Collective Efficacy and Community Crime Rates: A Cross-National Test of Rival Models

A Dissertation Submitted to the Graduate School of the University of Cincinnati

In Partial Fulfillment of the Requirements of the Degree of

Doctorate of Philosophy (Ph.D.)

In the School of Criminal Justice of the College of Education, Criminal Justice, and Human Services

2016

by

Cecilia Chouhy

B.A., Universidad de la República, 2006 M.A., Universidad de la República, 2013

Dissertation Committee: Francis T. Cullen, Ph.D. (Chair)

Michael L. Benson, Ph.D. Pamela Wilcox, Ph.D. Cheryl Lero Jonson, Ph.D.

ABSTRACT

The burgeoning number of community-level studies of crime has helped to highlight the importance of contextual effects when understanding differences in crime across communities. Inspired by the Chicago School of social disorganization, communities and crime scholars have focused on disentangling the community characteristics that make them more or less able to control crime. In this context, collective efficacy theory—first articulated in 1997 by Robert Sampson, Stephen Raudenbush, and Felton Earls—has emerged as the most prominent community-level explanation of differential crime rates across geographical units.

However, research on the construct of collective efficacy has two main limitations. First, tests of this perspective rarely include measures of rival community-level explanations of crime, particularly perspectives that incorporate cultural features as key elements of their formulations. Thus, the level of legal cynicism (Kirk & Papachristos, 2011) and the endorsement of violence as a way to solve problems within the community (Anderson, 1999; Stewart & Simons, 2010) have been shown to explain variations in crime across communities. Little is known, however, about whether these factors retain their explanatory power in models that also consider collective efficacy or whether collective efficacy remains associated with crime when these cultural conditions are taken into consideration.

Second, tests of collective efficacy theory have been conducted primarily on data drawn from communities located in the United States and other advanced Western nations.

Accordingly, it is unclear whether collective efficacy theory—as well as other macro-level perspectives—are general theories or whether their explanatory power is specific to the United States and similar nations, the structure of their communities, and the particularity of their crime problem (Sampson, 2006).

In this context, using data from the Latin American Population Survey (LAPOP) from 2012 and 2014 collected in 472 communities in five South American countries, this dissertation aims to make a contribution by addressing these two gaps in the communities and crime literature. Specifically, the research strategy involves providing a test of collective efficacy theory and competing community-level theories of crime in five South American Nations

With some caveats, the results revealed that collective efficacy theory is generalizable to the South American context. In this sample, collective efficacy operated as a protective factor against crime across these communities. Further, alternative theories of crime—legal cynicism and subculture of violence—were shown to provide important insights into the sources of varying victimization rates across communities.

This study advances the area of communities and crime in three ways. First, it reveals the capacity of collective efficacy theory to account for variations in victimization rates in South America—that is, beyond the context of Western industrialized nations. Second, it demonstrates the value of incorporating cultural elements into the study of communities and crime. In this regard, the findings suggest that cultural and control perspectives can be successfully integrated into a more comprehensive understanding of crime. Third, by setting forth an alternative operationalization of collective efficacy, it helps to illuminate the complex relationship between structural characteristics, the different dimensions of collective efficacy, and victimization rates.

ACKNOWLEDGMENTS

The culmination of this dissertation represents a turning point in my academic career. I am indebted to many people who made this accomplishment possible. First, I am extremely grateful to Dr. Francis Cullen, my academic mentor and one of my greatest supporters. I was fortunate enough to start working with him at the beginning of my doctoral studies and to benefit early from endless discussions about crucial issues such as criminological theory, academic scholarship, world politics, and, more importantly, soccer. His mentorship has been invaluable and inspirational in too many ways. His insights into the field go beyond a perfunctory accumulation of scholarly knowledge. He has a vision for the field and always encouraged me to move theories forward and look at the bigger picture. In this quest, he has stimulated my critical thinking and opened innumerable opportunities for research and collaboration. I would consider myself happy to be able to become half as good a mentor to my students as he has been to his.

Second, I want to thank the members of mi dissertation committee. The help and support I received from Dr. Benson and Dr. Jonson not only made my dissertation more solid and complete but also gave me the confidence I needed to move forward and be able to finish it. I also appreciate their patience and willingness to cooperate with my tight schedule during the summer without complaining. I am especially indebted to Dr. Wilcox for her endless support and availability to discuss the specifics of my methodological strategy and the implications of each of the estimation decisions I made. Also, it was in her class that I was introduced to the communities and crime area. Her passion and engagement to high quality research in the area inspired me to embark in this line of research for my dissertation and—hopefully—beyond it.

I would also like to thank all the faculty and staff in the School of Criminal Justice at the University of Cincinnati. Being surrounded by so many great scholars and having the

opportunity to learn from them in and out of the classroom has enriched me greatly. I want to express my appreciation to the people in the Corrections Institute for the opportunities they gave me and their support during my last years in the program. I am also appreciative of my fellow students for the engaging class discussions and the inspirational debates during breaks and other informal gatherings. It would have not been the same without you. I am indebted also to my home University, the Universidad de la República, for the solid educational background and the support it provided me that made it possible for me to succeed as a doctoral student. I would also like to thank the Latin American Public Opinion Project (LAPOP) and its major supporters (the United States Agency for International Development, the Inter-American Development Bank, and Vanderbilt University) for making available the data used in this dissertation.

Finally, I want to acknowledge the emotional support I received from my family and friends, without whom I would not have been able to complete this dissertation. I especially want to thank my parents (Gloria and Lorenzo) and my two brothers (Gabriel and Pablo). They not only provided me support and encouragement during my doctoral years, but also were responsible for inspiring my curiosity for the world in general and to cement my critical thinking through endless living room discussions about political and social events. Last but not least, I want to thank my husband, Martín and my son Oliver. There are no words to express my appreciation and love to you. It may have been easier without Oliver, but infinitely less rewarding. Martín's willingness to leave everything behind to embark in this journey with me is invaluable. This dissertation is also his making. It is the product of too many ruined summers and late dinners filled with discussions about criminology and beyond. Above all, he made having a four-month old and a finished dissertation two compatible events. He is a great partner and an even better father. ¡Gracias!

TABLE OF CONTENTS

Chapter 1 THE INTELLECTUAL ORIGINS OF COLLECTIVE EFFICACY THEORY:	
FROM SOCIAL DISORGANIZATION TO THE SYSTEMIC MODEL	1
SHAW AND MCKAY'S SOCIAL DISORGANIZATION THEORY	4
REFORMULATING SOCIAL DISORGANIZATON THEORY:	
KORNHAUSER'S CRITQUE	13
Context	
Building on Shaw and McKay	25
Conclusion	
THE SYSTEMIC MODEL OF SOCIAL DISORGANIZATON	
The Core Components of the Systemic Model	32
Testing the Systemic Model: Specifying the Relationship	
Between Ties and Crime	
CONCLUSION	44
Chapter 2	
COLLECTIVE EFFICACY THEORY AND BEYOND:	
CONTEMPORARY COMMUNITY-LEVEL THEORIES OF CRIME	45
ADVANCING THE STUDY OF COMMNITIES AND CRIME:	
SAMPSON'S CONTRIBUTIONS	46
Adding Family Disruption to the Systemic Model	
Contextual Effects on Community Attachment	
Full Test of the Systemic Model	52
COLLECTIVE EFFICACY THEORY	
The Project on Human Development in Chicago Neighborhoods (PHDCN)	
Community Structural Differentiation in the Context of Deindustrialization	
The Intervening Construct: Collective Efficacy	
Further Developments in Collective Efficacy Theory	
New Directions in Collective Efficacy Research	72
RIVAL MACRO-LEVEL THEORIES: BRINGING BACK CULTURE INTO COMMUNITIES AND CRIME STUDIES	76
Subcultural Theory: Oppositional Culture	
Legal Cynicism Theory: Attenuated Culture	
THE EMPIRICAL STATUS OF COLLECTIVE EFFICACY THEORY	
Assessing the Empirical Validity of Collective Efficacy Theory	
Collective Efficacy and Rival Theories	
International Tests of Collective Efficacy Theory	
Conclusion	
RESEARCH STRATEGY	
CONCLUSION	

Chapter 3 METHODS	117
DATA	
Sampling Design MEASURES	
Dependent Variables: Victimization Rates	
Independent Variables: Theoretical Measures	
Structural Factors	
DATA ANALYSES	
Missing Data	
Statistical Analyses	
Chapter 4	
RESULTS	143
SOURCES OF COLLECTIVE EFFICACY	144
COLLECTIVE EFFICACY AND VICTIMIZATION	
Household Victimization	151
Personal Neighborhood Victimization	158
CONCLUSION	
Chapter 5 ASSESSING COLLECTIVE EFFICACY THEORY: GENERALIZABILITY AND FUTURE DIRECTIONS	1/0
	108
THE CURRENT TEST OF COLLECTIVE EFFICACY:	
ASSESSING THE STUDY HYPOTHESES	
COLLECTIVE EFFICACY IN A SOUTH AMERICAN CONTE	
The Different Sources of Collective Efficacy in Latin America	
Assessing the Generalizability of Collective Efficacy	
Structural Characteristics and Mediation Effects	
BRINGING CULTURE BACK IN	
Legal Cynicism	
Subculture of Violence	
ConclusionFUTURE DIRECTIONS	
The Empirical Basis of Collective Efficacy Theory	
Collective Efficacy as a Multidimensional Construct	
Moving Beyond Willingness to Intervene	
CONCLUSION	
REFERENCES	196

Chapter 1

THE INTELLECTUAL ORIGINS OF COLLECTIVE EFFICACY THEORY: FROM SOCIAL DISORGANIZATION TO THE SYSTEMIC MODEL

In their classic work *Juvenile Delinquency and Urban Areas*, Clifford Shaw and Henry McKay (1942) demonstrated that rates of delinquency varied across community contexts.

Drawing on the Chicago school of sociology, they sought to explain the epidemiology of delinquency by the degree of neighborhood organization. They proposed that social disorganization was criminogenic because it resulted within an ecological area in a breakdown of informal social control and the transmission of criminal cultural values. Shaw and McKay's formulation emerged as the major macro-level perspective on crime of its time, ultimately giving rise to both control theory and differential association theory.

During the 1960s and into the 1970s, however, this perspective waned in popularity. In part, its decline can be traced to the rise of more critical theories that rejected "disorganization" as a value-laden term that slighted inner-city residents. More so, social disorganization theory, as well as macro-level criminology in general, was displaced by the growth of a range of individual-level theories (e.g., strain, control, differential association, labeling). These perspectives had the added advantage of being able to be tested using self-reported surveys of school populations. Following the template used by Hirschi (1969) in *Causes of Delinquency*, scholars conducted hundreds of studies testing rival theories that resulted in publications and career advancement (Cullen, 2011).

This was the prevailing context when Ruth Kornhauser (1978) wrote her seminal work *Social Sources of Delinquency*—a volume that ultimately led to a revitalization of community-level criminology in general and social disorganization theory in particular (Cullen & Wilcox,

2015; Sampson, 2011). Kornhauser's work proved to have an enduring impact in the field (see Cullen, Wilcox, Sampson, & Dooley, 2015), inspiring many researchers—including, by his own account, Robert Sampson (2011)—to engage in macro-level studies. According to Sampson, reading Kornhauser cemented his interest in macro-level effects and persuaded him that the control component of social disorganization theory offered the most compelling theoretical approach at this level of analysis. He thus embarked in a sustained line of research focused on unraveling the criminogenic effects of structural and community characteristics on community capacity for control. His work within this macro-level control perspective went from an elaboration of an informal control theory that added family disruption as a core construct (Sampson, 1987), to directly measuring and testing social disorganization (Sampson & Groves, 1989; Sampson, 1988), to formulating what is now arguably the leading macro-level theory of crime—collective efficacy theory (Sampson, Raudenbush, & Earls, 1997; Sampson, 2012). This trajectory shows how his underlying preoccupation for communities and crime—inspired by Kornhauser—remained, while his theoretical and empirical work was constantly redefined and refined.

The Chicago school tradition is currently the predominant community-level explanation of crime in the United States, and it has been widely tested mainly through its most recent formulation: collective efficacy. However, research on the construct of collective efficacy has two main limitations. First, tests of this perspective rarely include measures of rival community-level explanations of crime, particularly perspectives that incorporate cultural features as key elements of their formulations. Thus, the level of legal cynicism within a community (Kirk & Papachristos, 2011; Sampson & Jeglum-Bartusch, 1998; Warner, 2003), and the prevalence of a subculture of violence (Anderson, 1999; Brezina, Agnew, Cullen, & Wright, 2004; Stewart &

Simons, 2010) have been shown to explain variations in crime across communities. Little is known, however, about whether these elements retain their explanatory power in models that also consider collective efficacy or whether, in particular, collective efficacy is still associated with crime when these cultural factors are taken into consideration. Second, tests of collective efficacy theory have been conducted primarily on data drawn from communities located in the United States and other advanced, Western nations. Accordingly, it is unclear whether collective efficacy theory—as well as other macro-level perspectives—are general theories or whether their explanatory power is specific to the United States and similar nations, the structure of their communities, and the particularity of their crime problems (Sampson, 2006).

In this context, this dissertation seeks to advance the study of collective efficacy theory by using data that address each of the limitations found in the existing literature. First, the current dataset allows for an empirical test that includes both control (collective efficacy) and cultural mechanisms (legal cynicism and subculture of violence) as potential community mediators between structural factors and crime rates. Second, the dataset allows for an assessment of the generality of collective efficacy and rival community-level theories of crime because it is based on a sample of non-U.S., South American nations.

The remainder of Chapter 1 conveys the theoretical context from which Sampson's collective efficacy theory ultimately emerged. This analysis occurs is three sections. The first section examines the founding of the Chicago School tradition of community-level explanations of crime in the early writings of Shaw and McKay. The second section discusses Kornhauser's reformulation of social disorganization as a pure control theory. Finally, the third section shows how the work of Shaw and McKay and Kornhauser set the stage for the development of the systemic model.

In Chapter 2, collective efficacy theory is presented. In particular, Robert Sampson's work within the Chicago School that eventually resulted in the formulation of collective efficacy theory is reviewed. The details of the collective efficacy model are examined, especially the perspective's current empirical status. This chapter also presents two alternative explanations to community-level crime rates that incorporate cultural features: legal cynicism and subculture of violence. Based on these considerations, the final section of the chapter specifies the research strategy used in this dissertation.

SHAW AND MCKAY'S SOCIAL DISORGANIZATION THEORY

The origins of the collective efficacy model can be traced in the writings of the Chicago School, especially in the work of Shaw and McKay (1942), which constitutes the first formulation of social disorganization theory. Clifford Shaw and Henry McKay attended the University of Chicago and became acquainted with the work of early Chicago theorists such as Ernest Burgess, Robert Park, Frederic Thrasher, William Thomas, and Florian Zaniecki. The Chicago School of Sociology was a vibrant intellectual community in the early 20th century, deeply concerned with the study of the social consequences of city growth, industrialization, and migration that were taking place and transforming radically the city of Chicago (Snodgrass, 1976; Wilcox Cullen, & Feldmeyer, in press).

In this context, Shaw and McKay (1942), as juvenile justice researchers, focused on understanding the causes of youth delinquency and the different social policies that could be carried out to prevent it. In this sense, and aligned with the broader focus of the Chicago School, they built a sociological community-level explanation of crime. In their view, crime should be understood as a social product rather than as the consequence of certain individual pathologies. The causes of crime were not to be sought within the individual but in the characteristics of the

social world in which individuals interacted and were socialized (Matza, 1969; Wilcox et al., in press). For this reason, instead of trying to uncover the individual factors associated with crime, Shaw and McKay developed a macro-level perspective aimed at understanding the social factors that influenced the emergence and perpetuation of delinquent activities. To do so, it was important to identify the differences in rates of delinquency across neighborhoods and to unravel the specific features of a community that make delinquency more likely to occur.

To frame their study, they relied on Ernest Burgess's (1925) concentric zone theory. In an attempt to understand the socially patterned development of cities, Burgess, another influential Chicago scholar, developed a theory of city growth based on concentric zones. Burgess (1925) depicted the city as consisting of five different types of zones, arranged in concentric circles progressively farther away from the business center. Zone I was the central business center, where the main buildings, museums, and stores were located. This area served as the epicenter of the city's economic, cultural, and social life. According to concentric zone theory, the rest of the city developed around this city center. Zone II, called the "zone in transition," surrounded the central business district and was characterized by being constantly invaded by the ever-growing industries and business, which results in a chaotic makeup where deteriorated residential units coexist with light manufacturing and business. Zone III was located beyond the zone in transition. This zone contained most of the industrial workers who were expelled by the expansion of Zone I into Zone II, and who were well off enough to move out of the zone in transition but who needed to remain close enough to the factories where they work. Zone IV, which encircled Zone III, was a residential area composed of high-class residential buildings and single-dwelling units. Farthest out, Zone V was comprised of the suburban areas and satellite cities where commuters live.

Because of the ongoing industrialization and city growth of the time, these zones were constantly expanding and invading the next one, in a process of extension and succession (Burgess, 1925; Wilcox et al., in press). Particularly, the expansion of the business district displaced residents into Zone II, characterized by deteriorated housing and poor living conditions (Burgess, 1925; Snodgrass, 1976). This zone was called the "zone in transition" precisely because inexpensive housing and closeness to factories attracted new waves of impoverished immigrant groups. The more recent immigrants displaced older immigrant groups that had achieved a more advantageous social and economic position, and had moved out to better settlements in zones farther away from the business center (Burgess, 1925; Wilcox et al., in press). The zone in transition thus remained inhabited by the most recent immigrants, usually unskilled workers with very limited resources and community ties. Dwellers in this zone were eager to move out to another zone as soon as they could afford to live in a better neighborhood. As a result, the zone in transition was characterized by high transiency and density as well as by the ethnic heterogeneity and low socioeconomic status of its dwellers, many of whom lived in poverty. According to Burgess, while the neighborhoods farther away from the center were socially organized, social disorganization reigned in the zone in transition, because of structural characteristics of the zone and immigrant status of its dwellers.

Based on Burgess's theory, Shaw and McKay (1942) undertook the major task of mapping Chicago's delinquency. Using official data on delinquency—arrests, commitments, and probationers—of three different periods between the beginning of 1900 and the 1930s. They were able to create spot maps for the residence of each delinquent and show the distribution of delinquency across Chicago neighborhoods. Their maps revealed that delinquency was consistently concentrated in the zone in transition. In this zone of high mobility, heterogeneity,

and poverty, other social ills—infant mortality, tuberculosis, mental disorder and truancy—were also concentrated. This finding held regardless of the type of delinquency measure that was used and applied to all of the time periods they analyzed—1900 to 1906, 1917 to 1923, and 1927 to 1933 for arrests and commitments; and 1926, 1927, and 1931 for probationers.

Finding that delinquency was consistently concentrated in the zone in transition led Shaw and McKay (1942) to attribute the variations in delinquency rates to the degree of community organization. Delinquency occurred at higher rates precisely in those communities that were socially disorganized, whereas in highly organized communities delinquency was less frequently manifested. Social disorganization was thus the core construct that explained the concentration of delinquency in certain geographical areas. This interpretation was closely aligned with the writings of other Chicago School scholars, who explored different urban social problems using social ecology theory (Snodgrass, 1976). Burgess (1925, p. 59) himself had pointed out earlier in his writings that "where mobility is the greatest, and where in consequence primary controls break down completely, as in the zone of deterioration in the modern city, there develop areas of demoralization, of promiscuity and of vice ... areas of mobility are also the regions in which are found juvenile delinquency, boys' gangs, poverty, wife desertion, divorce, abandoned infants, vice."

Although not formally stated, Shaw and McKay's theory focused on three important issues: the causes of social disorganization, the mechanisms through which social disorganization led to crime, and the concentration of delinquency in geographical areas and not ethic groups. The following paragraphs discuss each of these issues in some detail. First, to understand the community conditions that explained social disorganization, Shaw and McKay (1942) analyzed the distribution of different community characteristics in order to assess whether

they were correlated with delinquency. Specifically, they analyzed three different aspects of urban areas: their physical status, the economic status of their dwellers, and their population composition. The physical status of the geographic areas was measured through population changes. The areas with decreasing population were those being invaded by the district business expansion, with the consequential displacement of dwellings out of the zone and the deterioration of the conditions of the residential units that remained being used for that purpose. Further, the economic status of the areas was assessed using different measures: percentage of families on relief, median rentals, and home ownership. These measures were useful to differentiate neighborhoods in terms of the socio-economic status of their residents. Areas with higher percentage of people on relief, low rentals, and low levels of home ownership, exhibited higher rates of delinquency. Finally, population composition was measured through the percentage and foreign born and Black heads of families. The areas in transition where delinquency was concentrated were found to be those with higher percentages of foreign-born population. This signals the fact that the process of expansion and succession indeed displaced older waves of immigrants to better zones and generated deteriorating conditions that attracted the most recent immigrants—foreign born and blacks migrating from the south.

In short, the high level of transiency, heterogeneity, and poverty, combined with the impoverished conditions of the neighborhood and its inhabitants, led to weakened family and community ties and to social disorganization. The structural characteristics of the zone in transition were responsible for causing social disorganization, which ultimately caused social pathologies such as crime and other social ills such as health problems and truancy.

Second, Shaw and McKay did not limit themselves to showing the association between social disorganization and higher rates of delinquency. Rather, they provided an explanation of

why social disorganization had a criminogenic effect and mediated the relationship between structural characteristics and delinquency rates. To do so, they drew from previous works in the area of gangs and juvenile delinquency, especially from Frederic Thrasher's study *The Gang* published in 1927. But their main and more detailed insights came from the life-histories their conducted with delinquent youths. The most famous of these studies is Stanley's own account of his life history, presented in what became a classic book in criminology, *The Jack-Roller* (Shaw, 1930).

Drawing from those materials Shaw and McKay (1942) set forth what was later to be conceptualized as a "mixed model" of delinquency (see, Kornhauser, 1978). Particularly, they stated that social disorganization led to crime through two different but related causal processes—the breakdown of control and the transmission of criminal values.

The first process consisted of the breakdown of social controls, an idea discussed extensively within the social disorganization tradition (Shaw, 1930). The structural conditions in the zone in transition made it difficult for their residents to properly socialize and control their children. New waves of European migrants faced significant challenges when socializing their children. Raised in traditional agrarian societies with strong community and family ties, they represented the values of the old world. Their values oftentimes proved to be ineffective and offered little guidance in how to solve new problems arising from the particularities of modern city life, such as children's leisure, that were nonexistent in agrarian societies (Shaw & McKay, 1942). Traditional social controls from the larger family and tight community bonds were attenuated in this new setting. Immigrant families thus tended to become isolated and lose their traditional authority due to their incapacity to provide solutions in terms of how to educate and control the new generations (Shaw, 1930). The heterogeneity of cultural backgrounds that

characterizes these communities also fractured social opinion and made it harder for the community to achieve general consensus or uniformity in terms of defining and finding solutions to common problems. The difficulty in reaching such consensus was further exacerbated because residents of these social disorganized communities moved to more attractive communities as soon as they had the capacity to do so. Accordingly, they had less incentive to focus on solving their current community problems and strength their ties with the community.

As Stanley's story shows, the problems faced in these types of communities resulted in the inability of families to control their children, who were allowed to wander the streets of the neighborhood with little informal social control. In Stanley's case, both his stepmother and his always-at-work father were unable (and oftentimes unwilling) to develop a close emotional attachment with him and to supervise his whereabouts. Further, as was usually the case, families did not unequivocally represent and support conventional values; Stanley's stepmother sometimes actively encouraged his delinquent activities. In Shaw and McKay's words: "Opposition from families within the area to illegal practices and institutions is lessened, however, by the fact that each system may be contributing in certain ways to the economic wellbeing of more large family groups" (1942, p.183). As Kornhauser (1978) later emphasized, illegal behavior was sometimes instrumental to achieving material goals. In this context, conventional values seemed less relevant to goal attainment and thus became attenuated within the community. Taken together, these elements meant that as with many other children in the zone in transition, Stanley was relatively free from social controls and was able to spend his time in the street where delinquency might be undertaken.

The second causal process identified by Shaw and McKay (1942) was the cultural transmission of delinquent and criminal values. They observed that criminal traditions were

highly prevalent in the zone in transition. These traditions did not exist or were weak in other concentric zones located farther away from the inner city. The high prevalence of criminal traditions in the zone in transition created culture conflict. Contrary to what happened to juveniles in the other zones of the city, youths in the zone in transition were exposed to both conventional and criminal traditions. They were thus able to learn criminal traditions from adults and older delinquents, attain status and obtain positive reinforcement by engaging in delinquent activities—all in a process that Sutherland (1947) would later call differential association. The learning of criminal traditions was documented by Shaw and McKay through the narratives of Stanley and other youngsters. In this case, life-histories showed how youths in the zone in transition had multiple opportunities to become acquainted with peers, older delinquents, and gang members who served as role models they admired and whose approval they sought. This criminal tradition was also encountered within the family, as Stanley's case attests, parents and older sibling oftentimes taught younger family members to value crime and engaged in delinquent and criminal acts with them.

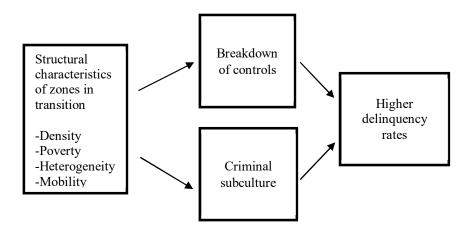
Finally, Shaw and McKay made a third important point, when they argue that the criminogenic properties of the zone in transition were attributable to the characteristics of the zone and not to the ethnic and cultural particularities of their inhabitants. As already noted, the delinquency concentration pattern observed by Shaw and McKay (1942) was relatively stable across the whole period. However, the ethnic groups that resided in those zones changed over time, because of the process of invasion and succession described by Burgess. Early arriving ethnic communities settled temporarily in the zone in transition but rapidly moved out to the following concentric zone as soon as they improved their socioeconomic condition.

Notably, after departing the zone in transition and relocating in Zone III or beyond, the level of a group's delinquency decreased. This finding suggested that criminal propensities did not reside in the cultural features of any particular ethnic group. If this were the case, then their elevated delinquency rates should have followed them as they changed zones, but they did not. Thus, high delinquency rates were tied to the areas and the social disorganization that prevailed within them. Crime was not inherent in any racial or ethnic group but caused by the social context of the community in which a group lived. This finding had important policy implications. Because crime was caused by the social disorganization faced by dwellers of the zone in transition, the solution to crime should be sought at the community level. It is not a coincidence that Shaw and McKay created The Chicago Area Project, a major intervention oriented toward neighborhood organization.

Even though Shaw and McKay never formally elaborated their theory, Figure 1.1 illustrates the core causal mechanisms they describe in their theory. The model shows that structural characteristics of the zone in transition, marked by density, high poverty, heterogeneity, and high mobility cause social disorganization. Social disorganization involves the breakdown of social control within the community and the emergence and persistence of a criminal subculture. Both the lack of controls and the criminal traditions are thus responsible for increasing delinquency rates within such communities.

Figure 1.1.

Shaw and McKay's Social Disorganization Model



In sum, Shaw and McKay's (1942) study was pioneering in showing the consistent relationship between structural factors and crime rates, suggesting the existence of a contextual effect of neighborhood characteristics on crime. They elaborated a compelling theory that accounted for why community characteristics translated into higher delinquency rates: social disorganization. Still, it remained the task of subsequent scholars to test their ideas and to investigate the empirical strength of their model.

REFORMULATING SOCIAL DISORGANIZATON THEORY: KORNHAUSER'S CRITQUE

Shaw and McKay's social disorganization theory had an enduring impact in communities and crime research. However, it was not until Ruth Kornhauser (1978) presented a reformulation of their theory that it gained the predominant place in criminology it now enjoys. This section presents Kornhauser's critique of Shaw and McKay's social disorganization theory and describes her reformulation of social disorganization as a pure control model. The first subsection

discusses the reasons for the decline of Shaw and McKay's social disorganization theory during the 1960s and 1970s, providing the academic context to Kornhauser's writing. The second subsection thus focuses on Kornhauser's appraisal of the different traditions in criminology that set the basis for her critique of social disorganization theory. Finally, the third subsection details the core elements of her critique of Shaw and McKay's social disorganization theory and her reformulation of social disorganization as a pure control model.

Context

Shaw and McKay's social disorganization theory was influential, leading not only to an important line of inquiry on communities and crime but also to the development differential association/social learning theory. Indeed, during the 1960s and 1970s, this perspective evolved mainly through differential association theory, understood primarily as a micro-level theory of crime. Even if not discarded by Edwin Sutherland (1947) in his formulation of differential association theory, the macro-level focus of social disorganization—or differential social organization, as he termed it—was often ignored, along with the social control component of the theory.

Shaw and McKay's social disorganization theory declined in popularity during this period. This decline was in part because of the specific criticisms received by their theory. On the other hand, the loss of popularity of social disorganization should be understood as part of a general trend in criminology. Micro-level theories of crime flourished during the 1960s and 1970s and shifted the interest of many scholars away from the study of communities and crime.

Bursik (1988) lists five important criticisms leveled at social disorganization theory. First, given the shift of focus in criminology, Bursik argues that social disorganization theory was unjustly attacked because of its macro-level orientation. Acknowledging the change in

criminological focus, he states that most of the criticism received by social disorganization was due to its inability to provide micro-level etiological explanations of crime and to predict individual behavior. According to Bursik, this criticism is not a valid. In his view, the social disorganization perspective added value to the criminological enterprise by emphasizing the role of social processes that had become marginalized from mainstream criminology.

But beyond this general critique, the four other criticisms directed at social disorganization theory identified analytical and empirical problems of the theory. Second, Bursik (1988) thus noted that a critique was related with a core assumption of social disorganization theory: the stability of ecological structures. As already discussed, Shaw and McKay (1969) used data from different periods of time to document that, even though the zones in transition were inhabited by different ethnic groups across these time periods, the pattern of delinquency rates across zones remained virtually the same. Thus, they concluded that the explanation for crime should be found in the characteristics of the zones and not in the ethnic cultures and traits of the minorities that inhabited them. This explanation was based on a "human ecology theory of urban dynamics" (Bursik, 1988, p. 524), a particular theory of urban dynamics, in which the processes of succession and invasion were understood as part of the "natural" growth of the city. Early research on social disorganization after Shaw and McKay relied on cross-sectional analyses. Because they were not able to test the stability hypothesis and the general dynamics of urban growth, whether patterns were stable was more often an assumption of the studies than an empirical question (Bursik, 1998).

However, Bursik and Webb (1982) showed that the relative stability of high delinquency zones only held until 1950. After that period, the processes of city growth changed and segregation, especially of black migrants from the South, became important. The black

population significantly increased in Chicago between 1950 and 1970. This new wave of immigrants was attracted to once white-only neighborhoods. Whites reacted to black migration by shunning the neighborhoods in which blacks settled. This change in neighborhoods' racial composition was accompanied by an increase in delinquency rates. Such increase was not observed in historically black zones that did not experience a change in its racial profile. Even though these new urban processes show that Burgess's ecological model of city growth was no longer an accurate depiction of the urban dynamics of the time, according to Bursik and Webb (1982) the processes that accounted for changes in delinquency rates were still valid. Specifically, the change in delinquency rates was still associated with community stability. When communities experienced a rapid change in their populations, their institutions suffered and became unstable. With time, residents became increasingly able to build a stable community. When community stabilization occurred, crime rates dropped.

Third, the measurement and operationalization of social disorganization theory was also put under scrutiny (Bursik, 1988). Specifically, scholars argued that the theory's central construct, social disorganization, was confounded with the outcome it intended to explain (Pfohl, 1985). In their study, Shaw and McKay did not measure social disorganization. Rather, they assumed that social disorganization was the characteristic feature of impoverished communities in zones in transition that caused crime. To make their case stronger, Shaw and McKay showed that the distribution of delinquency followed the same pattern than the distribution of other social ills—mental health problems, infant mortality, and truancy. Thus, they did not always clearly differentiate the concept of disorganization from the social pathologies that it was supposed to cause. This conceptual problem led subsequent studies of social disorganization to use measures

of deviance both as an indicator of social disorganization and as a measure of the output of interest (Bursik, 1988, Pfohl, 1985).

Further, the lack of a clear formulation and operationalization of social disorganization led scholars to focus on finding correlations between community characteristics that were supposed to lead to social disorganization (i.e. poverty, heterogeneity, and transiency) and crime or delinquency. Thus, some researchers directly associated poor community conditions with social disorganization (Bursik, 1988). On the other hand, others used indicators of social disorganization—such as the proportion of working women or unmarried men—that lacked face validity and reflected their own biases in regards with what they considered "disorganized" (Pfohl, 1985). Chicago school researchers—mostly white, middle-class, and male—were inclined to view most practices of impoverished and predominantly minority communities as indicative of social disorganization instead of qualifying them just as differentially organized. The value-laden term "disorganization" was used to depict certain organizational features of impoverished communities as pathological. Thus, absent a clear definition and operationalization of social disorganization—not confounded with deviance—the association between community conditions, social disorganization, and crime remained speculative.

Fourth, social disorganization critics argued that the measures of delinquency and crime were also problematic (Bursik, 1988). In their study, Shaw and McKay (1947) used three different measures of delinquency—arrests, commitments, and probationers—all of them drawn from official data. A common criticism of official data is that they may reflect either real differences in behavior or differences in the exercise of formal social control. In this instance, Shaw and McKay were criticized because of a potential class bias in police and court decision making that would produce higher rates of official statistics among youths living in the zone in

transition even if their actual delinquent participation was the same as youngsters residing in other zones. This view was bolstered by studies using self-reported data that showed few class differences in wayward conduct.

Fifth, scholars have attacked the normative assumptions embedded in Shaw and McKay's social disorganization theory (Bursik, 1988; Pfohl, 1985; Snodgrass, 1976). For example, critical criminologists questioned Shaw and McKay's notion that the growth of the city was "natural." According to Snodgrass (1976), Shaw and McKay's analysis reflected their nostalgic rural view about communities in which the problems of urban life were seen as the result of what they lacked with respect to the idyllic rural community. Communities characterized by culture conflict, weak controls, or problematic family relationships were then those suffering from higher crime rates precisely because such community make outs were viewed as criminogenic.

Placing the responsibility for crime in the communities—or viewing their disorganization as the "natural" consequence of industrialization—Shaw and McKay thus missed the opportunity to discuss in depth the direct role of political and economic forces in generating these community conditions. In Snodgrass words: "The interpretation was paralysed at the communal level, a level which implied that either the residents were responsible for the deteriorated areas, or that communities collapsed on their own account. Instead of turning inward to find the causes of delinquency in local traditions, families, play groups and gangs, their interpretation might have turned outward to show political, economic and historical forces at work, which would have accounted for both social disorganization and the internal conditions, including the delinquency." (1976, p. 10). Their interpretation thus neglected the importance of housing market manipulation, social stratification, and the unequal distribution of political and economic power between the wealthy business owners and the residents of impoverished communities

(Snodgrass, 1976; Pfohl, 1985). Disorganized communities were seen as the victims of natural social processes and not of socially created conditions produced by a "highly unequal system of social stratification" (Pfohl, 1985, p. 68).

In short, these critiques, combined with the decline of macro-level theories of crime in general that left them marginalized from mainstream criminology, contributed to the demise of social disorganization theory. The rising popularity of a number of micro-level etiological theories of crime, such as social bond, strain, and differential association, shifted the focus of the field away from aggregate-level theories (Bursik, 1988; Pratt & Cullen, 2005; Sampson, 2002). The expansion of survey research and the path suggested by Hirschi (1969) to test micro-level rival theories using school samples consolidated this line of research and provided scholars with multiple opportunities for publication and promotion (Cullen, 2011).

It was within this context that Ruth Kornhauser (1978) published her classic analytical critique of existing criminological theories, *Social Sources of Delinquency*. This work, written in the midst of the decline of macro-level theories in criminology, inspired many scholars to direct their attention toward communities and crime research. She proposed a more appealing and testable reformulation of social disorganization theory that helped this perspective to reclaim a central place in criminology. Her assessment salvaged macro-level social disorganization theory from the oblivion in which it had fallen and promoted a vibrant line of research in the area (Cullen and Wilcox, 2015; Sampson, 2011). However, as discussed later in the chapter, this revitalization came at a price (Greenberg, 2015; Matsueda, 2015). Influenced by her writing, social disorganization has been conceived purely as a social control model, which has often resulted in the exclusion of culture from contemporary research and theorizing on social disorganization.

Two different considerations help explain why Kornhauser's (1978) volume was influential. First, she contributed to the organization of the theoretical knowledge in criminology. Thus, she mapped the different traditions in criminology and provided a clear account of their analytical models, their assumptions, and their limitations. Specifically, she categorized the different theories of the time into three different traditions: strain, cultural deviance, and control. She then added an extra category comprising what she called "mixed models," which she proceeded to criticize. Second, building specifically on the work of Shaw and McKay, Kornhauser revitalized interest in social disorganization theory and, in particular, in macro-level, informal social control theory. In so doing, she laid the foundation for the systemic model within criminology.

Analysis of Criminological Theories

In an important analysis, Kornhauser discussed the different assumptions underlying the cultural deviance and strain traditions. This assessment led her to embrace control and to reject both the two rival traditions and any effort at theoretical integration. In this regard, she was greatly influenced by Travis Hirschi's (1969) work, in which he criticized differential association and strain theories and set forth a micro-level control theory of crime. Hirschi (1978) and Kornhauser (1978) asserted that these theoretical traditions differed in terms of three important assumptions.

First, Kornhauser (1978) argued that differential association theory (Sutherland, 1947) and strain theory (Merton, 1938) assumed that people were "blank slates" at least to the extent than features of human nature did not determine involvement in crime. Their theoretical task thus was to explain the origins of the motivation to break the law: Why do it? Why commit a crime? Although they provided different answers—social learning of criminal attitudes and

skills versus structurally induced strain—differential association and strain theories both understood the need to account for why individuals varied in their willingness to be criminogenic. Following Hirschi (1969) and other control theorists, Kornhauser (1978) rejected this view—seeing motivation as rooted in human nature and seeing variation in criminal involvement as tied to variations in controls.

Thus, in line with other control theorists, Kornhauser (1978) argued that humans are not blank slates but have a particular kind of nature: They seek immediate gratification in the most expedient way possible. At times, the most expedient means to securing easy and immediate gratification is by committing a crime—such as by using force or fraud to secure what one wants. In practical terms, by their nature, humans have enough incentive—enough *motivation*—to commit criminal acts virtually all the time. Given that such motivation is ubiquitous—consistently high for everyone—then it follows that this factor does not differentiate between who is and is not a criminal. That is, because motivation in essence is invariantly high, it cannot explain variation in criminal conduct.

Kornhauser and fellow control theorists thus argued that other perspectives—especially strain theory and cultural deviance (or differential association) theory—were fatally flawed due to their erroneous view of human nature. For them, the propensity or motivation to engage in crime did not need to be explained; it was present in human nature. Whether individuals experienced strain or criminal learning was irrelevant. These motivational forces were redundant because human nature already had imbued individuals with sufficient motivation to engage in criminal acts. The key question, then, was not: Why do people break the law? Rather, it was: Why don't people break the law? For control theorists, the challenge thus was to explain

what stopped people from acting on their desire for easy, immediate gratification. The answer, of course, was the presence of control.

Second, her rejection of a "blank slate" human nature led Kornhauser to identify another important difference across traditions: their views on socialization. Borrowing from Durkheim and consistent with a control perspective, Kornhauser (1978) argues that it is through socialization that individuals learn how to regulate their innate needs and wants, and thus to restrain themselves to commit crimes. It is the normative and moral regulation of society that socializes individuals to conform to conventional means and goals and to satisfy and restrain their desires. But this socialization is not perfect, and that is what leads to crime. When individuals escape from social controls and follow their innate drives, it becomes possible for deviation and crime to occur. Even though conventional social norms are widespread in society, not every individual internalizes the norms and controls with the same level of strength. When such controls fail to operate—when they are absent or become weak or *attenuated*—crime occurs. This point is critical to control perspectives, because they posit that crime is the byproduct of failures and variations in socialization. It is the lack of control rather than the presence of motivation that engenders crime.

Control theory's view of socialization appears in stark contrast with the views of the socalled "cultural deviance" perspective. According to Kornhauser (1978), the cultural deviance perspective assumes that socialization into a person's group is always perfect and that crime is the product of cultural conflicts within society. Thus, because there is normative conflict in society, different groups coexist with different definitions regarding what is right and wrong. Members of the dominant group define conformity as preferable, whereas members of other groups define crime as preferable. In this case, crime or deviance occurs because members are conforming to the norms of their group. In then follows that "deviance" is ultimately a matter of labeling. Certain individuals and behaviors will be labeled as deviant because of the power distribution across different groups, where powerful groups will define what is deviant according to their interests and values.

Kornhauser (1978) criticizes the over-socialized view of the individual and the unlimited cultural variability assumed by advocates of the subcultural perspective. In her view, cultural deviance theory rules out the possibility of deviation because every act is seen as conforming toward a specific subculture. Social order is enforced only via norms and conformity is always achieved. From Kornhauser's perspective, by focusing only on the distribution of power across subcultures and the labeling of certain subcultural orientations as deviant that emerges from such power conflicts, subcultural theorists erroneously equate social structure with culture. For this reason, she argues, their view on social order is excessively narrow.

For strain theories, on the other hand, socialization is needed for crime (Hirschi, 1969). It is through socialization that the motivation for committing crime is engendered. Individuals are successfully socialized into mainstream goals. In particular, in the United States, the "American Dream" is universally prescribed, and thus every individual internalizes the goal of success. However, this cultural orientation is incongruent with the nation's social structure. In particular, for the disadvantaged, the social stratification restricts access to the means needed to achieve the goal of success mandated by the American Dream. In this case, most individuals are successfully socialized into goals—there are no different goals—but differ in terms of their allegiance to the norms regulating the legitimate behaviors to attain those goals, which leads to innovative adaptations such as crime (Merton, 1938). Certain individuals—especially those from the lower-classes—experience strain because the goal of success is blocked for them.

According to Kornhauser (1978), because strain theory assumes a general consensus in terms of social goals, it is more compatible with control theory. However, strain is irrelevant to the explanation of crime because motivation (unfulfilled needs) are, in her view, ubiquitous and thus cannot explain variations in crime. Needs and wants are diverse and not always culturally induced. Wanting more is part of human nature; people always experience strain, even the very rich. Thus, because strain does not vary, it cannot successfully explain variations in crime and delinquency (for a critique of this view, see Agnew & Cullen, 2015).

Borrowing from Hirschi (1969) and other research in strain theory, she presents empirical data to build another important criticism to strain theory. Specifically, Kornhauser (1978) argues that it is not the disjunction between aspirations and expectations that causes crime (see also Agnew and Cullen, 2015). Rather, the absolute level of expectations and, to a lesser extent aspirations, are what matter. When individuals have low expectations or aspirations, they are more likely to engage in crime, because their "stakes in conformity" are lowered. On the contrary, individuals with high levels of aspirations and expectations are better bonded to society and thus are less prone to engage in crime and delinquency. Importantly, those with high aspirations and low expectations offend at lower rates than those with low levels of both aspirations and expectations. This last finding is particularly relevant because it shows that what causes crime is not the disjunction between goals and expectations—strain—but the level of control. High aspirations are not criminogenic; rather, they function as a restraint from crime. In this case, strain can only operate through the weakening of social controls, whereas crime can also occur regardless of strain. For this reason, asserts Kornhauser, the control perspective is better suited to explain crime than strain.

In summary, according to Kornhauser (1978), control theories assume that there is a general consensus in terms of conventional norms in society. By contrast, cultural deviance perspectives, conceiving humans as lacking a nature, assume that they can adopt infinite types of cultures and act conforming to an unlimited set of values. Strain theorists also resort to culture to explain motivation. According to them, individuals are perfectly socialized into culturally defined goals; they just differ in terms of the legitimate means to attain the goals prescribed by their culture.

Building on Shaw and McKay

Even though Kornhauser's depiction of the different criminological traditions was controversial (Agnew, 2011; Agnew & Cullen 2015; Akers, 1996; Greenberg 2015; Matsueda, 1988, 1997, 2015), it represented an important step in defining and characterizing the different currents in criminology and identifying their divergent theoretical assumptions. As noted, Kornhauser's evaluation of the main criminological traditions was far from neutral. Through her "appraisal of analytical models," she made a strong case for control theories, which she viewed as more appropriate in terms of assumptions and consequently better suited to explain variations in crime and conformity.

But unlike Hirschi (1969), Kornhauser was not interested in micro-level causes of crime. Rather, her project was to understand the sources of crime at the community level. Thus, her second contribution was to derive a control theory of crime aimed at explaining macro-level differences in communities' crime rates. This theory was based on Shaw and McKay's social disorganization theory, but was reformulated into a pure control model. By setting forth her theory, she revitalized macro-level criminology and strengthened both the theoretical and empirical discussion in communities and crime research.

Kornhauser (1978) recognizes the value of Shaw and McKay's social disorganization theory. However, she categorizes their original formulation as a "mixed model," because it incorporated elements both from control and cultural deviance perspectives. As already discussed, Kornhauser believes that these two traditions were rooted in different and contradictory assumptions, and thus she strongly opposed their theoretical integration. Mixed models such as Shaw and McKay's were thus deemed intrinsically flawed and inconsistent.

Specifically, she disagrees with the notion of conflicting cultures that was part of Shaw and McKay's theory. Consistent with control theory, Kornhauser (1978) claims that human plasticity is limited and that a minimum set of norms are shared across every culture. Modern societies are characterized by normative consensus instead of normative conflict.

According to Durkheim (1893/1984), the division of labor in modern societies is marked by increasing levels of social interdependency that promote organic solidarities, replacing traditional mechanic solidarities. Borrowing from this idea of changing solidarities, Kornhauser (1978) states that there is a disruption between traditional controls and newer controls emerged from complex societies. This disruption opens the possibility for cultural disorganization.

Despite the existence of a general normative consensus in society, the strength of the prevailing culture is not constant across the social structure. Impoverished and poorly integrated communities have problems realizing "common values." In this context, certain cultural values become irrelevant, given that they prescribe courses of action that are not instrumental for achieving common goals. Thus, cultural values become attenuated. However, even if the culture in modern societies is attenuated, a general set of norms is still broadly shared among their members who mostly embrace mainstream values.

In this sense, Kornhauser agrees with Shaw and McKay in that the structural causes of social disorganization relate to the social structure of the slum, particularly the low socioeconomic status and high mobility of their residents and the concentration of immigrant population within such zones. In her view, these factors are sufficient to explain the processes of community instability that lead to the state of social disorganization.

However, she rejects the importance of the cultural transmission component of social disorganization. In her view, the existence of a delinquent subculture is irrelevant to the explanation of crime. Further, she argues that there are not two conflicting value systems—conventional versus criminal. Rather, there is one dominant conventional, mainstream culture. What varies is the extent to which those located at different points in the social structure internalize these mainstream values. In Kornhauser's words, "Poor people in poor communities do not create for themselves different moral values. Instead, they retain their allegiance to societal values but restrict the use of those values to situations in which they are applicable. In their daily lives, they rely on provisional standards that are existentially relevant. Restricted in use, compromised in reality, societal values are deprived of symbolic enrichment." (1978, p. 77)

Thus, criminal gangs or groups are the product of cultural attenuation due to the incapacity of the community to realize common values. They do not represent a new institutionalized culture into which youths are socialized and from which they learn an alternative set of values and definitions that motivates them to offend. Rather, criminal gangs are the consequence of the attenuated culture and weak controls in the community. Delinquent groups exist because the community is disorganized and would cease to exist if the community were to become organized. The autonomy of the delinquent system is limited; it exists and persists only because of the weakness of community organization, its inability to realize common

values, and the ineffectiveness of its institutions to exert successful controls over the individuals (Kornhauser, 1978). Additionally, cultural transmission adds little to the explanation of crime. Because motivation does not have to be explained, there is no need for such cultural transmission for crime to emerge and continue to exist. For this reason, observes Kornhauser, it is illogical to consider the existence of a delinquent subculture an important mediator producing social disorganization.

In short, according to Kornhauser, the presence of a delinquent subculture is not a necessary condition for delinquency: juveniles are not socialized into delinquency but are drawn into delinquency because of the weak controls exerted by their families, schools, and other institutions. Cultural attenuation and structural disorganization both contribute to this process. Favoring a control perspective, she states that the cultural transmission component of Shaw and McKay's theory is not necessary; the breakdown of controls and the attenuation of culture are sufficient and necessary conditions to explain crime and its maintenance. There is no need to add what she views as a poorly formulated component—cultural transmission.

Kornhauser (1978) then proposes a pure recursive control model, in which structural factors—density, poverty, heterogeneity, and mobility—lead to social disorganization. The two components of social disorganization are structural disorganization and cultural attenuation. At the structural level, due to their lack of resources, institutions become weakened and unable to function properly. Also, the high levels of transiency make institutions unstable. Institutions emerge and fade rapidly in communities where the residents tend to dwell in this area for short periods of time. To make matters worse, in heterogeneous communities, institutions—the family, the school, and the local churches—tend to be isolated and fractured from each other. Distinct institutions—such as local churches—arise, but lack the capacity to connect between

each other and with other larger social institutions. Thus, these institutions are unable to socialize and control individuals and to provide them with successful paths to achieve mainstream goals.

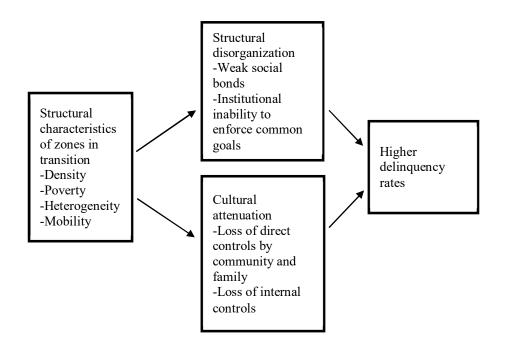
The consequence of this institutional failure is the weakening of indirect controls.

Institutions are not able to bind individuals to conformity or to direct controls because individuals are disaffiliated from these failed institutions. Further, isolated institutions are unable to detect common standards and goals within the community and thus are ineffective in enforcing such standards. The failure of social institutions leads to defective socialization—which undermines internal controls—the loss of indirect external controls, and the incapacity of the community to find ways to update its control structure.

In the cultural sphere, the diversity, obsolescence, instability, and irrelevance of culture lead to the cultural attenuation of societal, communal, and subcultural values. In this context, community and societal values do not constitute a common ground that unifies opinions within the community. Without this common ground, the community appears as unable to exert direct social control over its members. In ethnically heterogeneous communities, different subcultures coexist. Even though these subcultures have similar value orientations, and hold conventional values, they differ in the content of their non-delinquent values. In socially disorganized communities, traditional and rural values tend to become obsolete, and no longer serve as grounds for behavior. When these subcultural values become attenuated, families become unable to enforce such values and thus provide external controls. Finally, the attenuation of values at all levels impacts socialization. Individuals not properly socialized are less likely to internalize common values and to develop the internal controls that would refrain them from engaging in crime.

Figure 1.2.

Kornhauser's Control Model of Social Disorganization



Thus, Kornhauser's (1978) reformulation of Shaw and McKay's perspective is presented graphically in Figure 1.2. As the figure shows, the structural conditions of poverty, heterogeneity, and transiency prevalent in the zones in transition generate social disorganization. Social disorganization has consequences both at the structural and cultural level. Structural disorganization weakens social bonds and institutions' ability to enforce common goals. Cultural disorganization, on the other hand, reduces the community's and family's capacity to exert direct social control and also undermines individuals' internal controls. Both cultural and structural disorganization thus decrease direct and indirect social controls within the community. Absent social controls, individuals are more likely to engage in crime and delinquency. Consequently, crime rates tend to be higher in disorganized communities.

Conclusion

In closing, Kornhauser's reformulation of social disorganization theory had a substantial impact on the field of criminology (Cullen et. al., 2015). Her book set the direction for further research on the contextual effects that operate at the community-level and generate differential crime rates. Kornhauser not only proposed a control-only social disorganization model, but she also emphasized the importance of measuring and testing social disorganization as the mechanism mediating the relationship between structure and crime. In her writing, social disorganization is very much related with neighborhood integration, and the strength of social bonds within the community and even primary groups. The segmentation of social structure was, according to Kornhauser, what undermined community's capacity to realize social goals by weakening solidarity bonds within its residents. Subsequently, scholars built on these insights and focused primarily on assessing how the strength of social ties within the community had a contextual effect on crime. Their work became known as the systemic model of social disorganization. The next subsection describes the specifics the systemic model, which inspired a considerably amount of research and became the predominant approach to communities and crime during the 1980s and 1990s.

THE SYSTEMIC MODEL OF SOCIAL DISORGANIZATON

Kornhauser's critique of social disorganization theory was a turning point in community-level studies of crime. Since then, social disorganization theory was conceptualized as within the social control tradition. This subsection focuses on describing the systemic model, which, borrowing from Kornhauser's insights on social control, became the predominant approach to social disorganization theory. The first subsection describes the core of the model and the main causal mechanisms that it lays out. The second subsection presents some of the tests that have

been carried out on the systemic model, and discusses the empirical validity of its different postulates.

The Core Components of the Systemic Model

Kornhauser's reformulation of social disorganization theory prompted scholars to embark on communities and crime research. Social disorganization became the leading approach to community-level studies of crime and, since then, has been understood primarily as a purely control theory of crime (Bursik and Grasmik, 1993; Cullen and Wilcox, 2015; Greenberg, 2015; Matsueda, 2015). The role of cultural transmission and even for a long time of attenuated culture was thus excluded from both theoretical developments and empirical analyses (Sampson & Wilson, 1995).

Rooting social disorganization in control theory led scholars to focus on understanding how communities differed in terms of their capacity to exert social control. Communities were thus conceptualized as systems of social control. For social disorganization scholars, the key issue was to understand how communities control crime. That is, the challenge was to unravel the community characteristics that make them more or less able to exercise control and prevent crime. Social control is thus understood not as the enforcement of a repressive order but as the capacity of a community to realize shared values in a context where lowering crime is seen as a consensus goal within a community (Kornhauser, 1978; Sampson and Groves, 1989). The systemic model of social disorganization, which became the prevailing approach to social disorganization during the 1980s and 1990s, built on Kornhauser's ideas to provide an answer to these questions. According to this model, the key to communities' differential ability to control crime rested on the strength and scope of the social and family ties within them (Bursik, 1988; Bursik and Grasmik, 1993).

Within the systemic model framework, communities are seen as systems of friendship and kinship networks and formal and informal ties (Kasarda & Janowitz, 1974). The more dense and cohesive these ties, the more informal and formal social control is exerted within the community; in turn, these communities will experience lower levels of crime. By contrast, a socially disorganized community is marked by the opposite conditions: ties are not dense and social networks within the community are scarce and fragmented, which in turns allows crime to flourish.

Communities characterized by broad and strong networks and ties are better able to self-regulate in two different ways (Bursik, 1988). First, socially organized communities more successfully supervise the behavior of their members, exerting informal social control.

According to Greenberg, Williams, and Rohe (1982), this type of informal control involves three different dimensions: (1) informal surveillance through which neighbors actively observe everyday neighborhood activities; (2) movement governing rules through which neighbors better demarcate the safe areas within the neighborhood and avoid those that are deemed unsafe; and (3) direct intervention through which residents directly intervene when they observe suspicious activities and reprimand certain behaviors deemed inappropriate, particularly those of children or youngsters. Second, closely tied communities are also more effective in socializing their residents. Community institutions (families, schools, local organizations) that are successful in socializing individuals into conventional values make it less likely that their residents will engage in non-conventional behavior in general and illegal behavior in particular (Bursik, 1988; Bursik and Grasmick, 1993).

Bursik and Grasmick (1993) identify three different levels in which social control operates, each related to a different type of network: private, parochial, and public. First, private

social control is exercised by primary groups, such as family members and friends. At this level, informal social control operates through the potential withdrawal of respect, affection, and support elicited by members of these groups. The stronger the ties within a family or a group of friends, the more private social control is exerted over their members who have more to lose from engaging in behaviors that contravenes their families' and friends' values and behaviors.

Second, the parochial level of social control is exercised by more distant neighbors and secondary groups and by local organizations, such as churches or schools. Frequent neighboring activities and interactions among neighbors, who know and look out for each, increase communities' level of informal social control (Vélez, 2001). In this case, social control operates at the parochial level mainly by altering the capacity of communities to supervise the behavior of their residents.

Third, external institutions, such as the police, public offices, or politicians influence social control at the public level. Public ties to politicians or public officers impact communities' capacity to capture external funds and allocate them in crime prevention strategies or other types of activities that provide informal and formal social control within the community. Also, public ties impact communities' relationships with the police and alter the general allocation of police resources, their crime prevention efforts, and different strategies across police departments within a city or broader area (Bursik, 1988, 1989; Bursik and Grasmick, 1993; Vélez, 2001). Extensive research has dealt with identifying the differential effect of each type of social control on crime rates (Bursik, 1999).

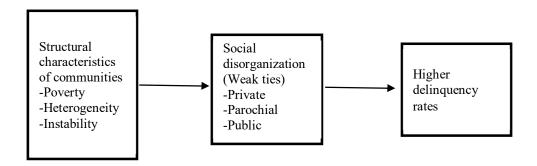
At the structural level, the systemic models also provides an explanation of how the structural characteristics of communities impact community organization—the strength and breadth of ties within the community. In doing so, it borrows from Park and Burgess the

ecological view of urban communities and their understanding of social solidarities in urban centers. The systemic model of community attachment appears in stark contrast with the prevalent approach to attachment in mass society: Wirth's linear development model (Bursik and Grasmik, 1993). The linear development model posited that urbanization and industrialization weakened community's social bonds and undermine the social significance of local communities. Departing from this notion, the systemic model recognizes the importance of unraveling the social worlds that emerge in urban settings. Far from being devoid of social solidarities, urban communities are conceived as social entities with a life of their own, strong attachments, and a particular sense of collectivity (Bursik and Grasmik, 1993). Thus, as already noted, according to Kasarda and Janowitz "The local community is viewed as a complex system of friendship and kinship networks and formal and informal associational ties rooted in family life and on-going socialization processes. At the same time it is fashioned by the large scale institution of mass society." (1974, p. 329).

In this framework, communities are not conceptualized as isolated entities but as the byproduct of larger social institutions present in mass societies that lead to their structural differentiation. Therefore, community attachment in mass society is closely related to the ecology of the city. Kasarda and Janowitz (1974) thus identify the structural characteristics that impact community attachment. In line with Shaw and McKay and Kornhauser (1978), they find length of residence to be the key factor determining community attachment. In particular, length of residence is found to strengthen bonds of kinship and friendship. To a lesser extent, social status and age also impact community attachments. Further, contrary to what the linear developmental model suggests, the size of the community and its density are not associated with weak social bonds, nor are they associated with the replacement of primary with secondary

Figure 1.3.

The Systemic Model of Social Disorganization



bonds. Their findings suggest that it is not urbanization (density and size of communities) that undermines social bonds and attachment. Rather, the key is on community stability. Social disorganization is not a constant across urban communities but a problem faced by unstable urban communities (Kasarda & Janowitz, 1974; Sampson, 1988). Researchers have since added other factors to the model, such as heterogeneity (Bursik, 1999; Sampson and Groves, 1989) or family disruption (Sampson, 1988). In general, instability, poverty, and heterogeneity constitute the core structural elements defined in the systemic model and are those persistently present in its different formulations and tests (see, e.g., Bursik, 1999; Sampson and Groves, 1989; Warner & Wilcox Rountree, 1997; Wilcox Rountree & Warner, 1999).

In short, the systemic model involves two different causal mechanisms (see Figure 1.3). First, it establishes a relationship between the structural characteristics of neighborhoods and the density of kinship, friendship and associational networks and ties that impact neighborhood organization. In this regard, it posits that structural elements—particularly poverty, high mobility, and heterogeneity—impact kinship and friendship ties, attachment, and social activities

in the community both at the contextual and individual level (Bursik, 1988; Bursik and Grasmick, 1993; Kasarda and Janowitz, 1974; Sampson, 1988). Second, it explores the relationship between such networks and ties as systems of social control and crime rates, understanding that low levels of attachment to the community would hinder the possibility of establishing successful controls, generating higher crime rates (Bursik, 1988; Bursik and Grasmick, 1993; Sampson, 1988; Sampson and Groves, 1989). Neighborhood networks in the systemic model have been operationalized in three different types: private, parochial and public.

The bottom line is that the systemic model establishes that communities' systems of networks and ties are the mediating mechanism through which community structural characteristics impact community capacity of self-regulation. Thus, differences in social ties may explain differences in crime rates across communities (Bursik and Grasmick, 1993).

By associating neighborhood organization with the strength and density of social ties, the systemic model clearly differentiates between the factors altering neighborhood organization (structural conditions) from neighborhood organization itself (density of ties). Further, it is able to differentiate such organization, understood as the capacity of neighborhood self-regulation, from its outcome—that is, crime rates. Thus, the systemic model overcomes the definitional weakness attributed to social disorganization's original formulation (Bursik, 1988; Bursik and Grasmick, 1993).

Testing the Systemic Model: Specifying the Relationship Between Ties and Crime

The systemic model represents a more consistent theoretical formulation of social disorganization theory than Shaw and McKay's original model because it clearly defines the causal processes that lead to differential crime rates across communities. Further, it provides a

causal model with testable propositions. This feature allows the theory to go beyond the mere correlation between structural factors and crime rates carried out by Shaw and McKay (1942) and test the explanation itself through the operationalization of the social networks component.

Thus, the systemic model became the mainstream approach to community-level criminology during the 1980s and 1990s and inspired many researchers to conduct empirical tests of its core propositions. The legacy of Kornhauser's (1978) formulation of social disorganization as a pure control theory is clearly visible analyzing the different assessments of the systemic model. Such assessments share the focus on social control and its effects on community-level crime rates from a systemic perspective. The exclusion of the cultural transmission component is a constant in contemporary social disorganization research.

The empirical assessments of the systemic model have been varied in terms of the tested components and methodological strategies and have yielded mixed results regarding the validity of the systemic model's core propositions. In this regard, three different lines of research within the systemic model are worth emphasizing. First, some studies focused on operationalizing and testing the role of social ties as the mediating mechanism between community structural characteristics and crime rates. By doing so, they sought to determine whether close ties and informal social control were the key explanatory variables influencing variation in crime rates across communities. Second, a different line of research focused on specifying the intricate relationship between different types of ties and social control. In this case, an effort was made to better define the causal mechanisms at work and to expose the limitations of the systemic model. Third, ethnographic studies have uncovered the problematic relationship between ties and crime in certain communities. They have shown that in some contexts dense ties may reduce but also

foster criminal activities. A more detailed discussion of these three lines of research is presented below.

First, in a now-classic article, Sampson and Groves (1989) conducted the first complete test of the systemic model. In their study, they were able to test both the direct effect of the structural elements on crime rates and the mediating role of social ties and informal social control on the relationship between community structural characteristics and crime rates. Using the 1982 British Crime Survey, they obtained measures of informal social control at the community-level and tested directly the contextual effect of social ties on crime rates. In this regard, Sampson and Groves's (1989) analysis provided support for the systemic model.

In their test, they included the original structural factors often identified by the systemic model (SES, mobility, and heterogeneity). Then, following Sampson (1987), they added family disruption and urbanization as key structural variables. Social disorganization itself—the intervening construct—was measured through three different components: local friendship networks, participation in community organization and supervision of teenage peer groups. That way they included measures of social ties as stated in the systemic model but also of direct social controls.

Putting all these elements together, they found that the structural elements were significantly associated with peer group supervision and in some cases with friendship ties and community participation. Further, these social disorganization indicators operated as mediators of structural factors and crime in some cases, although the evidence was not completely conclusive and the significance of each component varied depending on the operationalization of crime used (Sampson & Groves, 1989). Lowenkamp, Cullen, and Pratt (2003) replicated this study using the same survey (the British Crime Survey) but with data from 1994 instead of 1982.

The results they reported were very similar to Sampson and Groves's (1989) original findings. Thus, they make a case for the consistency of the processes leading to differential crime rates identified by Sampson and Groves. The consistency of their results more than 10 years later underscores that Sampson and Groves's findings regarding the mediating role of social ties and informal social control was meaningful rather than fortuitous.

Second, further empirical assessments of the systemic focused on specific aspects of the theory, in an effort to understand the different role of diverse elements in the relationship between social ties and crime. Some of this research has been directed toward disentangling the context-specific and contradictory status of social disorganization's general propositions and the differential importance of the distinct social ties (Bursik, 1999; Vélez, 2001; Warner & Wilcox, 1997; Wilcox & Warner, 1999). Other authors have sought to develop constructs (and measures) to better test the specific explanations of the processes through which structural factors influence crime rates (Bellair, 1997; Warner, 2007). Another important line of research explored the contradicting functions of organized gangs within communities and their effect in social order (Pattillo, 1998; Venkatesh, 1997). These diverse issues are addressed through different methods.

In general, quantitative approaches have been used to assess levels of ties and their impact on effective social control, and to compare them across different settings. Warner and Wilcox Rountree (1997) and Bellair (1997) proposed different ways to measure social ties, in an attempt to improve the identification of the kind of neighborhood relationships that are actually important for the theory. Warner and Wilcox Rountree (1997) used a combined measure comprising both help obtained and given to neighbors and close ties with them (e.g., sharing a meal with them). On a similar note, Bellair (1997) tested the relative importance of different frequencies in neighbors' interaction, concluding that frequent contact was not necessary to

activate informal social control. Both studies could be seen either as supporting the systemic model or as providing contradictory evidence. They propose measures that indicate that perhaps the strength of the ties is not the key element in generating social organization but a different pattern of relationship between neighborhoods. Maintaining weak ties and infrequent relationships but cooperating with each other outside friendship networks appears to be the key issue in this regard.

In a further analysis of the differential role of certain type of ties in particular contexts, Wilcox Rountree and Warner (1999) suggest a gendered relationship between ties and crime. That is, they argue that female and male social ties have a distinct impact on crime. Their analysis of Seattle neighborhoods reveals that social ties between females are more effective in controlling crime, particularly in neighborhoods where female headed households are scarce.

Adding more complexity to the matter, both Vélez (2001) and Bursik (1999) present different attempts to understand the specific role of each type of ties in social control. While Bursik (1999) stresses the importance of private and parochial networks in generating social control, Vélez's (2001) study suggests that the capacity of a community to obtain external resources to reduce crime is crucial, making a case for the importance of public social control in crime rates.

Warner (2007) advances the discussion of whether there are different sources of the activation of direct and indirect informal social controls within a community. Her study seeks to better specify the different elements of the theory. Further, she focuses on unraveling the link between ties and the actual exercise of these controls, which was often taken for granted (or hypothesized as the operant mechanism) by former empirical assessments. Her analyses of 66 neighborhoods show that social ties impact only indirect social controls but not direct controls.

This finding suggests that the relationship between ties and control is contingent upon the type of control assessed and it is not necessary related to the strength of ties.

Third, ethnographic approaches have been crucial to address perspectives not previously illuminated by quantitative research on this issue. The studies of Pattillo (1998) and Venkatesh (1997) explore the intricate relationship between gangs and the social organization of the communities they inhabit. In gang-ridden neighborhoods, the density of ties does not necessary translate in lower crime rates. Rather, gangs tend to have an important regulating role within their communities and are embedded in the communal social life.

Thus, analyzing a Black middle-class neighborhood, Pattillo (1998) shows how strong social networks fostered by the residential stability within a community may both increase and decrease informal social control and thus decrease the community's capacity to lower crime. This apparent paradox occurs because gang members are strongly attached to the community and even share most of their values. Thus, gang members are subject to the informal social control of the community and propelled to conform to community standards of behavior. They also become agents of informal social control themselves and help the community fight disorder. However, gangs' embeddedness in the community also limits the community's ability to control crime. Conventional agents reach a compromise with gang members and end up tolerating certain amount of crime or violence thus decreasing the level of social control exerted within the community over their gang members.

In his study of an impoverished community, Venkatesh's (1997) underscores the role of gangs in providing community resources and informal social control. Similar to Pattillo (1998) Venkatesh thus unravels the complex role of gangs within a community. Particularly, he points out that gang members are not exclusively seen as such. Rather, they are also tied to the

community by kinship and friendship associations and interact from a different set of roles—siblings, cousins, friends—with the broader community. The resources secured by gang activities are also an important community asset and are sometimes used to the benefit of community members and also to strengthen local institutions.

Accordingly, conventional members of the community have an ambiguous relationship with gang members: They exert social control to limit gang activities and violence while also benefiting from gang resources, support certain gang activities, and even protect gang members. On the other hand, gang members are also agents of social control and fulfill and important role in regulating the behavior of community members. In Venkatesh's (1997, p. 107) words: "The gang, in this sense...was not simply a 'social bandit' with no other ties to the community other than periodic outburst of disruptive behavior (cf. Hobsbawm 1959, p. 6). It became a recognized, albeit internally contradictory, community institution, performing a range of 'positive functions' (Klein 1995) while simultaneously engaging in behaviors that disrupted community social life."

Taken together, this evidence provides mixed empirical support for the systemic model. Even though social ties and networks are clearly seen as an important source of informal social control, the relationship between the strength of social ties is not unequivocal. Ethnographic studies similarly illuminate this complexity, revealing that the relationship between ties, social control, and crime tends to be contingent upon the type of tie and the specifics of the neighborhood. Further, as more quantitative approaches show, even though social ties appear in some studies as related to crime, their intensity may not be the key to understanding differences in informal social control and crime rates: weak ties and infrequent interaction may be as effective in generating informal social control as strong and dense ties.

CONCLUSION

The systemic model of social disorganization theory provided a pure control reformulation of Shaw and McKay's theory that revitalized communities and crime research. However, the numerous empirical tests of this theory were not conclusive regarding the empirical validity of the systemic model's main propositions. Specifically, the relation between social ties and crime rates was shown to be not as straightforward as hypothesized.

Collective efficacy theory, set forth by Sampson and colleagues (Sampson, 2006, 2012; Sampson et. al, 1997), is best seen as an updated and more appealing reformulation of the systemic model and is currently the leading community-level theory of crime. This theory proposes a reformulation of the systemic model that, among other things, identifies a different mediating mechanism between communities' structural characteristics and crime. Collective efficacy proposes to move beyond social ties and specifies the particular processes through which communities prevent crime. Thus, it intends to better capture the key elements that impact a community's ability to exercise social control and prevent crime. These and related issues are considered in Chapter 2.

Chapter 2

COLLECTIVE EFFICACY THEORY AND BEYOND: CONTEMPORARY COMMUNITY-LEVEL THEORIES OF CRIME

The work of Shaw and McKay was so influential that contemporary research in communities and crime is still predominantly "Chicago style." The systemic model greatly helped to bring fresh attention to old Chicago school ideas regarding the importance of social contexts and the specific focus on communities' regulatory capacities to prevent crime (Sampson, 2002). Indeed, as discussed in Chapter 1, the systemic model of social disorganization revitalized macro-level theory. Inspired by Chicago school's ideas, many researchers embarked in communities and crime studies and conducted a variety of tests of the systemic model.

Despite making important contributions, problems with the systemic model soon became apparent. On the positive side, research revealed that both the structural characteristics of communities and their degree of organization and capacity to exert informal social control explained their differential crime rates. This finding gave credence to social disorganization insights and showed that Chicago-style research in communities and crime was worth undertaking (Bursik, 1999; Lowenkamp, Cullen, & Pratt, 2003; Sampson & Groves, 1989; Vélez, 2001; Veysey & Messner, 1999). However, research also suggested that the density and strength of ties may not always explain communities' capacity to control crime. Empirical studies revealed an intricate relationship between ties and social control. Ties did not necessarily translate into informal social control (Bellair, 1997; Kubrin & Weitzer, 2003; Pattillo, 1998; Sampson, 2002, 2012; Venkatesh, 1997; Warner & Wilcox Rountree, 1997). Thus, social ties

differed in terms of their relationship with community social control; whether they are activated to prevent crime appeared to be contingent on specific community contexts.

It was in this context that Sampson—in conjunction with Steven Raudenbush and Felton Earls (1997)—introduced collective efficacy theory. This theory identified a different mediating mechanism—collective efficacy—that was hypothesized to better capture communities' ability to control crime. Thus, collective efficacy theory was a step forward in communities and crime research and was able to overcome some of the problems of the systemic model.

In this regard, this chapter begins by presenting an overview of Robert Sampson's work in communities and crime that led to his formulation of collective efficacy theory. The chapter next provides a detailed description of the core elements of the theory and the different tests that Sampson and colleagues have carried out to assess its empirical validity. In turn, a discussion of two important rival theories from the subcultural perspective is introduced: legal cynicism theory and oppositional culture theory. The broader empirical literature testing collective efficacy theory is then assessed. These considerations set the context for outlining the dissertation's research strategy.

ADVANCING THE STUDY OF COMMNITIES AND CRIME: SAMPSON'S CONTRIBUTIONS

Social disorganization theory, particularly its systemic model formulation, set the academic context for the emergence of collective efficacy theory. Chapter 1 largely described how Shaw and McKay's original formulation of social disorganization evolved into the systemic model and was, since Kornhauser's (1978) critique, conceptualized as a macro-level social control theory of crime. Further, this chapter also presented the empirical findings brought by

the new wave of research in communities and crime during the 1980s and 1990s that opened up space for Sampson's new theory.

However, to fully understand how schools of criminological thought evolve, it is often necessary to examine how individuals embark on a scholarly pathway that unfolds in ways that achieve theoretical advances (Cullen, Jonson, Myer, & Adler, 2011). After all, theories are not created in a vacuum but are written by people with specific backgrounds, motivations, and in particular contexts. Thus, reviewing the development of Sampson's work in communities and crime research will help to provide a more complete understanding of the context out of which collective efficacy theory emerged.

Robert Sampson is arguably the most prominent scholar in the area of communities and crime. His statement of collective efficacy theory and further elaboration of its theoretical underpinnings constitute his most salient contributions. Even so, by the time he set forth collective efficacy theory, he had already established a well-developed and influential research agenda in the field. According to his own account, he became acquainted with Kornhauser's (1978) work on social disorganization theory while enrolled in a graduate seminar taught by Travis Hirschi at SUNY-Albany. Reading Kornhauser's *Social Sources of Delinquency* created his interest in macro-level criminology and led him to define himself as a control theorist (Sampson, 2011).

Because of this interest in macro-level theory, Sampson's early works focused on unraveling the impact of contextual effects—namely, the structural characteristics of communities—on crime and victimization. These views appeared in stark contrast with the then-predominant subcultural explanations of crime (Sampson, 2011). Before his seminal work with Steven Raudenbush and Felton Earls (Sampson et. al, 1997) in which they introduced the notion

of collective efficacy, he made three important contributions to social disorganization theory.

These are reviewed in the following sections.

Adding Family Disruption to the Systemic Model

Sampson's first contribution to social disorganization theory was to incorporate family disruption into the systemic model as a core community structural characteristic. This addition stemmed from his work focused on explaining urban Black violence through family disruption (Sampson, 1987). In this study, Sampson (1987) elaborated an informal social control theory to explain the disproportionally higher crime rates observed in Black communities. To do so, he focused on unraveling the role of family disruption on crime, which he hypothesized mediated the relationship between the particular set of structural characteristics commonly faced by Black communities (i.e. economic deprivation and unemployment) and their higher crime rates. Using census and FBI data from 171 cities of 100,000 or more inhabitants, he explored the relationship between the rate of employed males by 100 females, the proportion of female-headed households, and crime rates for Blacks.

The analysis was divided in two different stages. First, he showed that the city-level proportion of Black male unemployment (measured by the number of employed Black males per 100 Black females) was directly associated with the levels of Black family disruption (percentage of Black female-headed households). Further, cities with lower levels of Black percapita income, lower Black median age, high percentage of Blacks, higher welfare payments, and situated in the northern region of the United States, exhibited higher levels of Black female headed households. Overall, this finding suggested that the high levels of family disruption observed in predominantly Black communities were produced by the structural characteristics of

such communities, which were marked by economic deprivation (low median income) and unemployment.

In the second stage of the analysis, he studied the determinants of Black homicides and Black robberies both for juveniles and adults. His estimations revealed a substantial direct effect of the percentage of Black female-headed households on every crime outcome, with the exception of adult Black homicides. Further, he observed that community structural characteristics had indirect effects on crime through family disruption. Specifically, even though the percent of employed males per 100 females only had a direct effect on Black juvenile robberies, it exhibited a substantial indirect effect (through family disruption) on the four criminal rates considered. Economic deprivation (Black median income) was shown to have a direct and indirect effect on crime rates. In additional analyses, Sampson showed that this association was also observed for Whites.

These findings illuminate the fact that the association between economic disadvantages faced by Black communities and higher crime rates may be obscured by the mediating role of family disruption in this relationship. The cultural explanations prevalent at that time tended to attribute the higher rates of family disruption observed in predominantly Black communities to different cultural orientations towards family and marriage and tended to dismiss the role of economic deprivation. However, the fact that economic disadvantages did explain family disruption and thus had an effect on crime, albeit indirect, constituted evidence against cultural theories.

Thus, Sampson proposed an alternative explanation for the higher crime rates observed in predominantly Black neighborhoods, which was later known as the "racial invariance thesis."

According to this thesis, the differential crime rates between Blacks and Whites were due to the

different challenges faced by Black and White communities. The causes of crime were not race-specific. There was not something unique to Black families or Black culture that caused crime. Rather, Black communities had higher rates of crime simply because they were more exposed to criminogenic community contexts. The criminogenic effects of structural characteristics on crime were invariant and equally affected both races (see also, Krivo & Peterson, 1996; Sampson, Morenoff, & Raudenbush, 2005; Sampson & Wilson, 1995).

Further, Sampson articulated a macro-level social control explanation of crime that accounted for the differences in crime rates between Black and White communities. In his work, the level of family instability within a community was thought to affect crime rates because it diminished the capacity of the community to exert social control both decreasing participation in community associations and undermining family supervision. This explanation bridged Wilson's work (see, e.g., Wilson, 1987) on the structural disadvantages faced by poor Black communities in the era of deindustrialization with the social disorganization tradition of communities and crime research.

Notably, inspired by his research, most systemic model scholars incorporated family disruption to the original systemic model formulation (see e.g., Bursik, 1999; Sampson and Groves, 1989; Warner & Wilcox Rountree, 1997; Wilcox Rountree & Warner, 1999. This was thus his first important contribution to social disorganization theory.

Contextual Effects on Community Attachment

Sampson's second contribution was to extend Kasarda and Janowitz's (1974) systemic model of community attachment by exploring contextual effects. Following Kasarda and Janowitz (1974), Sampson (1988) sought to understand the causes of community attachment and strong ties in mass societies. As discussed in Chapter 1, in their study, Kasarda and Janowitz

tested two alternative models of community attachment. On the one hand, the linear development model stated that that the process of urbanization was directly associated with the decay of community attachments. Thus, population size and density were hypothesized to decrease community ties. On the other hand, the systemic model of attachment posited that it was not the process of urbanization itself that generated weak ties within a community. Rather, the ecological process of city growth led to the structural differentiation of communities within the cities. Communities thus differed in terms of their structural characteristics, particularly the socioeconomic status, residential stability, and the age composition of their dwellers. For the systemic model, these were the elements that explained community attachment instead of urbanization itself. Kasarda and Janowitz's (1974) study offered support to the systemic model and found length of residence to be the most important variable to explain individual-level community bonds.

Using the British Crime Survey (BCS) of 1982, Sampson was able to explore individual-level and contextual-level effects of community characteristics on social bonds. Thus, he found that residential stability—whether individuals grew up close to their current homes—was the significantly associated with friendship ties, collective attachment, and social participation. In line with Kasarda and Janowitz findings (1974), population size and density did not undermine such attachment.

Further, the particular sampling design of the BCS data offered the possibility to test contextual effects in 238 electoral wards and polling districts in England and Wales. Measures for each geographical unit were constructed aggregating the responses of the respondents surveyed within each area. The average number of respondents within each community was 46. Using these aggregated-level data, Sampson was then able to show that length of residence also

operated at the contextual level. That is, community residential stability exerted an effect on community-level ties. This finding underscored that the time individuals spent living in a community was not only what mattered; rather, the fact that they lived in a stable community also increased the ties they developed within such community (Sampson, 1988).

Full Test of the Systemic Model

Sampson's third contribution to social disorganization theory was to present the first full test of the systemic model. As already discussed in Chapter 1, he set forth the first complete test of social disorganization theory. Working with Byron Groves (Sampson & Groves, 1989), he assessed two different mechanisms hypothesized by the systemic model and presented a direct measure of social disorganization.

In this study, Sampson and Groves used the 1982 British Crime Survey to explain differential crime rates across 238 British electoral wards and polling districts in Britain and to explore the mediation effect of informal social control and social ties on the relationship between community structural characteristics and crime rates in a multi-level framework. They further replicated their analyses using the 1984 survey, which provided data of 300 political constituencies in England and Wales.

This study was important for two different reasons. First, it was the first study that incorporated a direct measure of social disorganization. The BCS not only provided data of meaningful geographical communities but also included questions regarding community social ties and informal social control, which allowed researchers to directly measure social disorganization. To do so, they used three different measures: local friendship networks, unsupervised peer groups, and organizational participation.

Second, Sampson and Groves were able to test the two different causal mechanism stated by the systemic model of social disorganization. In this regard, they first analyzed the structural determinants of the three different measures of social disorganization. Thus, they found that socioeconomic status, neighborhood heterogeneity, residential stability, family disruption, and urbanization were significantly associated with at least one of the social disorganization measures. In particular, all the structural factors were significantly associated with the presence of unsupervised peer groups. This finding showed that the structural characteristics identified by the systemic model actually impacted the level of community organization. In the second stage, then, they sought to establish whether social disorganization mediated the relationship between the already described structural characteristics and crime. To do so, they showed that social disorganization—especially the presence of unsupervised peer groups—was significantly associated with different types of personal and household victimization and offending rates, controlling for structural characteristics.

Sampson and Groves (1989) thus provided supporting evidence to the systemic model and presented a clear way to test its most important postulates using survey research. In their study, they moved beyond simply analyzing the correlation between structural conditions and crime rates and directly tested the role of social disorganization, using specific measures to assess this construct. Their path-breaking piece thus paved the way for further research on the systemic model.

Given his early career, it is not surprising that Sampson was offered a position at the University of Chicago. During his time in Chicago he consolidated his involvement in a major research project from which he would later derive the empirical basis of his collective efficacy theory: the Project on Human Development in Chicago Neighborhoods (PHDCN) (Sampson,

2011, 2012). This project, originally conceived as a developmental individual-level study of criminal behavior, gradually incorporated a strong community focus. It was the community focus of the PHDCN and its rich data that led to the formulation and further refinement of collective efficacy theory (Sampson, 2012). It is to describing collective efficacy theory that next section turns to.

COLLECTIVE EFFICACY THEORY

Robert Sampson's rich intellectual trajectory in macro-level criminology and his involvement in the Project on Human Development in Chicago Neighborhoods (PHDCN) set a favorable context for the emergence of collective efficacy theory. During his tenure at the University of Chicago, Sampson became increasingly involved with the formulation of the PHDCN. By actively participating in the design of the project, he was able to introduce his macro-level perspective into the study design and take part in key tasks such as the construction of the questionnaire and the survey design, among other things (Sampson, 2012).

Of course, the PHDCN itself cannot be understood apart from the theoretical framework from which it emerged. Rather, the PHDCN reflects Sampson's intellectual trajectory and his Chicago-style research. In Sampson's words (2012, p.71), "data are theory," so it is not surprising that Chicago-inspired research led to the development of a Chicago-style theory. Collective efficacy theory maintains the same logic of the previous formulations within the Chicago School tradition: structural factors impact a community's capacity to exert social control, which in turn impacts crime rates. However, collective efficacy modifies both the structural elements and the mediating mechanisms that are hypothesized to impact crime at the community level.

This section focuses on presenting collective efficacy theory. Thus, its first subsection describes the PHDCN dataset, which gave the empirical basis for the formulation of collective efficacy theory. Second, the following subsection delineates the structural elements that, according to collective efficacy theory, are deemed to affect community organization. The third subsection discusses the notion of collective efficacy and its hypothesized role as mediator between community structural characteristics and crime rates. The fourth section focuses on further developments of collective efficacy theory, describing different elements that have been explored by Sampson and colleagues after setting forth collective efficacy in its original formulation. Finally, future lines of research within the collective efficacy framework are presented in the fifth subsection.

The Project on Human Development in Chicago Neighborhoods (PHDCN)

The Project on Human Development in Chicago Neighborhoods was originally conceptualized as a major prospective study of multiple cohorts of youths aimed at exploring crime from a life-course developmental perspective. As such, the main focus was individual-level correlates of crime, especially using surveys to measure individual differences in risk factors. However, a sociological focus was increasingly added to the project due in large part to both Albert Reiss and Sampson's own involvement in the project. Thus, the individual-level cohort design was embedded in a separate community-level design, which assessed neighborhood properties separately. The community-level study recognized the importance of ecological units in their own right and focused on understanding the impact of community characteristics on crime rates and the general well-being of their residents (Sampson, 2011, 2012).

One of the challenges for the neighborhood study was to select the appropriate ecological unit in which to anchor the neighborhood sampling design. As Sampson (2012) notes, research has often relied on different ecological units—such as communities, neighborhoods, or block groups—to explore contextual effects and constitute meaningful units of analysis. For the purpose of the PHDCN, the decision was made to anchor the sampling design in units smaller than communities but larger than census tracts. Thus, Chicago was divided in 343 neighborhood clusters (NC). NC were constructed by grouping two or three census tracts, taking into account meaningful geographic boundaries and seeking to keep them relatively homogeneous in terms of the relevant structural characteristics (racial composition, socioeconomic status, density, and family structure). These NC averaged 8,000 residents.

From the total 343 NC defined, 80 were selected using a stratification scheme based on SES and race/ethnicity. Each stratum thus captured a different combination of SES and racial composition. Neighborhoods were selected within each non-empty stratum. Through this design, the sample of neighborhoods successfully captured the full range of differences across neighborhoods in terms of two important structural variables: SES and race/ethnicity.

The Longitudinal Cohort Study was then embedded within this neighborhood design. Thus, different cohorts of youths between the ages 0 to 18 were randomly sampled within each selected NC. Through this sampling design, the individual-level study was representative of families living in neighborhoods of different types within Chicago. Three different waves of data were collected over an 8-year time frame. Different individual-level characteristics such as personality, health, and family structure were thus surveyed. In subsequent waves, families who moved were followed and interviewed in their new place of residence.

The community-level design involved three different studies: a community survey, systematic social observations, and cognate studies. First, the community survey component—the most important part of the community study design—consisted of a survey of different neighborhood properties through a questionnaire administered to residents of the 343 Chicago NC defined in the design. In total, data were collected on 8,782 adult respondents residing in Chicago in 1995. Inspired by social disorganization theory, the questionnaire included items tackling important neighborhood-level constructs such as informal social control, neighborhood ties, social cohesion, and community participation, among others (Sampson, 2012). The original formulation of collective efficacy was drawn from these data.

Second, a study of systematic social observation in the 80 sampled NC was conducted. Thus, videotapes, observer logs, and audio recordings of all street segments within the 80 NC were collected. This study sought to capture the daily life and everyday activities occurring within each neighborhood as well as the physical conditions of those geographical units.

Third, further information on the neighborhoods was obtained. Thus, census data, health records, police and court records, phonebook fiches, and tax records were collected.

Additionally, three different cognate studies were carried out, tackling additional features of the neighborhood. First, the Chicago Collective Civic Participation Project collected data on public events of Civic Engagement in Chicago. Second, the lost-letter field experiment explored other-regarding behavior of neighborhood residents through an experiment that analyzed the differential rates of return of randomly dropped stamped letters. Finally, the Key Informant Network Study consisted on identifying and interviewing community leaders.

Importantly, a comparative study was designed in collaboration with the University of Cambridge. In this study, residents of different Stockholm neighborhoods were surveyed

regarding the characteristics of their neighborhoods. This study was specifically designed to be comparable with the Chicago Study and to explore differences and similarities in terms of neighborhoods processes. Also, according to Sampson (2012), the PHDCN study inspired different studies around the world. These studies are described in the third section of this chapter that deals with the empirical status of collective efficacy.

Community Structural Differentiation in the Context of Deindustrialization

In their seminal work, Robert Sampson, Stephen Raudenbush, and Felton Earls (1997) presented a formulation of collective efficacy based on their findings from the PHDCN data. As already discussed, the PHDCN was heavily influenced by the Chicago School research style and its community-level focus. Thus, the fact that collective efficacy is embedded in this intellectual tradition should not be seen as a mere coincidence. Rather, the community survey questions were constructed with social disorganization in mind, and the research design was specifically set to explore core constructs for the Chicago School tradition.

In this context, collective efficacy theory appears as a step forward in social disorganization theory, which was previously dominated by the systemic perspective (Sampson, 2002, 2006, 2012). Collective efficacy thus maintains the basic theoretical layout of the social disorganization model, which holds that general social and economic processes are responsible for the structural differentiation of communities. Communities then are deemed to vary in terms of their structural characteristics. Further, in this framework, those structural characteristics are thought to impact crime and other outcomes through certain community characteristics that affect the residents' capacity to exert social control.

Collective efficacy theory, however, modifies both the structural characteristics that are considered relevant and the community characteristics associated with residents' capacity for

control. The concept of collective efficacy tackles precisely the social control component. Still, before discussing the mechanisms through which communities are able control crime—collective efficacy—it is important to describe how this new theory reconceptualized the structural features held to affect social control and community crime rates. The continuities and changes in the structural factors identified by collective efficacy theory with respect to those originally proposed social disorganization are discussed below.

Writing in the first half of the 20th Century, early Chicago School theorists in general and Shaw and McKay in particular were concerned with the consequences of industrialization and city growth at a time when cities were expanding rapidly and urban centers were attracting and assimilating workers from rural areas and immigrants from outside the United States. Though not without negative consequences, the ecology of the city was, nevertheless, seen as a process of continuous expansion and progress (Snodgrass, 1976). It was in this context that they identified socioeconomic status, residential mobility, and ethnic heterogeneity as the key structural factors generating structural differentiations across communities that impacted community organization.

In line with the traditional school of social disorganization, residential stability and immigrant concentration are also included in the collective efficacy model. Similar to their conceptualization in the systemic model, both residential stability and immigrant concentration were theorized as important structural community characteristics that impacted their level of organization and their capacity of control. Immigrant concentration captured what Shaw and McKay originally conceptualized as ethnic heterogeneity. According to collective efficacy theory, communities with high levels of immigrants tended to be culturally and linguistically heterogeneous and are thus less able to realize common values (Sampson et al., 1997). The

argument for residential instability went along the same lines and also represented a continuity with respect to the original formulation of social disorganization theory.

However, instead of focusing exclusively on socioeconomic status or poverty, collective efficacy theory borrowed from Wilson (1987) the notion of concentrated disadvantages as one of the most important structural characteristics impacting community organization (Sampson et. al. 1997). Thus, it departed from the early description of urban dynamics coined by Shaw and McKay (1942), characteristic of an era of urbanization to focus on the urban dynamics of postindustrial society.

In this regard, the social and economic context had dramatically changed by the 1980s and 1990s. The city growth observed in the beginning of the century was followed by an era deindustrialization starting in the 1970s. Urban communities thus entered in rapid decay due to the loss of manufacturing jobs and the relocation of jobs outside the cities and overseas (Wilson, 1987). This economic restructuring impacted particularly those groups that had historically occupied an unprivileged position in the social structure and had a more fragile relationship with the job market: the Black urban poor. The combination of the increasing levels of joblessness among poor Black males, combined with the historical and contemporary structural racism and specific political processes—such as public housing allocation—contributed to the hyper ghettization of the urban Black poor and the expansion of the underclass (Sampson & Wilson, 1995; Wacquant & Wilson, 1989; Wilson, 1987). Members of the underclass were then characterized by their exclusion from the mainstream occupational system and by the fact that they lived in depressed communities. Such communities had become socially isolated due to the out-migration of middle class workers with more stable patterns of employment and increasing

opportunities. This concentrated disadvantages faced by the urban poor thus undermined the social organization of their communities.

Further, these deprivations propelled a set of behavioral adaptations that further reinforced the disadvantages. Thus, for example, as Sampson (1988) showed, the scarcity of males with stable employment undermined marriage prospects and family stability within the community. Such joblessness affected the number of female-headed households. Single-headed households tend to be more socially and economically vulnerable and, among other things, struggle more to exercise informal social control over their youngest members. Therefore, the notion of concentrated disadvantage was key to understanding the community structural differentiation in the era of deindustrialization.

Collective efficacy theory thus incorporates concentrated disadvantages as one of the structural elements that explains community organization (Sampson et al., 1997). In this sense, it draws from Sampson's (1988) previous empirical work on the link between structural characteristics, family disruption, and crime rates. Showing that joblessness and economic deprivation had indirect effects on crime through family disruption, this study showed the importance of understanding the specific challenges faced by Black communities in order to explain the higher crime rates exhibited by predominantly Black communities. The concept of concentrated disadvantages thus captured the specific social and economic milieu that characterized poor Black communities in the inner city (Wilson, 1987).

In short, collective efficacy theory identifies three different causal factors at the structural level: concentrated disadvantages, immigrant concentration, and residential stability. In their foundational study of collective efficacy, Sampson et al. (1997) operationalized these constructs

using measures from the 1990 census. They conducted a factor analysis with variables tackling these constructs and found that, as theorized, they loaded in three different factors.

First, the percentage of households below the poverty line, of people on public assistance, of female-headed families, of unemployed, of individuals younger than 18, and of Black all loaded heavily on the first factor, which was defined as representing concentrated disadvantages. Second, percent foreign born and percent Latino had loadings of 0.70 and 0.88 on the second factor, which was termed immigrant concentration. Finally, the third factor was called residential stability, with high loadings of the percent of population living in the same household since 1985 and percent of homeowners. These loadings gave empirical credence to these three distinct theoretical constructs.

The Intervening Construct: Collective Efficacy

Notably, collective efficacy theory goes beyond merely updating the structural characteristics deemed to impact neighborhood organization at the community level. Rather, the most important contribution of this theory is the identification of collective efficacy as the main mediating mechanism between community structural characteristics and crime rates. This subsection focuses on explaining the meaning of collective efficacy and its implications for social disorganization theory. To do so, it is necessary first to describing how this concept emerged as an attempt to make sense of the empirical data and how it was defined and operationalized in its original formulation. Then, the focus turns to specify this definition and further discuss what the shift from social ties to collective efficacy means for communities and crime research.

Collective Efficacy Original Study. The theory of collective efficacy was first introduced in Sampson, Raudenbush, and Earls's seminal paper Neighborhoods and violent

crime: A multilevel study of collective efficacy, published in 1997. In this article, Sampson and colleagues identify collective efficacy as the mediating mechanism between communities' social composition (structural characteristics) and crime rates. Inspired by social disorganization theory and using the PHDCN Community Survey data, especially designed to capture relevant community organization features, they sought to disentangle the community organizational features that affected crime rates at the community level. Thus, they operationalized two different constructs: informal social control and social cohesion/social trust.

Informal social control was measured using five items asking for the likelihood of their neighbors intervening in different scenarios: (1) children were skipping school; (2) children were graffiti-painting a local building; (3) children were disrespecting an adult; (4) a fight broke in front of their houses; and (5) a budget cut was threatening the closest fire station. A five point Likert scale ranging from "very unlikely" to "very likely" was used to rate responses. Social cohesion and trust was also measured using five items, which used a five point Likert scale to rate respondents' agreement with the following statements: (1) "People around here are willing to help their neighbors." (2) "This is a close-knit neighborhood." (3) "People in this neighborhood can be trusted." (4) "People in this neighborhood generally don't get along with each other." And (5) "People in this neighborhood do not share the same values." The last two items were reverse coded (Sampson et al., 1997, p. 920).

At first, items were combined to form each of the measures at the individual level. Then, a neighborhood-level measure of social cohesion/trust and a separate measure neighborhood-level measure of informal social were constructed. These measures were computed aggregating the responses of all the individuals within each neighborhood. Notably, these two constructs were originally intended to capture two distinct neighborhood properties and thus were thought

to be conceptually separate. However, when the data were analyzed, Sampson et al. found that the measures of informal social control and social cohesion and trust were highly correlated at the neighborhood level. The correlation coefficient for this association was above 0.80. Due to potential problems with multicollinearity, these variables could not both be included simultaneously in the same multivariate model. Accordingly, Sampson et al. had little choice but to combine them into a single construct. They termed this newly invented construct "collective efficacy." This construct was shown to be highly reliable at the neighborhood-level. The neighborhood-level reliability, which they estimated using a measurement model, ranged between 0.80 and 0.91 depending on number of respondents per neighborhood. Further, 21% of the variance in perceived collective efficacy was explained by neighborhood clustering. Thus, the concept of collective efficacy was produced by a serendipitous empirical finding.

Of course, the fact that collective efficacy theory emerged as an *ad hoc* response to what the data were showing does not mean that the he construct was devoid of any theoretical basis. Rather, the construct emerged because of the interplay between theory and data (Sampson, 2011). As Sampson and colleagues (1997, p. 920) put it: "Because we also expected that the willingness to intervene on behalf of the neighborhood would be enhanced under conditions of mutual trust and cohesion, we combined the two scales into a summary measure labeled collective efficacy."

In their study, Sampson et al. (1997) then found that collective efficacy successfully mediated the relationship between neighborhood social composition and three different measures of crime: perceived violence, violent victimization, and homicide events. As already discussed, social composition was measured through concentrated disadvantage, immigrant concentration, and residential stability. When possible, hierarchical linear modeling was used to control for

individual-level characteristics so as to rule out compositional effects. Estimations showed that these three structural neighborhood characteristics were significantly associated with crime at the neighborhood level. The only exception was immigrant concentration, which did not appear to be significantly associated with homicide events. When collective efficacy was added to the models, it not only was significantly and substantially associated with all the outcomes but also considerably reduced the association of the structural variables with crime. Further, collective efficacy retained its explanatory power when variables measuring friendship and kinship ties, neighborhood organizations, and local services were added to the estimations.

Specifying the Meaning of Collective Efficacy. The formulation of collective efficacy as the mediating mechanism between structural characteristics and crime at the community level had serious implications for communities and crime research. Before the invention of the construct of collective efficacy, social disorganization theorists were focused on testing the systemic model in which informal social control was attributed to the intensity of social ties. However, as already discussed, this research on the systemic model came to suggest that the mere presence of strong ties may not be the key organizational feature to underlying the capacity for community control. Particularly, research had challenged this assumption in three different ways. First, some research found that less frequent interaction increased informal social control (Bellair, 1997, Warner and Wilcox Rountree 1997). Second, the relationship between ties and both formal and informal social control was shown to be contingent on the type of tie considered and elicit different types of interventions (Wilcox Rountree & Warner, 1999; Vélez, 2001; Warner, 2007; Wilkinson, 2007). Third, the equivocal relationship between ties, informal social control, and crime was also revealed in ethnographic analyses of the role of gangs in exerting neighborhood control (Pattillo, 1998; Venkatesh, 1997). These studies showed how in

neighborhoods characterized by both dense ties and the presence of gangs social ties may bind the criminal and non-criminal elements of the neighborhood and may thus block community controls and foster crime (Sampson, 2012).

Collective efficacy draws from these findings to posit that the mediating mechanism is not the mere existence of social ties but the collective capacity of a community to activate social networks and mobilize resources in order to achieve its shared communal goals (Morenoff, Sampson, & Raudenbush, 2001; Sampson, Morenoff, & Earls, 1999; Sampson, Raudenbush, & Earls et al., 1997; Sampson, 2002, 2006). Under the umbrella of collective efficacy, two different but interconnected mechanisms are identified: social cohesion and shared expectations for control. The social cohesion mechanism captures the collectivity part of the construct, whereas the shared expectations for control mechanism captures the efficacy part of the construct.

In this framework, social control is still hypothesized as a community capacity, which cannot be reduced to or explained by the individual characteristics of residents. However, the conceptualization of the community features that facilitate the exercise of community social control differs from that proposed by social disorganization theory and the systemic model. Through this conceptualization, collective efficacy theory intends to provide a more updated view of community social control.

First, collective efficacy breaks with the nostalgic view of "urban village" that was implicit in the systemic model. The idea that close family and friendship ties provided the ideal context for community social control is seen to portray an anachronist and idealistic view of urban life. According to Sampson (2011, 2012), in contemporary cities, neighbors do not seek to be close to each other. Further, given the density and size of neighborhoods, getting to know

every neighbor intimately is, in contemporary urban America, viewed as an impossible task. However, the fact that close ties are not what binds neighborhoods together does not mean that the notion of community is lost or that communities are no longer capable of achieving social order. Collective efficacy theory recognizes this change in the urban milieu. Thus, it posits that neighbors no longer need to be close to each other to be able to achieve their communal goals. Rather, they just need basic levels of social interaction and trust that can form the basis for undertaking collective action when a neighborhood problem potentially arises. Institutions, weak ties, and expectations for control are thus more important than dense social networks.

Second, collective efficacy incorporates the notion of social support (cohesion) and social networks, but from an action-oriented perspective that emphasizes the role of agency. The emphasis is placed on a community's capacity for action. Collective efficacy departs from a notion of social capital based just on the accumulation of social ties. Rather, it focuses on the shared expectations for action (Sampson, 2012). From this perspective and consistent with previous research, ties are seen only as potential resources for action. Social ties are hypothesized to be relevant sources for social control. However, their mere presence does not guarantee the exertion of social control within a community. Social ties are stocks that may be used as resources for neighborhood mobilization. Thus, they may or may not translate into collective action.

On the other hand, collective efficacy theory seeks to explain precisely what activates social control. According to this theory, it is the shared expectations for action that matter. Thus, the focus is on whether neighbors believe others in the neighborhood would intervene in certain situations and whether they share a sense of community with their fellow neighbors (Sampson, 2012). Collective efficacy is the belief among members of a community that they are

able and willing to mobilize towards a certain goal. Therefore, the construct is intended to capture the residents' sense of engagement with, but not necessarily their attachment to, other members of their community (Sampson, 2002, 2006). Strong ties within the community are not sufficient to prevent crime; rather, it is necessary for the community to be able to activate those networks through collective action (Sampson, 2006).

Third, collective efficacy theory emphasizes the role of shared norms for social control. Thus, it posits that collective efficacy—and social control—stem from both a particular social structure characterized by social cohesion and support and a specific norm agreement (Sampson, 2006). It is not just the structure of ties that matters, but the cultural aspect of shared expectations regarding social control—neglected by the systemic model—is also important (Sampson, 2011). If neighbors do not share certain norms regarding when action is expected, it is unlikely that they will collectively mobilize towards shared goals and produce social order. This is often the case in neighborhoods where criminal networks are strong (Sampson, 2012).

Further Developments in Collective Efficacy Theory

In further studies, Sampson and colleagues reinforced the empirical validity of collective. Notably, they also sought to elaborate the theory by exploring a range of issues, two of which are in particular important: the role of spatial proximity (Sampson et al., 1999; Morenoff et al., 2001), and the stability of collective efficacy and its association with crime (Sampson, 2012).

First, in a 2001 study, Morenoff, Sampson, and Raudenbush sought to unravel the spatial dynamics of neighborhood violence and its link with collective efficacy. Given that spatial units in the city are interrelated and that boundaries are arbitrary, they tried to elucidate whether the characteristics of surrounding neighborhoods impacted the level of violence in a particular neighborhood. Using data from the PHDCN and vital statistics and police records to account for

homicide rates, they first mapped the areas according to their level of violence and collective efficacy. Thus, they found that areas with high homicide rates and low collective efficacy were not dispersed across the city but clustered. High homicide neighborhoods tended to be proximate to neighborhoods with similar levels of homicide. A similar pattern was observed for collective efficacy. Further, there was an overlap between high homicide and low collective efficacy clusters.

This geographical distribution thus not only suggested the association between collective efficacy and crime rates—shown initially by Sampson et al. (1997)—but also reinforced the idea that neighborhoods should not be considered as isolated units containing within their boundaries all relevant social life. The regression analyses, which included spatial lags to account for proximity, further reinforced this interconnected view of urban life, showing that the homicides in a given neighborhood are associated with the homicides occurring in surrounding neighborhoods. When spatial lags were added, Morenoff and colleagues found positive spatial effects for concentrated disadvantage and collective efficacy. These effects remained significant after controlling for prior homicide. In particular, a certain neighborhood homicide rate was influenced not only by its collective efficacy but also by the collective efficacy of the adjacent neighborhoods and to those proximal but not adjacent. As the distance between neighborhoods increased, the effect of the level of collective efficacy of one neighborhood on the other exponentially decreased. This spatial dependence was also observed for concentrated disadvantages and other measures of inequality.

Notably, these results did not hold when social ties were mapped. However, this finding does not suggest that social ties are unrelated to neighborhood crime. Rather, social ties appear to have an indirect effect on crime through collective efficacy. Estimations of collective efficacy

levels thus show that, even when controlling for spatial dependency and prior homicide rates, community associations, organization, and social ties all significantly predicted neighborhood-level collective efficacy (Morenoff et al., 2001). Thus, by investigating the relationship between ties, organizations, and neighborhood participation with collective efficacy, this study reveals that these social and institutional factors actually impact collective efficacy and have an indirect effect on crime.

Overall, this study advances collective efficacy theory by exploring the role played by spatial proximity in key neighborhood processes. Including spatial effects challenges the notion of "urban village" by recognizing that neighborhood boundaries and cross-neighborhood social processes are diffuse in contemporary cities. Including proximity effects also allows for the factor of spatial interdependence to be assessed and for the robustness of previous results regarding collective efficacy and crime to be evaluated. This study suggests that Sampson et al.'s (1997) findings are robust and remain even after controlling for proximity effects and adding prior homicide rates as a control for unobserved heterogeneity.

Second, another addition to this perspective involves analyzing how collective efficacy varies over time and its association with crime from 1995 to 2006. Using data from the 1995 and the 2002 waves of the PHDCN Community Sample, Sampson (2012) first shows that collective efficacy is relatively stable across time. This stability is similar across communities of different racial compositions.

Next, Sampson (2012) analyzed the relationship between collective efficacy and its structural sources over time, using available data from 1970. He used data on poverty (as a proxy of concentrated disadvantage), ethnic heterogeneity and residential stability. Through this analysis, he showed that poverty in 1970 influenced levels of collective efficacy in 1995. This

finding indicated that poverty has a long-term effect on a community's capacity for control, thus suggesting a vicious cycle in which poverty erodes community organization which in turn in turn increases community vulnerability. Further, the data seemed to indicate that this association was not reducible to the mere association between past and contemporary poverty within a community or to the contemporary association between poverty levels and collective efficacy. Rather, poverty in 1970 was more strongly associated with contemporary collective efficacy than 1990 poverty and successfully predicted recent declines in collective efficacy. Therefore, the data suggested that poverty has a long-lasting and cumulative effect on collective efficacy. Importantly, once other structural elements were controlled statistically, both actual levels of ethnic diversity and changes in such diversity did not predict either 1995 collective efficacy levels or changes in collective efficacy between 1995 and 2000. From this finding, it follows that ethnic diversity alone did not reduce collective efficacy but co-varied with other set of structural variables (poverty and residential stability) that did impact collective efficacy levels.

In addition to analyzing the trend in collective efficacy and its sources, Sampson (2012) took advantage of the longitudinal design of the PHDCN data to assess the predictive power of collective efficacy on crime rates over time, during the period between 1995 and 2006. Thus, he studied whether collective efficacy impacts future homicide rates, controlling for structural characteristics, friendship ties, moral cynicism. and previous levels of crime. His model shows collective efficacy to be consistently associated with homicide rates. Further, concentrated disadvantage was strongly associated with violence while residential stability exhibited a less consistent pattern of association. Legal cynicism was shown to be positively associated with crime as well. These results held when other offenses were considered. In longitudinal models, collective efficacy continued to yield a negative effect on crime, controlling for structural

characteristics and legal cynicism. These estimations also indicated that increases in collective efficacy were associated with above average decreases in homicide rates. This decline in homicide rates was more pronounced when increases in collective efficacy were accompanied by decreases in cumulative disadvantages.

Further, taking advantage of the longitudinal structure of the PHDCN data, Sampson (2012) explored the relationship between past crime levels on current levels of collective efficacy. Using collective efficacy as the dependent variable and adding crime rates to the model, he found that past levels of residential stability, density, and concentrated disadvantages as well as current levels of ties and moral cynicism were associated with collective efficacy. Further, even after controlling for these predictors—and for previous levels of collective efficacy—prior crime appears to be strongly and negatively associated with collective efficacy. Overall, concentrated disadvantage was the variable more strongly associated with lower levels of collective efficacy. These findings suggest the existence of reciprocal effects between crime, collective efficacy, and community characteristics—particularly community disadvantages.

New Directions in Collective Efficacy Research

Since its original formulation in 1997, collective efficacy theory has consolidated its position as the predominant approach to communities and crime research. The next section reviews the wide range of empirical tests inspired by collective efficacy theory. Overall, this empirical literature not only provides general support for the theory but also illustrates its salience for the field and its wide range of applications. As Sampson (2011) notes, the notion of collective efficacy provides an open-ended framework that can be used to inform data analysis, interpret empirical patterns, and guide further research. As such, it is constantly open to new challenges, theoretical elaboration, and application when launching fresh investigations of other

settings and problems. In this spirit, Sampson (2006) identifies four different challenges faced by collective efficacy theory that constitute interesting avenues for future research.

First, the mediating role of collective efficacy between structural characteristics and crime has not been definitely established. Collective efficacy often assumes that structural characteristics precede causally the level of collective efficacy. It is in this scenario that the mediation hypothesis makes sense. However, the opposite relationship can obtain—that is, collective efficacy may be responsible for generating structural differentiation across communities. Communities marked by high levels of interpersonal trust and more able to mobilize resources towards achieving their goals are likely to attract more affluent residents and better capture community resources. On the other hand, low levels of collective efficacy may lead those who are better off in a community to move away and reside elsewhere. Thus, through selection processes, collective efficacy may have a direct effect on community structural characteristics such as poverty and residential stability. The notion that structure precedes social processes is thus only an assumption that should be more thoroughly discussed and explored. Research should elucidate the directions of the causal processes identified by collective efficacy theory and the intricate relationship between collective efficacy, structural characteristics, and crime. As Sampson's own work (2006, 2012) suggests, these relationships are likely to be less straightforward than the basic formulation of the theory states.

Second, the discriminant validity of collective efficacy is still problematic. That is, the concept of collective efficacy tends to overlap with other community social processes such as social ties, social disorganization, or informal social control. Thus, it is difficult to empirically distinguish collective efficacy from these other social processes that represent separate constructs but are narrowly intertwined with the process of collective efficacy. According to Sampson

(2006), this problem is empirical but also conceptual. For example, even if in a factor analysis variables such as poverty load in the same factor as crime, that would not mean that they are the same construct—only that they vary together. This is the case in the PHDCN data, where structural disadvantages load together with crime. Importantly, collective efficacy also consistently loads with disorder but not with density of ties. This finding gives empirical credence to the conceptual distinction between collective efficacy and social ties. However, it is important to highlight that the difference between collective efficacy and social ties is also conceptual. The importance of a conceptual distinction between empirically related constructs is easier to visualize when thinking about the differentiation between poverty and crime. The fact that they load together would seldom be seen as indication that the concepts are the same. In the case of social ties and collective efficacy this theoretical distinction is less intuitive but not less relevant and it stands because it provides theoretical meaning to the relationships illuminated by the data. In short, the solution to the discriminant validity problem lies not only in the empirical findings and the statistical methods used; rather, the differentiation between social processes and structural features is also a theoretical task.

Third, further research should explore the role of technology in generating collective efficacy. According to Sampson (2006), technology has the potential to increase collective efficacy by facilitating the activation of weak ties. Far from alienating people, technology has been shown to be instrumental not only to organizing social protests and to political involvement in general but also to increasing social interaction and engagement at the neighborhood level. Moreover, the rapid access to information about crime that the internet provides may help communities to gain more awareness about the distribution and the intensity of crime in their neighborhoods and thus increase community engagement and collective efficacy.

Finally, one critical point for the expansion of collective efficacy theory is the exploration of the generality of the causal mechanisms that it posits. In order to establish this generality, comparative studies should be conducted and research must be undertaken outside the United States. Sampson (2006) recognizes that research in this direction has been scarce and that only a few comparative studies have been conducted. The extant results, however, appear encouraging. Thus, Sampson and Wikström (2008) compared the effect of collective efficacy in Stockholm and Chicago. Controlling for different levels of crime and social characteristics between these cities, they found that collective efficacy mediated the effects of community characteristics and crime rates in both places.

Notably, Sampson (2012) cites other studies also supporting the generality of collective efficacy theory in different parts of the world. However, drawing from the few studies conducted in this region, he states that Latin America may be the exception to such generality. Studies conducted in Belo Horizonte, Brazil (Villarreal & Silva, 2006) and in the city of Medellín, Colombia (Cerdá & Morenoff, 2013) show that collective efficacy is higher in more disadvantaged neighborhoods and that it is either unrelated or positively associated with crime rates. These studies are discussed in more detail in section four, which presents a more detailed discussion of the empirical status of collective efficacy, focusing more precisely on the different empirical tests that have been conducted outside the United States. Before turning to the empirical status of collective efficacy theory, next section describes alternative theories of crime at the community level that incorporate cultural features to communities and crime research.

RIVAL MACRO-LEVEL THEORIES: BRINGING BACK CULTURE INTO COMMUNITIES AND CRIME STUDIES

It is perhaps ironic that Shaw and McKay's original formulation of social disorganization theory—currently a major macro-level social control tradition—is considered also the theoretical antecedent to contemporary social learning theory, a micro-level cultural transmission theory. As already discussed in Chapter 1, Shaw and McKay's theoretical eclecticism was portrayed by Kornhauser (1978) as a flaw instead of as a strength. Thus, to resolve the apparent intrinsic weakness of Shaw and McKay's integrative approach, social disorganization theory was deprived of its cultural transmission component and since then has been presented purely as a social control theory. At the same time, Edwin Sutherland's (1947) main interest in social disorganization theory—the process of differential association—became a dominant perspective and eventually evolved into social learning theory (Akers, Krohn, Lanza-Kaduce, & Radosevich, 1979; Akers, 1998). Despite its influence within micro-level criminology, the cultural transmission tradition became marginalized from communities and crime research and was generally ignored by scholars in this area.

Besides Kornhauser's (1978) critique, the demise of community-level subcultural explanations of crime and deviance was related to subcultural theorists' common neglect of the structural challenges faced by impoverished and predominantly Black communities—places where crime abounded—and their focus on "cultural pathologies" associated with such communities. These perspectives were highly criticized as "victim-blaming" or openly racist explanations of crime (Matsueda, 2015; Sampson, 1987; Sampson & Bartusch, 1998; Sampson & Wilson, 1995; Wilson, 1987). Discouraged by such criticisms, scholars avoided exploring the role of culture—and race—when understanding crime and resorted to alternative explanations. Thus, instead of the heated theoretical and empirical combat that characterized micro-level

criminology (see, e.g., Akers, 1996; Costello, 1997, 1998; Greenberg, 2015; Hirschi, 1996; Matsueda, 1988, 1997, 2015), the area of communities and crime has been largely monopolized by the social control perspective.

In recent years, however, there has been a move towards incorporating cultural aspects into communities and crime research. This section describes two different approaches to the incorporation of culture into community-level criminology. First, rooted in the cultural transmission tradition, oppositional culture theory has served as a competitor to the social control paradigm. Second, the attenuated culture/legal cynicism approach presents a view of culture that is consistent with control theory and thus is compatible with the prevailing social control formulation of social disorganization theory.

Subcultural Theory: Oppositional Culture

Most current communities' scholars concur that Kornhauser's (1978) critique of what she termed the "cultural deviance tradition" was too extreme and risked presenting a caricaturized version of cultural transmission theory (Bursik, 2015; Matsueda, Drakulich, & Kubrin, 2006; Matsueda, 2015; Sampson & Bean, 2006). Thus, some researchers now posit that her view of culture came directly from her adherence to Parsons's structural functionalist theory of social action, which overemphasizes social order and value consensus (Matsueda, 2015). In Bursik (2015, p. 113) words:

Kornhauser had been using a very dated conceptualization of culture that depicts it as a single, monolithic set of norms, values, and beliefs that (a) are internalized and shared by all members of a group and (b) provide the 'ultimate ends or values toward which action is directed'...perhaps it was not so much the coexistence of competing cultures in

neighborhoods that was problematic in social disorganization, as it was the view of culture that Kornhauser brought to her analysis.

Alternative and more flexible conceptualizations of culture seem more suited to explain conflicting values in contemporary societies. Following Swidler's (1986) analysis, instead of being an organized set of wants and preferences towards which to orientate future actions, culture can be seen as providing individuals with a set of or "toolkits" or skills for them to use in different situations to solve specific problems. According to this view, actions should not be seen as choices oriented to fulfill certain already-internalized values. On the contrary, culture shapes people's skills and styles that makes them differentially apt to pursue different lines of action. Thus, it is not what people value that matters but people's culturally shaped know-how, their cultural competencies.

For example, middle-class children acquire the competencies required to achieve success in the educational system and, accordingly, they engage in behaviors and courses of action that conform to these competencies. On the other hand, lower class children tend to lack such competencies and thus move away from the "middle-class path to success." As Swidler (1986, p. 275) puts it: "One can hardly pursue success in a world where the accepted skills, style, and informal know-how are unfamiliar. One does better to look for a line of action for which one already has the cultural equipment." Within this framework, values do not explain actions; rather, "action and values are organized to take advantage of cultural competences." Importantly, instead of adopting one coherent and uniform set of values, individuals are exposed to different "chunks" of culture that provide them with different and often contradictory resources for action. Thus, individuals differentially located in the social structure are

differentially equipped to deal with particular situations, define the situations differently, and choose diverse strategies for action (Swidler, 1986; see also Matsueda, 2015).

Anderson's 1999 seminal ethnographic study of violence in an inner-city neighborhood in Philadelphia, Code of the Street: Decency, Violence, and the Moral Life of the Inner City, constitutes the most salient subcultural approach to crime. In this work, Anderson argues that the processes of deindustrialization and structural racism that contributed to the social isolation and alienation of residents of impoverished inner-city Black communities—as described by Wilson (1987)—created the conditions for the emergence of "street" values that are conducive to violence. That is, the "code of the street" emerged as a cultural adaptation to structural constraints. Notably, this code provides inner-city youth with a set of rules and strategies that help them navigate everyday life and that are opposed to mainstream orientations. In a context in which most residents lack the skills and resources to achieve status through conventional means (work or education) and are increasingly alienated from the police and other institutions from the larger society, this "code of the street" provides a set of rules and strategies that allow young residents to achieve status and secure protection.

The "code of the street" thus consists of a set of prescriptions that serve to regulate interpersonal behavior on the basis of violence and aggression. It emphasizes the role of honor and manhood and prescribes the use of violence and aggression—and responding with violence if provoked—as the means to secure respect and avoid future aggression. According to Anderson (1999), the "code of the street" is not fully hegemonic but rather is differentially embraced by area residents. Strong mainstream orientations are also deeply ingrained in most of the families within the community he studied—the so called "decent" families—which coexist with those more strongly regulated by the "code of the street." Even though many inner-city

families do not fully endorse the "code of the street" and are largely inclined towards "decent" behaviors and values, they are nonetheless regulated by the "code of the street." In contexts where the "code of the street" is widely adopted, individuals feel pressured towards act in conformity to its prescriptions. People—especially young males—who do not act aggressively and affirm they manhood may not be able to secure status and be seen as weak. Thus, they will likely be targeted by those affirming the values of the code and victimized. For this reason, even if they don't endorse it, "decent" people still are motivated to enact it in order to avoid being targeted and victimized. Anderson (1999) calls this process "code switching."

Anderson's (1999) code of the street thus provides an explanation for the high levels of violence observed in poor inner-city neighborhoods rooted in the subcultural tradition. In this case, it is not only the lack of social control but the existence of an antagonist subculture that positively prescribes the use of violence that explain these higher crime rates. Importantly, Anderson's explanation did not deny that structural community characteristics influence crime. The processes that, according to Anderson, generated the conditions for the emergence of the "code of the street" were similar to those highlighted by Wilson (1987) and later incorporated into collective efficacy theory. In this case, however, the mechanism through which community characteristics translate into crime differ from those posited by social disorganization theory. Importantly, in Anderson's explanation, the "code of the street" exerts a contextual effect on crime. Thus, the regulatory power of the code in terms of individual behavior operates regardless of individuals' intrinsic adherence to the values it professed. The mere existence of a conflicting subculture within the neighborhood makes its residents more likely to resort to violence (Matsueda et al., 2006).

Before Anderson (1999), other ethnographic studies had already highlighted the importance of cultural transmission and certain conflicting cultural codes or frames to understanding violence (Hannerz, 1969; Horowitz, 1983). However, so far, very few studies have tested this propositions using quantitative techniques. Extant research measuring the adoption of the code of the street and its impact on violence and delinquency has found a direct association between adoption of the code and crime and violence as well as a mediating effect of the adoption of the code of the street between structural characteristics and crime at the individual-level (Brezina, Agnew, Cullen, & Wright, 2004; Matsueda et al., 2006; Stewart & Simons, 2006). Further, neighborhood levels of adoption of the code appear to exert a contextual effect on crime, above and beyond individual characteristics (Stewart & Simons, 2010). However, contrary to what Anderson (1999) suggests, adhering to the code of the street does not seem to have a protective effect on victimization (Stewart, Schreck, & Simons, 2006).

In sum, even though Anderson's (1999) work has been influential in the field, tests of his theory in a quantitative framework have been limited. Despite the importance of the social learning/differential association tradition in micro-level criminology, scholars have fallen short when studying the potential effects of oppositional cultures in communities and crime research.

Legal Cynicism Theory: Attenuated Culture

The last subsection argued that the cultural transmission tradition had hardly been incorporated to the study of communities and crime. However, there is a renewed interest in exploring the role of culture when understanding different community processes and their link with crime. In this regard, a growing line of research has been aimed at incorporating culture back into the general framework of social disorganization, following precisely Kornhauser's

(1978) writings on cultural attenuation (Kirk & Papachristos, 2011; Kirk & Papachristos, 2015; Sampson & Jeglum Bartusch, 1998; Sampson & Wilson, 1995; Warner, 2003).

Chapter 1 presented Kornhauser's (1978) critique of Shaw and McKay's social disorganization theory and set forth her theoretical reformulation of social disorganization into a pure control model. She argued that society was marked not by cultural conflict but by cultural consensus. In her framework, culture was proposed to be widely shared across the social structure; all members of a community thus shared the same general conventional goals and values. However, although culture did not differ in terms of its basic content, it did vary in its strength and the extent to which citizens displayed allegiance to it. Kornhauser thus asserted that culture could be strongly held or, among residents in some communities, become weakened or "attenuated." From this perspective, it follows that research on cultural attenuation should first elucidate whether communities differ in their cultural strength, that is, if there are differences in resident's level of commitment to mainstream values across communities. Then, if such is the case, empirical studies should focus on identifying the causal elements that influenced cultural strength as well as the consequences of attenuated culture in terms of community organization, informal social control, and crime of such cultural attenuation.

According to Sampson and Wilson (1995) it was in highly disadvantaged contexts that individuals became less able to realize conventional values. As already discussed, structural elements impacting disadvantage communities—such as high levels of joblessness—also affected social behaviors—such as marriage prospects and family stability. Thus, many members of the community tended to see their prospects of getting married, securing a job, or realizing a wide range of other conventional values as increasing unrealistic. Further, if the realization of those values was not generally visible within the community, such values failed to

be perceived as shared in this area and became attenuated. Community members thus were led to believe that their neighbors did not hold conventional values (Warner, 2003) and to become themselves more tolerant to non-conventional behaviors (Sampson & Jeglum-Bartusch, 1997; Sampson & Wilson, 1995). Further, social isolation and structural disadvantages has also been hypothesized to foster cynicism in regards with social norms (Sampson & Jeglum-Bartusch, 1998) and legal institutions (Kirk & Papachristos, 2011).

First, "tolerance of deviance" refers, as its name suggest, to the extent to which residence in a community will tolerate or accept behaviors that are criminal or deviant. Importantly, within the framework of attenuated culture, residents do not positively value such wayward conduct but rather accepted it as part of everyday life (Sampson & Bean, 2006). In Sampson and Jeglum-Bartusch (1998, p. 781) words:

Although conventional norms are pervasive in any community, it may be that tolerance of deviance, a cultural emphasis on 'toughness' and 'bravado' in the face of danger, and an overt readiness to use violence varies across structural and situational contexts. In this regard, community contexts may shape 'cognitive landscapes' (Sampson 1997) of appropriate standards and expectations of conduct.

In general, tolerance of deviance has been measured by asking respondents about their attitudes toward certain behaviors and values. These might include how strongly they (or their neighbors) support conventional values and behaviors (Warner, 2003) or, as asked in the PHDCN, how much they condemn certain unconventional behaviors (Sampson & Jeglum-Bartusch, 1998; Sampson, 2012).

Second, "legal cynicism" refers not to how much people value a particular norm but how they feel about the regulation of certain norms by certain social institutions (such as the law and

the police). Thus, at the macro-level, legal cynicism seeks to capture a state of normlessness in which there is little consensus regarding the legitimacy of certain regulations or institutions (Sampson & Jeglum-Bartusch, 1998; Kirk & Papachristos, 2015). In this case, individuals do not contest the value of the norms but frame them in a way that may allow them to act in a non-conformist way under certain circumstances. In the PHDCN, legal/moral cynicism was measured through five different questions asking respondents about whether they agreed with statements justifying law violations or stating that certain behaviors should not elicit formal interventions (Sampson, 2012; Sampson & Jeglum-Bartusch, 1998). Kirk and Papachristos (2011, 2015) operationalize legal cynicism as more closely tied to individuals' perceptions of the legitimacy of the agents in charge of enforcing or regulating the observance of the law. Thus, in this case, legal cynicism assesses trust in the police and in the justice system.

Kirk and Papachristos (2011) analyzed whether legal cynicism had positive contextual effect on crime. Controlling for individual characteristics and structural factors, they found that higher levels of cynicism were related to higher homicide rates. Note that this relationship was robust even when measures of collective efficacy and tolerance of deviance were included in the analysis in their model. By contrast, their analysis revealed that tolerance of deviance was not associated with crime. This finding suggests that certain cultural framings in which the law and the law enforcement agencies are seen as illegitimate impact the strategies for action that individuals consider and that may enable certain violent behaviors.

In regard to the sources of legal cynicism, Kirk and Papachristos (2011) found that, at the neighborhood level, concentrated disadvantage, residential stability, and proportion of youth living in the neighborhood all increased legal cynicism. At the individual level, the analysis

showed that minorities tended to possess more cynical views about laws and law enforcement. Further, being a victim of a crime also increased legal cynicism.

In their study, Sampson and Jeglum-Bartusch (1998) did not analyze the consequences of either tolerance of deviance and legal/moral cynicism. However, their findings revealed that concentrated disadvantaged increased legal cynicism whereas immigrant concentration and residential stability were not related to legal cynicism. Further, their results showed that minorities tended to be less tolerant of deviance and that immigration and residential stability both reduced tolerance of deviance. However, concentrated disadvantage increased tolerance of deviance, which may explain why violence was higher in predominantly Black communities even though non-Whites tended to exhibit lower levels of tolerance towards deviance.

Further, Warner (2003) studied the relationship between attenuated culture, structural characteristics, social ties, and informal social control across 66 neighborhoods in a Southern State. In her study, she measured attenuated culture through the respondents' perceptions of neighbors' level of agreement with seven different cultural values. Her analyses reveal that the respondents' lack of adherence to conventional values and disadvantage both decreased the strength of conventional culture. Further, stability had an indirect effect on cultural strength through social ties. Importantly, analyzing reciprocal effects between ties and cultural strength, Warner (2003) concluded that social ties impacted cultural strength but that cultural strength did not impact ties. Finally, she reported a positive relationship between the strength of conventional culture and informal social control. Thus, her findings give support to Kornhauser's postulates regarding the effect of cultural disorganization on informal social control.

Overall, this literature seems to indicate social disorganization scholars' growing willingness to incorporate cultural aspects into their study of crime. For now, these efforts have

been almost exclusively centered in testing the cultural attenuation model. Social disorganization scholars seem still to be reluctant to measure and test constructs more narrowly related to the notion of conflicting or oppositional subcultures. So far, the study of culture has been limited to exploring the role of tolerance of deviance and moral/legal cynicism. Research on attenuated culture seems to suggest that much can be gained from including cultural features into social disorganization theory.

In summary, despite these advances, most writings within the social disorganization tradition still rely on an overly narrow definition of culture and ignore more complex and diverse conceptualizations of the role of culture. Even if not embracing an integrative approach, scholars should at least entertain the notion of cultural conflict and subject it to rigorous theoretical combat. Only in that way will Kornhauser's (1978) claims regarding the empirical adequacy of social control be subject to empirical scrutiny.

The next section discusses the empirical status of collective efficacy theory. This review includes attempts by scholars to include cultural factors, especially legal cynicism, into the study of this perspective.

THE EMPIRICAL STATUS OF COLLECTIVE EFFICACY THEORY

Since its first formulation in 1997, collective efficacy theory has developed into the predominant approach within the social disorganization paradigm in particular and, more broadly, within communities and crime research. Part of the appeal of collective efficacy theory is that revitalized social disorganization theory by providing a more nuanced discussion of the complex social processes that impact community control. Further, collective efficacy theory emerged from the PHDCN research project. The PHDCN is a major ongoing research enterprise

that has managed to collect a wide array of data measuring core constructs of the social disorganization tradition as well as other important individual-level and neighborhood-level data.

Both the updated framework provided by collective efficacy and the PHDCN data thus prompted scholars to embark on research that focused on identifying and refining the understanding of neighborhood-level processes and their impact on crime and neighborhood well-being directly (Browning, Feinberg, & Dietz, 2004; Browning & Jackson, 2013; Burchfield & Silver, 2013; Mair, Diez Roux, & Morenoff, 2010; Morenoff, Sampson, & Raudenbush, 2001; Morenoff, 2003; Sampson, Raudenbush, & Earls, 1997; Wright & Benson, 2011) or indirectly incorporated measures regarding neighborhood context that expanded their understanding of individual-level processes (Maimon & Browning, 2010, 2012; Meier, Slutske, Arndt, & Cadoret, 2008; Simons, Simons, Burt, Brody, & Cutrona, 2005; Wright, Pinchevsky, Benson, & Radatz, 2015; Zimmerman, 2010). Further, the PHDCN provided a clear operationalization of important community-level constructs such as social cohesion, community participation, informal social control, or social ties. This identification and operationalization of core constructs within a survey questionnaire guided community-level research outside Chicago and facilitated the proliferation of Chicago-style research across the Unites States (Armstrong, Katz, & Schnebly, 2015; Burchfield & Silver, 2013; Macdonald, Stokes, Grunwald, & Bluthenthal, 2013; Messner, Rosenfeld, & Baumer, 2004; Rosenfeld, Messner, & Baumer, 2001) and, even if still scarce, around the world (Bruinsma, Pauwels, Weerman, & Bernasco, 2013; Cerdá & Morenoff, 2013; Cerdá et al., 2012; Hedayati Marzbali, Abdullah, Razak, & Maghsoodi Tilaki, 2014; Jiang, Land, & Wang, 2013; Jiang, Wang, & Lambert, 2010; Mazerolle, Wickes, & McBroom, 2010; Sutherland, Brunton-Smith, & Jackson, 2013; Villarreal & Silva, 2006; Zhang, Messner, & Liu, 2007).

This section discusses the empirical status of collective efficacy and provides a description of the different lines of research it has inspired. Thus, the first subsection presents the different types of studies that have been conducted within the collective efficacy theory framework. Second, the following subsection focuses on describing research aimed at testing collective efficacy theory along with alternative macro-level theories of crime. In particular, this subsection focuses in reviewing those studies that incorporate cultural elements to the study of communities and crime. Finally, the third subsection describes research attempts to test the generality of collective efficacy outside the United States. Among these studies, particular attention is given to extant research conducted in less developed countries, especially in South America.

Assessing the Empirical Validity of Collective Efficacy Theory

Collective efficacy theory has been subjected to a diversity of empirical tests. Among these tests, it important to highlight three different lines or types of research. First, more "traditional" studies focus on testing the explanatory power of collective efficacy as a mediator between community structural characteristics and crime rates across geographical units in different settings. Second, an emergent line of research has focused on studying the relationship between the different elements of collective efficacy (social cohesion and trust and informal social control) separately and on analyzing their association with several social capital dimensions such as social networks, community organizations, or social activism. Third, a different line of research has focused on understanding the determinants of collective efficacy and its components.

"Traditional" Tests of Collective Efficacy. Traditional tests of collective efficacy theory have been conducted in different settings. In general, studies have provided support to the

theory. According to a meta-analysis of 214 macro-level studies of crime conducted by Pratt and Cullen (2005), social disorganization theory ranked among the macro-level theories with the highest levels of empirical validity. Social disorganization is classified by the authors not only as exhibiting high levels of empirical support but also as being adequately tested in general and yielding results that appear not to be conditioned by the methodology used to test it. Thus, the structural characteristics deemed to influence community organization according to this framework—socioeconomic status, urbanism, racial heterogeneity, residential mobility, family disruption, unsupervised local peer groups, and collective efficacy—show, with the exception of socioeconomic status and residential mobility, effect sizes above 0.20. Notably, collective efficacy appears as the predictor with a largest effect size (0.315) and ranked 6th among the 23 macro-level predictors coded in the study. Even though the relatively small number of studies of collective efficacy covered in this meta-analysis makes this effect size unstable, the salience of collective efficacy as a macro-level predictor of crime is still remarkable. A caveat to this metaanalysis is that it excluded multi-level studies in which the dependent variable is measured at the individual level. Because collective efficacy theory is best tested through survey research an assessed through multi-level models, many relevant studies of collective efficacy were excluded from the review.

Individual studies also tend to confirm the validity of collective efficacy. Besides

Sampson and colleagues empirical work with the PHDCN data (Morenoff et al., 2001; Sampson,

Morenoff, & Earls, 1999; Sampson et al., 1997), collective efficacy has been shown to be

associated with violence among adolescents in Los Angeles (Burchfield & Silver, 2013;

Macdonald et al., 2013), violent crime in Arizona (Armstrong et al., 2015), and juvenile

delinquency in Iowa and Georgia (Simons et al., 2005). Further, studies incorporating slightly

different constructs to measure community social processes have shown significant main effects of social cohesion and informal social control when analyzed separately (see, e.g., Hawdon & Ryan, 2009; Rhineberger-Dunn & Carlson, 2011). These studies are discussed later in this section.

Other scholars have used the PHDCN to further the analysis of collective efficacy by specifying the link between collective efficacy and different micro- and macro-level social processes. In regards with the main effect of collective efficacy, many of these studies have yielded inconclusive results. Thus, Browning, Feinberg, and Dietz, (2004) and Browning (2009) found that collective efficacy reduced property crime and perceptions of disorder. In a later study, Browning and Jackson (2013) also showed a negative association between collective efficacy and homicide rates, but no association between collective efficacy and exposure to violence.

Exploring the applicability of collective efficacy theory to account for differences in intimate partner violence, Browning (2002) found a direct effect of neighborhood collective efficacy on intimate partner homicide and intimate partner violence (IPV). However, in Wright and Benson's (2011) further analysis of IPV, collective efficacy yielded a significant effect on IPV only when concentrated disadvantage was not included in the estimations.

Further, when analyzing youth violence, Fagan, Wright, and Pinchevsky (2013) found no direct effect of collective efficacy. Maimon and Browning (2010), on the contrary, did report a direct effect of collective efficacy on youth violent behavior but only in the models in which they controlled for prior violent behavior. Moreover, Fagan and Wright's (2012) study reveals a contextual but positive effect of collective efficacy only on female violence and general delinquency but no effect for males.

Even though these results do not seem to give robust empirical support to collective efficacy theory, it is important to highlight that in this literature, studies that tested collective efficacy in specific cities (Armstrong et al., 2015; Burchfield & Silver, 2013; Macdonald et al., 2013) or for specific types of crime (Browning, 2002; Wright & Benson, 2011) have generally shown support for the theory. However, when collective efficacy has been used in models that account for relevant individual-level processes and that seek to explain offending rather than victimization, its main effects tend to be inconclusive. In these cases, the focus tends to switch from assessing main effects only to disentangling mediating and moderating effects between collective efficacy, individual-level factors (such as unstructured socializing), and offending or violent behavior (Fagan et al., 2013; Fagan & Wright, 2012; Maimon & Browning, 2012).

Collective Efficacy and Social Capital. The notion of collective efficacy as comprising both social cohesion and trust and expectations for informal social control was set forth by Sampson and colleagues (1997) in their original formulation of the theory. As already discussed, this concept emerged as an attempt to make sense of their empirical findings, which were revealing a high neighborhood-level correlation between social cohesion and trust and expectations for control (Sampson, 2011). Given the data patterns they encountered, Sampson and colleagues introduced the notion of collective efficacy and posited that social cohesion and trust and expectations of social control were narrowly intertwined within a community. Their argument was that the sense of collectivity produced by shared norms and social trust set the basis for and reinforced the mutual expectations for control within a community (their "efficacy").

Several scholars adopted this notion and used the construct of collective efficacy to understand not only differential crime rates across communities but also other individual-level

and macro-level processes. However, the general theoretical framework proposed by collective efficacy theory has been used in a more eclectic fashion by these scholars. Thus, many studies separate social cohesion and trust from the expectations for informal social control and try to disentangle how they relate to each other and to different community organization features.

The broader notion of social capital has been instrumental in this attempt to explore more exhaustively the different social processes that may impact community crime rates (Hawdon & Ryan, 2009). Under the umbrella of social capital, slightly different but related community-social constructs—such as social cohesion, social trust, informal social control, formal social control, organizational participation, or civic engagement—have thus been used to account for differential crime rates across geographical units.

For example, Rhineberger-Dunn & Carlson (2011) used the PHDCN data to assess the neighborhood-level correlates of different types of crime. In their study, they analyzed social cohesion and social control (the components of collective efficacy) separately and also explored the role of formal social control and police-citizen relations. They concluded that social cohesion and informal social control mediated the relationship between structural characteristics and violent crime. However, this finding did not hold for property crimes. In this case, social cohesion appeared as positively associated with larceny victimization and not significantly associated with burglary and vandalism. Further, informal control was significantly associated with these types of victimization (with the exception of burglary), but its effect was weaker than that of formal social control. By contrast, formal social control was not related with the level of violent crime. Their findings revealed that although informal social controls are most important for some crimes, this is not true for every crime. In this case, less serious crimes appeared to be more related to residents' perception regarding formal social control exerted within the

community—a construct measured by the level of satisfaction with the job made by police controlling crime reported by neighborhood residents.

Importantly, this study shows that the two processes contained within the notion of collective efficacy do not necessarily operate in the same direction. Thus, while informal social control appeared to be related—albeit with different intensity—to all types of crime considered, the effect of social cohesion was contingent upon the type of crime considered, ranging from a suppressive effect on violent crime to a positive effect on larceny. According to this analysis, therefore, social cohesion and informal social control may not represent a unique construct but rather two different social processes. In this framework, social cohesion may have both direct effects on crime (in different directions) as well as indirect effects through informal social control (Rhineberger-Dunn & Carlson, 2011).

In a similar line of inquiry, Hawdon and Ryan (2009) studied victimization rates across 41 neighborhoods in South Carolina to analyze how the two dimensions of social capital—civic participation and trust and reciprocity—differently impact distinct social controls and thus affect victimization rates. Through structural equation modeling, they show an intricate relationship between the different dimensions of social capital considered and social controls. Thus, civic participation increased parochial controls, whereas trust undermined parochial but increased private controls. Further, public and parochial controls both reduced victimization rates.

Using larger geographic aggregates—counties and combinations of counties—Rosenfeld, Messner, and Baumer (2001) and Messner, Rosenfeld, and Baumer (2004) analyzed the relationship between social capital and homicide rates. Rosenfeld et al. (2001) found a negative association between a composite measure of social capital (capturing social trust and social participation) and homicide rates. However, in Messner et al.'s (2004) study, these dimensions

appeared to be differently associated with homicide rates: while social trust appeared to diminish crime, social activism was shown to be positively associated with homicide rates. Estimating simultaneous equation models for the relationships between homicide and trust and homicide and activism, they showed that homicide not only was affected by social capital but also affected both social trust and activism.

By analyzing the differential effects of social trust and cohesion and indirect social control, these studies raise questions about conceptualizing collective efficacy as a unified or single construct. Unraveling the effects of the different mechanisms that may be important for community social control seems a fruitful path. The notion of collective efficacy introduced an important distinction between social networks and community capacity for action (Sampson, 2012). A broader concept of social capital that also recognizes this capacity for action (Coleman, 1994; Portes & Sensenbrenner, 1993) may help to further conceptualize and test the interrelation between different dimensions of community organization.

Even though the concept of social capital has been loosely defined in the social sciences in general (Coleman, 1990; Portes, 1998, 2000) and in criminology in particular (Kubrin & Weitzer, 2003; Rosenfeld et al., 2001; Sampson & Graif, 2009; Wells, Schafer, Varano, & Bynum, 2006), it nonetheless provides important insights into community-level mechanisms that can impact crime. As Portes (2000, p. 4) argues, the notion of social capital as a property of communities, though useful, has not been well elaborated. However, he points out that "theoretical problems in the formulation of the concept have been partially compensated by subsequent efforts at measuring it empirically." In this regard, while most authors emphasize the role of social trust and activism (Hawdon & Ryan, 2009; Messner et al., 2004), Sampson and Graif (2009) identify four different constructs that have been often related to the general notion

of social capital: ties or networks, collective efficacy, organizational involvement, and conduct norms. Thus, Sampson and Graif subsume collective efficacy into the general notion of social capital. Either understanding collective efficacy as a single construct or analyzing social cohesion and social control separately, it seems that measuring the different dimensions of social capital and testing their association with crime may be a worthy path for future research in communities and crime.

Determinants of Collective Efficacy and Social Control. Studies have also sought to understand the sources of informal social control and social trust. Sampson (1997) and Sampson et al. (1999), for example, used the PHDCN data also to focus particularly on informal social control. Thus, Sampson (1997) shows that children's social control has a direct effect on crime even when controlling for structural disadvantage, immigration, and residential stability.

Further, his findings also suggest that these structural characteristics impact social control.

Sampson et al. (1999) corroborate this finding regarding the social control of children while pointing out that the determinants of children's social control are different than those of two different dimensions of social capital: intergenerational closure and reciprocal exchange.

Garcia, Taylor, and Lawton (2007) invert the hypothesized causal process and focus on understanding the effect of crime on community-level differences in trust in neighbors across 45 neighborhoods in Philadelphia. Their analysis reveals a negative effect of crime on trust.

Neighborhood crime thus appears to erode neighborhood trust, which may open a vicious cycle in which this diminished trust undermines community social controls and thus further increases crime.

In a similar note, Duncan, Duncan, Okut, Strycker, and Hix-Small, (2003) analyze the determinants of collective efficacy—understood as a single construct—using data from 1,105

individuals nested in 392 families from 55 neighborhoods in a large Northwest metropolitan area. The nested structure of the data allowed them to study determinants of collective efficacy at three different levels: individuals, families, and neighborhoods. They found that age at the individual level and a married status of the parents or guardian at the family level impacted positively the perceived levels of collective efficacy. Further, both perceived violent crime and police recorded violent crimes diminished the levels of collective efficacy at the neighborhood level.

Collective Efficacy and Rival Theories

The influence of collective efficacy theory on the field has been noteworthy. The updated framework provided by collective efficacy, as well as the major research enterprise that constitute the PHDCN, revitalized the agenda of Chicago-style communities and crime research. However, Kornhauser's (1978) disparaging critique of culture within social disorganization theory remains noticeable; the incorporation of cultural features on the understanding of neighborhood effects is absent from most studies. Even though collective efficacy theory incorporated a cognitive notion of culture based on shared expectations for action (Sampson, 2012), this theory is still well rooted in the social control paradigm and, at least in its original formulation, does not consider the role of differential attitudes, shared norms, or values across communities. In this context, it is not surprising that tests of collective efficacy have often failed to incorporate cultural components to their study of neighborhood effects on crime.

In short, collective efficacy theory has seldom been subjected to "theoretical combat" with alternative explanations of crime. In recent years, however, some studies have been conducted that incorporated in their tests of collective efficacy measures capturing cultural elements, such as legal cynicism of subcultural values. Even if still scarce, these studies have

been instrumental to enhancing the understanding of community-level effects on crime and better specifying the relationship between a community's cultural orientations, informal social control and collective efficacy, and crime.

Sampson (2012) himself has recently incorporated cultural elements into his study of crime rates. In this regard, he explored the role of altruism and moral cynicism, along with collective efficacy, in explaining differences in crime rates across neighborhoods. The concept of moral cynicism captures social norms regarding the moral rules and the applicability of the law. Sampson proposes that this concept constitutes a potentially important neighborhood-level cultural mechanism. Further, the behavioral measure of social altruism combines measures of performed CPRs and lost letters returned within a community. Both behaviors denote higher community inclinations to engage in other-regarding behavior. In his study, Sampson (2012) finds that, after controlling for neighborhood characteristics, collective efficacy increases social altruism while moral cynicism reduces it. Further, all three measures have a direct effect on homicide rates. These findings suggest that collective efficacy, moral cynicism, and social altruism have independent effects on crime and that are not contradictory explanations of crime. Rather, according to this study, incorporating cultural mechanisms such as moral cynicism seems to add then to the understanding of crime at the community level.

One of the most salient attempts to tests neighborhood-level theories seen as competing comes from Browning et al., (2004) and Browning (2009) studies on the negotiated coexistence model, an elaboration of collective efficacy theory. The negotiated coexistence model tries to make sense of the apparent paradox of highly organized neighborhoods with high crime rates. To do so, it argues that social networks and collective efficacy constitute two different dimensions of social organization that may exert different and contradictory effects on crime.

Thus, according to this model, dense social ties exert two different influences on crime. On the one hand, in line with what is posited by collective efficacy theory, social ties foster collective efficacy and thus exert an indirect negative effect on crime. On the other hand, neighborhoods high in network interactions and reciprocated exchanges provide offenders with social capital and thus facilitate crime. Browning et al. (2004) and Browning (2009) present the negotiated coexistence model as a competing explanation to the cultural transmission model. According to the cultural transmission perspective, the ambivalent role of social networks for crime would be explained by the fact that dense social networks promote the circulation of pro-criminal subcultural values.

Browning et al. (2004) and Browning (2009) use the PHDCN data to empirically elucidate this issue. Browning et al.'s (2004) estimations show that when the level of collective efficacy is controlled, social ties (measured through the level of interactions and reciprocated exchanges among neighbors) are shown to be not associated with crime. Further, analyzing the interaction between network exchange and collective efficacy, they observe that in contexts characterized by high levels of network exchange, the effect of collective efficacy on crime is reduced. Thus, in line with previous research showing the ambivalent role of social ties for community control, they conclude that dense network exchange indeed provides social capital for offenders and hence diminishes communities' regulatory capacity. On the other hand, the social trust/cohesion and shared expectations for prosocial action component of social capital—captured by the concept of collective efficacy—operates as a protective factor against crime. Dense network exchange thus prevents crime by fostering collective efficacy but at the same time diminishes the crime-reducing effect of collective efficacy.

Notably, Browning et al. (2004) also included a measure of tolerance of deviance to evaluate the alternative subcultural thesis. However, their models do not support this explanation: not only was tolerance of deviance not associated with homicide rates at the neighborhood level but also the interaction between this measure and the level of social networks within the neighborhood was not significant. This finding seems to suggest that the extent to which communities are tolerant and condone certain acts of deviance does not affect the amount of crime experienced by such community. Further, this lack of association between subcultural values and crime did not appear to be contingent upon the density of networks and frequency of exchanges within the community. Thus, there was no evidence suggesting that dense networks positively impacted crime by facilitating the transmission of values that were tolerant to deviance.

Browning (2009) further expanded this model to analyze the determinants of property crime and disorder using a multi-level model. In line with Browning et al. (2004), he found that network exchanges diminished the effect of collective efficacy on crime. Further, he incorporates a measure of legal cynicism and shows that it is unrelated with the two measures of property crime considered but positively associated with perceived disorder. Thus, the data favor the negotiated coexistence framework over subcultural explanations of crime at the neighborhood level.

Further, Silver and Miller (2004) seek to identify the different community organizational features and cultural beliefs and attitudes that impact social control using also the PHDCN data. Notably, they concluded that friendship and kinship ties, voluntary associations, and local organizations did not impact social control at the community level. Legal cynicism was also unrelated with social control. Instead, satisfaction with police and neighborhood attachment

were significantly associated with social control. These findings suggest that close social ties may not be key for informal social control. Rather, a general sense of attachment to the neighborhood (not necessarily to the residents) and the belief that the police is doing a good job appear to be what influence informal social control at the community level. Thus, satisfaction with police appears to be an important aspect for community social control.

Other studies have also analyzed the relationship between legal cynicism and collective efficacy. Using the PHDCN data, Kirk and Matsuda (2011), found that legal cynicism impacted the probability that an offense would lead to an arrest. Further, this association was mediated by collective efficacy. Thus, they conclude that legal cynicism undermines communities' reciprocal trust and willingness to intervene to control crime, reducing the likelihood that residents would take action in the presence of a crime and either directly intervene or call the police. According Kirk and Matsuda, this relationship between legal cynicism and collective efficacy may explain why dense neighborhoods sometimes lack collective efficacy. When residents mistrust the legal system, they are probably less likely to engage in social control, seeing no point in intervening given that criminals would not be effectively dealt with by the police or the justice system.

Intervening may even backfire in such cases, and they may end up being vulnerable to offenders' retaliation. Further, legal cynicism may lead residents to turn to offenders and rely on their support to secure protection and resources.

Nix, Wolfe, Rojek, and Kaminski (2015) similarly found that individuals' perceptions of procedural justice (whether the police acts fairly and respectfully) impacted individuals' accounts of neighborhood collective efficacy. Swatt, Varano, Uchida, and Solomon, (2013) also explored the individual-level association between collective efficacy and satisfaction with police

and found that satisfaction with police impacted collective efficacy, which thus negatively impacted fear of crime and perceptions of incivilities.

International Tests of Collective Efficacy Theory

In recent years, collective efficacy theory has caught the attention of international scholars. There is now an emerging body of research conducted in different parts of the world aimed at testing neighborhood effects on crime "Chicago-style." However, these investigations remain scarce and are mostly concentrated in Western developed nations such as England, Sweden, Netherlands, or Australia. To date, only a few studies have been undertaken in non-Western or non-industrialized countries. Although with some caveats, these studies tend to show the relative applicability of collective efficacy to other national contexts. This subsection first reviews the different findings of the test of collective efficacy and related constructs conducted outside the United States. Second, it focuses on the tests carried out in South American nations, which are the more direct antecedent of the present study.

Collective Efficacy Around the World. Studies conducted in Western and non-Western nations tend show support for collective efficacy theory, thus contributing to its claim as a general framework for studying community-level effects. In this regard, the most direct replication of the Chicago study was conducted by Sampson and Wikström (2008) in the city of Stockholm, Sweden. This study was specially designed for comparative purposes and thus replicated much of the Community Survey portion of the PHDCN. Analyzing 3,992 residents nested in 200 geographical units they also found that measures of social cohesion and informal social control were highly correlated and that combining them into the single construct of collective efficacy made sense empirically. Remarkably, in both cities, minority groups—foreign born in Stockholm and Blacks in Chicago—were spatially located in areas of

concentrated disadvantage. Further, concentrated disadvantage as a whole and each of its component separately were associated with higher rates of violence in both cities. The Stockholm data also showed that concentrated disadvantage was inversely associated with collective efficacy and that collective efficacy had a negative effect on violence. Thus, collective efficacy mediated the relationship between structural disadvantages and violence also in Stockholm. Notably, the bivariate association between collective efficacy and violence (the slope of the collective efficacy coefficients) was very similar for both cities. This finding indicates that, even though the levels of violence in each city are greatly dissimilar (violence in Stockholm is much lower than violence in Chicago), the effect of collective efficacy is constant between the cities. Multivariate and multilevel analyses confirmed this negative and significant association between collective efficacy and violence rates and victimization in both cities.

A similar conclusion was reached by Mazerolle et al.'s (2010) study of 80 communities in Brisbane, Australia. Using the same items to construct a measure of collective efficacy and also including measures of social ties and community crime prevention programs, they found that collective efficacy was, once again, negatively associated with victimization. Further, as predicted by collective efficacy theory, collective efficacy mediated the effect of neighborhood structural characteristics—in this case operationalized as percent of respondents reporting low income, percent at different address five years ago, and percent of young people—on violent victimization. By contrast, the density of ties did not explain differences in victimization rates.

However, other studies have not found consistent support for collective efficacy theory. Thus, in their study of 4,700 neighborhoods in London, Sutherland et al. (2013) found a direct effect of collective efficacy on crime. In this case, however, not only the magnitude of the collective efficacy effect was relatively small, but also collective efficacy did not mediate the

effect of structural characteristics on crime. Further, Bruinsma et al., (2013) used data from 110 neighborhoods in the Hague, Netherlands, to test five different specifications of social disorganization theory: the classic model (containing only structural factors), Shaw and McKay's model (which added heterogeneous tolerance values), Sampson's (1988) family disruption model, Sampson and Groves's specification of the systemic model, the social capital model (including friendship networks and organizational participation), and Sampson et al.'s (1997) collective efficacy model. Their analysis did not find consistent evidence in favor of social disorganization theory across its five different specifications. For example, while residential stability, family disruption, and SES were associated with offending rates, collective efficacy was not significantly associated with any these three measures. However, not all the constructs identified by the different specifications of social disorganization were shown to be unrelated with crime rates. Surprisingly, instead of collective efficacy, organizational participation appeared as significantly associated with crime rates both in the systemic model and the social capital specifications. The density of friendship ties also yielded significant results in the social capital model. The social capital specification thus received partial support.

Other studies conducted in non-Western nations—particularly in different cities in China—have found support for collective efficacy theory, especially in terms of the validity of the direct association between collective efficacy and different types of crime. Thus, a study conducted by Jiang et al. (2013) in 30 communities in Guangzhou, China, found that collective efficacy, social ties, and semi-formal control (perceived importance of the mediation committee in maintaining order) were all negatively associated with perceived property crime. However, these community dimensions did not mediate the direct effects of residential stability and poverty on perceived crime. Also undertaken in Guangzhou, a previous study by Jiang and

colleagues (2010) had similarly examined the correlates of informal social control—measured through neighborhoods residents' reported willingness to intervene in different situations. This study had found that informal social control was explained by residential stability and satisfaction with the police. Importantly, socioeconomic status, social ties, and legal cynicism were not related with informal social control at the community level.

Another study carried out in a different Chinese city, Tianjin, reach similar conclusions regarding the impact of collective efficacy on crime. Thus, Zhang et al. (2007) analyzed different neighborhood-level correlates of burglary. They tested the effect of both routine activities and social disorganization measures. They found that target attractiveness was positively associated with levels burglary, whereas guardianship was negatively associated with this type of crime. Further, community-level social processes identified by social disorganization theory—collective efficacy and formal social control—explained differences in burglary rates across neighborhoods. However, in line with communities and crime research outside the United States, the direct effect of community structural characteristics on crime was not as hypothesized by collective efficacy theory: only residential stability yielded a direct effect on burglary rates, while poverty and immigrant concentration were not associated with neighborhood crime. Further, the association between residential stability and crime was not mediated by social processes at the community level.

Overall, these studies suggest that collective efficacy in particular and other general community social processes identified by social disorganization theory (such as informal social control, formal social control, or social ties) tend to be associated with different rates of crime around the world. However, while in some cases these factors mediate the relationship between community disadvantage, residential stability, and immigrant concentration and crime, this

relationship is not consistent across settings. Thus, the structural elements highlighted by social disorganization theory do not appear to be consistently correlated with community-level variations in crime rates. Further, even in the studies in which these characteristics are found to be associated with crime, their effects do not seem to be mediated by community processes such as collective efficacy.

Explaining Community Crime Rates in South America. In his assessment of the generalizability of collective efficacy theory to other regions, Sampson (2012) recognizes that collective efficacy might be less applicable to explain community-differences in crime in South American nations. His insights on this matter come from two different studies conducted in Brazil (Villarreal and Silva, 2006) and Colombia (Cerdá & Morenoff, 2013) in which social cohesion and collective efficacy, respectively, were found to be associated with higher, rather than lower, community crime rates.

Villarreal and Silva (2006) analyzed the impact of social cohesion and neighborhood disorder on crime rates across neighborhoods in Belo Horizonte, Brazil. To do so, they used data from the Victimization Survey Belo Horizonte, which gathered information from 3,873 respondents distributed across 197 census tracts. In their study, they assessed social cohesion by aggregating at the neighborhood level respondents' reported level of close ties within the neighborhood and of reciprocated exchange with other neighborhood residents. Additionally, measures of neighborhood disorder (assessing the quantity of vacant buildings, empty lot, debris and litter, and disorderly conduct observed by neighborhood residents) and of organizational participation (indicating the presence of at least one organization devoted to the problem of violence in the neighborhood) were included in their analysis, along with measures of residential stability, female-headed households, and neighborhood disadvantage (a factor that combines

racial composition and percent households earning less than twice the minimum wage). First, Villarreal and Silva (2006) analyzed the determinants of social cohesion and perception of disorder and found—contrary to what social disorganization posits—that neighborhood disadvantage and residential stability both positively impacted social cohesion. On the other hand, perceived disorder was, at the neighborhood level, impacted only by neighborhood disadvantage. Second, they proceeded to estimate the determinants of robbery and assault victimization. Thus, they found that only neighborhood disadvantage was significantly associated with robberies, while neighborhood disorder was positively associated with assault. Only neighborhood disorder was also significantly associated with homicide rates. Finally, social cohesion was associated only with perceived risk of victimization. In this case, social cohesion presented a positive association with crime and mediated part of the paradoxically negative association between neighborhood disadvantage and perceived risk of victimization. Perceived neighborhood disorder was unrelated with perceived risk of victimization.

Villarreal and Silva's (2006) findings thus contradict the postulates of social disorganization theory: social cohesion is either unrelated to or positively associated with neighborhood crime. Additionally, social cohesion appears to be higher in disadvantage neighborhoods. Further, neighborhood disadvantage is negatively associated with assault victimization and robbery victimization while only positively associated to homicide rates. Trying to make sense of these findings, Villarreal and Silva argue that the higher levels of social integration observed in poor urban neighborhoods is the product of both the history of poor urban settlements—often the product of the negotiation between organized communities and different government agencies—and the particular survival strategies of the urban poor in which such residents rely on their integration in community informal markets. Further, Villarreal and

Silva argued that the fact that socially cohesive neighborhoods may present high crime rates is consistent with findings in the United States regarding the already discussed ambiguous association between social ties and crime at the neighborhood level (Bellair, 1997; Browning et al., 2004; Browning, 2009; Pattillo, 1998; Venkatesh, 1997; Warner & Wilcox Rountree, 1997).

Importantly, Villarreal and Silva (2006) explained the positive association between social and perceived risk of victimization arguing that dense networks facilitate the exchange of information regarding different crime events and thus increase residents' perceptions of the likelihood that they may be victim of those types of events. They further tested this explanation by showing how knowledge about homicides in the neighborhood mediated the relationship between social cohesion and perceived risk of homicide victimization. In this case, social ties did not appear to make a community more or less safe, but they affected the level of information community residents had about crime events. Still, because their analysis did not include a measure of collective efficacy or informal social control, it was not possible to evaluate whether shared expectations for action do in fact explain the differential activation of social ties and thus explain differential crime rates.

By contrast, Cerdá and Morenoff (2013) include in their study a direct measure of collective efficacy and offer a direct comparison of the relationship between collective efficacy and crime between the cities of Medellín, in Colombia, and Chicago. By including measures of collective efficacy, they thus are better suited than Villarreal and Silva (2006) to "actually understand if a different social process is indeed at work in the Latin American urban context since, in contrast with social cohesion, where the evidence is equivocal, previous work in the United States has found a particularly s strong association between poverty and social control (Sampson et al. 1999)". (Cerdá and Morenoff, 2013, pp. 9-10).

Cerdá and Morenoff (2013) analyze data from the Chicago Community Health Study and the Medellín Study on the Prevalence and Risk Factors for Interpersonal Violence in the Metropolitan Area. Their study includes data from 3,105 adults nested within the 343 NC defined by the PHDCN in Chicago obtained between 2001 and 2003, as well as data collected between 2002 and 2003 of approximately 2,500 respondents from 166 neighborhoods. In Medellín, collective efficacy was measured through a slightly modified version of Sampson et al.'s (1997) original scale and also integrating the dimension of social cohesion and social trust with the social control dimension. The measure used for Chicago is exactly the same as the one used by Sampson et al. (1997). The neighborhood-level reliability of the collective efficacy scale 0.5, which is relatively low compared with the reliability of the Chicago scale (0.8). The dependent variables for this study were 2003 homicide rates and perceived neighborhood violence.

First, analyzing the spatial distribution of poverty and collective efficacy, Cerdá and Morenoff (2013) find that while high poverty and high collective efficacy neighborhoods in Chicago are rare (only 3% of the total neighborhoods), this combination is not uncommon in Medellín, accounting for 22% of its neighborhoods. Further, Cerdá and Morenoff (2013) examine the different covariates of collective efficacy, both at the individual-level and neighborhood-level and find that poverty is positively associated with collective efficacy in Medellín and negatively associated with the same construct in Chicago. The other structural characteristics considered (residential stability, population density, and previous neighborhood violence) are not significantly associated with collective efficacy.

Second, they proceed to analyze the determinants of homicide rates in each city. Thus the findings from Chicago are consistent with collective efficacy theory: collective efficacy,

poverty, stability, and density are all associated with such homicide rates in the expected directions. In Medellín, however, collective efficacy was not associated with homicide rates, and the effects of poverty on homicide were substantially smaller than in Chicago. Analyzing the determinants of perceived risk of violence, they found a positive association between collective efficacy and perceived violence in Medellín and a negative one in Chicago.

Notably, both the lack of association between collective efficacy and homicide rates and the positive association between collective efficacy and perceived crime encountered by Cerdá and Morenoff (2013) are consistent with Villarreal and Silva's (2006) findings. Thus, they seem to indicate that the lack of association found between ties and crime in Brazil appears to be explainable not because of the social disorganization measure used but by the particular patterns of community integration of South American neighborhoods.

In light of these findings, Cerdá and Morenoff (2013) furthered their analyses of the association between collective efficacy and crime and explored the differential role of collective efficacy on different types of neighborhoods, defined by their level of collective efficacy and poverty. They found a positive effect of collective efficacy in homicide rates in neighborhoods high in poverty. Remarkably, this effect also was found in Chicago, where homicide rates in high-poverty neighborhood also exhibiting high levels of collective efficacy were also larger than in high-poverty neighborhoods low in collective efficacy. Further, in non-disadvantaged neighborhoods, the effect of collective efficacy was negative both in Chicago and Medellín, but it did not achieve statistical significance in either of them. With regard to perceived violence, the effect of collective efficacy on this outcome was negative in all types of Chicago neighborhoods but the difference was only statistically significant in non-disadvantage neighborhoods. In

Medellín, however, collective efficacy was positively associated with perceived crime in every type of neighborhood and yielded a larger effect on crime in non-disadvantaged neighborhoods.

These findings illuminate, once again, the complex relationship between structural characteristics, social control, and crime. Thus, they first suggest that the pattern of community association in South American countries tends to differ from that observed in developed Western nations. In this case, the historical and contemporary challenges of the urban poor make them more likely to be highly organized and not only highly tied to each other—as Villarreal and Silva's (2006) study suggest—but also more efficacious in terms of their cohesion and willingness to intervene.

However, these higher levels collective efficacy do not protect them from crime. Cerdá and Morenoff (2013) suggest that this finding, also observed in Chicago, could be explained by the social isolation of disadvantaged neighborhoods. The lack of "bridging" social capital thus renders them unable to secure outside resources and achieve communal goals, even if they mobilize towards those goals. When community mobilization does not help reducing crime, high levels of collective efficacy only denote high levels of neighborhood integration. As several scholars have pointed out (Browning et al., 2004; Browning, 2009; Pattillo, 1998; Venkatesh, 1997), neighborhood integration may positively influence crime by providing social capital to criminals within the neighborhood. In this case, and consistent with the negotiated coexistence framework (Browning et al., 2004; Browning, 2009), the negative side of social capital seems to counteract the effect of a potential, but blocked, collective action.

Using a different approach, Cerdá et al. (2012) paint a more encouraging picture with regards to the potential effects of increasing collective efficacy in South American neighborhoods. Taking advantage of a natural experiment, Cerdá et al., (2012) analyze the

impact of a transit policy aimed at connect previously isolated neighborhoods to the city center. Survey data of neighborhood residents from before and after the intervention were collected both on intervention neighborhoods and on similar neighborhoods in which the intervention did not take place. Analyses of reported violence and homicide rates for intervention and non-intervention neighborhoods reveal a crime-reducing effect of this policy. The decline in homicide between 2003 and 2008 was 66% higher in intervention neighborhoods than in non-intervention neighborhoods. Further, studying the changes in collective efficacy and attitudes towards law enforcement between residents of intervention and non-intervention neighborhoods, a positive effect on collective efficacy and on positive attitudes towards law enforcement was observed. Thus, they suggested that the decline in violence observed in intervention neighborhoods could be explained by the increases in collective efficacy and improvement of residents' attitudes towards law enforcement produced by the intervention, which may have promoted the interaction between neighbors and local institutions and thus increased social trust and willingness to intervene within the neighborhood.

Together, these studies seem to indicate that interventions aimed at increasing communal bonds and connecting residents with resources and agents located outside its limits may foster collective efficacy and trust within community members and thus have a crime-reducing effect. In this regard, connecting residents not only to each other but also to the larger social environment of the city—building bridging social capital—may be the key to assuring that collective efficacy enhancements actually produce crime-reducing effects.

Conclusion

Overall, five different conclusions can be drawn from the empirical literature on collective efficacy. First, research suggests that collective efficacy has a direct negative effect on crime. Collective efficacy, defined as social cohesion and trust and shared expectations for action, thus appears to protect communities from crime.

Second, most studies show that collective efficacy mediates the relationship between community structural characteristics and crime. However, while the direct effects of collective efficacy on crime tend to hold across different studies, the findings regarding the mediation effect are less conclusive. Thus, some studies, especially those conducted outside the United States, fail to show a mediating effect of collective efficacy on the relationship between structural characteristics and crime. Further, in South America, collective efficacy seems to be concentrated in disadvantaged neighborhoods.

Third, collective efficacy, social ties, social control, and social capital are narrowly intertwined dimensions of community organization sometimes not clearly differentiated in theory and research. Different strategies to operationalize and test the relationship between this constructs have been undertaken. In general, research has shown an equivocal association between ties and both collective efficacy and informal social control and a more clear relationship between collective efficacy, social control, and crime. Further, results are somewhat inconsistent as of whether collective efficacy should be understood as a single construct or parsed out into its two components: social cohesion and trust and informal social control.

Fourth, cultural aspects have been seldom included in studies testing collective efficacy theory. Recently, some studies have added measures of legal cynicism and tolerance to their models that added explanatory value to collective efficacy theory and expanded its framework.

These studies are not conclusive in regards with the role of attenuated culture on crime but have shown that collective efficacy tends to exert an effect on crime even when those factors are controlled. Further, some studies suggest that legal cynicism undermines collective efficacy. However, studies in collective efficacy have failed to introduce measures of conflicting subcultural values. Thus, collective efficacy has not been tested again its more important rival theory: cultural transmission theory.

Fifth, collective efficacy has not been widely tested across settings. Recent studies in Western developed nations show general support for collective efficacy theory. Studies conducted in China somewhat corroborate these findings, especially the fact that collective efficacy exerts a direct negative effect on crime. However, in South America, the validity of collective efficacy has been questioned. In this case, collective efficacy and social cohesion have been shown to be higher in impoverished communities and to either be unrelated to crime or to exert a positive effect on crime rates, particularly on perceptions of violence.

RESEARCH STRATEGY

Scholars have long been concerned with understanding why certain communities exhibit high crime rates while others are relatively crime-free. Understanding that crime is a socially and geographically situated phenomenon, many scholars have embarked on research aimed at exploring how differences between communities explain differences in crime rates, focusing specifically on identifying the structural, organizational, and cultural aspects of communities that affect crime levels. Thus, considerable attention has been given to the study of community-level determinants of crime, and a prolific area that studies differences in crime across communities has consolidated within criminology. In this regard, the Chicago school tradition has represented for long the leading paradigm, giving rise to multiple theories. Collective efficacy theory is

currently the most popular of these perspectives and provides an updated and constantly evolving framework from which to study community differences in crime. As such, it has inspired numerous studies aimed at testing its core propositions and advancing the theoretical discussion in the area.

Recently, some efforts have been made to expand the core of social disorganization theory in two ways. First, a new line of research has incorporated cultural elements—for long excluded from the social disorganization perspective—into this framework. Thus, some studies recently incorporated the constructs of tolerance to deviance and legal cynicism into their assessments of social disorganization theory. Despite their merit, these studies are somewhat limited because they only assess the notion of attenuated culture, consistent with control theory, but have failed to incorporate cultural elements from alternative theories such as differential association/social learning.

Second, research has aimed at assessing the generalizability of social disorganization theory. Thus, studies have been conducted in different parts of the world and have shown lent empirical support to social disorganization theory. However, these efforts have been limited and mostly undertaken in Western industrialized nations. Two studies carried out in South America have produces findings contrary to collective efficacy theory, thus suggesting that this perspective may not be applicable to the South American context. More research is warranted to assess whether collective efficacy can successfully account for differences in crime rates across South American communities and, if not, to understand why more adequately.

This dissertation aims to make a contribution by addressing these two gaps in the communities and crime research. Specifically, the research strategy involves providing a test of collective efficacy theory and competing community-level theories of crime in five South

American Nations: Argentina, Chile, Ecuador, Peru, and Uruguay. In particular, this dissertation intends to provide answers to the following questions:

- Do crime rates vary substantially across communities in South America?
- Are differences in crime rates associated with the structural conditions of communities in South America?
- Are organizational and cultural aspects of communities associated with differential crime rates in South America? Do they mediate the impact—if there is one—of structural characteristics?
- Can organizational differences across South American communities be explained by differences in their structural characteristics?

Drawing from the empirical literature on social disorganization and alternative theories, it is possible to formulate five different hypotheses for this research. These are the following:

- There will be considerable variation in crime rates across communities in South America.
- Structural factors will be associated with differences in victimization rates across different geographic units.
- Disadvantaged communities will have lower levels of collective efficacy.
- Collective efficacy will be negatively associated with victimization while legal cynicism and positive attitudes towards violence will be associated with higher rates of victimization.
- Collective efficacy, legal cynicism, and positive attitudes towards violence will mediate the relationship between community structural characteristics and victimization rates.

The next chapter discusses the empirical strategy used to explore these issues. To do so, it provides information on the data used as well as the measures and analytical strategy defined for this study.

CONCLUSION

Robert Sampson's work has shaped the theory and research in the communities and crime area, leading most notably to the development of collective efficacy theory. Collective efficacy theory provides an updated understanding of the processes that impact communities' ability to control crime. Thus, it posits that residents' shared expectations of social control fostered in relationships of mutual trust—what he termed "collective efficacy"—operate as a protective factor against crime at the community level. This perspective main thesis is that variations in collective efficacy explain differences in crime rates across communities.

Collective efficacy theory has received empirical support. Very few studies, however, have tested collective efficacy theory in analyses that include measures of rival macro-level theories. Further, only a few studies have been undertaken outside the United States. This dissertation seeks to fill this void in the literature by testing collective efficacy and alternative theories (legal cynicism and oppositional culture) in five South American countries.

Chapter 3

METHODS

Community-level explanations of crime are growing in popularity within contemporary criminology, with scholars offering diverse theories to account for variations in crime rates across ecological areas (Pratt & Cullen, 2005). Notably, the Chicago school tradition has been the predominant approach to this subject, originally through the systemic model (Bursik, 1999; Kasarda & Janowitz, 1974; Sampson & Groves, 1989) and then through its later reformulation, the collective efficacy model (Morenoff, Sampson, & Raudenbush, 2001; Sampson, 2002, 2006, 2012; Sampson, Raudenbush, & Earls, 1997).

The purpose of this dissertation is to test whether collective efficacy theory, when rival theories are included in the analysis, can account for variations in crime rates across communities in South America. Despite the importance of the Chicago school tradition in the United States, research assessing community-level explanations of crime using data from other parts of the world remains limited (Sampson, 2006). In this context, by using data from the Latin American Population Survey (LAPOP) from 2012 and 2014 collected in five South American countries, this dissertation attempts to help fill a void in the existing research on community-level determinants of crime.

As noted, the current study tests not only the applicability of the core propositions not only of collective efficacy theory but also of two major rival community theories of crime. Thus, the analysis includes measures of legal cynicism theory (Kirk & Papachristos, 2011; Sampson & Jeglum Bartusch, 1998), and of subculture of violence theory (Anderson, 1999; Stewart & Simons, 2010). These alternative perspectives are seldom included in tests of collective efficacy theory

This chapter presents a description of the methodology used for this study. The first section describes the data used in the analysis: the Latin American Population Study (LAPOP) data. The second section presents the measures used to assess each of the theoretical constructs relevant for this study. Finally, the third section details the analytical strategy selected.

DATA

The data used for this study come from the AmericasBarometer 2012 and 2014 Surveys, conducted by the Latin American Public Opinion Project (LAPOP), Vanderbilt University. The survey comprises information on 26 countries in the Americas. This study is focused on South American countries. However, not all nations in the survey are included in the analyses. In five countries, data were collected and labeled in a way that made it possible to merge the 2012 and 2014 datasets while retaining the same primary sampling units. Thus, the number of observations per community was doubled, which made it possible to create units with enough cases to undertake a macro-level analysis. Other datasets did not provide sufficient information to complete this merger. Accordingly, only those five countries in which it was possible to merge the 2012 and 2014 datasets were included in the current study: Argentina, Chile, Ecuador, Peru, and Uruguay. In total, data on 15,130 respondents nested within 472 communities are analyzed. Further details about the survey can be found in LAPOP (2012, 2014) or in the reports and technical information sheets elaborated for each country (available at the AmericasBarometer website: www.AmericasBarometer.org).

In each country, the survey provided coverage of the total adult population at the national level. The sampling frame covered all non-institutionalized eligible adults in each country.

Responses were collected by interviewing one person per household. Several questions were included that asked about information pertaining to the household as a unit or to other household

members. For this reason, the statistical unit of observation is the household—or, more specifically, the dwelling).

Sampling Design

In each South American nation, approximately 1,500 face-to-face interviews were conducted using a multi-stage stratified sampling design. An effort was made from the LAPOP team to make each sampling strategy in each country comparable, even though the census methodology differs across countries. The sampling design was based on the most updated census information in each surveyed country. The geographical units defined in the sampling strategy were based on the definitions and classification of geographic units provided by each countries' statistical authority and defined by the census. Thus, the definition of census blocks, segments, and districts, though comparable, vary slightly across countries. In each country, the stratification was made taking into account three different factors: major regions, municipality size, and type of area (rural or urban) within each municipality.

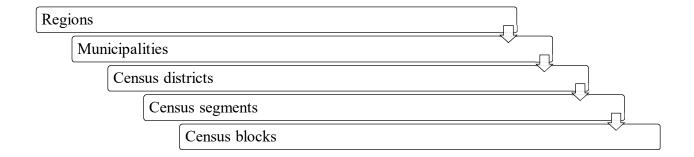
In 2012, the LAPOP team decided to adopt a sampling design that would allow for representativeness at the municipality level. To do so, the stratified design was modified to concentrate more cases within the primary sampling unit. At least two different census blocks were selected within each sampling unit, totaling a minimum of 12 observations per primary sampling unit (6 per census block). The primary sampling unit was the census district and is the geographical unit used to define communities in this study. In small municipalities, the primary sampling unit was the municipality, which coincided with the census district. Larger municipalities were subdivided into different census districts, which were the primary sampling units.

In Argentina, Ecuador, and Uruguay, for each census district, a census segment was selected, and two different census blocks for each segment were then selected. In Chile and Peru, two blocks were selected randomly directly from each census district. For this reason, communities in Argentina, Uruguay, and Ecuador were geographically more narrow, concentrated within the same census segment, whereas in Chile and Peru they represented broader—though still meaningful—geographical units. Except for minor adaptations, primary sampling frames were the same for the 2012 and 2014 survey and only the sampling units at the block level were replaced. To gain power for the tests, this study combined observations from both 2012 and 2014. Thus, it doubled the number of observations at the lower level (a minimum of 24 per unit). The final stage consisted of selecting households within the census blocks. Selection of interviewees within each household was made using sampling quotas by age and gender in all countries but Chile. Here, researchers randomly selected one of the adults living in the household using a modified Kish table, which provides an algorithm for the random selection. The 2012 and 2014 datasets for each country were merged and the communities were matched. After this process, five communities in Ecuador were removed because they were only included in the 2014 sample. The remaining 472 communities were successfully matched.

Figure 2.1. illustrates the different stages in the stratification process. Each country was divided by regions. Within each region, using probability proportional to size, different municipalities were selected. Nation capitals and big cities were automatically included in the design. Large municipalities were further subdivided into census districts. Census segments were thus selected within each district and two different blocks were randomly selected within each segment. Six different households were selected within each block. In Chile and Peru, census blocks were selected directly from census districts.

Figure 3.1.

LAPOP Stratified Sampling Design



Data from 15,130 respondents across 472 communities were used. Table 3.1. shows the number of communities and the number of observations per community in each country. Overall, an average of 32 respondents were sampled within each community. The minimum number of respondents per community was 23 and the maximum 54.

MEASURES

The measures from this study come from the LAPOP Survey Questionnaire.

Questionnaires vary slightly across countries and years, but they maintain a core set of questions that are asked in every edition. The questions selected for this study come from questions used in both the 2012 and 2014 editions. The only exception is the subculture of violence questions, which were asked only in 2012. In this case, the variable was included only at the aggregated level.

Because countries differ in terms of the quality and procedures for collecting their own statistical data, and, in particular, their official crime data, the decision was made to use only information from the surveys for the analysis. This strategy increased consistency across data

Table 3.1

Number of Communities and Observations per Community in Each Country

Country	Number of Communities	Minimum	Average	Maximum
Ecuador	77	24	38.2	54
Peru	125	24	24.0	24
Chile	123	23	25.5	36
Uruguay	63	48	48.0	48
Argentina	84	36	36.0	36
Total	472	23	32.1	54

collection procedures. Thus, all community-level variables from this study were constructed aggregating individual responses. Table 3.2. provides a description of the variables used.

Dependent Variables: Victimization Rates

Crime rates are measured through victimization at the household level and personal victimization within the neighborhood. First, it is important to distinguish between prevalence and incidence measures. Prevalence measures indicate the rates of occurrence of certain events—in this case victimization—while incidence measures take also into consideration the number of events that occurred. In this case, the measures used represent the prevalence (and not the incidence) of victimization in the sample (Lauritsen & Rezey, 2013). Thus, victimization rates indicate the proportion of households or individuals that were victimized during a specific period, regardless of the number of times such victimization occurred.

Second, it is important to select the unit over which victimization will be reported. There is discussion in the literature regarding how to validly and reliably measure crime rates using victimization information (see, e.g., Gottfredson & Hindelang, 1981). Assessments of personal victimization tend to be more reliable, given that it is easier for individuals to recall events that

Table 3.2.

Description of Variables

Variable	Items
Household victimization	 "Have you been a victim of any type of crime in the past 12 months? That is, have you been a victim of robbery, burglary, assault, fraud, blackmail, extortion, violent threats or any other type of crime in the past 12 months? (Yes/No)." "Has any other person living in your household been a victim of any type of crime in the past 12 months? That is, has any other person living in your household been a victim of robbery, burglary, assault, fraud, blackmail, extortion, violent threats or any other type of crime in the past 12 months? (Yes/No)."
Personal community victimization	 "Have you been a victim of any type of crime in the past 12 months? That is, have you been a victim of robbery, burglary, assault, fraud, blackmail, extortion, violent threats or any other type of crime in the past 12 months? (Yes/No)." If yes: "Could you tell me, in what place that last crime occurred?" (1="in this home"/"in this neighborhood"; 0="in this municipality"/"in another municipality"/"in another country")
Social trust	1. "Speaking of the people from around here, would you say that people in this community are very trustworthy, somewhat trustworthy, not very trustworthy or untrustworthy?" (4="very trustworthy" to 1="untrustworthy")
Community efficacy	 "Have you attended a town meeting, city council meeting or other meeting in the past 12 months? (Yes/No)" "In the last 12 months have you tried to help to solve a problem in your community or in your neighborhood? (Yes/No)" "Do you attend meetings of a community improvement committee or association? (Yes/No)"
Public efficacy	 "In order to solve your problems have you ever requested help or cooperation from a local public official or local government: for example, a mayor, municipal council, councilman, provincial official, civil governor or governor? (Yes/No) "Have you sought assistance from or presented a request to any office, official or councilperson of the municipality within the past 12 months? (Yes/No)"

Table 3.2. (cont.)

Variable	Items
Legal cynicism	 "To what extent do you think the courts in (country) guarantee a fair trial?" (1="not at all" to 7="a lot") "To what extent do you trust the justice system?" (1="not at all" to 7="a lot") "To what extent do you trust the National Police?" (1="not at all" to 7="a lot") "If you were a victim of a robbery or assault, how much faith do you have that the judicial system would punish the guilty?" (1="a
	lot"/2="some"/3="little"/4="none")
Subculture of violence	1. "In order to teach a child, a parent hits the child each time he or she disobeys." (3="would approve"/2="would not approve, but understand"/1="would not approve, nor understand")
	2. "A man hits his wife because she has been unfaithful with another man." (3="would approve"/2="would not approve, but understand"/1="would not approve, nor understand")
	3. "A person kills someone who has raped a son or daughter." (3="would approve"/2="would not approve, but understand"/1="would not approve, nor understand")
	4. "If a person frightens his community and someone kills him." (3="would approve"/2="would not approve, but understand"/1="would not approve, nor understand")
	5. "If a group of people begin to carry out social cleansing, that is, kill people that some people consider undesirable." (3="would approve"/2="would not approve, but understand"/1="would not approve, nor understand")
	6. "If the police torture a criminal to get information about a very dangerous organized crime group." (3="would approve"/2="would not approve, but understand"/1="would not approve, nor understand")

occurred to them as opposed to events related to other people in their household. Further, another measurement challenge is that because victimization is a relatively rare event, victimization rates tend to be unstable.

Household victimization has the advantage of being broader and including a wider set of events than personal victimization. Further, measuring the prevalence of victimization at the

household level is better suited in this analysis, because it matches the unit of observation defined in the study. In their foundational study of collective efficacy, Sampson et al. (1997) measured victimization at the household level. The downside of using household victimization with this particular dataset is that, in this case, the victimization events are not necessarily located within the boundaries of the community. Still, because the purpose of the study is not to assess the actual prevalence of crime in each community but to study differences in crime rates across geographical zones, household victimization can be considered a good proxy of the occurrence of victimization events within the community. A measure of victimization not explicitly located within the community has been often used to assess community-level victimization (see, e.g., Lowenkamp, Cullen, & Pratt, 2003; Macdonald et al., 2013; Rhineberger-Dunn & Carlson, 2011; Sampson & Groves, 1989; Veysey & Messner, 1999).

For the reasons stated above, an additional measure of victimization is included: personal victimization occurring within the neighborhood. Even though this measure has the disadvantage of being too restrictive—only indicative of the respondent's victimization—and thus less stable, it has the advantage referring to victimization events occurring within the community.

Thus, the following two measures were included. First, *household victimization* was measured combining two items. The first one assessed whether the individual was personally victimized or not through the following question "Have you been a victim of any type of crime in the past 12 months? That is, have you been a victim of robbery, burglary, assault, fraud, blackmail, extortion, violent threats or any other type of crime in the past 12 months? (Yes/No)." The second assessed victimization of other members of the household by asking the respondents: "Has any other person living in your household been a victim of any type of crime in the past 12

months? That is, has any other person living in your household been a victim of robbery, burglary, assault, fraud, blackmail, extortion, violent threats or any other type of crime in the past 12 months? (Yes/No)." Affirmative responses to either of these questions were coded as one, while negative responses to both questions were coded as zero.

Personal neighborhood victimization was measured combining two different questions. First, it assessed personal victimization through the following question: "Have you been a victim of any type of crime in the past 12 months? That is, have you been a victim of robbery, burglary, assault, fraud, blackmail, extortion, violent threats or any other type of crime in the past 12 months? (Yes/No)." Then, a follow-up question regarding the location of the victimization event was asked to all that responded affirmatively. Thus, they were asked: "Could you tell me, in what place that last crime occurred?" Possible responses were: "in this home," "in this neighborhood," "in this municipality," "in another municipality", and "in another country." Responses from individuals who answered affirmatively to the victimization question and who selected the "in this home," or "in this neighborhood" respondents to the follow-up questions were coded as one. Other responses were coded as 0.

Estimations were performed for each of these dependent variables. Due to the nested structure of the data, multilevel models were used to predict responses to each of these dependent variables. Thus, these variables were introduced in the models at the individual level.

Independent Variables: Theoretical Measures

One of the main contributions of the present study is that it presents a simultaneous test of three different community-level theories of crime. The survey questionnaire includes a wide range of questions that allow for the operationalization of the main constructs that can operate as mediating mechanisms between structural factors and community crime rates in each theory:

collective efficacy, legal cynicism, and subculture of violence. Structural factors that differentiate across communities are also captured in this survey. However, it should be noted that, as is often the case when conducting simultaneous tests of theories with secondary data, measures do not perfectly capture all the components of the theory. The cross-sectional nature of the design also does not allow the analysis to assess issues related to the temporal order among the variables.

Collective Efficacy. The measurement of collective efficacy was guided by the previous empirical and theoretical work on this subject by Sampson (2006, 2012; see also Sampson et al., 1997). In their 1997 seminal study, Sampson and colleagues operationalized collective efficacy through two different components: social cohesion and trust, and informal social control.

Because these two components showed to be highly correlated in the PHDCN data Sampson they were combined into a single measure that represented collective efficacy. Based on the data available for this study and the data patterns observed, this dissertation operationalized collective efficacy through three different measures: social trust, community efficacy, and public efficacy. The first measure intends to capture the "collective" component of the construct while the last two measures capture its "efficacy" portion.

As already discussed, the first component of collective efficacy, social cohesion and trust, was measured by Sampson and colleagues (1997, p. 920) using a Likert-type scale to rate respondents' agreement to five different items: (1) "People around here are willing to help their neighbors." (2) "This is a close-knit neighborhood." (3) "People in this neighborhood can be trusted." (4) "People in this neighborhood generally don't get along with each other." (5) "People in this neighborhood do not share the same values."

In this study, the social cohesion and social trust component of collective efficacy was assessed through the variable *social trust*. This construct was measured through the following item: "Speaking of the people from around here, would you say that people in this community are very trustworthy, somewhat trustworthy, not very trustworthy or untrustworthy...?" Possible responses ranged from 1="very trustworthy" to 4="very untrustworthy." Responses were reverse coded so that higher values represent higher levels of trust. At the community level, trust was measured by averaging responses within each community.

According to Sampson (2012), informal social control relates to the "efficacy" part of the concept. It refers to the collective capacity of a community to activate networks and resources to achieve its communal goals. In Sampson et al.'s (1997, p. 920), informal social control was assessed asking respondents to rate—using a five point Likert scale—the likelihood that their neighbors would intervene in five different scenarios: (1) "children were skipping school"; (2) "children were graffiti-painting a local building"; (3) "children were disrespecting an adult"; (4) "a fight broke in front of their houses"; and (5) "a budget cut was threatening the closest fire station."

The LAPOP data do not contain direct measures of informal social control. For this reason, in this study, the "efficacy" component of collective efficacy is assessed through two different variables, each representing a distinct type of efficacy. First, a measure of *community efficacy* is constructed. This measure combined the following items: (1) "Have you attended a town meeting, city council meeting or other meeting in the past 12 months? (Yes/No);" (2) "In the last 12 months have you tried to help to solve a problem in your community or in your neighborhood? (Yes/No);" and (3) "Do you attend meetings of a community improvement committee or association? (Yes/No)." Each affirmative response was coded as one. The

variable ranges from 0 to 3 and represents the number of types of community-strengthening activities in which the respondent is involved. Higher scores represent higher levels of participation. An aggregated measure of community efficacy was constructed by averaging individual's responses across each community.

Even though Sampson and colleagues (1997) measured collective efficacy differently, this community efficacy measure, assessing community-strengthening participation, seems appropriate because it captures community's actual mobilization towards community goals. This measure is closely related to what Morenoff et al. (2001, p. 527) define as "voluntary associations," which was measured by surveying respondents' participation in the following organizations "(1) local religious organizations; (2) neighborhood watch programs; (3) block group, tenant associations, or community council; (4) business or civic groups; (5) ethnic or nationality clubs; and (6) local political organizations." However, community efficacy, as defined in this study, focuses only on participation in those activities aimed at strengthening the community rather than on a broader set of organizations and affiliations. Thus, it appears more defensible to assess an active facet of collective efficacy instead of just a stock of social capital. Sampson and colleagues' original informal social control measured expectations regarding mobilization towards common values. By doing so, they did not capture specific act of informal social control or actual community intervention. Rather, they assessed the perceived likelihood of such mobilization. In this case, rather than shared expectations regarding mobilization towards common values, this measure denoted the actual level of mobilization within the community, thus, its efficacy.

Besides community efficacy, a measure of public efficacy was also defined. The distinction between public efficacy and community efficacy is of particular importance in South

America, where research has suggested that collective efficacy may be either not associated or positively associated with crime. In this regard, Cerdá and Morenoff (2013, p. 27) assert that in highly disadvantaged contexts, "neighbors may organize around the common goal of controlling deviance in the neighborhood, but the lack of connections to influential social networks outside of their immediate circle render them socially isolated and limited in effectiveness (Altschuler, et al. 2004)." The lack of "bridging" social capital could be key to explaining why collective efficacy does not translate into lower crime rates. Intending to capture community residents' capacity to contact local officials and public institutions and their ability to secure their help to solve personal problems, a measure of public efficacy was included.

Thus, *public efficacy* was measured combining the following items: (1) "In order to solve your problems have you ever requested help or cooperation from a local public official or local government: for example, a mayor, municipal council, councilman, provincial official, civil governor or governor? (Yes/No), and (2) "Have you sought assistance from or presented a request to any office, official or councilperson of the municipality within the past 12 months? (Yes/No)". Affirmative responses were coded as 1 and the variables were added together. Higher values of the variable thus represent higher levels of public efficacy. Within each community, responses were averaged to represent community public efficacy.

In the LAPOP dataset, these three measures of collective efficacy were not highly correlated at the community level. Further, community trust and community efficacy were negatively correlated. The correlation between these variables was relatively low (r=-0.14). Public efficacy was moderately correlated with community efficacy (r=0.35) and weakly associated with social trust (r=0.12). These relatively low correlations suggested that each

independent variable represents a distinct construct that can be analyzed separately. For this reason, all three independent variables were included separately in the analysis.

Legal Cynicism. The notion of legal cynicism was introduced into the communities and crime research by Sampson and Jeglum-Bartusch (1999). In their study, they measure legal cynicism through items assessing attitudes towards the law and social norms. In a further study, Kirk and Papachristos (2011) propose a slightly different conceptualization and measurement of legal cynicism that is more focused on individuals' assessments of the functioning, applicability, and legitimacy of the law and its agents than on the applicability of social norms in certain situations. Thus, Kirk and Papachristos "conceptualize legal cynicism as a frame through which individuals interpret the functioning and usefulness of the law and its agents," and they measure it through agreement with the following items: "(1) laws are made to be broken, (2) the police are not doing a good job in preventing crime in this neighborhood, and (3) the police are not able to maintain order on the streets and sidewalks in the neighborhood." (2011, p. 1207; see also, Kirk & Matsuda, 2011).

In this study, *legal cynicism* was measured following Kirk and Papachristos's (2011) conceptualization. Three items were combined to assess the extent to which the respondents believed (using a scale from 1="not at all" to 7="a lot") in the following statements: (1) "To what extent do you think the courts in (country) guarantee a fair trial?" (2) "To what extent do you trust the justice system?" (3) "To what extent do you trust the National Police?" In addition, a question with only four response categories was included that asked: "If you were a victim of a robbery or assault, how much faith do you have that the judicial system would punish the guilty?" Response categories for this last item were: 1="a lot," 2="some," 3="little," and 4=none. The alpha reliability of these items was 0.68.

Items were combined using factor analysis. Only one factor was extracted in this case, retaining 52.4% of the total variance. Bartlett's test of sphericity showed that the variables were not uncorrelated (χ^2 =9756.3; p≤0.001), which leads to the rejection of the null hypothesis of no correlation between variables. Further, the KMO statistic (70.5) indicated the adequacy of conducting a factor analysis. Loadings ranged from 0.64 to 0.83. The factor was rotated so that higher values would represent higher levels of legal cynicism. The responses were further averaged across respondents within each community to construct community-level legal cynicism.

Subculture of Violence. The oppositional culture theory understands culture in a different way than does social control theory. In this sense, it focuses not on the different levels of internalization of or cynicism towards the mainstream culture but on the existence of conflicting values and definitions that suggest alternative strategies for action. One variant of this approach is subculture of violence theory. Here, individuals in a community have internalized or access values that approve of the use of violence, especially as a solution to certain affronts or problems. Anderson's (1999) code of the street is the most common conceptualization along this line in criminology and has led to different pieces of research operationalizing it (see, e.g., Brezina et al., 2004; Stewart & Simons, 2006).

In this study, the *subculture of violence* is measured through six different items, comprising responses the extent to which individual would approve of the use of violence in the following situations: (1) "In order to teach a child, a parent hits the child each time he or she disobeys." (2) "A man hits his wife because she has been unfaithful with another man." (3) "A person kills someone who has raped a son or daughter." (4) "If a person frightens his community and someone kills him." (5) "If a group of people begin to carry out social cleansing, that is, kill

people that some people consider undesirable." And (6) "If the police torture a criminal to get information about a very dangerous organized crime group." The possible responses were: 3="would approve", 2="would not approve, but understand," and 1="would not approve, nor understand." The alpha reliability of these items was 0.75.

Using principal components factor analysis, a one factor solution was encountered, through which 45.4% of the variance was retained. The KMO statistic (0.79) and Bartlett's test of sphericity (χ^2 =9043.4; p≤0.001) indicate the appropriateness of conducting factor analysis with these variables. Further, factor loadings were relatively high, ranging from 0.54 to 0.77. Higher values in this case indicate a higher level of adoption of a subculture of violence. Mean levels of subculture of violence across community respondents were used as the community-level measure of subculture of violence.

Structural Factors

Finally, different structural factors are included in the estimations, at the individual and community levels.

Concentrated disadvantages. Several constructs were combined into the measure of concentrated disadvantage. First, the quality of living within the household was assessed. Thus, respondents were asked to indicate whether they have the following in their houses: "Refrigerator," "Landline/residential telephone (not cellular)," "Cellular telephone," "Vehicle/car. How many?," "Washing machine," "Microwave oven", "Indoor plumbing,", "Indoor bathroom," "Computer," "Internet," "Flat panel TV," and "Is the house connected to the sewage system?" Affirmative responses were all coded as 1, except for the "vehicle/car" variable in which the number of vehicles owned by the household was recorded.

Factor analysis was conducted with these items and two different factors were extracted. The total variance retained. According to the KMO statistic (0.80) and Bartlett's test of sphericity (χ²=34877.8; p≤0.000), it was appropriate to conduct factor analysis with this data structure. Factors were rotated using the Promax oblique rotation. The variables "refrigerator," "landline/residential telephone (not cellular)," "cellular telephone," "vehicle/car" "washing machine," "microwave oven", "computer," "internet," "flat panel TV," all loaded in the first factor, with loadings ranging from 0.62 to 0.83. This variable thus was called *household goods*. Variables indicating whether the household had indoor plumbing, indoor bathroom and was connected to the sewage system presented higher loadings in the second factor (ranging from 0.66 to 0.84). Thus, the second factor was termed *dwelling quality*. Both variables were then aggregated at the community level.

Second, *minority concentration* was assessed using a continuous measure of skin color.

Using a color pallet with increasingly darker tones, the interviewer was asked to indicate the tone that better matches that of the interviewee's skin. This measure better captures the complexities of racial classification in South America, where a large proportion of the population defines themselves as of mixed race. Further, because racial composition and racial identification vary widely across countries and regions, this measure appears as more reliable in measuring racial differences across individuals. This variable was aggregated at the community level to represent communities' minority concentration.

Third, a variable indicating that the household was receiving *welfare assistance* was included. In this case, the interviewee was asked: "Do you or someone in your household receive regular assistance in the form of money, food, or products from the government, not including pensions/social security? (Yes/No)." At the community level, responses were

combined into a measure representing percent number of households receiving welfare assistance.

Fourth, a measure of household composition, the *number of people living in the household*, was also included. The average number of people living in the household was used at the community level.

Due to the high correlations between the variables, a factor analysis was conducted with these five variables: household goods, dwelling quality, minority concentration, welfare assistance, and number of people living in the household. The KMO statistic (0.60) and the Bartlett's test of sphericity (χ^2 = 3690.2; p≤0.000) show a relatively high correlation across variables and suggest that it is appropriate to conduct factor analysis. A two-factor solution was encountered. Household goods, dwelling quality, and minority concentration presented heavy loads in the first factor, which was called *concentrated disadvantages*. This factor was rotated so that higher scores represented higher levels of concentrated disadvantage. In the second factor, welfare assistance and number of people in the household presented higher loadings. Thus, this factor was named *household vulnerability*. Higher scores represent higher levels of vulnerability. Both variables were aggregated at the community level.

Other Variables. A dummy variable indicating the size of the region in which the community is located was also included. Regions were classified in five different categories: nation capital (metro area), big city, medium size city, small city, and rural area. Further Gender was included as a control variable only at the individual level. Age was included as a control variable only in those models estimating personal neighborhood victimization.

The LAPOP survey questionnaire does not include measures of immigrant concentration and residential stability. Further, the primary sampling units were not identified using their

corresponding census codes from their respective countries. Thus, it was not possible to incorporate community-level census information to the analysis. For these reasons, no variables assessing immigrant concentration and residential stability were included in the analyses.

DATA ANALYSES

Missing Data

Before conducting the analyses, checks for missing data were conducted. The factors presented in the variables sections were constructed using listwise deletion and then included in the missing data analyses and imputed with the rest of the variables. Analyses of the amount of missing data show that the proportion of missing values is relatively low in all variables. Of the 15 variables used in the different models estimated, only 3 had more than 3% of missing values. The variables that exhibited the maximum percentage of missing values were concentrated disadvantage and household vulnerability (9.1%). The average percent missing across the 10 variables with missing data was 3.3%.

Little's (1988) test was performed to check for the structure of the missing data. In this case, the null hypothesis of missing at random was rejected (χ^2 =2393.3; p≤0.000). For this reason, data were imputed using multiple imputation (White, Royston, & Wood, 2011). Fifteen different imputations were created using chained equations. The imputation model included all variables used in the analyses were included in the imputation model. Aggregate-level variables were constructed with the non-imputed data. Even though they do not present missing values, they were included in the imputation model, because they provide important information to impute the rest of the variables.

Multiple imputation is increasingly used to impute categorical, count, and skewed variables and has been shown to yield unbiased estimates in most situations, especially when the

fraction of missing data is small (White et al., 2011). The dependent variable and all independent variables used in the analyses were included in the imputation model. Observations with missing values in the dependent variable were included in the imputation model and in the analysis. According to Young and Johnson (2010), the differences between estimations with and without imputed values in the dependent variables become negligible when the fraction of missing data is small and the number of imputations relatively large. Given that it is important to keep the maximum amount of observations per community, the decision was made to retain all the observations.

In this case, because the fraction of missing data is relatively low, the number of imputations surpassed the rule of thumb usually indicated of using a number of imputations at least equal to the fraction of missing information (FMI) (White et al., 2011). FMI values and average relative variance increase (RVI)—which show the loss of efficiency in the estimates—are reported for every estimation. Overall, these statistics show that the estimates are efficient and that the variability across results was low. Further, the reproducibility of results was checked by computing Monte Carlo errors of the coefficients, standard errors, test statistics, and p-values (White et al., 2001). These Monte Carlo errors fell below the thresholds suggested by Withe et. al., (2001). In the results section, the average coefficients and statistics across all imputations are presented. For simplicity, the likelihood ratio tests discussed come only from the first imputation. These tests were also performed for the rest of the imputations and yielded similar results.

Statistical Analyses

The present study focuses on understanding community-level differences in victimization rates. The research problem is thus set at the aggregate level. The characteristics of the research

problem and the type of data available—collected at the household level—allow to explore differences in victimization across communities using multi-level models (Peugh, 2010). Multi-level models have been increasingly used in the social sciences in general (Leeuw & Meijer, 2010; Teachman & Crowder, 2002) and in criminology in particular (Kirk & Matsuda, 2011; Morenoff et al., 2001; Sampson & Jeglum Bartusch, 1998; Sampson, 2012; Wilcox Rountree, Land, & Miethe, 1994) to investigate aggregated-level effects on different outcomes.

The fact that households are clustered within communities makes estimations that do not account for the hierarchical structure of the data potentially problematic. The most salient problem in this case is the potential bias introduced due to the correlation between units within the same aggregate. Units within the same cluster tend to be more similar between each other than units from different aggregates (Agresti, 2002). The fact that units within communities tend to be more similar than units across communities is of particular importance in the present analysis, since households are not randomly distributed across communities. Rather, complex urban and social dynamics influence how individuals and households are sorted across communities (Sampson, 2012).

One of the main problems of not accounting for this clustering is that standard errors tends to be underestimated, especially in aggregated-level variables, which increases Type I error (Steele, 2008). Multi-level models account for the hierarchical structure of the data and—unlike single-level linear models that assume independence across observations—allow for correlation between units. Thus, they produce correct standard errors.

Producing accurate standard errors is not the only benefit of using multi-level models. As Steele (2008) notes, several other statistical techniques (accounting for design effects, including clusters as fixed-effects) also yield correct estimates. However, these techniques only "correct"

for clustering instead of treating it as a phenomenon worth exploring and understanding. On the contrary, multi-level models treat clustering as a meaningful aspect of the analysis and allow to explore the sources of the between-group variability (Steele, 2008).

In this regard, to better understand the elements that impact community-level crime rates, it is important to isolate contextual effects from pure compositional ones. Multi-level models provide the ideal technique to explore this issue, because they decompose the variance of the dependent variable into between and within groups (Steele, 2008; Teachman & Crowder, 2002). Decomposing the variance across households and communities allows for the assessment of how community-level variance in victimization rates is affected by household characteristics within the neighborhood. Through these types of models, it is also possible to evaluate how the community-level characteristics affect community-level variance in victimization rates even after controlling for household-level characteristics, thus identifying pure contextual effects.

In this study, because the dependent variable is dichotomous, the type of multi-level models estimated are *mixed-effects logit models* with random intercepts. This model is defined as follows (StataCorp, 2013; see also Steele, 2009):

$$Pr(y_{ij} = 1 | x_{ij}, u_j) = H(x_{ij}\beta + u_j)$$

Defining H as the logit function, which represents the log odds of the probability of y=1, the equation would be the following:

$$\log {\left(\frac{\pi_{ij}}{1 - \pi_{ij}}\right)} = \beta_0 + x_{ij}\beta + u_j$$

With j=1,...,M representing the M different clusters. Each cluster j containing $i=1,...,n_j$ observations in this specific cluster. Also, y_{ij} represents the value of the dependent

variable for observation i in cluster j, that can take values of 0 or 1. Similarly, each x_{ij} represents a vector of all the values of each of the p covariates of the model for observation i in cluster j, while β represents the vector of fixed regression coefficients¹. Finally, u_j represents the random intercept of cluster j. In this model $u_j \sim N(0, \sigma_u^2)$, meaning that the random intercepts follow a normal distribution with mean 0 and variance σ_u^2 .

This equation can be also expressed as a latent linear response model, in which a probability function is assumed to underlie the actual observed outcomes such that $y_{ij}=1$ is observed when the latent function y_{ij}^* is above a certain arbitrary threshold.

$$y^* = \beta_0 + x_{ij}\beta + u_j + \varepsilon_{ij}$$

The term ε_{ij} represents the individual-level error term, and it is assumed to be distributed following a logistic distribution with mean 0 and variance $\pi^2/3$.

Besides the distributional assumptions of the random effects and the error terms, one of the most important assumptions of random effect models is the independence of the random effects from the covariates. Clark, Crawford, Steele, and Vignoles (2010) discuss this issue at length and weigh the advantages and disadvantages of using random versus fixed effects models. According to Clark et al., most researchers, especially in the economics field, consider the independence between random effects and covariates to be an unrealistic assumption, and tend to estimate fixed effects models instead, which relax this assumption. However, this strategy leads to confounding the fixed effects with the level 2 covariates, thus making it impossible to estimate contextual effects and explore the causes of between-cluster variation.

1

¹ This vector of coefficients may include both level 1 and level 2 explanatory variables. Level 2 variables only vary at the aggregated level, and are thus represented by the vector x_i .

For this reason, even in scenarios where it is plausible to assume non-random sorting into level 2 aggregates, random effect models may be adequate. As already mentioned, household sorting into communities is not a random phenomenon, and it is likely that certain community characteristics may be correlated with both victimization and community sorting. However, if the elements that account for such sorting are relatively well-represented in the estimation model (at least as control variables), then the random effects assumption will still hold. Thus, if the causes of sorting are well accounted for, the random effects (level 2 residuals) would comprise only the effects of the level 2 variables that are uncorrelated with the other already included covariates. That is, if the model is reasonably well specified, random effects estimations are still preferred. In this case, because main structural community factors are included in the model, random effects estimations are considered appropriate.

The estimation of the mixed effects logit models was performed using STATA 13. These models are estimated using maximum likelihood estimators and directly integrating the random effects. The computations are performed using an extension of the adaptive Gaussian quadrature based on conditional modes (StataCorp, 2013). Maximum likelihood methods tend to be computationally intensive, but they are usually preferred over other approximations (Steele, 2009). One of the advantages of these methods is that, since they compute the log likelihood of the models, they allow for the performance of likelihood ratio (LR) tests and thus compare the relative fit of different models. In this case, a LR test comparing the fit of the random coefficient model and the simple logistic model is performed in every case. Further, LR tests are used to evaluate the relative fit of nested models. As different explanatory variables are added in the model, LR tests allow to identify whether such additions improve model fit. Besides LR tests,

the Akaike information criteria statistic, which shows the differences in model fit across nested models, is presented.

Finally, residual intraclass correlation coefficients (ICC) are computed. ICC in the unrestricted model is good to evaluate the proportion of the variation in the dependent variable that is due to community-level variation and measure the extent of the variability of interest in the study (Steele, 2009). When adding variables to the model, computing successive ICCs allows to evaluate how different sets of variables impact the residual between group variance, providing a measure of the explanatory power of the different models in terms of between-group variation and to evaluate the magnitude of contextual and compositional effects.

Chapter 4

RESULTS

The burgeoning number of community-level studies of crime has helped to highlight the importance of contextual effects when understanding differences in crime across communities. Inspired by the Chicago School of social disorganization, communities and crime scholars have focused on disentangling the community characteristics that make them more or less able to control crime. In this context, collective efficacy theory appears to be the most prominent community-level explanation of differential crime rates across geographical units. Even though research has generally provided support for this theory, studies have yet to elucidate whether collective efficacy theory applies to other contexts.

This dissertation attempted to fill a gap in research by providing a test of collective efficacy theory in the South American context, using data from Latin American Population Survey from 2012 and 2014. Further, the analyses incorporated elements from alternative community-level theories of crime seldom tested in conjunction with social disorganization theory.

This chapter presents the results of these tests. The results are presented in two different sections. First, the sources of collective efficacy are discussed and estimations of the different collective efficacy variables used in this study—social trust, community efficacy, and public efficacy—are presented. Second, estimations of victimization are presented. The second section is divided in two subsections. The first subsection presents the results of the household victimization estimations, whereas the second subsection presents the results of the personal neighborhood victimization estimations.

Six different estimations are performed for the two dependent variable considered—household victimization and personal neighborhood victimization. First, a model containing only community structural characteristics is estimated. Second, single-theory models containing community structural characteristics and the relevant community-level features highlighted by each of the theories, are presented. Finally, an estimation is performed that includes variables from the three theories considered as well as the community-level structural characteristics.

In all cases, grand-mean centered individual-level variables representing each of the theoretical constructs are included at the individual level. That way, the coefficients for the community-level variables represent the unconfounded contextual effects of the community-level variables on victimization. That is, they show community-level effects on victimization that are above and beyond the effects of the individual-level characteristics of community residents (Hofmann & Gavin, 1998; Wu & Wooldridge, 2005).

SOURCES OF COLLECTIVE EFFICACY

Before studying the effects of collective efficacy on victimization rates, it is important to test whether variations in community structural characteristics explain variations in collective efficacy theory. According to collective efficacy theory (Sampson, 2012), concentrated disadvantage, immigrant concentration, and residential instability undermine the capacity of a community to mobilize resources towards achieving communal goals—that is, its collective efficacy. This study includes three different measures of collective efficacy: social trust, community efficacy, and public efficacy. Because each measure captures a different facet of collective efficacy that may be rooted in distinct community characteristics, a different estimation is performed for each variable. To make all models comparable, each collective

efficacy variable was dichotomized² and a multilevel logit regression was estimated for each of them. The structural characteristics considered in this case are concentrated disadvantage and household vulnerability. As may be recalled, the concentrated disadvantage variable combines measures of the household goods, the quality of the dwelling, and minority concentration. Household vulnerability measures whether or not the household receives welfare assistance and the number of individuals living in the household.

Table 4.1. presents the results of the random intercepts logit models for collective efficacy. Intraclass correlations (ICC) from the unrestricted models of the three different measures of collective efficacy show that a substantial portion of the variation of collective efficacy is due to between-community differences. Specifically, 14% of the variation in social trust occurs at the community-level. Further, the percentages of variation of community efficacy and public efficacy due to community-level differences are 13 and 8, respectively. These values are smaller than the 21% between neighborhood variance in collective efficacy reported by Sampson et al. (1997), but similar to the intraclass correlations of measures of social capital (or collective efficacy for children) presented in Sampson et al.' (1999) piece. In the present study, the size of the intraclass correlations suggests that community-level differences in collective efficacy are important; communities vary substantially in terms of their collective efficacy.

The fact that the level of collective efficacy differs across communities gives justification for exploring the role of collective efficacy when attempting to explain differential crime rates across communities and makes it important to understand what causes such community-level differences in collective efficacy. The fixed-effects portion of the models presented in Table 4.1

² For the public and community efficacy variables, zero indicates the lack of involvement in any of the activities listed in each case and one indicates participation in at least one of them. The social trust variable was dichotomized coding the "not very trustworthy" and "untrustworthy" responses as zero and the "somewhat trustworthy" and "very trustworthy" as one.

shows the sources of the different components of collective efficacy. Notably, not all components of collective efficacy are associated with the structural characteristics of the community in the same direction. Impoverished communities tend to exhibit higher levels of public and community efficacy but diminished levels of trust.

Specifically, in the social trust model, both community concentrated disadvantage and community vulnerability are negatively associated with community-level trust. These two community structural characteristics affect the random intercept that represents the level of social trust in a specific community. Whether a certain individual considers that their neighbors are trustworthy depends on a set of individual characteristics and the structural characteristics of their household but also on the characteristics of the community in which he or she resides.

Community structural characteristics are thus shown to exert a contextual effect on social trust. In particular, a one-unit increase in the level of concentrated disadvantages faced by a community reduces by 30% the likelihood that an average individual would trust their neighbors. Further, an increase of one unit in the level of vulnerability within a community is associated with a 41% decrease in that likelihood. This finding indicates that highly disadvantaged and vulnerable communities have diminished levels of social trust.

The action-oriented components of collective efficacy, however, are associated with community-level concentrated disadvantage and vulnerability in the opposite direction. Thus, community efficacy is higher in impoverished communities. In particular, overall levels of participation in community-strengthening activities (community efficacy) are associated with the level of disadvantage faced by the community as well as with the vulnerability of the households

Table 4.1.

Two-level logit estimations of collective efficacy. Random intercepts models. Odd ratios.

	Social trust		Communit	y efficacy	Public efficacy		
	OR	z	OR	\overline{z}	OR	z	
Individual-level variables							
Household vulnerability	0.94^{**}	(-2.96)	1.02	(1.01)	1.11***	(4.56)	
Household concentrated disadvantage	0.79^{***}	(-8.83)	0.94^{*}	(-2.43)	1.02	(0.67)	
Age	1.00^{**}	(2.74)	1.02***	(14.06)	1.01***	(8.67)	
Male	1.12**	(2.91)	1.04	(1.17)	0.80^{***}	(-5.38)	
Community-level variables							
Community vulnerability	0.59^{***}	(-4.68)	1.31*	(2.45)	0.88	(-1.21)	
Community concentrated disadvantage	0.70^{***}	(-5.21)	1.58***	(6.24)	1.11	(1.49)	
Size of region							
Big city	0.97	(-0.32)	0.91	(-0.92)	0.81^{*}	(-2.20)	
Medium size city	1.52***	(3.83)	0.90	(-1.04)	1.01	(0.09)	
Small city	1.81***	(5.78)	0.80^*	(-2.24)	1.31**	(2.99)	
Rural area	2.37***	(6.75)	1.36*	(2.46)	1.64***	(4.50)	
Observations	15130		15130		15130		
Log Likelihood	-8773.83		-9838.28		-7895.70		
AIC	17571.66		19700.57		15815.39		
ICC	0.10		0.10		0.06		
ICC (unrestricted model)	0.14		0.13		0.08		
Max FMI	0.09		0.06		0.10		
Average RMI	0.03		0.01		0.03		

 $^{^{\}dagger} p < 0.1, ^* p < 0.05, ^{**} p < 0.01, ^{***} p < 0.001$

within such community. The contextual effect of concentrated disadvantage and household vulnerability in the mean levels of community efficacy is reflected by the fact that an average individual is 58 % more likely to participate in community activities if he or she resides in a community one unit above the mean level of disadvantage than the average. Further, one-unit increase in the level of vulnerability of the community is associated with a 31% increase in the likelihood of participation in community-strengthening activities. With regards to the sources of public efficacy, the direction and strength of this association is less conclusive. Thus, neither community-level disadvantages or vulnerability appear as significantly associated with public efficacy levels. However, when individual-level vulnerabilities and concentrated disadvantages are group-mean centered, community-level concentrated disadvantage appears as positively

associated with public efficacy (using a 0.1 significance level). Thus, communities with higher levels of disadvantage have higher levels of public efficacy. Such higher levels of public efficacy, however, are not purely contextual but due also to the compositional factors. More disadvantaged communities thus exhibit higher levels of public efficacy in part due to the fact that more disadvantaged households exhibit higher levels of individual-level public efficacy; that is, individuals in these households are more likely to ask local officials or politicians for help when trying to solve a personal problem. At the community level, the concentration of disadvantaged households within a community explains a portion of why these communities exhibit higher levels of public efficacy. When compositional and contextual effects are separated, none is significant. Combined, however, they show that public efficacy is significantly higher in disadvantaged communities.

The analysis of the model fit statistics for the models presented in Table 4.1. indicate that contextual-level effects successfully explain substantial portions of the variations of collective efficacy across communities. First, the residual intraclass correlations of the full models indicate that the variance across communities in each of the collective efficacy components considered is reduced. In the social trust model, the intraclass correlation drops from 14% in the unrestricted model to 10% in the full model, suggesting that the model successfully accounts for approximately 29% of the variation in social trust levels across communities. This reduction in the unexplained community-level variance is also considerable in the community efficacy and public efficacy models. In this case, residual intraclass correlations drop from 13% to 10% in the community efficacy model and 8% to 6% in the public efficacy estimation. These differences represent a 23% and 25% reduction in the unexplained variance at the community level, respectively.

Second, different likelihood ratio tests to compare model fit were performed. A comparison with a single-level logit estimation was carried out for each model. Likelihood ratio tests comparing single-level and multi-level models show that multi-level models are more appropriate in all cases. Further, likelihood ratio tests between the full models and the unrestricted model suggest that full models are a better fit for the data. More importantly, a comparison between models including only individual-level controls and a community-level control for the size of the region and the full models in which community-level concentrated disadvantages and vulnerability are added to the models shows that the latter models provide a better fit to the data in each case. These results point out that concentrated disadvantage and vulnerability are important sources of collective efficacy and help to explain variations in the different components of collective efficacy at the community-level.

Taken together, these models indicate that collective efficacy varies substantially across communities and that a portion of such variation is due to communities' structural differentiation. However, the relationship between collective efficacy and community structural characteristics appears to be less straightforward than commonly assumed in the prior literature. A more nuanced understanding of the different components of collective efficacy—conceived as a multidimensional construct—is necessary to better unravel the different social processes that affect collective efficacy. In this case, the results show that while community-level disadvantages and vulnerability undermine trust and cohesion in a community, these same characteristics appear to strengthen their efficacy. Impoverished communities in this sample show higher levels of organization and mobilization toward community goals. Whether such higher levels of efficacy actually operate as a protective factor against crime is discussed in the next section.

COLLECTIVE EFFICACY AND VICTIMIZATION

This section presents the results of the random intercepts logit estimations of victimization. The models estimated aim at explaining the community-level elements that impact community victimization rates. This section is subdivided in two different sections. The first subsection presents the results of the estimations predicting household victimization. The second subsection presents the findings for the personal neighborhood victimization models.

In each case, six different models are presented. First, a model with no parameters is estimated. Second, an estimation containing only the structural community characteristics and the individual and community-level controls is performed. Third, a collective efficacy model is estimated which includes the structural characteristics and the collective efficacy variables. Fourth, a model for legal cynicism theory is estimated by adding legal cynicism to the structural characteristics. Fifth, a subculture of violence model is estimated. Finally, model 6 includes elements for the three theories considered and the structural characteristics.

In every model estimated, when a theoretically relevant community-level variable was introduced in the analysis, its grand mean centered corresponding individual-level variable was introduced as control. For example, in the collective efficacy model, the variable indicating the level of social trust within the community was added alongside the individual-level trust variable. Controlling for individual-level characteristics allows for the estimation of true contextual effects, separating them from compositional effects explained by the clustering within communities of individuals with certain characteristics that may in fact be associated with individual-level victimization.

Thus, the effects of the community-level variables presented in this section should be interpreted as pure contextual effects. In the example above, the effect of community-level

social trust should be read as the effect of living in a community with a certain level of trust on the victimization rates of an average community. The aggregated level of trust impacts the random intercept estimated for each community. That is, it affects the individual-level risk of victimization because it sets a different intercept for the whole community over which the individual-level risk of victimization, depending on individual-level characteristics, is estimated. In other words, it measures the impact of community trust on victimization, regardless of the level of trust of a specific individual within a community.

Household Victimization

This subsection presents the household victimization estimations. The results of the different random intercepts logit models of household victimization are presented in table 4.2. The estimations of the six different models are discussed below.

Unrestricted Model. The unrestricted model of household victimization (Model 1) allows one to evaluate whether victimization rates vary substantially across communities. The intraclass correlation of the unrestricted model shows that 15% of the variance in victimization occurs across the 472 communities considered. The size of the intraclass correlation indicates that there is substantial variation in victimization across communities. Figure 4.1 shows the caterpillar plot of the random intercepts estimated in the null model³. The figure provides a visual depiction of this variability and indicates that the random intercepts for each community estimated in the unrestricted model vary considerably. The confidence intervals for these intercepts show that the estimations of the random intercepts do not overlap in all cases. Communities are significantly different in terms of their victimization rates.

_

³ All caterpillar plots presented in this study are estimated using the first imputation only. Caterpillar plots for the other 14 imputed datasets did not differ from the one presented here and are available upon request.

Table 4.2.

Two-level logit estimations of household victimization. Random intercepts model. Odd ratios.

	Model 1	Model 2		Model 3		Model 4		Model 5		Model 6	
		OR	z	OR	z	OR	z	OR	z	OR	Z
Individual-level variables											
Social trust (ind.)				0.82^{***}	(-8.47)					0.86^{***}	(-6.52)
Community efficacy (ind.)				1.19***	(7.26)					1.19***	(7.22)
Public efficacy (ind.)				1.22***	(5.92)					1.21***	(5.75)
Legal cynicism (ind.)						1.34***	(14.56)			1.32***	(13.53)
Household vulnerability		1.09***	(4.08)	1.08***	(3.50)	1.10***	(4.59)	1.09***	(4.08)	1.09***	(4.02)
Household concentrated		0.87^{***}	(-5.58)	0.85^{***}	(-6.04)	0.86^{***}	(-5.70)	0.87^{***}	(-5.58)	0.85^{***}	(-6.00)
disadvantage											
Age		0.99^{***}	(-9.77)	0.99^{***}	(-10.70)	0.99^{***}	(-8.79)	0.99^{***}	(-9.73)	0.99^{***}	(-9.90)
Male		1.08^{*}	(2.12)	1.09^{*}	(2.45)	1.08^{*}	(2.02)	1.08^{*}	(2.08)	1.09^{*}	(2.23)
Community-level variables											
Social trust				0.60^{***}	(-4.21)					0.79^{\dagger}	(-1.89)
Community efficacy				0.79^{\dagger}	(-1.90)					0.79^{\dagger}	(-1.92)
Public efficacy				0.73	(-1.42)					0.71	(-1.60)
Legal cynicism						1.46***	(4.12)			1.33**	(2.99)
Subculture of violence								1.32***	(3.98)	1.26***	(3.36)
Community vulnerability		1.26*	(2.05)	1.11	(0.90)	1.14	(1.22)	1.15	(1.27)	1.01	(0.09)
Community concentrated		1.56***	(5.98)	1.46***	(4.90)	1.52***	(5.88)	1.38***	(4.10)	1.35***	(3.76)
disadvantage											
Size of region											
Big city		0.87	(-1.34)	0.88	(-1.25)	0.88	(-1.28)	0.86	(-1.54)	0.87	(-1.46)
Medium size city		0.68^{***}	(-3.61)	0.77^{*}	(-2.40)	0.75^{**}	(-2.84)	0.71^{**}	(-3.24)	0.82^{*}	(-1.97)
Small city		0.56^{***}	(-5.82)	0.67^{***}	(-3.76)	0.64^{***}	(-4.55)	0.59^{***}	(-5.30)	0.73^{**}	(-3.13)
Rural area		0.27^{***}	(-10.27)	0.36***	(-7.44)	0.33***	(-8.82)	0.29^{***}	(-9.66)	0.40^{***}	(-6.78)
Observations	15130	15130		15130		15130		15130		15130	
Log Likelihood	-9493.01	-9332.47		-9218.98		-9190.10		-9324.60		-9096.87	
AIC	18990.03	18688.93		18473.95		18408.21		18675.20		18235.74	
ICC	0.15	0.10		0.09		0.09		0.09		0.08	
Max FMI	0.01	0.11		0.11		0.11		0.11		0.12	
Average RVI	0.01	0.02		0.02		0.02		0.02		0.02	

The fact that variation in victimization across communities exists gives not only methodological but also substantive justification to the current analysis focusing on unraveling the community-level elements that explain such variation. The analysis of variance thus allows for an assessment of the first research question and reveals that communities in this sample do vary in terms of their victimization rates. A likelihood ratio test comparing the fit of a single-level logistic model and the current random intercept model further reinforce this finding by showing that the multilevel analysis provides a better fit to the data ($\chi^2 = 852.15$, p < .05). Once it is established that there is a relevant portion of the variance in victimization occurring at the community-level, it is worth exploring the different elements that may explain such variability.

Structural Characteristics Model. Model 2 incorporates structural characteristics into the estimation of household victimization. Individual-level controls for age and gender are included, along with the individual-level disadvantage and vulnerability. A control for size of the region at the community-level is also added to the model. Model 2 shows that community vulnerability and community concentrated disadvantages are both positively associated with higher victimization rates in the community. The random intercepts estimated are higher for impoverished communities. Thus, residing in a community in which households are more vulnerable and disadvantaged places an individual at a higher risk for victimization. In particular, living in a community one unit above the mean level of vulnerability increases the risk of victimization of an average individual by 26%. Moreover, a one-unit increase in community concentrated disadvantage increases the risk that an average household would be victimized by 56%. The likelihood ratio test indicates that this model provides a better fit to the data than the unrestricted model ($\chi^2 = 319.97$, p < .05). Residual intraclass correlation shows that the proportion of unexplained variance due to community-level differences in victimization is 10%

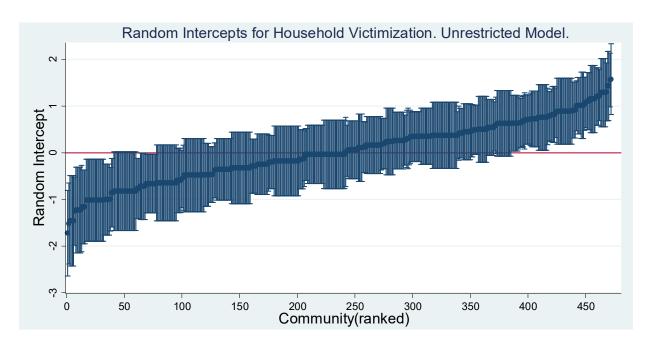


Figure 4.1. Caterpillar plot. Random Intercepts in Household Victimization Unrestricted Model.

instead of the 15% variance of the unrestrained model.

Collective Efficacy Model. Model 3 incorporates the collective efficacy variables into the previous structural characteristics-only model. According to the likelihood ratio test, this model provides a better fit to the data than model 2 ($\chi^2 = 229.66$, p < 0.05) and explains a larger portion of the community-level variance (40%). The fixed-effects portion of the model shows that overall, collective efficacy reduces victimization rates. However, not all components of collective efficacy are significantly associated with community-level victimization. In particular, social trust is associated with a decrease in community victimization rates. A one-unit increase in social trust reduces the risk of victimization by 40%. Community efficacy is also associated with a lower victimization rate. When community efficacy increases by one unit, the risk of victimization decreases by 21%. In this case, this association is significant only at .10, with a p-value of 0.57 so it should be taken with caution. However, when public efficacy is removed

from the analysis (model not shown), the p-value for the association between community efficacy and household victimization is reduced (p = 0.012), and the odd ratio shows a larger effect of a one-unit change in community efficacy (OR = 0.74).

The association between public efficacy and victimization does not achieve statistical significance. A model with public efficacy and not community efficacy shows that public efficacy is significantly associated with victimization rates (OR = 0.66, p = 0.046). It is when community efficacy is introduced that public efficacy is rendered non-significant in the model. This result highlights the relevance of the efficacy components of collective efficacy theory and suggests an intricate relationship between them that should be further explored.

Adding the collective efficacy variables also reduces the effect of the structural characteristics on victimization, giving support to the mediation hypothesis. In particular, when the three collective efficacy variables are introduced in the model, the association between vulnerability and victimization rates is rendered non-significant. The effect of concentrated disadvantage on victimization rates remains significant but is considerably reduced. In this model, a one-unit increase in concentrated disadvantage is associated with a smaller increase in the likelihood of household victimization (46%) than in Model 2.

Legal Cynicism Model. Model 4 shows the results of the legal cynicism model. In this case, legal cynicism is added to the structural characteristics-only model. The residual intraclass correlation is 0.09, which compared to the 0.15 intraclass correlation of the unrestricted model, indicates that this model explains 40% of the between-communities variance in victimization. The likelihood ratio test shows that adding legal cynicism to the model provides a better fit to the data than model 2 ($\chi^2 = 229.66$, p < 0.05) and explains a larger portion of the community-level variance (40%).

In this model, legal cynicism is positively associated with household victimization rates within a community. Besides the effect of the level of cynicism reported by an individual in his or her specific risk of victimization, the level of legal cynicism within a community exerts a contextual effect on the risk of victimization. Living in a community in which legal cynicism is one unit higher than the average increases by 46% the individual risk of household victimization. The effect of including legal cynicism in the model on the effect of the structural characteristics is similar to that of including the collective efficacy variables. Thus, in the legal cynicism model, community vulnerability is no longer associated with household victimization (p = 0.22) while concentrated disadvantages remains significant but less strongly associated with victimization rates (OR = 1.52, p < 0.05).

Subculture of Violence Model. Model 5 presents an estimation of household victimization that includes the structural characteristics and the subculture of violence variable. In this case, because the subculture of violence questions were only asked in the 2012 edition of the LAPOP Survey, a control for the individual-level attitudes towards violence could not be included. According to the likelihood ratio test, the subculture of violence model represents an improvement with respect to Model 2, the structural characteristics-only model ($\chi^2 = 15.79$, p < 0.05). The residual intraclass correlation is 0.09, which indicates a similar explanatory power than the collective efficacy and legal cynicism single-theory models (Model 3 and Model 4).

The fixed-effects portion of the model shows that subculture of violence is significantly associated with household victimization rates within a community. Higher levels of approval of violence within a community make individuals and the members of his or her household more likely to experience victimization. A one-unit increase in the community level subculture of violence index increases the risk of household victimization by 32%. Similar to what was

observed for Models 3 and 4, subculture of violence also appears to mediate the effect of community structural characteristics on victimization rates. Thus, household vulnerability is not significant in this model, and the effect of concentrated disadvantages is sharply decreased. In this case, the effect of a unit increase in concentrated disadvantage in the risk of household victimization drops from 56% in the structural characteristics-only model (Model 2) to 38% in the subculture of violence model.

Full Model. Model 6 presents the results of an estimation combining the elements of all three alternative theories. This model presents a better fit than every single-theory model considered. Likelihood ratio tests show a significant improvement of fit of this model in all cases ($\chi^2 = 15.79$ ranges from 188.85 to 451.39 and p-values are all below 0.05). Further, this model increases the percentage of community-level explained variance. In this case, the residual intraclass correlation is 0.08, which is a 46% drop in the residual variance with respect to the unrestricted model and an 11% improvement with respect to the single-theory models. The data thus suggest that theoretical integration rather than theoretical combat is the most accurate approach to better understanding differences in victimization rates across communities.

Analyzing the regression parameters, it is noteworthy that the variables from all theories retain their significance. The only community-process variable that does not achieve statistical significance is public efficacy, which was already non-significant in the single-theory collective efficacy model. Social trust, however, is significant but only at the .10 significance level, with a p-value of .052, marginally above the .05 threshold. Its effect on household victimization, though reduced, remains substantial (OR = 0.79). Community efficacy maintains its significant association with household victimization at the .10 but not .05 level (p = 0.055) and shows an effect of similar magnitude (OR = 0.79). Legal cynicism and subculture of violence also remain

significantly and positively associated with community-level household victimization but exhibit a reduced effect (OR = 1.33 and OR = 1.26, respectively).

The variables representing each of the three alternative theories considered successfully mediate the association between structural characteristics and household victimization rates. In this case, and in line with what was observed in the single-theory models, community vulnerability is not significantly associated with crime. On the other hand, concentrated disadvantages still exerts a positive, significant effect on victimization. However, its effect on victimization rates decreases even more than in every single-theory model. In this case, the effect of a one-unit increase in community disadvantage in an average community is associated with a 35% increase in the victimization risk of an average individual, instead of the 56% increase reported in Model 2.

Personal Neighborhood Victimization

The current section presents the results of the personal neighborhood victimization estimations. The same six different models presented for household victimization were also estimated with the personal neighborhood victimization dependent variable. This variable has the advantage of being more precise in terms of the location at which victimization occurs. However, its main disadvantage is that its prevalence is lower than that of household victimization (11.6% vs. 35.5%). This lower base rate makes the estimations of the community-level intercepts less stable. Further, the absence of a clear definition of neighborhood in the survey questionnaire introduces measurement error. Table 4.3 displays the results of the six different random intercept logit estimations performed.

Unrestricted Model. Model 1 shows the results of the random intercepts unrestricted model. In this case, the intraclass correlation is smaller than for the household victimization

model. Specifically, the intraclass correlation of 0.09 indicates that 9% of the variance in personal neighborhood victimization occurs at the community level.

The caterpillar plot displayed in Figure 4.2., shows the estimated random intercept for each community and its standard error, providing further information regarding the variability of rates of personal victimization within the neighborhood across communities. In this graph, it can be observed that there is more overlap in the random intercepts estimated and a smaller range of variability across intercepts than in the household victimization model. Still, the likelihood-ratio test comparing a single-level logit model and the two-level random intercepts model indicate that the two-level estimation provides a better fit to the data ($\chi^2 = 141.42$, p < 0.05), suggesting that community-level variability in personal neighborhood victimization is substantial enough to merit a multi-level analysis.

Structural Characteristics Model. In Model 2, the results of the estimation including only the structural characteristics and a set of controls is presented. In this case, the intraclass correlation is 6%, which corresponds to a 33% between-communities explained variance. Besides explaining a considerable portion of the community-level variance, Model 2 represents an improvement with respect to the unrestricted model in terms of fit. The likelihood ratio test comparing both models shows that model 2 provides a better fit to the data than model 1 (χ^2 = 80.41, p < 0.05).

The analysis of the fixed-effects parameters, however, reveals that neither community disadvantages nor household vulnerability are significantly associated with personal neighborhood victimization rates within a community. Surprisingly, the only significant parameter in the model is the dummy variable indicating that the community is in a predominantly rural area. No individual-level variable appears as significantly associated with

Table 4.3.

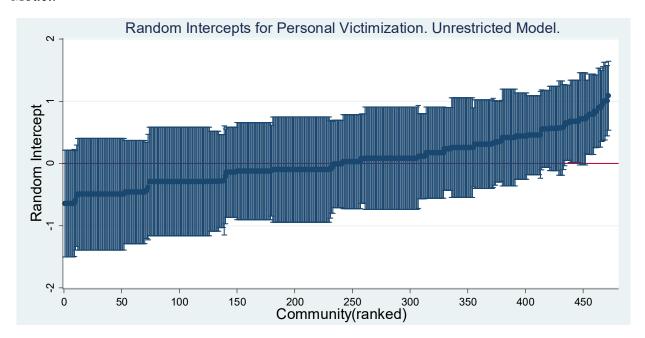
Two-level logit estimations of personal neighborhood victimization. Random intercept models. Odd ratios.

	Model 1	Model 2		Model 3		Model 4		Model 5		Model 6	
		OR	\boldsymbol{z}	OR	\boldsymbol{z}	OR	Z	OR	z	OR	\boldsymbol{z}
Individual-level variables											
Social trust (ind.)				0.76^{***}	(-8.55)					0.79^{***}	(-7.19)
Community efficacy (ind.)				1.22***	(5.85)					1.22***	(5.80)
Public efficacy (ind.)				1.27***	(5.41)					1.26***	(5.29)
Legal cynicism (ind.)						1.31***	(9.60)			1.27***	(8.42)
Household vulnerability		0.98	(-0.59)	0.97	(-1.14)	0.99	(-0.35)	0.98	(-0.59)	0.97	(-0.87)
Household concentrated disadvantage		0.95	(-1.35)	0.93^{\dagger}	(-1.90)	0.95	(-1.42)	0.95	(-1.35)	0.93^{\dagger}	(-1.84)
Age		1.00	(-1.47)	1.00^{*}	(-2.14)	1.00	(-0.78)	1.00	(-1.42)	1.00	(-1.62)
Male		0.97	(-0.58)	0.99	(-0.25)	0.97	(-0.62)	0.97	(-0.62)	0.98	(-0.37)
Community-level variables											
Social trust				0.94	(-0.50)					0.96	(-0.32)
Community efficacy				0.65^{**}	(-3.03)					0.64^{**}	(-3.20)
Public efficacy				0.89	(-0.46)					0.90	(-0.42)
Legal cynicism						0.85	(-1.54)			0.81^{\dagger}	(-1.95)
Subculture of violence								1.23**	(2.74)	1.22^{*}	(2.49)
Community vulnerability		0.85	(-1.35)	0.82	(-1.63)	0.83	(-1.49)	0.80^{\dagger}	(-1.85)	0.78^{*}	(-2.00)
Community concentrated disadvantage		1.09	(1.06)	1.11	(1.14)	1.10	(1.09)	1.00	(0.01)	1.03	(0.36)
Size of region											
Big city		1.02	(0.20)	1.03	(0.28)	1.03	(0.25)	1.01	(0.07)	1.02	(0.18)
Medium size city		0.97	(-0.32)	1.02	(0.17)	0.98	(-0.19)	1.00	(0.01)	1.04	(0.38)
Small city		0.85^{\dagger}	(-1.64)	0.90	(-0.98)	0.86	(-1.41)	0.88	(-1.20)	0.92	(-0.76)
Rural area		0.38^{***}	(-6.79)	0.43***	(-5.34)	0.39^{***}	(-6.39)	0.40^{***}	(-6.32)	0.45^{***}	(-5.03)
Observations	15130	15130		15130		15130		15130		15130	
Communities	472	472		472		472		472		472	
Log Likelihood	-5491.28	-5451.41		-5368.68		-5401.49		-5447.66		-5327.71	
AIC	10986.56	10926.82		10773.36		10830.99		10921.32		10697.41	
ICC	0.09	0.06		0.06		0.06		0.06		0.06	
Max FMI	0.00	0.11		0.11		0.11		0.11		0.11	
Average RVI	0.00	0.02		0.01		0.02		0.02		0.02	
$\frac{1}{n} < 0.1 * n < 0.05 ** n < 0.01 *** n < 0.001$											

 $^{^{\}dagger} p < 0.1, ^* p < 0.05, ^{**} p < 0.01, ^{***} p < 0.001$

Figure 4.2.

Caterpillar plot. Random Intercepts in Personal Neighborhood Victimization Unrestricted Model.



the risk of personal victimization.

Collective Efficacy Model. Model 3 incorporates the variables capturing the different collective efficacy constructs. In this case, the residual intraclass correlation (0.06) is similar to the structural-characteristics-only model, but the fit to the data is better ($\chi^2 = 166.45$, p < 0.05). The fixed-effects portion of the model show that, of the three collective efficacy variables in the model, the only variable significantly associated with community-level rates of personal victimization within the neighborhood is community efficacy. Particularly, community efficacy is negatively associated with community rates of personal victimization. For an average individual in an average community, a one-unit increase in community efficacy is associated with a 35% reduced risk of personal victimization. Additionally, the relationship between the variables representing neighborhood structural characteristics (vulnerability and disadvantages)

and personal victimization rates remains non-significant when the collective efficacy variables are included in the model.

Legal Cynicism Model. The legal cynicism model (Model 4) incorporates the legal cynicism variable to the structural characteristics-only model. The community-level explained variation of the legal cynicism model is similar to that of Model 2, and only provides a slightly better fit to the data than model 2 ($\chi^2 = 91.46$, p < 0.05). More importantly, the parameter estimates for the community-level legal cynicism variable is not significant in this model. Legal cynicism appears as important only at the individual level. Thus, the fact that an individual scores higher in legal cynicism places him or her at higher risk of victimization. However, when this effect is controlled for, the level of cynicism among the residents of his or her community do not significantly impact his or her chances of experiencing personal victimization within his or her neighborhood. The parameters of the structural characteristics variables also remain non-significant.

Subculture of Violence Model. Model 5 contains the estimations of the subculture of violence model. In this case, adding the subculture of violence variable to the structural characteristics-only model improves model fit significantly but only marginally (likelihood ratio test $\chi^2 = 7.63$, p < 0.05). Similar to what was observed for the other single-theory models, the residual intraclass correlation of the subculture of violence model is 0.06, indicating that the percent of the between communities variance explained by the model is practically the same as that explained by the structural characteristics-only model.

In this case, the subculture of violence variable is significantly associated with personal neighborhood victimization. A higher level of adherence to a subculture of violence within a particular community is associated with a higher level of personal neighborhood victimization

reported by its residents. A one-unit increase in the subculture of violence score of the community thus increases by 23% an average resident's likelihood of personally experiencing victimization within his or her neighborhood.

Surprisingly, when the subculture of violence variable is added to the model, community vulnerability is significantly associated with personal victimization rates, using a significance level of .10. In this case, the sign of the association is the opposite to that which is typically reported in the literature: household vulnerability is associated with lower rather than higher personal victimization rates within the neighborhood. It is important to highlight that the coefficient of the community vulnerability variable was negative in all previous models, even if it did not achieve statistical significance. This counterintuitive finding warrants further exploration that exceeds the scope of the present study. However, the fact that more vulnerable communities (those with higher proportions of individuals receiving welfare assistance and larger in size) present lower levels of personal victimization could be related to either higher levels of guardianship derived from the larger size of households or to the differential routine activities of those receiving welfare assistance. Further, residents of communities with higher proportions of welfare recipients make less attractive targets, which may reduce their odds of victimization within their neighborhoods.

The fact that this result is observed only for the victimization variable that refers specifically to the experience of victimization within the neighborhood should be also explored. In this regard, it is possible that the neighborhood boundaries that individuals set when responding to this question do not necessarily correspond with those broader limits set by the census designs in which this analysis is based. Absent a clearer definition of neighborhood in the survey questionnaire, the respondents may be setting too narrow boundaries for their

neighborhoods. If neighborhoods are defined as places in which the respondents feel safe and "at home," they may be underreporting neighborhood victimization by setting the victimization experienced outside their "safety zones," conceiving it as out-of-neighborhood victimization, even if it was occurring within the borders of a broader, but still relevant, community.

Full Model. The final estimation (Model 6) incorporates the variables from all the theories considered. In this case, the residual intraclass correlation of 0.06 indicates that the multi-theory model does not account for a larger portion of the community-level variation in personal victimization. However, likelihood ratio tests comparing each single-level theory model with the multi-level theory model clearly show that Model 6 provides a better fit to the data than every single-theory model considered (χ^2 ranges from 74.36 to 233.18, in all cases p < 0.05).

The fixed-effects part of the model shows that community efficacy and subculture of violence retain the significant association with personal victimization rates that they exhibited in the single theory models. The magnitudes of these associations remain practically the same (OR = 0.64 for community efficacy and OR= 1.22 for subculture of violence). Legal cynicism, however, is significantly associated with personal victimization rates within the neighborhood at the community level. The effect of legal cynicism in this case is the opposite of the one observed in the household victimization model and what would be expected from the theory. Thus, controlling for the other community social processes and individual-level characteristics, higher levels of legal cynicism are associated with lower rates of personal neighborhood victimization. Community legal cynicism appears as a protective factor that decreases community's vulnerability to victimization. However, this association is only significant at the .10 level, which suggests that it should be taken with caution.

Although counterintuitive, this finding may reflect the fact that in communities where residents are cynical about the police and the justice system, these residents may be more likely to watch out for each other, especially among immediate neighbors. This protective factor may be bounded only to the narrow limits of the proximate neighborhood and does not extend to the broader community, in which—as the household victimization models show—the likelihood of victimization may be even heightened.

Finally, with regard to the effects, in the full model, of community structural characteristics on personal neighborhood victimization rates, community vulnerability is negatively associated with community rates of personal neighborhood victimization. This finding is similar to that reported in Model 5. Thus, this result provides evidence against the mediation hypothesis and even suggests a potential suppression effect of subculture of violence on household vulnerability. In particular, when subculture of violence is controlled in the model, the true protective effect of community vulnerability on personal victimization rates is revealed. In this case, it is possible that household vulnerability exerts not only a positive and indirect effect on victimization rates through its positive impact on the subculture of violence but also a direct negative effect on crime through mechanisms such as guardianship or lower target attractiveness. Thus, when subculture of violence is included in the model, the net effect of vulnerability on victimization is negative instead of positive. When subculture of violence is not included in the model, the two opposite effects counteract each other, resulting in a null overall effect such as the one shown in the structural characteristics-only model.

CONCLUSION

This chapter has presented the results of the different models estimated. In general, the analyses show the importance of understanding community-level variation of both collective

efficacy and victimization rates. In the South American data examined, substantial variation exists across communities in terms of their victimization rates and their levels collective efficacy. Estimations of the sources of the different components of collective efficacy reveal that the effect of structural characteristics on collective efficacy depends on the type of component that is being studied. Thus, while impoverished communities tend to show diminished levels of trust, their levels of efficacy are heightened.

Analyses of household victimization reveal the ability of collective efficacy to account for differences in household victimization rates across communities. Further, legal cynicism and subculture of violence also appear to add to the explanation of community victimization rates. These three different community characteristics identified by three different theories appear to successfully account for an important portion of the variation in household victimization rates across communities and mediate the relationship between structural characteristics and victimization rates.

The results of the personal neighborhood victimization estimation provide a less straightforward set of conclusions. Lower levels of community efficacy and higher levels of adherence to a subculture of violence within a community appear to increase the level of personal neighborhood victimization within a community. However, community levels of legal cynicism appear to decrease rather than increase community rates of personal neighborhood victimization. Further, community vulnerability also exerts a protective effect on personal neighborhood victimization rates.

The fact that personal neighborhood victimization has a low base rate and that communities vary less in terms of their rates of personal neighborhood victimization may be impacting the results. However, the misalignment between the results from the household

victimization models and the personal neighborhood victimization models warrants further analysis—especially the opposite signs of the effects of the legal cynicism variable encountered between these two models.

Overall, these findings indicate that community-level theories of crime are relatively successful in explaining differences in victimization rates across communities in the current South American sample and account for important portions of the community-level variation in victimization rates. Further, the fact that multi-theory models provide the best fit to the data suggests that each of the three theories considered explains a different portion of the variation in community-level victimization rates. However, the percent of unexplained variance remains relatively high even after incorporating elements from collective efficacy, legal cynicism, and subculture of violence theory, suggesting that though successful in explaining some variation, these theories do not fully capture the complex relationship between communities and crime in South America. Future research should focus on capturing the specific elements that explain community-level differences in crime in South America.

Chapter 5

ASSESSING COLLECTIVE EFFICACY THEORY:

GENERALIZABILITY AND FUTURE DIRECTIONS

Scholarship within the tradition of the Chicago School has helped to consolidate the area of communities and crime within the field of criminology. The expansion of this line of research has been instrumental in increasing the understanding of community-level social processes that explain why certain ecological areas are more vulnerable to crime and experience higher rates of victimization. This dissertation has aimed to expand this understanding in two ways. First, it explored the generalizability of collective efficacy theory—the most influential contemporary perspective from the Chicago School tradition—by testing whether its core proposition explain variation in victimization rates across communities in South America. Second, it sought to advance existing research by incorporating rival cultural theories into an empirical assessment of the collective efficacy approach.

This chapter presents an analysis of the main findings of this dissertation and discusses its implications for research and theory. Further, it proposes new direction for research in communities and crime. To do so, the chapter is organized as follows. First, the hypotheses formulated in Chapter 3 are revisited and assessed in light of the evidence presented in Chapter 4. Second, the generalizability of collective efficacy theory to South America is examined. emphasizing the extent to which components of collective efficacy are generalizable across contexts or have effects specified by the South American context. Third, a case for theoretical integration is made, and the need to incorporate cultural aspects into the study of communities and crime is discussed. Finally, based on the findings of this dissertation, future directions for community-level research on crime are suggested.

THE CURRENT TEST OF COLLECTIVE EFFICACY: ASSESSING THE STUDY HYPOTHESES

To understand more fully the implications of the results presented in Chapter 4, it is important to revisit the original hypotheses formulated in Chapter 2 and to contrast them with the current findings. Below, a summary of the main results is presented and these findings are discussed then in relation to the study hypotheses.

Table 5.1. summarizes the findings presented in Chapter 4. This table conveys the results from the full models that included elements from all three perspectives in this study. The table shows the effects of the variables representing the main constructs of the three theories on household victimization and personal neighborhood victimization rates. Table 5.1 reveals that collective efficacy, legal cynicism, and the subculture of violence theories all explain differences in victimization rates across communities. The results, however, are inconsistent and not always in the predicted direction.

First, for collective efficacy theory, community efficacy and trust were shown to reduce crime. Community efficacy—measured through participation in community-strengthening activities—appears to reduce crime regardless of the dependent variable considered. On the other hand, social trust is only significantly associated with crime in the household victimization model. Public efficacy is not shown to have a significant effect on crime in either model. Second, the table reveals that the effect of legal cynicism on crime depends on the dependent variable considered: it is positively associated with household victimization rates and negatively associated to personal victimization rates. Third, the results indicate that communities characterized by higher levels of approval to violent responses have

Table 5.1.

Summary of Findings

Variable	Household Victimization	Personal Neighborhood Victimization
Collective Efficacy		
Social Trust	DC	NS
Community Efficacy	DC	DC
Public Efficacy	NS	NS
Legal Cynicism	IC	DC
Subculture of Violence	IC	IC

DC = decreases crime; IC = increases crime; NS = not significant

higher crime rates than those where residents do not endorse violence as a means of setting disputes. These results also have implications for this project's hypotheses, which were derived from the literature and listed in Chapter 3. In all five hypotheses are considered.

Hypothesis #1: There will be considerable variation in crime rates across communities in South America.

Support. In line with what is commonly found in United States-based research, there are substantial differences in victimization rates across communities. However, the extent of the variation in victimization that occurs at the community-level depends of the type of dependent variable that is being considered. In this case, household victimization appears to vary more at the community-level than personal neighborhood victimization.

Hypothesis #2: Structural factors will be associated with differences in victimization rates across different geographic units.

Partial support. The relationship between structural characteristics and crime depends on the dependent variable that is being considered. Concentrated disadvantages and household vulnerability are both associated with higher levels of household victimization. The variable of structural disadvantages, however, does not appear significantly associated with personal neighborhood victimization.

Hypothesis #3: *Disadvantaged communities will have lower levels of collective efficacy.*

Partial support. Disadvantaged communities show a lower level of trust but increased levels of community and, to a lesser extent, public efficacy. Thus, the "community" and the "efficacy" portion of the construct do not seem to go together in the communities from this sample. How the different components of collective efficacy relate to each other merits further research.

Hypothesis #4:

A) Collective efficacy will be negatively associated with victimization

Support. Collective efficacy decreases crime. Community efficacy decreases crime in both models, whereas social trust decreases crime in the household victimization model. On the other hand, public efficacy is not significantly associated with crime in either model.

B) Legal cynicism will be associated with higher rates of victimization

Inconclusive support. The effect of legal cynicism of crime is less clear than the effect of the components of other theories in this analysis. In this study, legal cynicism is shown to increase household victimization but to decrease personal neighborhood victimization. More research should be conducted to better unravel the causes of this contradicting effects.

C) Positive attitudes towards violence will be associated with higher victimization rates

Support. Higher levels of adherence to a subculture of violence are associated with more crime. The measure of subculture of violence is positively associated with both household victimization and personal neighborhood victimization.

Hypothesis #5: Collective efficacy, legal cynicism, and positive attitudes towards violence will mediate the relationship between community structural characteristics and victimization rates.

Partial support. Collective efficacy, legal cynicism, and positive attitudes towards violence fully mediate the relationship between community vulnerability and household victimization. Further, they partially mediate the relationship between concentrated disadvantage and household victimization. However, structural characteristics are unrelated to personal neighborhood victimization rates. In this case, rather than mediation, collective efficacy and cultural characteristics—especially subculture of violence—are shown to have suppressing effects on the relationship between vulnerability and personal neighborhood victimization rates. That is, the effect of community structural characteristics on personal neighborhood victimization, which are non-significant in the model including only structural characteristics, achieve statistical significance when collective efficacy and community cultural characteristics are controlled in the model. More research on this topic would help the field understand why vulnerability may be positively associated with crime when collective efficacy and cultural characteristics are controlled for in the estimation. In this sense, the different sources of collective efficacy but also on community cultural characteristics and their interrelation should be further explored.

COLLECTIVE EFFICACY IN A SOUTH AMERICAN CONTEXT

A central purpose of this dissertation was to assess whether mainstream communities and crime theories, developed to account for variations in crime rates across communities in the United States, are generalizable to a South American context. The Chicago School tradition of social disorganization represents the most influential approach to the study of communities and crime in the industrialized world. For that reason, this dissertation chose to focus on assessing the validity of the most prominent contemporary Chicago-style theory—collective efficacy theory (Sampson et al., 1997; Sampson, 2012)—using data from five South American countries. Additionally, this study explored the applicability of two alternative macro-level theories of crime to South America: legal cynicism (Kirk & Papachristos, 2011; Sampson & Jeglum Bartusch, 1998), and subculture of violence (Anderson, 1999; Stewart & Simons, 2010).

In the previous section, the hypotheses set forth previously were discussed in light of the evidence provided in this dissertation. Overall, the findings show that macro-level theories of crime provide valuable insights into the community-level social processes that impact communities' ability to prevent crime in South America. The three theories considered explained an important portion of the variation in victimization rates across communities in South America.

However, the results do not provide full support to all portions of these theories. Some of the findings suggest that the transferability of U.S.-based macro-level theories of crime to the South American context is not straightforward and requires further examination. Efforts should be made to better specify the specific features of communities in South America that explain these counterintuitive results. In this line, it is worth emphasizing three different findings: the sources of collective efficacy, the role of collective efficacy and cultural elements to understand

community variations in crime rates, and the relationship between structural characteristics, social and cultural community characteristics, and crime.

The Different Sources of Collective Efficacy in Latin America

The results indicate that the effect of structural characteristics on collective efficacy is not unequivocal and depends on the dimension being considered. In particular, impoverished communities seem to exhibit lower levels of social trust but higher levels of community—and probably public—efficacy. The positive association between structural disadvantages and community efficacy is aligned with findings from the two studies of social disorganization theory previously conducted in South America. The studies of both Villarreal and Silva (2006) and Cerdá and Morenoff (2013) reported that the pattern of social integration in South America seems to differ from that in the United States. Social cohesion—in Villarreal and Silva's (2006) study—and collective efficacy—in Cerdá and Morenoff's (2013) study—revealed higher, rather than lower, levels in impoverished communities.

Contrary to what is observed in the United States and other industrialized nations, according to these findings, impoverished communities in South America are marked by higher levels of social integration and seem better able to mobilize collectively towards certain communal goals. As both Villarreal and Silva (2006) and Cerdá and Morenoff (2013) point out, the particular history of poor settlements in urban places may explain their higher levels not only of social ties and cohesion but also of collective action. In many countries in Latin America, poor urban squatter settlements were the results of "planned land invasions." These land acquisitions required certain organizational capacity in the community and the ability of local leaders to mobilize political networks to secure resources such as water, building materials,

electricity, roads, and ultimately, land tenure" (Álvarez-Rivadulla, 2012, p. 38; see also Koster, 2012).

The importance of community organization and mobilization in poor communities is not limited only to the settlement history of certain impoverished communities but is a vital element to ensure the subsistence of slum dwellers in contexts of hyper-unemployment and extreme deprivation. Strong "networks of reciprocal help" are well-developed in these contexts and are based on geographical proximity and on friendship and kinship ties (Auyero, 2000). Residents in these impoverished communities develop survival strategies linked with the informal economy sector (or the popular economy), many of which are neighborhood-based and depend on strong ties and interdependence among neighbors (Auyero, 2000; Portes & Haller, 2005; Portes & Schauffler, 1993; Villarreal & Silva, 2006).

Given their tradition of collective action and cooperation, it is not surprising that impoverished communities in the present study exhibit higher levels of community efficacy. More importantly, the intricate relationship between these organized and highly interdependent communities and political brokers in Latin America also has been subjected to theoretical and empirical debate (Álvarez-Rivadulla, 2012; Auyero, 2000; Auyero, Lapegna, & Page Poma, 2009). In contexts marked by the increasing marginalization of unskilled workers from the formal economy and the pauperization of their working conditions, the capacity of the informal networks of self-help to actually provide resources to the community and mitigate the effects of hardened economic conditions decreases. In this situation, political networks gain relevance (Auyero, 2000). As Auyero (2000) notes, political brokers operating within impoverished communities fulfill a vital role in the communities they serve. Members of the political parties work closely with the community residents and help them secure state resources they

increasingly depend on. The closely tied political networks they conform are crucial in facilitating slum residents access to otherwise neglected resources.

In this context, political efficacy—the ability of residents within a community to contact public officials in order to obtain solutions for their problems—becomes crucial. In this study, public efficacy was not associated with victimization rates. However, the measure of public efficacy was comprised of only two items and possibly did not capture the whole range of problems that may be solved by contacting local officials and through public institutions.

Further, public efficacy was significant when community efficacy was not included in the model and that the measure only. In this sense, achieving a better understanding of the relationship between structural disadvantages and community and public efficacy and of the interrelation between these two types of efficacy appears to be a fruitful path for future research aimed at specifying the dynamics of collective efficacy in the South American context.

According to this study's findings, however, not all elements of collective efficacy are more prevalent in impoverished areas. Thus, while community efficacy and public efficacy are higher in disadvantaged communities, social trust appears to be higher in more affluent communities. The finding that efficacy is not fostered equally by social cohesion and trust contradicts Sampson et al.'s (1997) finding regarding the high positive correlation between scales measuring social cohesion and informal social control. It was the high correlation between the social cohesion and trust scales that prompted Sampson and colleagues (1997) to set forth collective efficacy theory, in an effort to make sense of the empirical evidence. In this sample, however, not all dimensions of collective efficacy seem to be clustered together.

Corboz's (2013) study of impoverished communities in Uruguay provides important insights that may help explain this finding. According to her study, the downward mobility

experienced by some working-class sectors increased the geographic proximity of this "new poor" with structurally poor slum dwellers. Faced with this geographic and economic proximity, the newly impoverished sectors resorted to symbolic boundaries that differentiate them from the chronic poor. The chronic poor are represented by these newly impoverished sectors through "a series of moral oppositions, highly reminiscent of hegemonic discourses on the culture of poverty, which cast the chronic poor as dirty, lacking in values, apathetic, disorganized, and responsible for their own poverty" (Corboz, 2013, p. 44). Mistrust and stigmatization may thus be heightened in impoverished communities, even in contexts of high levels of organization and network exchange. Further, more interdependent communities may be more vulnerable to negative encounters between neighbors and conflicting social bonds that may foster social mistrust (Míguez, 2014).

Assessing the Generalizability of Collective Efficacy

The main goal of this dissertation is to assess the generalizability of collective efficacy theory to explain community crime rates in South America. In this regard, the results from the current analysis show that, similar to tests conducted in the United States, collective efficacy is negatively associated with victimization rates at the community level. This finding provides support for collective efficacy theory in a region where previous studies have challenged it. Whereas Villarreal and Silva (2006) and Cerdá and Morenoff (2013) found a non-significant effect of social cohesion and collective efficacy, respectively, on crime, the current study reveals a negative relationship between collective efficacy and crime. Both community efficacy and social trust appear to protect communities from crime. Even though the evidence is weaker for public efficacy, the results suggest that it may be worth further exploring its role when understanding community-level variations in crime.

The difference between the findings reported in previous as opposed to the current analyses may be related to the different operationalization of collective efficacy used here.

Collective efficacy is conceptualized in the current study as a multi-dimensional construct, and its components are introduced separately in the statistical models. Further, instead of measuring shared expectations for control, this dissertation captures the "community" portion of the construct of collective efficacy. That is, it measures actual participation in community-strengthening activities (community efficacy) and active attempts to seek help from public official (public efficacy).

In their study, Cerdá and Morenoff (2013) argue that the lack of crime-reducing effect of collective efficacy may be due to the social isolation faced by impoverished communities, which diminish their capacity to obtain outside resources in order to achieve their communal goals. According to these authors, the lack of "bridging" social capital blocks this capacity and leaves the community defenseless against crime regardless of community internal efforts to control it. The present study includes an explicit—though imperfect—measure of bridging social capital: public efficacy. Thus, it controls for levels of social isolation, which allows the analysis to better disentangle the distinct impact of the different types of efficacy and social trust on variations in community crime rates.

In his study of Argentina, Auyero (2000) shows how local networks of reciprocal help and political networks are closely intertwined in impoverished communities. They both have a crucial role in helping communities achieve higher levels of welfare and access to resources. Further, Auyero and colleagues' (2009) highlight the fact that political brokers may even promote or facilitate collective action. This is an often neglected positive aspect of these types of networks characterized by relationships of patronage and clientelism. Political brokers are

instrumental in connecting local communities with the government and facilitate their access to public resources. Further, they facilitate and promote collective action by validating the demands of local actors and providing resources and information that increase their mobilizing power. By promoting community efficacy—at least in some cases—and helping the community to secure resources to prevent crime, public efficacy can thus have a crime-reducing effect.

Measuring both the ability of the community to organize internally toward common goals and to secure resources from the outside is thus important to capturing more fully how higher levels of collective efficacy may translate into lower community crime rates. Conceptualizing collective efficacy as a multidimensional construct would represent a step forward in the understanding of the community social processes that make some communities better suited than others to successfully engage in crime prevention strategies.

Structural Characteristics and Mediation Effects

The third important finding regarding the generalizability of collective efficacy theory to the South American context has to do with the role of structural characteristics on crime. In this case, data from this study tend to support the mediation hypothesis, especially when taking into consideration the results of the household victimization models. Similar to what occurs in studies conducted in the United States (Armstrong et. al, 2015; Burchfield & Silver, 2013; Morenoff et al, 2001; Sampson et al., 1997), South American disadvantaged communities appear to be particularly vulnerable to crime. Part of this association is explained by differences in organizational and cultural characteristics of more vulnerable communities. Although higher in community and public efficacy, impoverished communities tend to have lower levels of social cohesion. Taken together, these community conditions—as well as legal cynicism and subculture of violence—reduce the association between structural characteristics and household

victimization, indicating that cultural and organizational aspects of communities mediate this relationship.

The results for personal neighborhood victimization are not so straightforward. Structural characteristics are not associated with rates of neighborhood victimization, which seems to suggest that residents of more vulnerable communities report similar rates of victimization in what they identify as their neighborhood as those living in more well-off communities. When the effects of collective efficacy, legal cynicism, and subculture of violence are controlled, those residing in more vulnerable communities are shown to experience lower levels of victimization in their neighborhoods. Community vulnerability, in this case, may have a positive indirect effect in crime through collective efficacy, legal cynicism, and subculture of violence and a negative direct effect on victimization. Communities characterized by larger households and an increased proportion of welfare recipients may be considered less attractive targets due to their impoverished conditions. Further, they may exert higher levels of guardianship within the narrow boundary of the neighborhood. Those two elements may operate as protective factors against neighborhood victimization. Further research should aim at better disentangling these effects. In this regard, the pattern of community structural differentiation in South America should be taken into consideration, rooted in a more specific understanding of the structural constrains faced by these communities and the particular dynamics of residential and social segregation in the region.

More research should be aimed at unpacking the different elements that may explain these diverse findings. In this sense, it is important to explore the differences that exist between household victimization and personal neighborhood victimization. Elucidating whether there is a substantial difference between personal and household victimization or between general

victimization and neighborhood-based victimization is an important task. Further, having a more accurate understanding of the neighborhood boundaries set by each respondent when asked to report on neighborhood victimization could help clarify this issue. Individuals in more closely-knit communities may be more prone to set narrow neighborhood boundaries, closely tied to the extension of their proximal networks and subjective "safe places." Residents in more anonymous communities where face-to-face encounters are more infrequent could tie their definitions of neighborhood to more abstract geographical entities, defined by administrative boundaries. The differences in the geographic scope of the neighborhood may thus explain why those communities that define it more narrowly report lower levels of neighborhood victimization, despite presenting higher levels of victimization in general.

BRINGING CULTURE BACK IN

In addition to exploring the generalizability of collective efficacy theory, this dissertation aimed to advance the area of communities and crime by testing cultural macro-level theories of crime in conjunction with collective efficacy. As discussed in Chapter 1, the development of social disorganization theory was greatly influenced by Kornhauser's (1978) critique of Shaw and MacKay's original formulation. Her appraisal of Shaw and McKay's theory criticized what she viewed as a "mixed-model" approach that incorporated elements from social control and cultural transmission traditions. She rejected this strategy as fatally flawed because it attempted to integrate two traditions that were based on incompatible assumptions (see also Hirschi, 1969). Thus, she proposed to eliminate the cultural transmission component of the theory and elaborate a pure control theory, which she considered to be more accurate and consistent. Her critique marked a turning point in the evolution of social disorganization theory. It helped to revitalize

macro-level research on crime but at the cost of marginalizing culture from subsequent developments of social disorganization theory.

Nowadays, a growing number of scholars have begun to question Kornhauser's narrow definition of culture, seeing it as tied too closely with how culture was conceptualized in structural functionalism theory. Without negating her contribution to the field, these scholars lament how her persuasive writings led to the marginalization of the construct of culture in community theory and research. They now advocate the reincorporation of cultural aspects into macro-level research (Bursik, 2015; Greenberg, 2015; Kubrin & Weitzer, 2003; Matsueda, 2006, 2015).

This dissertation embraced this recommendation by incorporating two cultural theories into the overall test of collective efficacy: legal cynicism (Kirk & Papachristos, 2011; Sampson & Jeglum Bartusch, 1998), and subculture of violence (Anderson, 1999; Stewart & Simons, 2010). The results reveal the value of taking this research path. The models that incorporated variables pertaining to these two different theories provided a better fit to the data than those containing only measures of collective efficacy theory. The results for household victimization also show that the full model accounted for a higher portion of the variance in victimization rates than in a less fully specified analysis. In the personal neighborhood victimization models, however, the increase in explained variance is negligible; still, the fit of the full model is better than that found in the model that only assessed collective efficacy.

In addition to improving the specification of the model, the analysis of the fixed-effect parameters of the aggregated-level variables provides important insights into the understanding of community-level differences in victimization rates. In this sample, the subculture of violence variable was significantly associated with higher household and personal neighborhood

victimization rates. However, legal cynicism was positively associated with household victimization rates but negatively related to personal victimization experienced within the neighborhood. The implications of the results for each of the theories are discussed below.

Legal Cynicism

Legal cynicism's opposite effects household victimization and personal neighborhood victimization are perhaps the most puzzling outcome in this study. In line with Kirk and Papachristos's (2011) findings when studying homicides in Chicago, legal cynicism is associated in this sample with increased rates of household victimization. As suggested by the theory, in communities characterized by a generalized mistrust of the legal system and the law enforcement agents, household victimization rates are higher.

From an attenuated culture perspective, this association may be explained by the fact that when a high portion of residents within a community do not trust law enforcement agents and are cynical regarding the justice system, community values become attenuated and lose their strength as guidance for behavior. The restricted use of conventional values undermines communities' ability to exert social control over their members (Kornhauser, 1978). As observed in the current study, the effect of legal cynicism on victimization is contextual, that is, it operates above and beyond individuals' own levels of legal cynicism.

This finding can also be interpreted from a different conceptualization of culture.

Following Kirk and Papachristos (2011; see also Swidler, 1986), culture can be interpreted more as a perceptual frame that shapes how individuals interpret their own situations and their behavioral options. Culture constrains the spectrum of options available for an individual in a particular situation. In this regard, through the lens of legal cynicism, individuals may interpret certain situations in a way that limits their behavioral responses. For example, absent the

possibility of resorting to the police, they are more likely to respond violently to certain situations. Diminished levels of formal social control may also make residents more vulnerable to victimization and more likely to engage in crime. According to the household victimization model, this seems to be the case in South America.

Legal cynicism, however, may operate in the opposite direction and have a crimereducing effect. The personal neighborhood victimization model shows that, when controlling
for collective efficacy and attitudes towards violence, the level of legal cynicism within a
community reduces the rates of personal victimization occurring within the individual's
neighborhood. In this case, it appears that the lack of faith in the justice system may entice
individuals to resort to their own devices and increase the levels of informal social control within
their proximate neighborhood. It is possible that this enhanced level of social control may be
restricted to a very narrow zone that coincides with what individuals define as their
neighborhood. Thus, individuals in cynical communities may be more zealous of their
proximate space but more likely to be victimized within the broader community. Within the
boundaries of their "safety zones," community residents respect each other's property and
protect themselves from crime. However, outside those zones, they are more likely to be
victimized or enter in conflict with less proximate neighbors.

According to Matsueda (2006), strong and weak ties are not equally distributed across social classes. Specifically, members of the lower classes tend to form stronger ties, whereas those in the middle and upper classes rely more frequently on weak and flexible ties. This distribution leads to a "fragmented lower class, with small isolated pockets of strongly tied groups, which require more time and energy to maintain, and an upper class characterized by diffuse weak ties, requiring less time, but yielding greater information and intellectual

flexibility" (p. 18). This fragmentation of the lower classes and their reliance on strong and proximate ties of solidarity may explain why the effect of legal cynicism on victimization is contingent upon the localization of victimization. Thus, while legal cynicism increases household victimization rates in general, it decreases the victimization that is deemed to occur within the narrow boundary of the proximate neighborhood. Household victimization events likely occur within the community but outside this proximate geographical space of the neighborhood. These narrow spaces are increasingly defended when the state is deemed to be absent or unreliable and residents have to rely on each other to protect themselves from crime.

Whether this finding is idiosyncratic to South American communities should be explored by further research. In Latin America, the police forces were often used by authoritarian governments to repress their population. Currently, even in a context of increasing democratization, the reports of police abuse are still high (Cruz, 2009). In this case, cynical communities may be better suited to defend themselves from crime and even avoid being victimized by police due to such mistrust. Cross-national studies that include measures of police abuse and legal cynicism at the community and country levels may help understanding the situations in which legal cynicism may operate as a protective factor against crime. How the country-level institutional makeup may explain the strength and direction of this association should be further examined.

Subculture of Violence

The findings regarding the role of the subculture of violence on victimization rates are more straightforward but not less relevant. In this case, communities in which residents supported violence at higher rates exhibited higher levels of victimization, regardless of the measure of victimization used.

These results attest to the promise of incorporating cultural elements into the study of crime at the community-level. While legal cynicism has been shown to explain to some extent why certain communities differ in terms of their crime rates, to fully understand the effect of community cultural features in crime it is also important to consider the role of pro-violence cultural codes. This study contributes in this direction by including a variable that measures precisely the level of adherence to a code of violence. This subculture of violence measure captures residents level of approval—or condoning—of certain violent behavioral responses such as a husband hitting his wife because of her being unfaithful, or people resorting to violence to retaliate for a crime or eliminate a threat in their communities. Variables of this sort are seldom included in macro-level studies of crime.

Communities and crime research could benefit from a more complex understanding of the role of culture. In this task, moving beyond a purely functionalist definition of culture as values that orient behavior is needed. The level of penetration of certain scripts of violence within a community may alter how individuals frame situations as well as the behavioral repertoires they have access to and act upon. In this sample, communities in which residents more strongly adhered to this code of violence exhibited higher levels of victimization. Thus, this study presented evidence in favor of that thesis and showed that variation in cultural codes explained a portion of the variation in victimization rates across South American communities.

Community-level quantitative research in the United States incorporating these types of variables is still scarce. Ethnographic studies, such as Anderson's (1999) seminal study of the code of the street, have been of great value in furnishing fresh insights into the reproduction of violence within certain communities. However, these types of studies focus only on communities where violence is more prevalent. Such urban ethnographic accounts thus tend to

"exoticize" the ghetto. The so-called adaptive behaviors of its residents are often presented as "ghetto specific" and seen through the moral lenses of the observer without further discussion or without providing a comparison across different community contexts (Wacquant, 2002).

Further, in some cases, the description of everyday practices lacks a clear articulation between theory and data (Wacquant, 1997).

A more nuanced discussion of the role of culture in promoting violence is needed. In this sense, conceptualizing culture as frames (Swidler, 1986) or toolkits (Sampson & Wilson, 1995) could help scholars in their efforts to explore how community residents construct their own world, interpret events, and give meaning to their actions. Understanding that the ghetto is "organized according to different principles, in response to a unique set of structural and strategic constraints" (Wacquant, 1997 p. 346), as ethnographic accounts reveal, could be of great help in this regard. Quantitative researchers should incorporate these insights and focus on constructing measures aimed at capturing how individuals give meaning, observe, and communicate about their social worlds in order to better understand how and why they behave towards it.

Conclusion

This dissertation shows the value of including cultural aspects into the community-level study of crime. Incorporating measures that capture cultural aspects of communities helps to explain more fully differences in victimization rates across communities and provides important insights into the analysis of crime. Importantly, the two cultural theories that were included in the study—legal cynicism and subculture of violence—were shown to be complementary to collective efficacy rather constituting rival explanations that rendered other perspectives irrelevant. When tested in conjunction with cultural theories, collective efficacy theory retained

its explanatory power, which suggest that each theory accounts for a different portion of the variability in crime rates across communities.

These findings suggest that theoretical integration may prove a fruitful enterprise in communities and crime research. In this regard, it seems advisable to forfeit the view that a clear dichotomy exists between social control and cultural transmission. Fortunately, the field is moving in that direction. Scholars now acknowledge the need to incorporate cultural aspects in the study of crime (Bursik, 1988; Kubrin & Weitzer, 2003; Matsueda, 2015). Even collective efficacy theory, the most prominent contemporary approach to social disorganization, relies on the notion of shared expectations for control, a cognitive cultural aspect (Sampson, 2012). However, a broader set of cultural elements could be explored. For example, explicit measures of cultural codes could enrich the explanation of community-level crime rates. This dissertation contributed to the much-needed research in that direction and showed the gains of following this path.

FUTURE DIRECTIONS

This dissertation has provided an important opportunity to discuss future directions in the study of collective efficacy. As has been shown, expanding the core of collective efficacy theory should involve conducting tests across the world that assess this perspective's generalizability. It also is clear that the inclusion of rival cultural theories improves the capacity of analyses to explain differential crime rates across communities. In addition, collective efficacy theory could benefit from a more refined understanding and operationalization of its core construct: collective efficacy. The value of embarking in this task is discussed below. After a brief introduction, particular attention is given to whether measures of social cohesion and trust should be combined

with measures communities' capacity for action. Further, the suitability of measuring capacity for action through willingness to intervene is debated, and an alternative measure is proposed.

The Empirical Basis of Collective Efficacy Theory

Collective efficacy theory was the emergent product of a serendipitous empirical finding: that a scale measuring social cohesion and trust was highly correlated with a scale measuring informal social control—so much so that including in the same model was precluded by the risk of multicollinearity. When analyzing the PHDCN data, Sampson and colleagues (1997) found that the two constructs measured by these scales, which were supposed to be distinct phenomena, were clustered together across Chicago neighborhoods. Given this finding, they were confronted with the necessity of merging social cohesion/trust and informal social control not just empirically but conceptually. To capture the combination of these two phenomena, they invented the construct of "collective efficacy." In the following two decades, the resulting theory has become the most influential community theory of crime rates.

Of course, this fact does not mean that collective efficacy was not also theoretically grounded. Collective efficacy theory provides an interesting blend between theory and data. Theory guided the PHDCN research design from which this finding emerged and also served to conceptualize and interpret the observed reality. It was the understanding that expectations for control were fostered in contexts of mutual trust and cohesion that gave the theoretical basis to collective efficacy theory (Sampson, 2011, 2012; Sampson et al., 1997).

However, the measurement and even the definition of collective efficacy have not been subjected to much discussion in the literature. Most research is still based on the PHDCN data, where this empirical pattern still holds (Browning, Feinberg, & Dietz, 2004; Browning, 2002;

Maimon & Browning, 2010; Wright & Benson, 2011). Other research has replicated these measures in other cities and contexts with only minor revisions (Armstrong et al., 2015; Cerdá & Morenoff, 2013; Mazerolle et al., 2010; Simons et al., 2005; Sutherland, Brunton-Smith, & Jackson, 2013). In these studies, the measurement of collective efficacy is often taken for granted. Despite some exceptions (see Armstrong et al., 2015, Simons et al, 2005), whether the measure of social cohesion and trust should be combined with a measure of informal social control is seldom given much attention.

Collective Efficacy as a Multidimensional Construct

A more explicit discussion of the components of collective efficacy is needed in the field. First, social cohesion and trust and informal social control—as measured by the PHDCN data—have been shown not to be highly correlated in every setting (Armstrong et al., 2015; Hipp & Wo, 2015). The question persists, however, regarding why this may be the case in some contexts but not others. As Sampson (2006) notes, the fact that two constructs are empirically correlated does not mean they are the same thing. Scholars should ask themselves whether the "collective" and the "efficacy" components of collective efficacy are part of the same phenomenon or are rather two interrelated constructs that impact each other.

In this dissertation, social trust was negatively associated with the community efficacy measure. More importantly, social trust and efficacy were differently associated with structural characteristics. Impoverished communities were shown to exhibit higher levels of efficacy but lower levels of trust. These findings suggest that the high correlation observed in Chicago between the two components of collective efficacy may be idiosyncratic or found only in a limited range of urban areas. A relationship of mutual trust among neighbors may not always be the key to fostering efficacy. While the social trust variable used in this study is measured using

only one item—which makes it somewhat limited—it is shown to be more prevalent in more affluent communities, which were not characterized by higher levels of efficacy.

In their study of neighborhoods in Brazil, Villarreal and Silva (2006) found that social cohesion was higher in impoverished communities. Rather than being a contradictory finding, this apparent paradox may relate to the different ways in which affluent and impoverished communities are bonded together. Matsueda (2006) argues that weak and strong ties are unequally distributed across social classes. While lower-class individuals tend to form strong ties, higher classes are more interconnected through weak ties and rely on a mix of weak and strong ties. This mix of strong and weak ties is what differentiates communities' ability to exercise agency and protect themselves against crime. Different measures of social trust and cohesion may be thus capturing distinct types of bonding across communities. Not every type of bonding appears to be equally efficacious in protecting communities against crime.

If this is the case, the discussion should be focused not so much on the extent to which but on how community residents are tied together. As currently conceptualized, collective efficacy theory has been instrumental in illuminating more fully the type of ties that appear to be more strongly related to reduced crime rates: weak and flexible ties that tend to be more impersonal. These types of ties are more characteristic of contemporary societies and depart from the nostalgic view of "urban village" highlighted by the systemic model. Through this operationalization, collective efficacy was able to move the focus beyond social ties—and their ambivalent role—and set forth a measure—collective efficacy—more likely to survive empirical scrutiny. However, combining social cohesion and trust with informal social control into a single measure may obscure more than clarify the complex interrelation between social ties and informal social control. A more fruitful strategy might be to continue to refine the different

measures of social cohesion and social ties in order to unravel how do they relate to a community capacity for action (their efficacy), the exercise of informal and formal social control that occurs within it, and the differential crime rates it exhibits. The work of Browning et al. (2004), Browning (2009), and of Hawdon and Ryan (2009), developed within the broader notion of "social capital," shows the promise of research in this direction.

Moving Beyond Willingness to Intervene

Second, research should also aim at specifying more fully the relationship between expectations for control and the actual exercise of social control. Thus, it is not clear that the variable of "perceived willingness to intervene" accurately captures how efficacious communities are—that is, the potential for action within a community.

In this dissertation, an alternative operationalization of efficacy was proposed. The two measures used—community efficacy and public efficacy—were more centered in capturing actual problem-solving abilities of the community. Community efficacy was shown to be consistently associated with victimization, which attests to the value of this conceptualization. Public efficacy is deemed to assess a conceptually different aspect of collective efficacy: the capacity of the members of the community to mobilize public resources in order to solve their problems. Public efficacy did not achieve significant results, but this might have been due in part to the use of a limited measure composed of only two dichotomous items. Regardless, more comprehensive measures of these two constructs should be developed in order to explore more completely their potential protective effect on victimization.

In short, the further development and refinement of collective efficacy requires a more nuanced discussion of its different components. When initially developed, the construct of collective efficacy provided a timely response to a theoretical and empirical crossroad and

helped to advance the explanation of crime at the community-level. However, as Sampson (2012) himself acknowledges, collective efficacy theory should be seen more as a guiding framework than as a finished theory. If not subject to more critical scrutiny, it faces the threat of becoming unable to provide sufficient answers to the question of why communities vary in their capacities to protect themselves from crime. Unpacking the different elements that may be impacting such capacities requires a stronger discussion regarding the measures that are being used to assess its central construct. In this sense, this dissertation shows the value of measuring different components of collective efficacy.

CONCLUSION

Using data from 472 communities in five different South American countries this dissertation provided a unique test of collective efficacy theory and alternative macro-level explanations of crime in an understudied setting. Even with some caveats, the results revealed that collective efficacy theory is generalizable to the South American context. In this sample, collective efficacy operated as a protective factor against crime across these communities.

Further, alternative theories of crime—legal cynicism and subculture of violence theory—were shown to provide important insights into the sources of varying victimization rates across communities.

Even with somewhat limited measures, this study made several important contributions to the area of communities and crime. First, it revealed the merit of collective efficacy theory to account for variations in victimization rates in South America. Second, it demonstrated the value of incorporating cultural elements into the study of communities and crime. In this regard, the findings suggest that cultural and control perspectives can be successfully integrated into a more comprehensive understanding of crime. Third, it made a theoretical contribution to the field by

setting forth an alternative operationalization of collective efficacy, which proved to be helpful in illuminating the complex relationship between structural characteristics, the different dimensions of collective efficacy, and victimization rates.

Expanding the scope of collective efficacy theory in the three directions signaled by this research could prove beneficial for research in communities and crime. Carrying out tests of collective efficacy across different settings is vital to gaining a more precise understanding of the elements that shape communities' ability to prevent and control crime. This dissertation shows the value of embarking in this line of research. More international tests should be conducted to help identify when and where the different components of collective efficacy become more or less relevant and in which situations they no longer serve as protective factors from crime. Further, cross-national research should investigate how country-level institutional, economic, and social conditions may shape the extent to which collective efficacy serves as a useful resource in communities' efforts to protect themselves against crime.

Finally, this dissertation reveals the importance of undertaking community-level theory and research as a vital part of the criminological enterprise. Although the writings of the Chicago School scholars extend back nearly a century, their insights remain salient today. Individuals are not atomistic actors that make choices, including criminal choices, independent of the context in which they are enmeshed. Communities have an emergent quality—they are more than the sum of their parts—and they create contexts that may facilitate crime by undermining social control and fostering cultural cognitions that reject prosocial solutions to problems and create criminal opportunities. As Sampson and others have illuminated, however, communities may also nourish collective efforts at problem solving and thus foster crime prevention. In this light, the Chicago School—whether through its more distant theorists such as

Clifford Shaw and Henry McKay or more contemporary such as Robert Sampson—remains a dynamic perspective that enriches our understanding of why crime rates vary across urban neighborhoods. The Chicago tradition is best honored not by rigid allegiance to past ideas but to efforts to elaborate existing insights and to test them rigorously. It is hoped that this dissertation has made just such a contribution.

REFERENCES

- Agnew, R. (2011). Toward a unified criminology: Integrating assumptions about crime, people and society. New York: NYU Press.
- Agnew, R., & Cullen, F. T. (2015). Challenging Kornhauser's critique of strain theory. In F. T. Cullen, P. Wilcox, R. J. Sampson, & B. D. Dooley (eds.), *Challenging criminological theory: The legacy of Ruth Rosner Kornhauser—Advances in criminological theory* (Vol. 19, pp. 145-164). New Brunswick, NJ: Transaction.
- Agresti, A. (2002). Categorical Data Analysis. Hoboken, NJ: John Wiley.
- Akers, R. L. (1996). Is differential association/social learning cultural deviance theory? *Criminology*, *34*, 229–247.
- Akers, R. L. (1998). Social learning and social structure: A general theory of crime and deviance. Boston MA: Northeastern University Press.
- Akers, R. L., Krohn, M. D., Lanza-Kaduce, L., & Marcia Radosevich. (1979). Social learning and deviant behavior: A specific test of a general theory. *American Sociological Review*, 44, 636–655.
- Álvarez-Rivadulla, M. J. (2012). Clientelism or something else? Squatter politics in Montevideo. *Latin American Politics and Society*, *54*, 37–63
- Anderson, E. (1999). *Code of the street: Decency, violence, and the moral life of the inner city.* New York, NY: W.W. Norton.
- Armstrong, T. A., Katz, C. M., & Schnebly, S. M. (2015). The relationship between citizen perceptions of collective efficacy and neighborhood violent crime. *Crime & Delinquency*, 61, 121–142.
- Auyero, J. (2000). The logic of clientelism in Argentina: An ethnographic account. *Latin American Research Review*, 35, 55–81.
- Auyero, J., Lapegna, P., & Page Poma, F. (2009). Patronage politics and contentious collective action: A recursive relationship. *Latin American Politics and Society*, *51*, 1–31.
- Bellair, P. E. (1997). Social interaction and community crime: Examining the importance of neighbor networks. *Criminology*, *3*, 677–704.
- Brezina T., Agnew R., Cullen F. T., Wright J. P. The code of the street: A quantitative assessment of Elijah Anderson's subculture of violence thesis and its contribution to youth violence research. *Youth Violence and Juvenile Justice*, *3*, 303–328.

- Browning, C. R. (2002). The span of collective efficacy: Extending social disorganization theory to partner violence. *Journal of Marriage and Family*, 64, 833–850.
- Browning, C. R. (2009). Illuminating the downside of social Capital. *American Behavioral Scientist*, 52, 1556–1578.
- Browning, C. R., & Jackson, A. L. (2013). The social ecology of public space: Active streets and violent crime in urban neighborhoods. *Criminology*, 51, 1009–1043.
- Browning, C. R., Feinberg, S. L., & Dietz, R. D. (2004). The paradox of social organization: networks, collective efficacy, and violent crime in urban neighborhoods. *Social Forces*, 83, 503–534.
- Bruinsma, G. J. N., Pauwels, L. J. R., Weerman, F. M., & Bernasco, W. (2013). Social disorganisation, social capital, collective efficacy and the spactial distribution of crime and offenders: An Empirical Test of Six Neighbourhood Models for a Dutch City. *British Journal of Criminology*, 53, 942–963.
- Burchfield, K. B., & Silver, E. (2013). Collective efficacy and crime in Los Angeles neighborhoods: Implications for the latino paradox. *Sociological Inquiry*, 83, 154–176.
- Burgess, E. W. (1925). The growth of the city: An introduction to a research project. In R. E. Park & E. W. Burgess (eds.), *The city* (pp. 47–62). Chicago, IL: University of Chicago Press.
- Bursik, R. J. & Webb J. (1982). Community change and patterns of delinquency. *American Journal of Sociology*, 88, 24–42.
- Bursik, R. J. (1988). Social disorganization and theories of crime and delinquency: Problems and prospects. *Criminology*, 26, 519–552.
- Bursik, R. J. (1999). The informal control of crime through neighborhood networks. *Sociological Focus*, 32, 85–97.
- Bursik, R. J. (2015). Social structure, culture and crime: Assessing Kornhauser's challenge to criminology. In F. T. Cullen, P. Wilcox, R. J. Sampson, & B. D. Dooley (eds.), *Challenging criminological theory: The legacy of Ruth Rosner Kornhauser—Advances in criminological theory* (Vol. 19, pp. 105-116). New Brunswick, NJ: Transaction.
- Cerdá, M., & Morenoff, J. D. (2013). *Investigating the influence of neighborhood context on levels of violence in Medellín and Chicago*. Retrieved from Princeton website: http://paa2007.princeton.edu/papers/72030
- Cerdá, M., Morenoff, J. D., Hansen, B. B., Tessari Hicks, K. J., Duque, L. F., Restrepo, A., & Diez-Roux, A. V. (2012). Reducing violence by transforming neighborhoods: A natural experiment in Medellín, Colombia. *American Journal of Epidemiology*, 175, 1045–1053.

- Clark, P., Crawford, C., Steele, F., & Vignoles, A. (2010). *The choice between fixed and random effects models: Some considerations for educational research* (Discussion paper No. 5287), Bonn, Germany. Retrieved from Institute for the Study of Labor website: http://ftp.iza.org/dp5287.pdf
- Coleman, J. S. (1990). *Foundations of social theory*. Cambridge, MA: Belknap Press of Harvard University Press.
- Coleman, J. S. (1994). A vision for sciology. Society (November), 29–31.
- Corboz, J. (2013). Asentamientos and cantegriles: New poverty and the moral dangers of proximity in Uruguayan squatter settlements. *Latin American Research Review*, 48, 44–62.
- Costello, B. J. (1997). On the logical adequacy of cultural deviance theories. *Theoretical Criminology*, 1, 403–428.
- Costello, B. J. (1998). The remarkable persistence of a flawed theory: A rejoinder to Matsueda. *Theoretical Criminology*, 2, 85–92.
- Cullen F.T. (2011). Beyond adolescence-limited criminology: Choosing our future—the American Society of Criminology 2010 Sutherland address. *Criminology*, 26, 287–330.
- Cullen, F. T., & Wilcox, P. (2015). Introduction: The legacy of Ruth Rosner Kornhauser. In F. T. Cullen, P. Wilcox, R. J. Sampson, & B. D. Dooley (eds.), *Challenging criminological theory: The legacy of Ruth Rosner Kornhauser—Advances in criminological theory* (Vol. 19, pp. 1-19). New Brunswick, NJ: Transaction.
- Cullen, F. T., Jonson, C. L., Myer, A. J., & Adler, F. (2011). Introduction: Preserving the origins of American Criminology. In F. T. Cullen, C. L. Jonson, A. J. Myer, & F. Adler (eds.), *The Origins of American Criminology—Advances in criminological theory* (Vol. 16, pp. 1–14). New Brunswick, NJ: Transaction
- Cullen, F. T., Wilcox, P., Sampson, R. J., & Dooley, B. D. (eds). (2015). *Challenging criminological theory: The legacy of Ruth Rosner Kornhauser—Advances in criminological theories, Vol. 19.* New Brunswick, NJ: Transaction.
- de Leeuw, J. & Meijer, E. (2010). Introduction to multilevel analysis. In J. de Leeuw & E. Meijer (eds.), Handbook of *multilevel analysis* (pp. 1–75). New York, NY: Springer.
- Duncan, T. E., Duncan, S. C., Okut, H., Strycker, L. a, & Hix-Small, H. (2003). A Multilevel Contextual Model of Neighbourhood Collective Efficacy. *American Journal of Community Psychology*, 32, 245–252.
- Durkheim, E. (1893/1984) The division of labor in society. New York, NY: Free Press

- Fagan, A. A., & Wright, E. M. (2012). The effects of neighborhood context on youth violence and delinquency: Does gender matter? *Youth Violence and Juvenile Justice*, 10, 64–82.
- Fagan, A. A., Wright, E. M., & Pinchevsky, G. M. (2013). The protective effects of neighborhood collective efficacy on adolescent substance use and violence following exposure to violence. *Journal of Youth and Adolescence*, 43, 1498–1512.
- Garcia, R. M., Taylor, R. B., & Lawton, B. A. (2007). Impacts of violent crime and neighborhood structure on trusting your neighbors. *Justice Quarterly*, 24, 679–704.
- Gottfredson, M. R., & Hindelang, M. J. (1981). Sociological aspects of criminal victimization. *Review Literature and Arts of the Americas*, 7, 107–128.
- Greenberg, D. F. (2015). The contested place of motivation in criminological theory. In F. T. Cullen, P. Wilcox, R. J. Sampson, & B. D. Dooley (eds.), Challenging criminological theory: The legacy of Ruth Rosner Kornhauser—Advances in criminological theory (Vol. 19, pp. 301-360). New Brunswick, NJ: Transaction.
- Greenberg, S., William, M. R., & Williams, J. R. (1982). Safe and secure neighborhoods: Physical characteristics and informal territorial control in high and low crime neighborhoods. Washington, DC: National Institute of Justice.
- Hannerz, U. (2004). *Soulside: Inquiries into ghetto culture and community*. Chicago, IL: University of Chicago.
- Hawdon, J., & Ryan, J. (2009). Social capital, social control, and changes in victimization rates. *Crime & Delinquency*, 55, 526–549.
- Hedayati Marzbali, M., Abdullah, A., Razak, N. A., & Maghsoodi Tilaki, M. J. (2014). Examining social cohesion and victimization in a Malaysian multiethnic neighborhood. *International Journal of Law, Crime and Justice, 42,* 384–405.
- Hipp, J. R., & Wo, J. C. (2015). Collective efficacy and crime. In *International encyclopedia of social & behavioral sciences* (Second Edition, Vol. 4, pp. 169–173). Elsevier.
- Hirschi, T. (1969). Causes of delinquency. Berkeley: University of California Press.
- Hirschi, T. (1996). Theory without ideas: Reply to Akers. Criminology, 34, 249–256.
- Hofmann, D. a, & Gavin, M. B. (1998). Centering decisions in hierarchical linear models: Implications for research in organizations. *Journal of Management*, 24, 623–641.
- Jiang, S., Land, K. C., & Wang, J. (2013). Social ties, collective efficacy and perceived neighborhood property crime in Guangzhou, China. Asian Journal of Criminology, 207– 223.

- Jiang, S., Wang, J., & Lambert, E. (2010). Correlates of informal social control in Guangzhou, China neighborhoods. *Journal of Criminal Justice*, *38*, 460–469.
- Kasarda, J. D., & Janowitz, M. (1974). Community attachment in mass society. *American Sociological Review*, 39, 328–339.
- Kirk, D. S., & Matsuda, M. (2011). Legal cynicism, collective efficacy, and the ecology of arrest. *Criminology*, 49, 443–472.
- Kirk, D. S., & Papachristos, A. V. (2011). Cultural mechanisms and the persistence of neighborhood violence. *American Journal of Sociology*, 116, 1190–1233.
- Kirk, D. S., & Papachristos, A. V. (2015). Concentrated disadvantage, the persistence of legal cynicism, and crime: Revisiting the conception of "culture" in criminology. In F. T. Cullen, P. Wilcox, R. J. Sampson, & B. D. Dooley (eds.), *Challenging criminological theory: The legacy of Ruth Rosner Kornhauser--Advances in criminological theory* (Vol. 19, pp. 259-274). New Brunswick, NJ: Transaction.
- Kornhauser, R. R. (1978). *Social sources of delinquency. An appraisal of analytic models.* Chicago, IL: University of Chicago Press.
- Koster, M. (2012). Mediating and getting "burnt" in the gap: Politics and brokerage in a Recife slum, Brazil. *Critique of Anthropology*, 32, 479–497.
- Kubrin, C. E., & Weitzer, R. (2003). New directions in social disorganization theory. *Journal of Research in Crime and Delinquency*, 40, 374–402.
- Latin American Public Opinion Project (LAPOP). (2012 & 2014) *The AmericasBarometer*. Available online at www.LapopSurveys.org.
- Lauritsen, J. L., & Rezey, M. L. (2013). *Technical report: Measuring the prevalence of crime with the National Crime Victimization Survey*. Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics.
- Little, R. J. A. (1988). A test of missing completely at random for multivariate data with missing values. *Journal of the American Statistical Association*, 83, 1198–1202.
- Macdonald, J., Stokes, R. J., Grunwald, B., & Bluthenthal, R. (2013). The privatization of public safety in urban neighborhoods: Do business improvement aistricts reduce violent crime among adolescents? *Law and Society Review*, 47, 621–652.
- Maimon, D., & Browning, C. R. (2010). Unstructured socializing, collective efficacy, and violent behavior among urban youth. *Criminology*, 48, 443–474.

- Maimon, D., & Browning, C. R. (2012). Adolescents' violent victimization in the neighbourhood: Situational and contextual determinants. *British Journal of Criminology*, 52, 808–833.
- Mair, C., Diez Roux, A. V., & Morenoff, J. D. (2010). Neighborhood stressors and social support as predictors of depressive symptoms in the Chicago Community Adult Health Study. *Health and Place*, 16, 811–819.
- Matsueda, R. L. (1988). The current state of differential association theory. *Crime and Delinquency*, *34*, 277–306.
- Matsueda, R. L. (1997). Cultural deviance theory: The remarkable persistence of a flawed term. *Theoretical Criminology, 1,* 429–452.
- Matsueda, R. L. (2006). Differential social organization, collective action, and crime. *Crime, Law and Social Change, 46*, 3–33.
- Matsueda, R. L. (2015). Social structure, culture, and crime: Assessing Kornhauser's challenge to criminology. In F. T. Cullen, P. Wilcox, R. J. Sampson, & B. D. Dooley (eds.), *Challenging criminological theory: The legacy of Ruth Rosner Kornhauser--Advances in criminological theory* (Vol. 19, pp. 117-143). New Brunswick, NJ: Transaction.
- Matsueda, R. L., Drakulich, K., & Kubrin, C. E. (2006). Race and neighborhood codes of violence. In R. D. Peterson, L. J. Krivo, & J. Hagan (eds.), *The many colors of crime: Inequalities of race, ethnicity, and crime in America* (pp. 334-356). New York, NY:New York University Press.
- Matza, D. (1969). Becoming deviant. Englewood Cliffs, NJ: Prentice Hall.
- Mazerolle, L., Wickes, R., & McBroom, J. (2010). Community variations in violence: The role of social ties and collective efficacy in comparative context. *Journal of Research in Crime and Delinquency*, 47, 3–30.
- Meier, M. H., Slutske, W. S., Arndt, S., & Cadoret, R. J. (2008). Impulsive and callous traits are more strongly associated with delinquent behavior in higher risk neighborhoods among boys and girls. *Journal of Abnormal Psychology*, 117, 377–385.
- Merton, R. K. (1938). Social structure and anomie. American Sociological Review, 5, 678-682.
- Messner, S. F., Rosenfeld, R., & Baumer, E. P. (2004). Dimensions of social capital and rates of criminal homicide. *American Sociological Review*, 69, 882–903.
- Míguez, D. (2014). Social disorganization and neighborhood crime in Argentine shantytowns. *International Journal of Criminology and Sociology*, *3*, 300–308.

- Morenoff, J. D. (2003). Neighborhood mechanisms and the spatial dynamics of birth weight. *American Journal of Sociology*, 108, 976–1017.
- Morenoff, J. D., Sampson, R. J., & Raudenbush, S. W. (2001). Neighborhood inequality, collective efficacy, and the spatial dynamics of urban violence. *Criminology*, 39, 517–558.
- Nix, J., Wolfe, S. E., Rojek, J., & Kaminski, R. J. (2015). Trust in the police: The influence of procedural justice and perceived collective efficacy. *Crime & Delinquency*, 61, 610–640.
- Peugh, J. L. (2010). A practical guide to multilevel modeling. *Journal of School Psychology*, 48, 85–112.
- Pfohl, S. J. (1985). Images of deviance and social control. New York: McGraw-Hill
- Portes, A. (1998). Social capital: Its origins and applications in modern sociology. *Annual Review of Sociology*, 24, 1–24.
- Portes, A. (2000). The Two meanings of social capital. Sociological Forum, 15, 1–12.
- Portes, A., & Haller, W. (2005). The informal economy. In N. J. Smelser & R. Swedberg (eds.), *The handbook of economic sociology* (2nd Ed. , pp. 403-425). New York: Princeton University Press.
- Portes, A., & Schauffler, R. (1993). Competing perspectives on the Latin American informal sector. *Population and Development Review*, 19, 33–60.
- Portes, A., & Sensenbrenner, J. (1993). Embeddedness and immigration: notes on the social determinants of economic action. *American Journal of Sociology*, 98, 1320–1350.
- Pratt, T. C., & Cullen, F. T. (2005). Assessing macro-level predictors and theories of crime: A meta-analysis. In M. Tonry (Ed.), *Crime and justice: A review of research* (Vol. 32, pp. 373–450). Chicago, IL: University of Chicago Press.
- Rhineberger-Dunn, G. M., & Carlson, S. M. (2011). An analysis of the mediating effects of social relations and controls on neighborhood crime victimization. *Western Criminology Review*, 12, 15–34.
- Rosenfeld, R., Messner, S. F., & Baumer, E. P. (2001). Social capital and homicide. *Social Forces*, 80, 283–309.
- Sampson, R. J. (1987). Urban black violence: The effect of male joblessness and family disruption. *American Journal of Sociology*, *93*, 348–382.
- Sampson, R. J. (1988). Local frienship ties and community attachment in mass society: A multilevel systemic model. *American Sociological Review*, *53*, 766–799.

- Sampson, R. J. (2002). New directions in community research, Chicago style. *Criminology*, 40, 213–230.
- Sampson, R. J. (2006). Collective efficacy theory: Lessons learned and directions for future research. In: F. T. Cullen, J. P. Wright, K. R. Blevins (eds.). *Taking stock: The status of criminological theory–Advances in criminological theory* (Vol. 15, pp. 149–167). New Brunswick, NJ: Transaction.
- Sampson, R. J. (2011). Communities and crime revisited: Intellectual trajectory of a Chicago School education. In F. T. Cullen, C. L. Jonson, A. J. Myer, & F. Adler (eds.), *The origins of American criminology—Advances in criminological theory* (Vol. 16, pp. 63–85). New Brunswick, NJ: Transaction.
- Sampson, R. J. (2012). *Great American city: Chicago and the enduring neighborhood effect.* Chicago, IL: University of Chicago Press.
- Sampson, R. J., & Bean, L. (2006). Cultural mechanisms and killing fields: A revised theory of community-level racial inequality. In R. D. Peterson, L. J. Krivo, & J. Hagan (eds.). *The many colors of crime: Inequalities of race, ethnicity, and crime in America*. New York: NYU Press.
- Sampson, R. J., & Graif, C. (2009). Neighborhood social capital as differential social organization: Resident and leadership dimensions. *American Behavioral Scientist*, *52*, 1579–1605
- Sampson, R. J., & Groves, W. B. (1989). Community structure and crime: Testing social-disorganization theory. *American Journal of Sociology*, *94*, 774–802.
- Sampson, R. J., & Jeglum-Bartusch, D. (1998). Legal cynicism and (subcultural?) tolerance of deviance: The neighborhood context of racial differences. *Law and Society Review*, *32*, 777–804.
- Sampson, R. J., & Wikström. P. H. (2008). The Social Order of Violence in Chicago and Stockholm Neighborhoods: A Comparative Inquiry. In I. Shapiro, S. Kalyvas and T. Masoud (eds.), *Order, Conflict, and Violence*. New York, NY: Cambridge University Press.
- Sampson, R. J., & Wilson, W. J. (1995). Toward a Theory of Race, Crime, and Urban Inequality. In J. Hagan & R. D. Peterson (eds.), *Crime & Inequality*. Stanford CA: Stanford University Press.
- Sampson, R. J., Morenoff, J. D., & Earls, F. (1999). Beyond social capital: Spatial dynamics of collective efficacy for children. *American Sociological Review*, 64, 633–660.
- Sampson, R. J., Morenoff, J. D., & Raudenbush, S. W. (2005). Social anatomy of racial and ethnic disparities in violence. *American Journal of Public Health*, 95, 224–32.

- Sampson, R. J., Raudenbush, S. W., & Earls, F. (1997). Neighborhoods and violent crime: a multilevel study of collective efficacy. *Science*, 277, 918–924.
- Shaw, C. R. (1930). *The jack-roller: A delinquent boy's own story*. Chicago, IL: University of Chicago Press.
- Shaw, C. R., & McKay, H. D. (1942). *Juvenile delinquency and urban areas*. Chicago, IL: University of Chicago Press.
- Silver, E., & Miller, L. L. (2004). Sources of informal social control in Chicago neighborhoods. *Criminology*, 42, 551–583.
- Simons, R. L., Simons, L. G., Burt, C. H., Brody, G. H., & Cutrona, C. (2005). Collective efficacy, authoritative parenting and delinquency: A longitudinal test of a model integrating community- and family-level processes. *Criminology*, 43, 989–1029.
- Snodgrass, J. (1976). Clifford R. Shaw and Henry D. McKay: Chicago criminologists. *British Journal of Criminology*, 16, 1–19.
- StataCorp. (2013). Stata: Release 13. Statistical software. College Station, TX: StataCorp LP.
- Steele, F. (2008). *Module 5 (concepts): Introduction to multilevel modelling concepts.* Centre for Multilevel Modelling, University of Bristol. 1–45.
- Steele, F. (2009). *Module 7: Multilevel models for binary responses concepts*. Centre for Multilevel Modelling, University of Bristol, 1–41.
- Stewart, E. A., & Simons, R. L. (2006). Structure and culture in African American adolescent violence: A partial test of the "code of the street" thesis. *Justice Quarterly*, 23, 1–33.
- Stewart, E. A., & Simons, R. L. (2010). Race, code of the street, and violent delinquency: A multilevel investigation of neighborhood street culture and individual norms of violence. *Criminology*, 48, 569–605.
- Stewart, E. A., Schreck, C. J., & Simons, R. L. (2006). "I ain't gonna let no one disrespect me": Does the code of the street reduce or increase violent victimization among african american adolescents? *Journal of Research in Crime and Delinquency*, 43, 427–458.
- Sutherland, A., Brunton-Smith, I., & Jackson, J. (2013). Collective efficacy, deprivation and violence in London. *British Journal of Criminology*, *53*, 1050–1074.
- Sutherland, E. H. (1947). Principles of criminology. 4th ed. Chicago, IL: J.B. Lippincott.
- Swatt, M. L., Varano, S. P., Uchida, C. D., & Solomon, S. E. (2013). Fear of crime, incivilities, and collective efficacy in four Miami neighborhoods. *Journal of Criminal Justice*, 41, 1–11.

- Swidler, A. (1986). Culture in action: Symbols and strategies. *American Sociological Review*, *51*, 273–286.
- Teachman, J., & Crowder, K. (2002). Multilevel models in family research: Some conceptual and methodological issues. *Journal of Marriage and Family*, *64*, 280–294.
- Thrasher, F. M. (1927). *The gang: A study of 1,313 gangs in Chicago*. Chicago, IL: University of Chicago Press.
- Vélez, M. B. (2001). The role of public social control in urban neighborhoods: A multilevel analysis of victimization risk. *Criminology*, *39*, 837-864.
- Venkatesh, S. A. (1997). The social organization of street gang activity in an urban ghetto. *The American Journal of Sociology*, 103, 82–111.
- Veysey, B. M., & Messner, S. F. (1999). Further testing of social disorganization theory: An elaboration of Sampson and Groves's "Community structure and crime." *Journal of Research in Crime and Delinquency*, 36, 156–174.
- Villarreal, A., & Silva, B. F. A. (2006). Social cohesion, criminal victimization and perceived risk of crime in Brazilian neighborhoods. *Social Forces*, 84, 1725–1753.
- Wacquant, L. (1997). Three pernicious premises in the study of the American ghetto. *Events and Debates*. Malden, MA: Blackwell Publishers.
- Wacquant, L. (2002). Scrutinizing the street: Poverty, morality, and the pitfalls of urban ethnography. *American Journal of Sociology*, 107, 1468–1532.
- Warner, B. D. (2003). The role of attenuated culture in social disorganization theory. *Criminology*, 41, 73–98.
- Warner, B. D. (2007). Directly intervene or call the authorities? A study of forms of neighborhood social control within a social disorganization framework. *Criminology*, 45, 99–129.
- Warner, B. D., & Wilcox Rountree, P. (1997). Local social ties in a community and crime model: Questioning the systemic nature of informal social control. *Social Problems*, 44, 520–536.
- Wells, W., Schafer, J. A., Varano, S. P., & Bynum, T. S. (2006). Neighborhood residents' production of order: The effects of collective efficacy on responses to neighborhood problems. *Crime & Delinquency*, 52, 523–550.
- White, I. R., Royston, P., & Wood, A. M. (2011). Multiple imputation using chained equations: Issues and guidance for practice. *Statistics in Medicine*, 30, 377–399.

- Wilcox Rountree, P., & Warner, B. D. (1999). Social ties and crime: Is the relationship gendered? *Criminology*, *37*, 789–814.
- Wilcox, P., Cullen, F. T., & Feldmeyer, B. (in press). *Communities and crime: An enduring* American challenge. Philadelphia, PA: Temple University Press.
- Wilson, W. J. (1987). *Truly disadvantaged: The inner city, the underclass, and public policy*. Chicago, IL: University Of Chicago Press.
- Wright, E. M., & Benson, M. L. (2011). Clarifying the effects of neighborhood context on violence "behind closed doors." *Justice Quarterly*, 28, 775–798.
- Wright, E. M., Pinchevsky, G. M., Benson, M. L., & Radatz, D. L. (2015). Intimate Partner Violence and Subsequent Depression: Examining the Roles of Neighborhood Supportive Mechanisms. *American Journal of Community Psychology*, 56, 342–356.
- Wu, Y.-W. B., & Wooldridge, P. J. (2005). The impact of centering first-level predictors on individual and contextual effects in multilevel data analysis. *Nursing Research*, *54*, 212–216.
- Young, R., & Johnson, D. (2011). Imputing the missing Y's: Implications for survey producers and survey users. In *Proceedings of the AAPOR Conference Abstracts* (pp. 6242–6248).
- Zhang, L., Messner, S. F., & Liu, J. (2007). A multilevel analysis of the risk of household burglary in the city of Tianjin, China. *British Journal of Criminology*, 47, 918–937.
- Zimmerman, G. M. (2010). Impulsivity, Offending, and the Neighborhood: Investigating the Person–Context Nexus. *Journal of Quantitative Criminology*, 26, 301–332.