* 32:15 - 29.

- Research, National Centre for Social. 2000a. "British Social Attitudes Survey." edited by N. C. f. S. Research. London, England: Inter-university Consortium for Political and Social Research.
- Research, Roper Center for Public Opinion. 2000b. "Social Capital Community Benchmark Survey."
- Reynolds, Tracey. 2013. "'Them and Us': 'Black Neighbourhoods' as a Social Capital Resource among Black Youths Living in Inner-city London." *Urban Studies* 50:484 - 498.
- Ritzer, George. 2004, 2008. *The McDonaldization of Society*. Thousands Oaks, CA: Pine Forge Press.
- Rookey, Bryan D. 2012. "Drunk Driving in the United States: An Examination of Informal and Formal Factors to Explain Variation in DUI Enforcement across U.S. Counties." *Western Criminology Review* 13:37 - 52.
- Rosenfeld, Richard, Steven F. Messner, and Eric P. Baumer. 2001. "Social Capital and Homicide." *Social Forces* 80:27.
- Salmi, Venla and Janne Kivivuori. 2006. "The Association between Social Capital and Juvenile Crime." *European Journal of Criminology* 3:123 - 148.
- Sampson, Robert. 1987. "Urban Black Violence: The Effect of Male Joblessness and Family Disruption." *American Journal of Sociology* 93:348-382.

_____. 1988. "Local friendship ties and community attachment in mass society: a multilevel systemic model." *American Sociological Review* 53:766-779.

_____. 2004. "Neighbourhood and Community." *New Economy*, pp. 106 - 113.

Sampson, Robert and Dawn Jeglum Bartusch. 1998. "Legal Cynicism and (Subcultural?) Tolerance of Deviance: The Neighborhood Context of Racial Differences." *Law & Society Review* 32:777 - 804.

Sampson, Robert J. 2008. "Collective Efficacy Theory: Lesson Learned and Directions for Future Inquiry." Pp. 149 - 167 in *Taking Stock: The Status of Criminological Theory*, vol. 15, edited by F. T. Cullen, John Paul Wright, & Kristie R. Blevins. Piscataway, NJ: Transaction Publishers.

Sampson, Robert J. and Corina Graif. 2009. "Neighborhood Social Capital as Differential Social Organization." *American Behavioral Scientist* 52:1579 - 1605.

Sampson, Robert J. and W. Byron Groves. 1989. "Community Structure and Crime: Testing Social-Disorganization Theory." *American Journal of Sociology* 94:774 - 802.

Sampson, Robert J., Jeffrey D. Morenoff, and Felton Earls. 1999. "Beyond Social Capital: Spatial Dynamics of Collective Efficacy for Children." *American Sociological Review* 64:633 - 660.

Sampson, Robert J., Stephen W. Raudenbush, and Felton Earls.

1997. "Neighborhoods and Violent Crime: A Multilevel Study of Collective Efficacy." *Science* 277:918-924.

Savelkoul, Michael, Maurice Gesthuizen, and Peer Scheepers.

2010. "Explaining relationships between ethnic diversity and informal social capital across European countries and regions: Tests of constrict, conflict and contact theory." *Social Science Research* 40:1091 - 1107.

Saxton, Gregory D. and Michelle A. Benson. 2005. "Social Capital and the Growth of the Nonprofit Sector." *Social Science Quarterly* 86:16-35.

Scribner, Richard, Katherine P. Theall, Bonnie Ghosh-Dastidar, Karen Mason, Deborah Cohen, and Neal Simonsen. 2007.

"Determinants of Social Capital Indicators at the Neighborhood Level: A Longitudinal Analysis of Loss of Off-Sale Alcohol Outlets and Voting." *Journal of Studies on Alcohol and Drugs* 68:934 - 943.

Shaw, Clifford and Henry McKay. 1942, 1949. *Juvenile*

Delinquency and Urban Areas: A Study of Delinquency in

Relation to Differential Characteristics of Local

Communities in American Cities. Chicago, IL; London, UK:

The University of Chicago Press.

- Skogan, W.G. 1990. *Disorder and Decline: Crime and the Spiral of Decay in American Neighborhoods*. Berkeley, CA: University of California Press.
- Smith, Brent L. and Kelly R. Damphousse. 1998. "Terrorism, Politics, and Punishment: A Test of Structural-Contextual Theory and the "Liberation Hypothesis"." *Criminology* 36:67 - 92.
- Smith, Brent L. and C. Ronald Huff. 1982. "Crime In The Country: The Vulnerability And Victimization Of Rural Citizens." *Journal of Criminal Justice* 10:271-282.
- Socia, Kelly M. and Janet P. Stamatel. 2012. "Neighborhood Characteristics and the Social Control of Registered Sex Offenders." *Crime & Delinquency* 58:565 - 587.
- Spano, Richard and Steve Nagy. 2005. "Social Guardianship and Social Isolation: An Application and Extension of Lifestyle/Routine Activities Theory to Rural Adolescents." *Rural Sociology* 70:414-437.
- Statistics, Office for National. 2012. "User Guide to Crime Statistics for England and Wales." Pp. 1 - 83, edited by U. S. Authority.
- _____. 2016. "Office of National Statistics", from <http://www.ons.gov.uk/ons/index.html>
- Steffensmeier, Darrell and Jeffery T. Ulmer. 2006. "Black and White Control of Numbers Gambling: A Cultural Assets --

- Social Capital View." *American Sociological Review* 71:123 - 156.
- Stone, Wendy. 2001. "Measuring social capital."
- Stults, Brian. 2010. "Determinants of Chicago Neighborhood Homicide Trajectories: 1965-1995." *Homicide Studies* 14:244 - 267.
- Sturgis, Patrick, Ian Brunton-Smith, Sanna Read, and Nick Allum. 2011. "Does Ethnic Diversity Erode Trust? Putnam's 'Hunkering Down' Thesis Reconsidered." *British Journal of Political Science* 41:57 - 82.
- Subramanian, S.V., Daniel J. Kim, and Ichiro Kawachi. 2002. "Social trust and self-rated health in US communities: a multilevel analysis." *Journal of Urban Health*.
- Sugrue, Thomas J. 1993. "The Structures of Urban Poverty: The Reorganization of Space and Work in Three Periods of American History." Pp. 85 -- 117 in *The Underclass Debate*, edited by M. B. Katz. Princeton, NJ: Princeton University Press.
- Surgenor, Paul. 2004. University of Ulster - Coleraine.
- Takagi, Daisuke, Kenichi Ikeda, and Ichiro Kawachi. 2012. "Neighborhood social capital and crime victimization: Comparison of spatial regression analysis and hierarchical regression analysis." *Social Science & Medicine* 75:1895 - 1902.

- Taylor, Ralph. 1997. "Social Order and Disorder of Street Blocks and Neighborhoods: Ecology, Microecology, and the Systemic Model of Social Disorganization." *Journal of Research in Crime and Delinquency* 34:113-155.
- Temkin, Kenneth and Williams M. Rohe. 1998. "Social Capital and Neighborhood Stability: An Empirical Investigation." *Housing Policy Debate* 9:61 - 88.
- Thoresen, Carl E. and Alex H.S. Harris. 2002. "Spirituality and Health: What's the Evidence and What's Needed?" *Annals of Behavioral Medicine* 24:3-13.
- Tobler, W.R. 1970. "A Computer Movie Simulating Urban Growth in the Detroit Region." *Economic Geography* 46:234-240.
- Tolbert, Charles M. and Thomas A. Lyson. 1992. "Earnings Inequality in the Nonmetropolitan United States: 1967 - 1990." *Rural Sociology* 57:494-511.
- Townsend, Leanne, Claire Wallace, Alison Smart, and Timothy Norman. 2016. "Building Virtual Bridges: How Rural Micro-Enterprises Develop Social Capital in Online and Face-to-Face Settings." *Sociologia Ruralis* 56:19.
- Uslaner, Eric. 1999. "Trust but verify: social capital and moral behavior." *Social Science Information* 38:29 - 55.
- _____. 2002. *The Moral Foundations of Trust* Cambridge University Press.

- Varshney, Ashutosh. 2002. *Ethnic Conflict and Civic Life* New Haven, CT: Yale University Press.
- Vermeij, Marco. 2007. "Four Wrongs Can Make a Right: From Stocks of Social Capital to Competing Ways of Life." *Politics & Policy* 35:33.
- Vermeulen, Floris, Jean Tillie, and Robert van de Walle. 2011. "Different Effects of Ethnic Diversity on Social Capital: Density of Foundations and Leisure Associations in Amsterdam Neighbourhoods." *Urban Studies* 49:337 - 352.
- Warner, Barbara D. and Pamela W. Rountree. 1997. "Local Social Ties in a Community and Crime Model: Questioning the Systematic Nature of Informal Social Control." *Social Problems* 44:520 - 537.
- Websdale, Neil. 1995. "An Ethnographic Assessment Of the Policing of Domestic Violence in Rural Eastern Kentucky." *Social Justice* 22:102-122.
- Weisheit, Ralph A. and Joseph Donnermeyer. 2000. "Change and continuity in crime in rural America." Pp. 309-357 in *Criminal justice 2000: Vol. 1. The nature of crime: Continuity and change*, edited by G. LaFree. Washington, DC: U.S. Department of Justice.
- Weisheit, Ralph A., David N. Falcone, and L. Edwards Wells. 2006. *Crime and Policing in Rural and Small-Town America*. Long Grove, IL: Waveland Press.

- White, Garland. 2006. *Crime Prevention Through Environmental Design: How Investing In Physical And Social Capital Makes Communities Safer*. Lewiston, NY: The Edwin Mellen Press.
- Wickes, Rebecca, Renee Zahnow, Gentry White, and Lorraine Mazerolle. 2015. "Ethnic Diversity and its Impact on Community, Social Cohesion and Neighborly Exchange." *Journal of Urban Affairs* 36:51 - 78.
- Williamson, Tom, David I. Ashby, and Richard Webber. 2006. "Classifying Neighbourhoods for Reassurance Policing." *Policing & Society* 16:189 - 218.
- Wilson, Steven G., David A. Plane, Paul J. Mackun, Thomas R. Fischetti, Justyna Goworowska, Darryl T. Cohen, Marc J. Perry, and Geoffrey W. Hatchard. 2012. "Patterns of Metropolitan and Micropolitan Population Change: 2000 to 2010." U.S. Census Bureau, Washington, D.C.
- Wilson, Thomas C. 1991. "Urbanism, Migration, and Tolerance: A Reassessment." *American Sociological Review* 56:117-123.
- Wilson, William J. 1987. *The Truly Disadvantaged*. Chicago, IL: University of Chicago Press.
- _____. 1996. *When Work Disappears: The Work of the New Urban Poor*. New York, NY: Alfred Knopf.
- _____. 2009. *More Than Just Race: Being Black and Poor in the Inner City*, Edited by J. Gates, Henry Louis. New York, NY: W.W. Norton and Company, Inc.

- Wirth, Louis. 1938. "Urbanism as a Way of Life." *American Journal of Sociology* 44:1 - 24.
- Wolfgang, Marvin E. 1968. "Urban Crime." in *The Metropolitan Enigma*, edited by J. Q. Wilson. Cambridge, Mass: Harvard University Press.
- Wollebek, Dag and Per Selle. 2007. "Origins of Social Capital: Socialization and Institutionalization Approaches Compared." *Journal of Civil Society* 3:26.
- Woolcock, Michael. 2001. "The Place of Social Capital in Understanding Social and Economic Outcomes." *ISUMA Canadian Journal of Policy Research* 2:11 - 17.
- _____. 2010. "The Rise and Routinization of Social Capital, 1988 - 2008." *Annual Review of Political Science* 13:21.
- Yamamura, Eiji. 2009. "Formal and informal deterrents of crime in Japan: Roles of police and social capital revisited." *The Journal of Socio-Economics* 38:611 - 621.
- Zhou, Min. 2005. "Ethnicity as social capital: community-based institutions and embedded networks of social relations." in *Ethnicity, Social Mobility, and Public Policy in the U.S. and U.K.*, edited by T. M. Glenn Loury, Steven Teles. Cambridge, U.K.: Cambridge University Press.

APPENDICES

Appendix A: BSAS Variables Measuring "Trust"

How much do you trust British governments of any party to place the needs of the nation above the interests of their own political party?

(Answer Choices – 1. Almost never; 2. Only some of the time; 3. Most of the time; 4. Just about always)

The United Kingdom government at Westminster has responsibility for England, Scotland, Wales and Northern Ireland. How much do you trust the UK government at Westminster to work in the best long-term interests of England? Please take your answer from this card.

(Answer Choices – 1. Almost never; 2. Only some of the time; 3. Most of the time; 4. Just about always)

Please tick a box to show how much you trust...

- a. ...governments of any party to spend taxpayers' money wisely for the benefit of everyone?
- b. ...NHS hospitals to spend their money wisely for the benefit of their patients?
- c. ...private hospitals to spend their money wisely for the benefit of their patients?
- d. ...state schools to spend their money wisely for the benefit of their pupils?
- e. ...private fee-paying schools to spend their money wisely for the benefit of their pupils?
- f. ...local councils to spend their money wisely for the benefit of local people?
- g. ...private pension companies to spend their money wisely for the benefit of their pensioners?
- h. ...the state pension scheme to spend its money wisely for the benefit of pensioners?
- i. ...police forces to spend their money wisely for the benefit of local people?

(Answer Choices – 1. Not at all; 2. Not much; 3. Quite a bit; 4. A great deal)

Appendix B: BSAS Variables Measuring "Organizational
Participation"

People sometimes belong to different kinds of groups or associations. The list below contains different types of groups. For each type of group, please tick a box to say whether you have taken part in the activities of this group in the past 12 months.

- A political party, club or association
- A trade union or professional association
- A church or other religious organization
- A sports group, hobby or leisure club
- A charitable organization or group
- A neighborhood association or group
- Other associations or groups

(Answer Choices – 1. I do not belong to such a group; 2. I belong to such a group but never taken part; 3. I have taken part once or twice; 4. I have taken part more than twice)

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