

# University of Cincinnati

Date: 6/22/2012

I, Kristin Swartz, hereby submit this original work as part of the requirements for the degree of Doctor of Philosophy in Criminal Justice.

It is entitled:

**"Code of the Hallway": Examining the Contextual Effects of School Subculture on Physical Violence, Sexual Offending, and Nonviolent Delinquency**

Student's name: **Kristin Swartz**

This work and its defense approved by:

Committee chair: Pamela Wilcox, PhD

Committee member: Graham C. Ousey, PhD

Committee member: Francis Cullen, PhD

Committee member: Christopher Sullivan, PhD



2750

Code of the Hallway:  
Examining the Contextual Effects of School Subculture on Physical Violence,  
Sexual Offending, and Non-Violent Delinquency

A dissertation submitted to the  
Graduate School  
of the University of Cincinnati  
in partial fulfillment of the  
requirements for the degree of

Doctor of Philosophy

in the Department of Criminal Justice  
of the College of Education, Criminal Justice, and Human Services

by

Kristin Swartz

M.S. University of Cincinnati, 2007

June 2012

Committee Chair: Pamela Wilcox, Ph. D.

Committee Members: Francis T. Cullen, Ph.D.

Christopher J. Sullivan, Ph.D.

Graham C. Ousey, Ph.D.

## **ABSTRACT**

This dissertation draws upon the subculture perspective that previously has been used to explain variation in crime across communities. It applies this perspective to schools in order to explore whether schools serve as an important context of cultural variation. That is, this dissertation examines how the subculture of a school—that is, its “code of the hallway”—may influence students’ behavior, including delinquency. Further this dissertation assesses whether the school subculture has differential effects on delinquency that occurs in school compared to out of school, whether its influences are specific to physical violence or more general, and whether the influences are gendered. The data used comes from a NIDA funded project and consists of 3,976 students who provided data in at least one of the four waves. The students were embedded within a total of 115 unique school contexts. The analytic strategy used is hierarchical linear modeling due to having students nested within schools non-randomly. The analysis supports that for some types of offending school-level subculture is significant and that the “code of the hallway” does influence out-of-school behavior for some types of offending. Also, school-level subculture is more important in explaining male offending compared to female offending. Limitations of the data and methods used are discussed, as well as, directions for future research.



<b>ACKNOWLEDGEMENTS .....</b>	<b>III</b>
<b>CHAPTER 1. INTRODUCTION TO THE PROBLEM: THE SCHOOL AS A STAGING AREA FOR VIOLENCE.....</b>	<b>1</b>
VIOLENCE AND VICTIMIZATION AMONG ADOLESCENT YOUTH .....	2
<i>Oppositional Culture and School Violence.....</i>	3
THE PRESENT STUDY .....	5
<i>Overview of Chapters to Follow .....</i>	7
<b>CHAPTER 2. THEORETICAL OVERVIEW: COMMUNITY CULTURE AND CRIME .....</b>	<b>8</b>
THE ORIGINS OF SOCIAL DISORGANIZATION THEORY .....	8
KORNHAUSER’S RECONCEPTUALIZATION OF SOCIAL DISORGANIZATION THEORY .....	11
THE SYSTEMIC MODEL.....	14
<i>The Theory .....</i>	14
<i>Empirical Evidence of the Systemic Model.....</i>	16
<i>Conditions and Caveats Regarding the Effects of Social Ties .....</i>	19
<i>Collective Efficacy: A Response to the Conditional Effects of Social Ties .....</i>	22
<i>Empirical Evidence on Collective Efficacy .....</i>	24
CONCENTRATED DISADVANTAGE AND SOCIAL DISORGANIZATION THEORY .....	28
<i>The Birth of Concentrated Disadvantage.....</i>	28
<i>Concentrated Disadvantage and Cultural Disorganization.....</i>	30
THE CULTURE PERSPECTIVE THROUGH THE EYES OF ELIJAH ANDERSON .....	35
<i>The Emergence of the Code .....</i>	35
<i>Campaigning for Respect.....</i>	36
<i>Decent and Street Families .....</i>	39
<i>Empirical Review of the “Code” and its Effects .....</i>	43
SUMMARY .....	54
<b>CHAPTER 3. THE SCHOOL AS A CONTEXT FOR SUBCULTURE .....</b>	<b>56</b>
THE CODE OF THE HALLWAY .....	56
STRUCTURAL AND ORGANIZATIONAL SCHOOL-BASED EFFECTS .....	58
COMMUNITY SUBCULTURE, SCHOOL SUBCULTURE, VIOLENT AND NON-VIOLENT OFFENDING ...	64
<i>Potential Gendered Effects of Subculture .....</i>	67
<i>Quantitative Research on School Subculture and Delinquency.....</i>	68
RESEARCH QUESTIONS .....	73
<b>CHAPTER 4. METHODOLOGY.....</b>	<b>76</b>
DATA.....	76
<i>Sample.....</i>	76
<i>Measures.....</i>	79
<i>Key Independent Variables .....</i>	81
<i>Control Variables .....</i>	82
<i>Analytic Strategy.....</i>	87
<b>CHAPTER 5. ANALYSES AND RESULTS.....</b>	<b>89</b>
BIVARIATE ANALYSIS .....	89
<i>School-Level Bivariate Associations .....</i>	90
MULTIVARIATE ANALYSES .....	94
<i>In-School and Out-of-School Physical Violence .....</i>	94
<i>In-School and Out-of-School Nonviolent Delinquency.....</i>	107
<i>Summary .....</i>	114

<b>CHAPTER 6: DISCUSSION AND CONCLUSION.....</b>	<b>116</b>
SUMMARY OF FINDINGS.....	116
<i>Student’s Adherence to the “Code of the Hallway”.....</i>	<i>118</i>
<i>Significance of School-Level Subculture.....</i>	<i>119</i>
<i>Exploring Contextual Effects of School-level Subculture.....</i>	<i>119</i>
<i>Effects of School-Level Subculture on In-School vs. Out-of-School Offending.....</i>	<i>122</i>
<i>Exploring Gendered Effects of School-Level “Code of the Hallway”.....</i>	<i>123</i>
<i>Summary of Support for Hypotheses.....</i>	<i>124</i>
IMPLICATIONS FOR THEORY AND PRACTICE.....	126
<i>Implications for Theory.....</i>	<i>127</i>
<i>Implications for Policy and Practice.....</i>	<i>129</i>
<i>Summary.....</i>	<i>131</i>
LIMITATIONS OF STUDY.....	131
<i>Research Methods.....</i>	<i>131</i>
<i>Measures of Key Theoretical Concepts.....</i>	<i>133</i>
DIRECTIONS FOR FUTURE RESEARCH.....	135
<i>Research Methods and Design.....</i>	<i>135</i>
<i>Improving and Expanding Measures.....</i>	<i>136</i>
<i>Theoretical Advancements.....</i>	<i>139</i>
CONCLUSION.....	140
REFERENCES.....	142

## ACKNOWLEDGEMENTS

Without the ongoing inspiration, support, and encouragement from my mentors, friends, and family, I could not have completed this dissertation. Each of you has played an instrumental role in helping me achieve my goals and to live my dream. For that, this work is dedicated to all of you.

First, I would like to thank Dr. Wilcox, my dissertation chair, not only did you help awaken my love and passion for criminology--you have been a teacher, a mentor, and I know you will be lifelong friend. Thank you for all of the pep talks and for not only caring about my progress through the program but also for caring about me as person. Through your mentorship, you have taught me so many skills that will aid me in being a successful researcher and teacher. I think back to when we first met, I think of how I was so unsure of myself, but eager to learn. I was scared to take the lead or try things on my own in fear that I would mess up and you would be disappointed in me. However, what I eventually learned is that it was okay if I made mistakes or even asked silly questions. I soon realized that it was when I did take those chances, that you were most proud. You always knew when I needed a little nudge but you never pushed too much. You didn't hold my hand but you steered me in the right direction. Yes, I made many mistakes along the way, but I worked through them and through that process, I learned.

Dr. Cullen, when I first met you, you were like a celebrity to me. Now, you are so much more. You are one of the wisest human beings I know; and through example, you have taught me that good, fair people can finish first. You are an architect; you have shown me that with strong work-ethic, detailed planning and passion for what you do, you can have whatever we want out of our careers. Thank you for all of the advice—solicited or unsolicited. With the assistance of your advice, I have been able to land my dream job. I know that your future advice (which I will seek) will help me navigate through life as a new faculty member. Thank you for sharing your love for criminology with your students; I feel very fortunate to be one of those students. Last, I want to thank you for matching me up with Dr. Wilcox. Without you having the foresight to have me start working with her, my academic career would likely look very different right now. She was the best thing you could have done for me.

To my other dissertation committee members, Dr. Sullivan and Dr. Ousey, you brought so much to this dissertation. Not only did you provide a different perspective to my work, but you also pushed me to consider things I may never have without you. Time is a precious commodity, and I am very appreciative of all the time and energy you put into helping me make my work of the highest possible quality. I look forward to us working together in the future.

Dr. Brown, thank you for challenging me and then giving me that little push I needed to pursue graduate school. You believed in me so much that I actually started to believe in myself. You helped me recognize that I had so much potential and would only be letting myself down if I

did not take the risk. Even greater, you never abandoned me. When I needed to talk to someone who had been where I was in that moment, I had you. Your encouragement and confidence in me, gave me the strength I needed at some very difficult and stressful times. You have been such an inspiration and motivator for me. I promise; I will pay it forward. I will encourage and support my students in achieving their dreams as you have done for me and so many others.

Thank you to Janis, Roger, and Sue. You were all always there for me when I needed advice or an objective opinion. You have always believed in my abilities to be successful in whatever I pursued. Roger, there were moments where I wanted to throw in the towel and you were there to remind me why I initially wanted my Ph.D. In your words, I wanted to become a “dream maker.” Now that you have helped make mine come true, I can go help my students reach theirs.

Thank you to all of the faculty that have taught me over the past 6 years. Over the course of my graduate work at UC, you have guided my education and provided me with the foundation I need to be a successful scholar and teacher. To all of the staff that makes our department run. Jean and Janice, you are the glue that holds the department together. Also, you have no idea how much of an impact your little words of encouragement can have on us. Thank you to Ashley for being my “formatting” wizard. You saved me so many headaches. I cannot imagine a better place for me to have completed my doctoral work. I cannot imagine another department that could care more about the success of their doctoral students or another department that could offer more opportunities for their students. I will always be proud to say I am part of the UC Criminal Justice family.

Thank you to my friends that have been there to listen and to force me to take breaks from my work here and there. Amy, thank you for being the best friend I could ask for. I may not have made it through that second comp had it not been for our almost daily study sessions at Starbucks. I also may not have finished this dissertation had it not been for reminding me, “You are so close, so close to having everything you have ever wanted.”

Last, but definitely not least, thank you to my family for all of their love. You have all always been so supportive of me pursuing my goals and dreams. Michael and Steven, you have been healthy distractions. Thank you for the numerous visits and reminding me that there is life outside of criminal justice. Dad, thank you for instilling the discipline I needed to complete this program and thank you for teaching me that no matter what you are working on, you give it your all. Mom, you have been my rock through this experience. Throughout this program, you have been my number one cheerleader. Even though you yourself had not experienced graduate school, you knew one thing—that I would and could do it! Whether it a high or a low point, you were there with me on this crazy rollercoaster of a going through a Ph.D. program. Your unwavering faith and confidence in my abilities is the only thing that got me through some days.



## **CHAPTER 1. INTRODUCTION TO THE PROBLEM: THE SCHOOL AS A STAGING AREA FOR VIOLENCE**

While much of youth violence occurs outside of school, over a third of all serious violent delinquent acts involving youth nonetheless takes place at school or on the way to or from school (Gottfredson, Gottfredson, Payne, & Gottfredson, 2005). Further, it is likely that some youth violence arising outside of school has spilled over from in-school conflict (e.g., Brunson & Miller, 2009; Mateu-Gelabert, 2000). In fact, schools are unique contexts in that, for youth, they serve as the one place where a large proportion of the population of a similar age interacts for a long period of time — thus providing opportunity for conflict, delinquency, and victimization to occur within its boundaries and to spill over to after-school times and places. Understanding the role of school characteristics in the etiology of youth violence should thus be of critical concern for educators, criminologists, and policy makers. Schools should be safe environments that foster the learning process and minimize fear of victimization. Additionally, schools should promote healthy behaviors outside of the school domain.

Yet, the extent to which schools foster safety from crime and victimization – both within the school and outside the school – varies substantially across different school contexts. Therefore, this unique context of schools and the effects of school context on delinquency occurring in and away from school is a potentially fruitful area of inquiry. Such is the focus of this dissertation. More specifically, this dissertation applies a community culture explanation of crime to the context of schools. This is done in an attempt to highlight one possible theoretical reason for variation in both in-school and out-of-school violence involving students. Before explaining the community culture perspective used herein, however, it is important to understand the prevalence or the extent of the behavior of interest.

## **VIOLENCE AND VICTIMIZATION AMONG ADOLESCENT YOUTH**

Approximately 4.3 percent of students between 12 and 18 years of age report some type of victimization at school (DeVoe & Bauer, 2010). Of that 4.3 percent, about half is property victimization and about half being more minor violent victimization. Less than half of one percent of victimization at school is classified as serious violent victimization. A recent analysis of the National Crime Victimization Survey revealed that a higher proportion of victimization against students between 12 and 18 years took place at school or on the way to or from school versus away from school. In 2008, this group reported 1.2 million property and violent victimizations at school and 1 million away from school. However, property crime is driving this trend. When disaggregated by crime type, violent victimization at school occurred at a rate that is comparable to or lower than, the rate of violent victimization away from school (Robers, Zhang, Truman, & Snyder, 2010). Regardless of context, from 1992 to 2008, the victimization rates of students between the ages of 12 and 18 decreased; and between 1995 and 2005, at-school victimization decreased from 10 percent to 4 percent but has since remained stable (Robers et al., 2010). Even though the aggregate trends of the victimization of students have been on a decline, adolescent and school-related violence remains a concern because the school should be a safe haven for our youth and any level of violence is a concern.

Additionally, while the vast majority of public schools reported at least one violent crime occurring at school, there is substantial variation in school violence across schools that deserve attention. Almost a quarter of public schools reported 20 or more violent crimes between 2007 and 2008, while 83 percent of schools did not report any serious violent offenses. At the extreme

end of the spectrum, about 1 percent reported more than 10 *serious* violent offenses<sup>1</sup>(Roberts et al., 2010). This variation suggests that there may be something about the context of these schools causing such higher rates of violence. For instance, research has revealed that violence is more likely to occur in public schools, located in urban communities characterized by concentrated disadvantage and high neighborhood crime rates (Gottfredson, 2001).

Further, research has revealed that incidents initiated in school spill into the community and vice versa. Through his ethnographic work, Mateu-Gelabert (2000) found that almost 40 percent of fighting incidents involve some kind of crossover between the school and the community. That is, incidents that begin in school are brought out into the community and incidents that begin in the community and are brought into the school (Miller, 2010).

### **Oppositional Culture and School Violence**

This research asserts, first, that violence and other forms of offending within schools is an important problem to understand; and second, that the context of the school may be influential, not only on offending that occurs in school but also on offending outside of the school. One promising approach to understanding the contextual influences of the school on violence may be to apply the community cultural explanation to the context of schools. That is, perhaps within some schools, there exists an oppositional culture or a culture that promotes the use of violence and other types of offending. The degree to which a school adheres to this culture may help to explain the variation in violence experienced within schools and, even further, may influence variation in delinquency involving school youth that occurs outside of school.

---

<sup>1</sup> Serious violent offenses include rape, sexual assault, robbery, and aggravated assault.

A current, popular explanation for community rates of crime is that subcultural influences are important. In particular, crime—especially violence among young males—is presumed to arise from a “code of the street” that encourages violence in certain situations (Anderson, 1999; Stewart & Simons, 2006). The notion that adherence to a street code explains variation in crime rates is most notably attributed to the work of Elijah Anderson and is most comprehensively discussed in his book, *Code of the Street: Decency, Violence, and the Moral Life of the Inner-City*. In Anderson’s ethnographic work, he reveals the existence of an oppositional culture where most of the rules and the norms of the culture contradict those of mainstream culture—that is, it is a culture that is comprised of a set of antisocial values, attitudes, and beliefs. This oppositional culture is rooted in a social context of “concentrated disadvantage” (Wilson, 1987).

According to Anderson (1999), the code serves as an adaptation to the structural deprivation and social isolation experienced by the residents living in such conditions. Because many of the values and rules of “street culture” endorse the use of violence and the commission of other crimes, it is proposed that individuals who adhere to a “street code” are at a higher risk of engaging in crime. Further, if an individual resides in a community where the “street code” is prevalent, they are at an even higher risk of being involved in crime—that is, there are contextual cultural effects at work. Therefore, communities that have more residents that adhere to a “street code” are likely to have higher crime rates than those where few people adhere to a “street code.”

In discussing street-code adoption, Anderson recognizes the importance of staging areas—locations where people interact and the cultural values are transmitted. In essence, these are areas where a behavioral code develops and is practiced. Potential staging areas include areas surrounding establishments such as liquor stores or bars, the neighborhood basketball court, recreation centers, and *schools*. These staging areas serve as contexts worthy of research

attention because it is within these contexts that youth reputations are formed and status and respect are gained and sustained. Therefore, if youth attend schools that have reputations for being “tough,” with high levels of violence, it is likely that at least some of the youth will develop that same reputation. Accordingly, from Anderson’s work, it could be presumed that schools comprised of a higher proportion of students who adhere to a “street code” would have higher rates of in-school delinquency and, further, that those cultural values expressed in school may crossover into the community and influence students’ behavior and their criminal involvement outside of school (Brunson & Miller, 2009; Miller, 2008).

## **THE PRESENT STUDY**

In this light, this dissertation draws upon the subculture of violence literature that previously has been used to explain variation in crime across communities. It applies this perspective to schools in order to explore whether schools serve as an important context of cultural variation. That is, this dissertation examines how the subculture of a school—that is, its “code of the hallway”—may influence students’ behavior, including delinquency.

More specifically, this dissertation builds upon the work of Felson et al. (1994) and Ousey and Wilcox (2005). Felson et al. (1994) was the first quantitative study to find a contextual effect of school subculture on both violence and non-violent delinquency. Ousey and Wilcox (2005) assessed the individual-level and school-level effects of culture simultaneously while estimating variation in school-based adolescent violence. They did not find support for contextual effects of culture; rather, it was the individual’s level of adherence to violent values that explained the variation in school-based violent delinquency. This dissertation extends Ousey and Wilcox (2005) by further exploring the potential differential effects of school subculture on

delinquency that occurs in school versus outside of school. As Ousey and Wilcox mention, it may be that schools are such highly-controlled environments that school subcultures may actually influence delinquency that occurs among students outside of schools more than that within them. This position is compatible with findings reported in qualitative studies by Brunson and Miller (2009) and Miller (2010), which are discussed in much more detail in Chapter 3.

The analysis in this dissertation directly addresses this possibility raised by Ousey and Wilcox by exploring whether school-based delinquent subculture differentially affects delinquency that occurs in school versus delinquency that occurs outside of school. In addition, the analysis broadens Ousey and Wilcox's notion of a school-based subculture by examining its effects beyond physical violence and, instead, in relation to various forms of delinquency (e.g., physical assault and robbery v. sexual assault v. non-violent delinquency). Further, this dissertation extends previous work by exploring whether the effects of a school-based subculture are possibly gendered (i.e., more powerful for males). In sum, this dissertation builds upon the subcultural perspective that is usually applied to communities by applying it to the contexts of schools. In doing so, it explores how an antisocial subculture, as an emergent property of schools, directly influences various types of delinquency that occurs among students both in schools and out of schools. Importantly, this effect of an antisocial school subculture – what I refer to as the “code of the hallway” – is presumed to be a contextual effect. That is, it is an effect that is presumed to operate independent of *individual-level adherence to subcultural values*.

## **Overview of Chapters to Follow**

Chapter 2 begins by discussing the evolution of the social disorganization perspective from the work of Shaw and McKay through the re-introduction of culture into structural theories with the work of scholars such as Robert Sampson, William Julius Wilson, Barbara Warner, and Elijah Anderson. Chapter 2 also reviews in detail the empirical status of the relationship between community culture and crime. Chapter 3 begins by discussing the theoretical concept of the “code of the hallway.” This includes a discussion of how the school serves as a context for cultural “street codes” and how the community culture literature is applicable to understanding school culture that is referred to as the “code of the hallway.” In this vein, Chapter 3 discusses how the culture of schools may spill out into the neighborhood, influencing delinquency that occurs outside of school, and it also discusses how these effects of school culture may be gendered. Chapter 3 concludes with a set of specific research questions and hypotheses that form the basis of this dissertation’s analysis.

Chapter 4 provides an in-depth discussion of the methods used for analysis purposes. A detailed description of the data and measures used in the analysis is provided. This chapter concludes with a discussion of the analytic strategy. Chapter 5 presents the results of the analysis. The analysis includes the linear hierarchical models for in-school and out-of-school violent delinquency, in-school and out-of-school sexual offending, and in-school and out-of-school non-violent delinquency. Analysis exploring possible gendered effects of contextual school culture is also presented. Chapter 6 provides a discussion of the findings, limitations of this research, and future directions for this line of inquiry.

## **CHAPTER 2. THEORETICAL OVERVIEW: COMMUNITY CULTURE AND CRIME**

The role that community culture plays in crime is addressed in various, sometimes competing, theoretical lights. These various perspectives are highlighted when one considers in detail the historical evolution of social disorganization theory. Thus, this chapter provides that historical overview. In the process, it emphasizes both “*cultural deviance*” and “*attenuated culture*” as important and distinct perspectives on the culture-crime relationship. Next, the chapter provides an overview of the most popular current perspective on culture’s role in crime – that being a perspective that violence is predicted by a “code of the street.” The chapter concludes with a detailed review of the recent empirical research on the emergence and influence of such a “code.”

### **THE ORIGINS OF SOCIAL DISORGANIZATION THEORY**

Social disorganization theory is concerned with understanding why crime rates vary across communities. The social disorganization paradigm is rooted in the Chicago School and the work of Clifford Shaw and Henry McKay were among the first sociologists in the United States to investigate the spatial distribution of crime and delinquency across urban communities. Their research extended from the work of Robert Park and Ernest Burgess, who had developed concentric zone theory—a theory that examined the implications of social forces such as, industrialization, urbanization, and immigration for the social life in Chicago communities. The theory proposed that cities grew in concentric circles that expanded their area by the invasion and succession of the next outer zone. This process resulted in the relocation of individuals and



groups. Park and Burgess's work was done during the height of a period of mass immigration to the United States. The processes of invasion and succession they describe included urban residents moving further away from the city towards the suburbs, in a sense invading the nearby areas. They were then succeeded by a new wave of immigrants. This continual inflow and outflow of people was linked to social forces such as industrialization. According to Park and Burgess, the processes of invasion and succession created discernible characteristics across the certain zones of the city. For instance, regardless of the individuals residing in the area, the zones closer to the center of the city or central business district would always be associated with more dilapidation and disorganization than zones on the periphery of the city.

Shaw and McKay applied Park and Burgess's concentric zone theory to the study of juvenile delinquency. To study the extent to which community structural characteristics explained the variation in rates of delinquency, Shaw and McKay used Chicago juvenile court cases and commitments for three time periods between 1900 and 1933. These findings were reported by Shaw, Zorbaugh, McKay, and Cottrell in the 1929 book, *Delinquency Areas* and, subsequently, in the more widely-cited 1942 book, by Shaw and McKay, *Juvenile Delinquency and Urban Areas*. This latter work was updated and re-released in 1969. The key finding emerging from their analyses was that delinquency was not randomly distributed throughout the city. Rather, delinquency tended to be clustered such that the highest delinquency rates were found in the inner-city areas and rates declined with greater distance from the center of the city. The areas with the highest delinquency rates were characterized by poverty, residential mobility, and ethnic heterogeneity.

According to Shaw and McKay, three key exogenous variables—economic deprivation, high rates of population turnover, and population heterogeneity—lead to social disorganization

which in turn, leads to higher delinquency rates. Though Shaw and McKay did not clearly define social disorganization in their 1942 work, it has generally been inferred as the inability of local communities to realize common values and solve commonly experienced problems (Bursik, 1988). Hence, most subsequent scholars have interpreted Shaw and McKay's theory as one of community-level informal social control – disorganized communities are thought to experience inadequate informal social control and thus higher rates of crime. However, a somewhat neglected reality is Shaw and McKay did not actually present a “pure” social control theory in their original work. Rather, their theoretical discussion blended or mixed components of other theoretical perspectives, including cultural deviance theory (Kornhauser, 1978).

Shaw and McKay's work reflects elements of both a subculture of deviance and the notion of a weakened or attenuated culture. The first of these ideas suggests that an autonomous subculture of deviance provides motivation for delinquency. Consistent with that idea, Shaw and McKay discuss the existence of competing and conflicting moral values within areas experiencing high rates of delinquency (Shaw & McKay, 1942). In these areas, opting for delinquency has presented a powerful alternative way of life, according to Shaw and McKay. An element of culture transmission is vividly illustrated by discussing the interaction youth have with adult offenders, who were brought into a life of delinquency by those adult offenders that preceded them. “This contact means that the traditions of delinquency can be and are transmitted down through the successive generations of boys...” (Shaw & McKay, 1942, p. 174).

In another portion of Shaw and McKay's work they attribute the variation of delinquency across ecological areas to a variation in values, norms, and attitudes. They further discuss that in some neighborhoods the extent that delinquency is supported is so great that it becomes a driving mechanism in the development of delinquent careers (Shaw & McKay, 1942, p. 170). Further, in

their discussion of juveniles' interactions with gangs, Shaw and McKay describe the process of social learning and how culture is transmitted through interaction between juveniles not yet in a gang or those who have just entered a gang. Through this process they learn the skills necessary to commit crimes and also the attitudes that are required for the juvenile to belong to the gang (Shaw & McKay, 1942). The process of culturally transmitted values through social learning is also discussed in Shaw's 1930 book *The Jack Roller*.

However, this discussion of alternative culture and of intergenerational transmission appears to contradict some of their other discussions of culture. For instance, in other writing they stated that while there are conflicting norms and values within communities, the predominant culture in all neighborhoods is conventional. Therefore, after an in-depth examination of Shaw and McKay's work, it is still debatable as to whether they viewed the role of culture within social disorganization as one of a true delinquent subculture of deviance or one of weakened mainstream culture. What is indisputable is that when Shaw and McKay's work is referenced, it is apparent that they recognized the importance of a community's culture in the explanation of crime.

### **KORNHAUSER'S RECONCEPTUALIZATION OF SOCIAL DISORGANIZATION THEORY**

After the work of Shaw and McKay, not much progress occurred within the social disorganization perspective until the late 1970s with the work of Ruth Rosner Kornhauser. Kornhauser (1978) contributed to the social disorganization paradigm by dissecting and further specifying the social disorganization theory presented by Shaw and McKay. She contended that Shaw and McKay had presented a mixed model, in essence combining control theory with

cultural deviance theory (evidence of both perspectives were presented in the section above). Importantly, she deemed these theories incompatible for integration.

For instance, Kornhauser claimed that, on the one hand, Shaw and McKay had argued that social structural forces—racial/ethnic heterogeneity, residential mobility, and poverty—led to social disorganization; and it was these social forces that interfered with adequate socialization. This contention is consistent with a control model. On the other hand, Kornhauser noted Shaw and McKay's claim that delinquent subcultures developed and contributed to crime rates introduces a cultural deviance theory component into the Shaw and McKay argument, making it an inherently illogical and contradictory “mixed model.”

Kornhauser's 1978 book, *Social Sources of Delinquency*, advocated for the use of “pure” as opposed to “mixed” theoretical models. To achieve this goal, she described two opposing perspectives on crime causation—social disorganization and cultural deviance. She argued that any theory of crime should fall under one of these two perspectives and, further, that they could not be integrated because they have conflicting views of human nature.

Kornhauser proposed that social disorganization theory should be conceptualized within a control perspective, assuming that humans are hedonistic and utilitarian and that, because of this, humans are difficult to socialize. Cultural deviance models, on the other hand, assume that humans are born blank slates and can be perfectly socialized and that the variability in culture is limitless (Kornhauser, 1978). According to the cultural deviance perspective, individuals commit crime and delinquency due to insufficient socialization to values that promote delinquency and crime, rather than from the insufficient socialization of values that discourage delinquency.

Kornhauser thus saw the underlying assumptions of cultural deviance theory as incompatible with the assumptions of control theory. It was her stance, therefore, that the

theories could not, logically, be integrated. Since Shaw and McKay had done so, her view was that their theory was seriously flawed. Her solution for making social disorganization theory more logically sound was to remove cultural deviance from the theory and reconceptualize as a “purer” social disorganization theory – one that focused on social control.

However, she did not completely ignore the role of culture. She allowed for the possibility of weakened culture to play a role in the social disorganization model. Kornhauser referred to this as “cultural disorganization;” it is now commonly referred to as “cultural attenuation” (Warner, 2003). The attenuated culture perspective argues that the role of culture in the explanation of community crime rates is not that there are competing sets of values within a community, including one that promotes crime, but rather that it is the variation in the strength of conventional culture that explains the variation in community crime rates. That is, communities that lack sufficient adherence to a conventional culture are unable to exert social control. This explanation of the role of culture is consistent with a control perspective and, therefore, Kornhauser argued it was compatible with a “pure” social disorganization model. Although she ultimately carved out room for the concept of *cultural disorganization* within a social disorganization framework, the negative tone of her remarks regarding a *cultural deviance* approach arguably led researchers within the social disorganization tradition to shy away from *any* linking of culture and social disorganization until the mid-1990s.

In sum, while social disorganization theory, as proposed by Shaw and McKay, enjoyed a brief period of prominence in criminological theory during the 1950s and 1960s, it quickly fell to the wayside. However, with the assistance of Kornhauser (1978), and her insights about pure theoretical models, a re-birth of social disorganization theory occurred in the 1980s through the development of the systemic model.

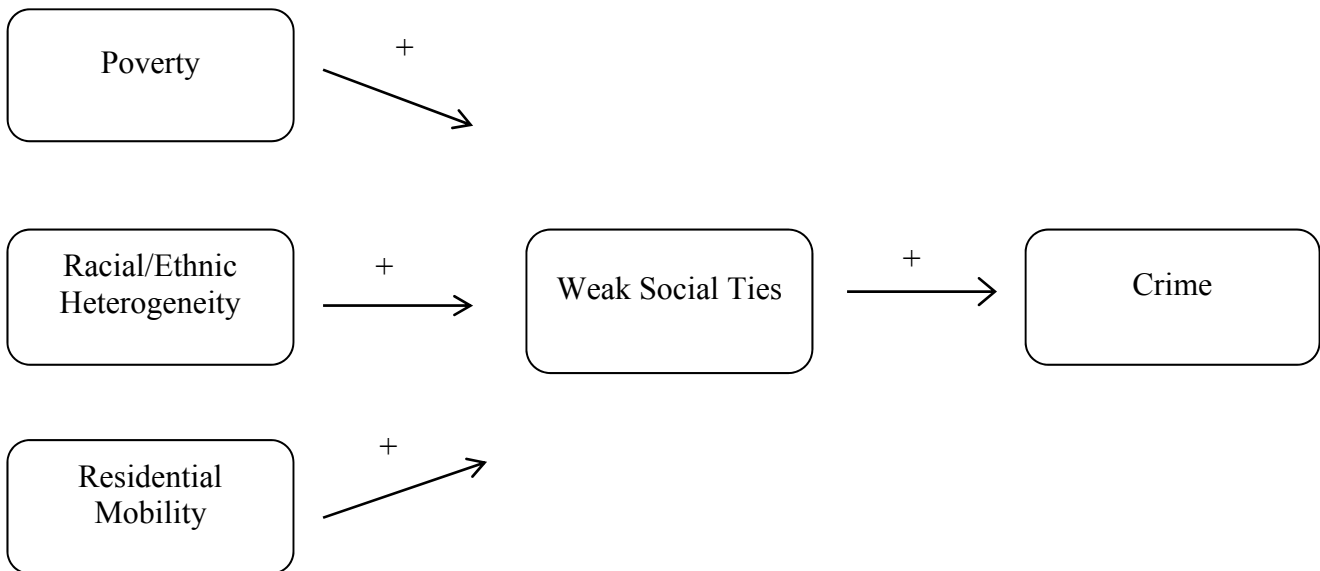
## THE SYSTEMIC MODEL

### The Theory

The macro-systemic model of social disorganization theory proposes that community context variables are associated with the level of informal social control within a community and that the level of informal social control is associated with the crime rates of that community. The three community context or structural variables most frequently considered are poverty, ethnic heterogeneity, and residential mobility. These exogenous variables are consistent with those presented in the work of Shaw and McKay. This model emphasizes that the relationship between the structural variables and crime is mediated through social control processes (Kornhauser, 1978). Further, the systemic model theorizes that informal social control stems from systems of *community-based ties and networks*. The more heterogeneous, more mobile, and more poor a neighborhood is, the weaker are the ties and networks for exerting informal social control, and the higher the crime rates (Sampson & Groves, 1989). Figure 2.1 depicts this process. Below, is an elaboration upon how informal social control began to be conceptualized by ties/networks.

Precipitated by the work of Kornhauser, researchers sought out how to conceptualize and operationalize the mediating mechanism of “informal social control.” For this, researchers turned to the work of Kasarda and Janowitz (1974). Kasarda and Janowitz tested two different models of local community: 1) a linear development model, and 2) a systemic model. Within the systemic model, the 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

**Figure 2.1. Systemic Model of Social Disorganization**



socialization processes” (Kasarda & Janowitz, 1974, p. 329). The main exogenous variables used to test the systemic model were population size and density and the length of residence. The endogenous variables included a measure of friendship and kinship bonds and formal and informal associational ties within the local community. The effects of population size and density on local friendship, kinship, and associational bonds were not significant. However, the length of residence was positively and significantly associated with social bonds. These results generated support for the systemic model. Although Kasarda and Janowitz’s study was not one of crime, it provided criminologists with an operationalization of informal social control. Based on the work of Kasarda and Janowitz, the intervening concept of informal social control began to be measured as *friendship and kinship ties* and also ties in the form of *participation with formal or informal social organizations*. It became an assumption of the systemic model that the exogenous variables were mediated through the mechanism of social ties. The stronger or the denser the social ties, the more informal social control, thus the lower the crime rates.

## **Empirical Evidence of the Systemic Model**

The empirical evidence for the systemic model is somewhat mixed. The theory proposes that the structural variables of poverty, heterogeneity, and residential mobility will be mediated by the social process of social disorganization; however, most studies have found that only some of the effects are mediated. This subsection synthesizes the empirical research on the systemic model.

*Early Work.* Bursik and Webb (1982) reexamined the proposition made by Shaw and McKay that regardless of changes in the ethnic or racial composition of the community, the relative distribution of delinquency throughout the city will remain relatively stable over time. Bursik and Webb were interested in whether Shaw and McKay's findings were a product of the time and whether their conclusions would hold in light of recent social changes. Bursik and Webb reanalyzed Shaw and McKay's data and added an additional set of more recent observations. They found that as Shaw and McKay did, delinquency rates remained stable between 1940 and 1950. However, after 1950, neighborhoods that experienced changes in the racial composition also tended to experience changes in their delinquency rate. During the 1950s and 1970s, there was a substantial increase in the African American population in Chicago neighborhoods and a corresponding increase in crime. This finding, on the surface, did not support the proposition of Shaw and McKay. In short, the influx of African Americans did appear to create instability in the neighborhoods into which they moved.

However, Bursik and Webb (1982) argued that it was not the group of people involved (i.e., African Americans), but rather the nature of the change in the community. In fact, closer inspection of changes in crime revealed that the delinquency rates were the highest between 1950 and 1960, when the most rapid changes were occurring. Then, the delinquency rates declined



somewhat in the following decade, perhaps because the new residents had time to establish themselves in the area and to build social networks. So, drawing upon Kasarda and Janowitz's (1974) idea that participation in social networks is primarily a function of length of residence, Bursik and Webb (1982) ultimately suggested that their findings were consistent with the systemic model.

***Sampson and Groves's Seminal Study.*** *Sampson and Groves (1989)* was the first direct test of the entire systemic model of social disorganization theory, including exogenous, intervening, and outcome variables. Previously, studies of social disorganization obtained measures of community context and crime, with an assumption that the community context variables were mediated by this unmeasured social process of social disorganization. Building on the work of previous theorist such as Kornhauser and Kasarda and Janowitz, one of Sampson and Groves' contributions was they were able to measure the "black box" of social disorganization—that is they.... They also were fortunate enough to have access to data that provided measures of these intervening variables. Sampson and Groves (1989) measured the three traditional structural dimensions of social disorganization: low SES, ethnic heterogeneity, residential mobility; and they added measures of family disruption, and urbanization to the model. The three intervening dimensions of social disorganization were measured as a lack of local friendship networks, unsupervised teenage peer groups, and low organizational participation. These three variables, in turn, were hypothesized to lead to higher rates of crime and delinquency.

Sampson and Groves used the British Crime Survey (BCS). The sample included 238 ecological areas of 60 addresses. There was an 80 percent response rate, resulting in a total sample of 10,905 individuals nested within the 238 contextual units. Each geographical unit

represented a “local community” similar to that of Shaw and McKay’s work in Chicago. They used crime and victimization rates from self-report data.

The empirical analysis revealed that communities characterized by few friendship networks, unsupervised teenage peer groups, and a lack of organizational participation had higher rates of crime and delinquency (Sampson and Groves, 1989). These factors mediated a large proportion of the effects of low SES, residential mobility, ethnic heterogeneity, and family disruption. When all of the intervening variables were combined, they mediated over half of the effect of the structural variables (Sampson & Groves, 1989). Although, the effects of structural variables were not completely mediated by the intervening variables, all of the findings provided support for Sampson and Groves’s hypotheses and were consistent with the systemic model. Sampson and Groves’ work, as the first direct test of systemic social disorganization theory, thus provided empirical support for continued inquiry and development of this perspective.

*Post-Sampson-and-Groves Tests.* In 2003, Lowenkamp, Cullen, and Pratt completed a rigorous replication of Sampson and Groves (1989). The researchers were interested in exploring whether Sampson and Groves results would hold, using the same data source but from a decade later, thus demonstrating that their results were not idiosyncratic. Almost all of the measures were identical to those used in Sampson and Groves, with only slight variations in a few measures. All of the findings were consistent with Sampson and Groves (1989). In the majority of the cases, the social disorganization measures mediated the effects of structural variables on rates of victimization (Lowenkamp et al., 2003). Although one-third of the parameter estimates differed significantly from those in Sampson and Groves (1989), all were in the direction predicted and suggested stronger support for the systemic model than in the original Sampson and Groves study. Lowenkamp et al. (2003) confirmed that social disorganization

theory, formulated as a systemic model, was a viable criminological theory. However, consistent with Sampson and Groves (1989), the study demonstrated that the structural variables were not completely mediated through social disorganization (see also Veysey & Messner, 1999).

Velez (2001) extended Sampson and Groves work by introducing a measure of “public systemic ties,” whereas the previously-reviewed research had focused on ties of a private and/or parochial nature (Bursik & Grasmick, 1993). Unlike private and parochial ties that exist within a community, public ties refer to the networks that allow neighborhoods to secure *external* resources necessary for the reduction of crime (Bursik and Grasmick, 1993). While taking into account neighborhood disadvantage, local social ties, and individual’s routine activities, Velez found that for both household and personal victimization, public social control yielded larger benefits for the reduction of victimization as neighborhood disadvantage increased. Public control played an important role in diminishing victimization risk, especially in disadvantaged neighborhoods. Velez also found that the effect of local social ties was completely mediated by public control for household victimization.

### **Conditions and Caveats Regarding the Effects of Social Ties**

Stemming from the contributions of Kasarda and Janowitz (1974), Kornhauser (1978), and the work of Bursik (1988), it became a widely-accepted truth that social ties provided a key mechanism through which social disorganization functions. However, a growing body of research suggests that the role of social ties may be more complicated than the basic systemic model suggests. This section discusses such research.

For example, Bellair (1997) found that for a community to exert social control, it did not necessarily require frequent interactions with neighbors. Using data from a victimization study

based on a sample from 60 neighborhoods from three different U.S. cities, Bellair (1997) reported that the cumulative measure of social ties, “getting together once a year or more” showed the strongest relationship with crime. This measure did mediate a large amount of the effects of heterogeneity and poverty on crime. Thus, Bellair (1997) provided evidence that frequent interaction among neighbors – presumably indicative of strong ties – does not necessarily translate in effective informal social control.

Warner and Wilcox Rountree (1997) contributed to the literature on social ties by revealing that the effect of social ties was conditional, based on the racial composition of the neighborhood. In neighborhoods that were racially heterogeneous or predominantly-minority, social ties did not have a significant effect on the rate of violence (Warner & Wilcox Rountree, 1997). In contrast, in predominantly white neighborhoods, social ties did have an effect on violence. Their analysis also revealed that the only structural variable that was mediated through social ties was residential stability, and even that was conditional on the level of poverty in the neighborhood. If, as social disorganization theory proposes, the structural characteristics only have indirect effects on crime, then another mediating process must be at work. Warner and Wilcox Rountree (1997) suggest that social disorganization models might be better specified by including measures of other levels of control (i.e., parochial and public control) *and measures of culture*. The role of culture within the social disorganization paradigm is discussed in a later section, yet it is important to note here that Warner and Wilcox Rountree (1997) strongly called into question the viability of social ties as the only factor to mediate the impact of structural social disorganization variables, offering culture as one possible alternative mediator (see also Warner and Wilcox Rountree 2000).

In a related study, Wilcox Rountree and Warner (1999) examined the conditions of social ties regarding gender. Historically, female and males have been viewed to play different roles in the community and the household—with males building most of their relationships at work while females build relationships and networks within the neighborhood. Even as females have become more involved in the labor force, research has indicated that females' social networks are larger than males, even after controlling for employment (Campbell & Lee, 1992). When this literature is considered, it is plausible that neighborhoods that have more female ties might have a greater capacity for exerting informal social control.

Wilcox Rountree & Warner, 1999 revealed that the extent of social ties among males versus among females was very similar.<sup>2</sup> However, the effect of male social ties was not associated with community rates of violence, whereas female ties were significantly and negatively related to violence. Having said that, the ability for female ties to reduce violence was contingent upon the percentage of female-headed households in the neighborhood. Specifically, in those neighborhoods that experienced a high percentage of female-headed households, female ties did not have a significant effect on violence. As such, this study implied the particular importance for community crime control of female ties in the presence of family-rooted men. The study provides evidence that, although male ties do not significantly affect violence directly, male ties are nonetheless important to a neighborhood's ability to exercise control (see also, Clear, 2007, 2008; Rose & Clear, 1998).

A qualitative study by Pattillo (1998) also contributed to the body of evidence suggesting that the systemic model and the effects of social ties may be conditional. Examining social ties within a middle-class black neighborhood revealed that it may not be accurate to assume that all

---

<sup>2</sup> Wilcox Rountree and Warner (1999) measured male and female ties as the proportion of men/women in the neighborhood engaging in "neighboring activities." These included activities such as helping neighborhoods with problems.

social ties facilitate social control. Pattillo's work demonstrated that in neighborhoods with strong ties, some of those ties may involve criminal networks. These criminal networks may be tolerated by the law-abiding residents because those individuals involved in criminal networks may provide resources to the neighborhood.

### **Collective Efficacy: A Response to the Conditional Effects of Social Ties**

The systemic model proposed that the effect of community context variables on crime were mediated by the social process of social disorganization—measured as social ties. It proposed that the denser the ties, the less social disorganization. Through the systemic model it was assumed that the mechanism by which social disorganization functioned was social ties. The core assumption of the systemic model was that the stronger or denser the social ties, the more informal social control; and therefore, the community would experience lower crime rates (Sampson, 2006). However, after empirical testing of the systemic model, it was revealed that the effects of social ties were conditional (Bellair, 1997; Warner & Rountree, 1997; Wilcox Rountree & Warner, 1999). This unconditional support for the systemic model has given reason to explore other mechanisms by which social disorganization may function. One of the responses to this issue within social disorganization theory was collective efficacy.

In their seminal piece where the concept of collective efficacy was first articulated, Sampson, Earls, and Raudenbush (1997) proposed that there was an element missing from social ties that could explain the conditionality of social ties. They proposed that the missing ingredient was the neighborhood's ability to *activate* ties and administer informal social control (Sampson et al., 1997). According to collective efficacy theory, strong/dense social ties alone did not necessarily lead to informal social control. Rather, the mechanism with which informal social

control functioned was not through social ties, but through a mechanism analogous to self efficacy, collective efficacy. Collective efficacy consists of two main components—trust and cohesion coupled with the *willingness to act*. Sampson et al.'s (1997) analysis found that the concepts of social cohesion and informal social control were positive and significantly correlated ( $r = 0.80$ ,  $p\text{-value} < .001$ ). With such a high correlation, Sampson et al. (1997) concluded that they were tapping the same construct. The mechanism of ties/networks, which was the focus of the systemic model, was missing the vital element of purposive action (Sampson et al., 1997). Activating informal social control is reliant upon a neighborhood's capacity to regulate the behavior of its members by recognizing collective, desired goals. However, according to collective efficacy theory, it is not necessary to have close-knit friendships or dense social ties to regulate the behavior of the neighborhood's residents (Sampson, 2006). Rather, it is the willingness to act on the shared norms and goal that is essential.

For example, if an open-air drug market started up business on a corner in a suburban neighborhood, it is likely that it would be quickly shut down (see, Cullen & Wilcox, forthcoming). While most of the residents of the neighborhood are not close friends, and may only see each other in passing, they possess shared concern for their children's safety, the potential threat of other criminal activity, and damage to their property. These shared norms and goals lead to them to respond by activating informal social control. These neighbors, who do not normally have one another over for dinner, are able to come together to get rid of the drug activity because they share norms and goals and therefore, activate social control. However, if the residents did not share the same concerns, if most of the neighbors were not bothered or concerned with the drug activity, they are not likely to respond to the problem. If the informal social control is not activated, there will be no effect on the drug activity and it will continue.

One of the major contributions of collective efficacy theory is that it addresses the measurement problems regarding social ties. Although social ties may assist in the ability to activate informal social control, if the willingness to act is missing, informal social control will not be achieved. Also, dense social ties are not necessary to achieve collective efficacy. Trust and the willingness to act may be present through the strength of parochial control through organizational strength or even technological strength (Sampson et al., 1997).

***Empirical Evidence on Collective Efficacy.*** Compared to the systemic model, collective efficacy has been more consistently supported; however, when examining the theory in relation to self-reported offending, collective efficacy has not been supported. To date, relatively few studies have been conducted on collective efficacy. This is because few datasets have strong measures of the concepts as Sampson et al. (1997) defined it and, consequently, most research on collective efficacy have used the same data (Cullen & Wilcox, forthcoming). The majority of research on collective efficacy has used data from the Project on Human Development in Chicago Neighborhoods (PHDCN). This next section summarizes the empirical evidence on collective efficacy theory.

In the first test of collective efficacy, Sampson et al. (1997) proposed that the effects of community context variables of concentrated disadvantage, immigrant concentration, and residential stability on rates of crime are mediated through the mechanism of collective efficacy. The theory hypothesized that concentrated disadvantage and high immigrant concentration would hinder the development of collective efficacy and high residential stability would promote collective efficacy (Sampson et al., 1997). When collective efficacy was added to the model, it substantially mediated the social composition variables across all measures. Collective efficacy explained more than three-fourths the variation of violence between neighborhoods. Also, an



increase in collective efficacy by two standard deviations was associated with almost a forty percent drop in expected homicide rates. In a follow-up study, also using the PHDCN, Sampson and Raudenbush (1999) found that collective efficacy was not only significantly associated with the variation in crime rates, but it was also significantly related to disorder.

Morenoff, Sampson, and Raudenbush (2001) expanded the previous work of Sampson and his colleagues on collective efficacy by introducing the importance of spatial proximity. Neighborhoods do not merely exist in a vacuum, but rather are interdependent. By introducing spatial proximity, it considers the major criticism of community research, that neighborhood lines are arbitrarily drawn based on the available data. Morenoff et al. (2001) was able to integrate elements of social disorganization, collective efficacy, and routine activities to examine two areas that have been underdeveloped within neighborhood research. They explore the interdependence of neighborhoods and the importance of the organizational strength needed to *activate* informal social control.

The model hypothesized that concentrated poverty and residential instability were negatively associated with collective efficacy, while density of social ties and organizational infrastructure was positively associated with collective efficacy. Concentrated disadvantage and residential instability and organizational infrastructure were posited to have direct effects on the endogenous variables; violence, disorder, and poor health. The effect of the exogenous variable, dense social ties, on the endogenous variables was hypothesized to be mediated through collective efficacy. Spatial proximity was hypothesized to influence all variables.

The overall results of Morenoff et al. (2001) are supportive of their hypothesized model. Regarding spatial proximity, there was a strong correlation between areas of high homicide rates and low levels of collective efficacy. Also, it appeared that neighborhoods with high levels of

collective efficacy were beneficial to neighborhoods that were spatially proximate. In the multivariate analyses, while controlling for collective efficacy, none of the systemic variables were significant. This included social ties, local organizations, and voluntary associations. It thus appeared that the systemic variables were important only insofar as they promoted collective efficacy. That is, the systemic variables did not influence crime directly, but rather indirectly through collective efficacy. The other major contribution by Morenoff et al. (2001) is that they found evidence that collective efficacy and crime had reciprocal effects. In other words, weak collective efficacy would lead to higher crime rates but also that crime would further weaken collective efficacy. In summary, Morenoff et al. (2001) provided additional support for collective efficacy and suggested that the mechanism by which social ties affect crime is via collective efficacy. From this point, the conceptualization of collective efficacy did not ignore the role of social ties and recognized that social ties did influence crime indirectly through collective efficacy (Sampson, 2006).

Some research on collective efficacy has also examined the potential conditional relationship of collective efficacy with crime. For example, Browning et al. (2004) introduced a model of “negotiated coexistence;” and examined that while in many instances social networks facilitate the development of social ties, social networks may also provide social capital for offenders. This, in turn, may impede the neighborhoods capacity of forming informal social control that works towards a common goal of a crime-free neighborhood. This model proposes that social ties may be both positively and negatively associated with neighborhood crime. While social ties may promote informal social control and assist in the development of collective efficacy, social ties may entrench residents of the community into networks of mutual obligation and thus actually weaken the impact of collective efficacy on crime. The coexistence model

provides a viable explanation as for why some neighborhoods may be socially organized, but still suffers from higher crime rates.

The analysis of Browning et al. (2004) provided support for the negotiated coexistence model. When collective efficacy was controlled, the main effect of networks was positively and significantly related to victimization. Also, the interaction between collective efficacy and networks was positive and significant for both victimization and homicide rates. The interpretation of this finding is that, as social network interaction and reciprocated exchange increase, the negative effect of collective efficacy on violence becomes weaker.

In another study, the importance of considering contexts other than the neighborhood was considered (Kirk, 2009). Kirk's (2009) analysis assessed how collective efficacy and informal social control interact across the contexts of the family, school, and neighborhood on school suspension and arrest. His results revealed that the effects of neighborhood collective efficacy were conditioned by the level of school-based efficacy and the trust between students and teachers.

While there has been support for collective efficacy, the theory has struggled in successfully explaining offending (Sampson, Morenoff, & Raudenbush, 2005). It appears to be better at explaining crime events compared to self-report offending. Also, future research needs to be conducted using data other than the PHDCN which only consists of Chicago neighborhoods.

In sum, this section has demonstrated that substantial empirical support for the systemic model exists. On the other hand, it has also shown that the posited mediating process "informal social control via social ties" is incomplete and/or partially flawed. The incomplete and conditional nature of social ties as a mechanism of informal social control of crime has given

reason for scholars to explore other mechanisms by which social disorganization may function—collective efficacy being one viable possibility. However, other viable possible alternative mechanisms include oppositional or attenuated culture. Additionally, theoretical elaborations upon the systemic model have also made room for the possibilities of oppositional and attenuated cultural effects. For instance, work on “concentration effects” has suggested that social and cultural disorganization play key roles in community crime. Accordingly, a discussion of scholarship dealing with such concentration effects is presented next.

## **CONCENTRATED DISADVANTAGE AND SOCIAL DISORGANIZATION THEORY**

### **The Birth of Concentrated Disadvantage**

In his seminal piece, *The Truly Disadvantaged* (1987), William Julius Wilson contributed to the social disorganization and community crime traditions by identifying the concept of *concentrated disadvantage*. Wilson’s work revealed that socially disorganized communities in the post-industrialization era were different from those studied by Shaw and McKay along with others. His work had direct implications for the structural variables that are appropriate within social disorganization research.

Wilson highlighted that the kind of poverty experienced in the 1980s was a different kind of poverty—a poverty of a greater magnitude and greater concentration. When the industrial jobs vacated American cities, especially those in the north, it left a huge hole in the economy. Those individuals with the resources to leave the city and follow jobs did, leaving behind the poorest households. Thus, the deindustrialization of cities ultimately resulted in a change in the demographic characteristics of cities. These cities were no longer heterogeneous, but rather

homogeneous, containing predominantly poor blacks. Further, prior to Wilson's work, according to social disorganization theory, residential mobility led to social disorganization. Wilson's work revealed that areas of social disorganization in the 1980s were no longer characterized by residential instability, but rather by a population so severely disadvantaged that there were virtually no means by which to leave.

Thus, it is the combination of extreme poverty (suffered by predominantly a black population), joblessness, and female-headed households that characterize the concept of concentrated disadvantage. After Wilson's work, the structural variables used in social disorganization studies began to reflect this notion of concentrated disadvantage. Instead of attributing disorganization to poverty, heterogeneity, and mobility, it was increasingly specified as a function of concentrated disadvantage.

Krivo and Peterson (1996), drawing from Wilson (1987), assessed whether 1) extremely disadvantaged neighborhoods had unusually high rates of crime, and 2) local structural disadvantage was equally important in influencing crime in black and white neighborhoods. In other words, they were interested in whether racial differences in structural disadvantage accounted for the racial differences in crime across communities. They found that extremely disadvantaged neighborhoods had qualitatively higher levels of crime than less disadvantaged neighborhoods. This held for both black and white neighborhoods. However, the role of extreme disadvantage was limited to violent crime. In support of Wilson (1987), Krivo and Peterson found that when structural conditions are controlled, crime rates are similar regardless of race. This suggests that the race differentials in crime rates are due to the differences in the structural contexts in which blacks and whites reside (see also, Ousey, 1999; 2000; Shihadeh & Ousey, 1996)

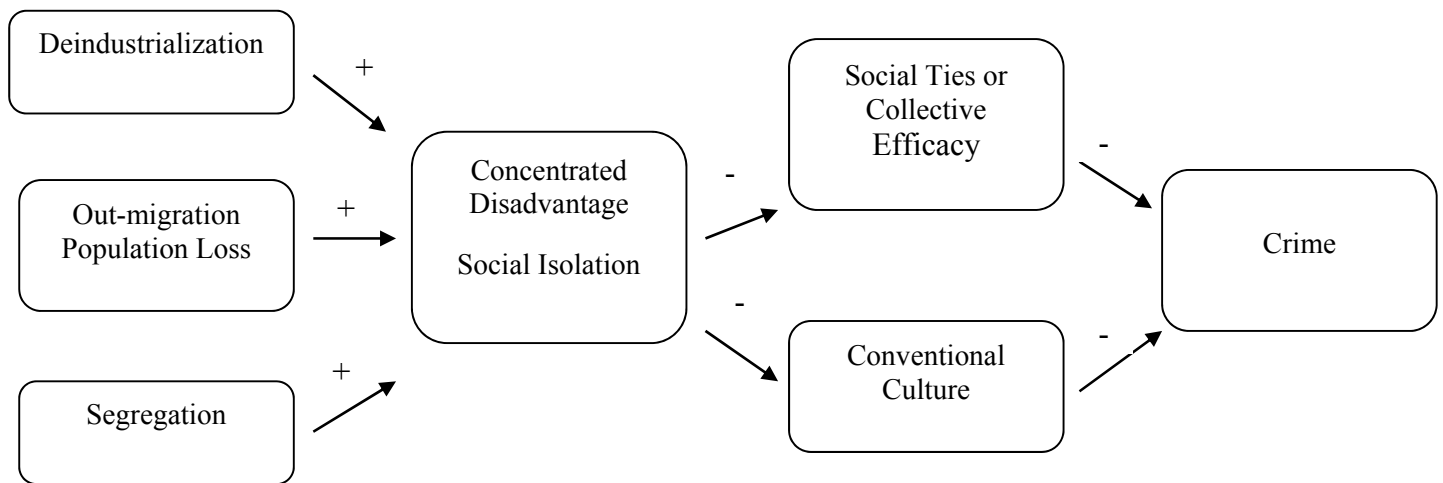
## Concentrated Disadvantage and Cultural Disorganization

In the past 15 years, several scholars have explored possible cultural influences, in conjunction with concentrated disadvantage, in order to understand community rates of crime. For example, Sampson and Wilson (1995) contributed to understanding the race-crime relationship by introducing the role of culture through the mechanism of cultural social isolation. Their model is sometimes referred to as the “contextualized subculture” model, and it discusses how the race-crime relationship could be understood through social and cultural disorganization. Cultural social isolation is characterized by the lack of contact or the lack of sustained interaction with the institutions and individuals of mainstream society and the values and norms that those institutions and individuals represent. Social isolation is characterized by a deprivation of resources, especially from resources existing outside of the neighborhood, and conventional role models. The nature of social isolation requires that residents in these communities acquire adaptations to their constraints and blocked opportunities (Sampson & Wilson, 1995). Social isolation is thus consistent with an attenuation of culture approach because of the emphasis on *adaptation* versus *internalization of deviant values and norms*.

The contextualized subculture model, depicted in Figure 2, posits that the structural factors of deindustrialization, out-migration, and segregation lead to concentrated disadvantage and social isolation. This combination of concentrated disadvantage and social isolation results in weakened systemic ties (or, collective efficacy), as well as, *weakened culture*. Both of these result in diminished informal social control of crime. Subsequently, higher crime rates are experienced within affected neighborhoods (Sampson & Wilson, 1995). In order to elaborate on the role of weakened—or attenuated—culture, Sampson and Wilson (1995, p. 50) introduced the concept of “cognitive landscapes,” as “ecologically structured norms” that set the standards or

expectations for behavior. In neighborhoods characterized by extreme disadvantage, an alternative “code” or value system may emerge that is more tolerant to disorder, crime, and drugs. This neighborhood has a very different “cognitive landscape” than a middle- or upper-class, predominantly white neighborhood that has low tolerance for even minor incivilities. In brief, Sampson and Wilson contributed to the social disorganization and community culture bodies of literature by specifying a model that remains compatible with previous control models of social disorganization theory and yet simultaneously takes into account the importance of culture (see Figure 2.2).

**Figure 2.2.Contextualized Subculture Model**



By examining the potential for racial differences in legal cynicism, level of satisfaction with police, and level of tolerance for variance forms of deviance, Sampson and Jeglum Bartusch (1998) revealed support for the argument that there are contextual differences in cognitive landscapes. They hypothesized that the variation in orientations towards deviance can be attributed to the social-ecological structure of neighborhoods—specifically the characteristics of residential instability, concentrated disadvantage, and a concentrated immigration population.

Their theoretical approach was compatible with an attenuated-culture approach rather than an oppositional-culture approach because of the way they discussed the idea of “tolerance for deviance.” Their position was that, if a community has a high tolerance for deviance, it demonstrates a weakened conventional culture, not an internalized deviant subculture in complete opposition to conventional culture.

The individual measures include a four-item factor to tap the concept of the tolerance of deviance. These items were asked both in regards to a thirteen and nineteen year old. The items included: 1) smoking cigarettes, 2) using marijuana, 3) drinking alcohol, and 4) getting involved in a fist fight (Sampson & Jeglum Bartusch, 1998). Legal cynicism was measured on a five-item scale tapping the general beliefs regarding the legitimacy of law and social norms. The ability of police to respond fairly and effectively was measured with five items to capture the concept of the satisfaction with police. Neighborhood structure was measured by concentrated disadvantage, concentrated immigration, and residential stability.

One of the major findings of this work was the lack of support for a “black” subculture of violence. This conclusion is derived from the result that African Americans are less tolerant of crime versus whites, when community context is controlled (Sampson & Jeglum Bartusch, 1998). At the same time, residents of neighborhoods characterized by concentrated disadvantage and residential instability demonstrated higher levels of legal cynicism, lower levels of satisfaction with police, and more tolerance of deviance. This finding cannot be attributed to compositional effects—this is, it cannot be attributed to characteristics of an individual; and thus, it presents support for a contextual effect of concentrated disadvantage. It further supports the notion of “cognitive landscapes,” or ecologically-influenced orientations towards crime and criminal justice institutions.



In the same tradition, Warner (2003) tested an integrated theoretical framework incorporating culture attenuation into a systemic model. The motivation of this research endeavor stemmed from recent ethnographic work highlighting the need for a re-integration of culture within contemporary community-level crime models (i.e., Anderson, 1999). Warner (2003) presented four major propositions. First, the level of social ties within a neighborhood was presumed to be weakened by social conditions such as concentrated disadvantage and residential mobility. This proposition is consistent with the systemic model. Second, she hypothesized that social ties positively influenced residents' perceptions of the extent to which their neighbors possessed conventional values (which she used as a measure of cultural strength, the opposite of cultural attenuation). Third, she posited that disadvantage had a negative direct effect on cultural strength. Fourth, she hypothesized that, the weaker the culture, the less a neighborhood would be able to exert informal social control of its residents.

Warner's results demonstrated that, even while many of the neighborhoods examined were characterized by high levels of poverty and drug use, the majority of residents either agreed or strongly agreed with conventional values. However, there was much more variation in the extent to which residents perceived their neighbors as holding conventional values. She deemed this as representing variation in "cultural strength." Warner's results also showed that residential stability increased social ties, leading, in turn, to a significant increase in cultural strength. Cultural strength, however, did not have a significant influence on social ties. Therefore, these findings revealed a recursive relationship between social ties and cultural strength. In accordance with the systemic model, Warner's findings also showed that social ties had a significant direct effect on informal social control. This held true regardless of the strength of

culture within the neighborhood. Finally, the hypothesis that neighborhoods with stronger culture foster informal social control was supported.

Carr, Napolitano, and Keating (2007) tested the two approaches of culture—the deviant subculture and culture attenuation perspectives—by comparing the responses from in-depth interviews of youth in three neighborhoods regarding their contacts with police, their satisfaction with police, and their ideas about reducing crime. One neighborhood was predominantly African American, one predominantly Latino, and the last predominantly white. This qualitative study revealed that, although most youth interviewed held a negative perception of police, they nonetheless responded that the best way to respond to crime was to increase police presence and to apply tougher policing policies. The authors interpreted these responses as indicative of a weakened conventional culture as opposed to an outright oppositional culture.

As reviewed up to this point in the chapter, initial work in the social disorganization tradition by Shaw and McKay alluded to culture and the potential roles it may play within a social disorganization model. However, partly because of the shift to a control perspective and an emphasis on structural disorganization (i.e., weak ties) within the systemic model, the role of culture was ignored within social disorganization theory for several decades. Once the research had revealed that informal social control (measured as social ties) only partially mediated the effect of structural characteristics on crime and that the effects of social ties were conditional, researchers began to re-explore the possible influence of culture within the social disorganization tradition. This re-exploration was reinforced by work emphasizing deleterious effects of concentrated disadvantage on social *and* cultural disorganization.

However, one of the most influential works regarding the role of culture in explaining community crime rates is that of Elijah Anderson's (1999) *Code of the Street: Decency, Violence*

*and the Moral Life of the Inner City*. In fact, perhaps more than any other work, this seminal ethnographic work has laid the path for contemporary research on neighborhood-based cultural effects on crime. The next section discusses the major themes and elements presented in Anderson's work.

## **THE CULTURE PERSPECTIVE THROUGH THE EYES OF ELIJAH ANDERSON**

Many scholars interpret Anderson's work as proposing that the variation of crime rates across neighborhoods is due to the degree to which residents adhere to an *oppositional culture*—that is, a subculture where most of the rules and norms go against mainstream culture and promote the use of violence and other types of criminal behavior. Anderson referred to these oppositional rules as the “code of the street.” The emergence of this code, its content, and its effects are discussed in detail below (for a recent review, see Swartz, 2010).

### **The Emergence of the Code**

Anderson (1999) proposes that the culture, or code, of inner-city neighborhoods develops because of the structural conditions in which residents are enmeshed. From Anderson's perspective, due to the structural deprivation residents of these inner-city neighborhoods experience, they cannot achieve status, respect, and success through the same channels as others who do not live in this structural deprivation. To that end, the “code” serves as an adaptation to this deprivation. The “code” not only dictates how individuals behave during interactions with others but it also sets new standards for success and new definitions for what gains respect and status within the neighborhood.

This “code of the street” is most likely to develop in a social context of “concentrated disadvantage,” as described initially by Wilson (1987). As discussed previously, in the 1980s inner-city neighborhoods, especially those within the rust-belt of the United States, began to experience a different type of poverty than before. This entrenched poverty and social isolation of inner-city residents derived from the consequences of deindustrialization, white-flight, and the segregation of housing markets (Wilson, 1987). Due to deindustrialization, many jobs vacated the cities; individuals with the resources to do so followed these jobs. This led many cities to experience significant population loss, and to a large extent, leaving behind only the poorest of residents. Compounding the effects of deindustrialization, the segregation of the housing markets and white-flight only further contributed to the isolation experienced in many of these poor inner-city neighborhoods. These various historical and social forces changed the structural conditions of inner-cities, resulting in areas consisting of predominately black populations that suffer from social isolation, persistent poverty, joblessness, and disrupted families. These structural conditions provide an environment that fosters interpersonal violence and drugs, other criminal activity and underground markets to flourish. According to Anderson, it is the social isolation and abandonment from mainstream society that has allowed the “code of the street” to prevail. In this light, the “code of the street” is an adaptation to the structural deprivation that these residents face.

### **Campaigning for Respect**

The foundation for the “code” is a set of informal rules that dictate interpersonal public behavior. Most of the rules reject mainstream conventional culture and this is why it is often classified as an oppositional culture. Essentially, the “code” is a set of antisocial values,

attitudes, and beliefs and because of what the “code” promotes, individuals that adhere to the “code” are more likely to be involved in violence, non-violent offending, and in general, have a disregard for others. At the heart of the code is the importance of publicly achieving, maintaining, and protecting reputation, status, and respect.

While most of the literature studying the “code of the street” focuses on the retaliatory component and violence to gain and maintain status and respect, when Anderson’s work is considered in its entirety, there is evidence that he is presenting a code that is multifaceted and best viewed as a general set of antisocial attitudes, values, and beliefs as opposed to a code of retaliatory violence alone. In fact, I argue that Anderson’s theoretical concept, “code of the street” can be divided into four elements, with the common theme across these elements being that each exists as a means to gain and sustain respect or status in the neighborhood. In my view, the “code of the street” expresses retaliation, predation, victimization, and most generally, a broad set of antisocial values. Again, it is through these four means that individuals who adhere to the code gain respect and establish status within the neighborhood.

Respect is viewed as a commodity; and for inner-city residents, “respect is viewed as an external entity, one that is hard-won but easily lost—and so must constantly be guarded” (p. 33). Due to the social isolation and structural deprivation experienced by those living in neighborhoods that adhere to the “code,” these individuals are not awarded with the same opportunities nor do they have access to the resources that are available to much of “middle-class, white” America. Through the adaptation process, the “code” allows for these individuals to define their own standards for success, and their own criteria for what gains respect and status. For “middle-class, white” America, success is largely judged based on an individual’s education, career, and home ownership. In neighborhoods, where the “code” has a presence, an individual’s

status and level of success is based on things such as being a “tough guy” and not someone to mess with, being a drug dealer, or even having children with numerous women. An individual’s reputation in these neighborhoods is very powerful. Therefore, in communities where the “code” has a presence, individuals place an extreme importance on the issue of respect, and this respect is often gained and maintained through adherence to the “code.”

One of the reasons the “code” is associated with increased crime rates is because the “code” promotes the use of violence under certain circumstances. According to the “code,” in response to verbal attacks on an individual’s reputation or physical attacks against an individual, it is completely acceptable to respond with violence. In fact, such violent responses are encouraged. Due to this element of the “code,” violence is frequently used to gain respect from others on the street—whether they are members of their peer group or potential transgressors. In an effort to deter interpersonal transgressions and to campaign for respect, individuals who adhere to the code feel as though they must respond with violence. If they do not respond with violence they are likely to be viewed by others as weak and a good target for future victimization. Because of this, the campaign for respect and the use of violence are intertwined.

In neighborhoods where the “code” has a presence, status and respect is also gained by the type of clothes, shoes, and jewelry worn. In addition, the type of car or the rims and stereo system in the car contribute to one’s status among his or her peers. According to the “code,” it is permissible to commit theft to obtain possession of an object that might gain an individual more respect or a higher status in the neighborhood. If an individual owns such materials, it is their duty to protect the status symbols because they are valuable targets for others who are wanting to build their reputation. While, violence is sometimes used to gain possession of these highly sought items, if an individual adhering to the “code” saw the opportunity to simply take someone

else's property, they would do so and essentially blame the victim that the property was left unguarded.

Again, because of the concentrated disadvantage and blocked opportunities, individuals living in neighborhoods that adhere to the "code" are not able to build self-worth and gain respect using the same educational or occupational avenues that middle-class America uses to gain respect. Therefore, they view one of the only avenues for gaining respect and a sense of self-worth is through developing a "tough" reputation commanding respect on the street. Having a "tough" reputation not only gains or maintains respect from others, but it also serves to provide self-protection. Many of these residents hold negative feeling towards the police and lack confidence in the police's ability to keep their neighborhood safe. Therefore, they often rely on themselves for protection and is viewed as a necessity for survival. Anderson explains that "The code of the street emerges where the influence of the police ends and personal responsibility for one's safety is felt to begin, resulting in a kind of 'people's law' based on 'street justice'" (p. 10).

### **Decent and Street Families**

Anderson recognizes that even in neighborhoods where the "code" prevails, there is still a large presence of conventional values. He indicates that these communities are socially organized by two conflicting orientations: "decent" and "street." Decent families mainly live their lives by following mainstream rules and have conventional values. They instill strong work ethic in their children and place extreme value on personal responsibility. They have hope for the future and believe that with hard work, their situation can be improved. Even though "decent" individuals and families do not live their life according to the "code," the "code" still affects their lives. For decent members of the community, it is necessary to be familiar with

“code” for survival purposes. Knowledge of the “code” allows them to navigate through the inner-city environment and it serves as a defense against those that adhere to the “code.”

Decent families are faced with culture conflict in that they want their children to internalize prosocial values but, at the same time, they do not want their children to be disrespected or taken advantage of on the street. To cope with the culture conflict, it is necessary for decent individuals to learn how to “code-switch.” Code-switching refers to a typically decent individual acting “street” or adhering to this code in certain situations. Under certain circumstances, for protection or to avoid being taken advantage of, decent individuals must be familiar with the “code” so they have the ability to “code-switch.”

Street families’ home-life, on the other hand, is often disorganized and they often lack the ability to prioritize their responsibilities. When money should go to food, housing, or even diapers, money may go to drugs and alcohol. This frequent mismanaging of resources is rooted in financial frustration but ultimately leads to selfishness and neglect of others. Given such circumstances, it is easy to see why Anderson characterizes these families as having an artificial sense of family and community. Beyond neglect of family members and their well-being, street families tend to have a general lack of consideration for others and their rights. Street parents often judge others based on the code and they may even socialize their children into the code in a “normative” way (p. 45). Individuals who adhere to the code use the code to direct their interpersonal behavior.

Anderson’s categorization of decent and street individuals is not one of mutually exclusive groups. Rather, he identifies a continuum, and individuals fall somewhere on the continuum of decent to street. Further, it is the degree to which individuals are socially isolated from the wider society that defines where they fall on this continuum. Most individuals in



neighborhoods with a presence of the “code” are generally decent, but it is the few that are intimately associated with the criminal element that allow for the code to endure. Not only does culture conflict arise in the community, but it is also present within families. Extended families are often comprised of members that are more or less street than others. This leads to culture conflict within a family and can cause tension and divides. For example, family members who are more street-oriented view the decent members as a threat, and they sometimes refer to them as “acting white” (p. 65). According to contemporary perspectives of culture, it appears as though Anderson’s work consists of two distinct, and often considered competing cultural perspectives.

Recently, and most explicitly in the work of Sampson and Bean (2006), two distinct positions of culture have been presented—one of “culture as values” and one of “culture as performance” or “culture-in-action.” While these positions are distinct and often considered conflicting, both positions appear in Anderson’s work. Culture as values is conceptualized as something internal, found within us, where culture in action is conceptualized as existing between us that is created through everyday social interaction (Sampson & Bean, 2006). From the culture in action perspective, culture is not deeply embedded within us but rather it is a social process that occurs in social interaction.

On one hand, Anderson discusses the “code of the street” within a social disorganization framework focusing on culture as an adaptation to the structural deprivation experienced where this “code of the street” is most likely to exist. The structural deprivation actually leads to an oppositional culture where the values go against those of mainstream culture. This account is consistent with a culture as values perspective. However, elements of culture as performance are also evident throughout Anderson’s work.

For example, from a culture in action or culture as performance perspective, Anderson's notion of decent and street, is not a question of who has internalized decent or street values but rather in what situations or for which audiences do these residents of deprived neighborhoods perform a decent self and for which audiences do they perform a street self. In situations where it is advantageous to follow conventional norms and values, such as when interacting with a teacher or a church, an individual might be more likely to perform according to decent values; however, when it is more advantageous to perform according to street values, they will do so. In this sense, Anderson's cultural account is one of culture as performance. However, as suggested above, it could also be argued that his account is consistent with a culture as values perspective.

It is the culture-conflict of decent and street individuals living in the same neighborhoods and interacting at staging areas such as recreation centers and schools, that it is possible that the "code" has a contextual effect. That is, a generally "decent" kid might commit a crime that goes against his personal values but does so because of the culture of his environment. For example, he or she may commit assault, knowing that it is wrong, but fearful that if he or she does not respond with violence, his peers will see him as "soft" and he may become a good target for future transgressions. In this sense, it is not the kid's individual values that lead him or her to commit assault, but rather the culture of the neighborhood.

Here, in this discussion of staging areas, the inconsistency between the "culture as values" and "culture as performance" is illustrated. According to Anderson, the decent kids do not internalize the street values, the culture is not embedded within the decent kids. Rather, during certain interactions, decent kids "perform" according to street values to "save face" and protect themselves. In a sense, it appears that Anderson is making an argument of two cultural processes—one for decent and one for street individuals. The decent kids' behavior is more

compatible with a culture-as-performance perspective, while the street kids' behavior is more compatible with culture-as-values perspective (Sampson & Bean, 2006). Whether the effects of culture are best framed within a culture-as-values or culture-as-performance paradigm—or whether the most appropriate paradigm depends on factors such as family orientation—remains an empirical question, and it is one that this dissertation begins to address.

In sum, according to Anderson, impoverished conditions, accompanied by unrelenting racial discrimination, have led to anger, bitterness, and a need to retaliate against mainstream society. Because individuals living in concentrated disadvantage and suffering from social isolation cannot achieve success using the same avenues as mainstream society, they have adapted by creating their own set of rules, and their own standards for respect and success. In the end, it is this social context of concentrated disadvantage coupled with social isolation that has allowed the “code” to continue.

While Anderson's qualitative work provides rich, in-depth details about the culture and lives of those living in poor urban communities, it is important for researchers to quantitatively test the propositions presented by Anderson. Since Anderson published his ethnography, researchers have, in fact, attempted to quantify his theory and test its empirical validity. The next subsection summarizes these studies.

### **Empirical Review of the “Code” and its Effects**

The quantitative research on the “code” has been largely supportive; however, there are some instances where the research has contradicted some of Anderson's claims. Brezina, Agnew, Cullen, and Wright (2004) highlighted the roles of perceived opportunity and victimization in explaining variation in adherence to a street code. These were two key elements set forth in

Anderson's (1999) subcultural account. Again, the role of blocked opportunities is relevant to the code because poor urban residents have limited opportunities to achieve respect and status through the legitimate means used in mainstream culture. Therefore, consistent with a strain perspective (Cohen, 1955; Cloward, & Ohlin, 1960), the code is presumed to be an adaptation to the hopelessness and alienation resulting from these restricted opportunities. The role of victimization is relevant to the code because, for many poor residents, knowing the code is necessary for survival. Individuals, who are at risk for victimization, learn the code for self-protection. Therefore, prior victimization is likely to influence the development of code-related beliefs.

Although perceived opportunity and victimization were key variables of interest, the researchers' two general hypotheses, incorporating *all* variables in their study include the following: 1) a range of demographic characteristics would be associated with the adherence to the code, such as low socioeconomic status, race, and residing in an urban neighborhood; and 2) a range of social process would be associated with the adherence to the code that promote or foster the learning of the code such as, inadequate parental supervision, abusive parents, exposure to violent or aggressive peers, *prior violence and victimization*, and a *lack of perceived opportunity through legitimate means*.

Brezina et al. (2004) used the first three waves of the National Youth Survey (NYS), a national delinquency self-report panel study of youths aged 11 to 17 years. A male subsample of the NYS, consisting of 918 male youths, was used for the analysis. The exogenous variables of SES, race, urban/nonurban residence, neighborhood crime rate, family structure, and age were measured at Time 1. The endogenous variables at Time 1 included perceived opportunity, victimization, and parenting factors, along with violent behavior at Time 1. At Time 2, peer

aggression, adherence to the code, and violent behavior were measured, and, at Time 3, violent behavior was measured.

Brezina et al. (2004) found that the perception of blocked opportunities was associated with an increased likelihood of antisocial and aggressive peers. The association with antisocial peers fostered the development of code-related beliefs that, in turn, led to an increase in violent behavior. Perceived blocked opportunities also had direct effects on Time 2 violence, while controlling for Time 1 violence. Time 2 violence, in turn, had direct effects on Time 3 violence. Time 2 violence was also related to a subsequent adherence to code-related beliefs. Further, previous victimization had a significant direct effect on violence at Time 3. In fact, their data suggested that violence is brought about more so by a need for self-protection or by anger rather than by an adherence to the code (Brezina et al., 2004). However, the violence, once it occurs, does promote subsequent adherence to the code. Overall, these results lend the most support for Anderson's contention that the code is an adaptation to restricted opportunities and to the high-crime environments in which the disadvantaged reside. While Brezina et al. (2004) does provide preliminary support for Anderson's cultural account, the findings should be accepted with caution and future replication and expansion of this research is needed. The measure of "code-related beliefs" is somewhat limited in that the measure does not consider context or under what conditions the use of violence would be appropriate. The context in which a violence response is appropriate is central to Anderson's work. The following two studies are able to improve upon the measure of the "code" in this respect.

Stewart and Simons (2006) conducted a partial test of Anderson's (1999) subculture of violence thesis by examining whether neighborhood context, family type, and discrimination affected the adoption of code-related beliefs. Stewart and Simons hypothesized that those

adolescents who were raised in a “street” family would be more likely to adhere to the code while those who were raised in a “decent” family would be less likely to adhere to the code. Second, they hypothesized that adolescents who experienced discrimination would be more likely to adhere to the code. Third, they hypothesized that the effects of neighborhood context, family type, and discrimination on delinquency would be mediated by the code.

To test their hypotheses, Stewart and Simons (2006) used 720 families from the first two waves of the multi-site Family and Community Health Study (FACHS). The aim of the FACHS data was to identify the neighborhood and family effects on the health and development of African-American children across a variety of community contexts. They took advantage of the longitudinal design of their data and predicted adherence to the code and violent delinquency, both measured at Wave 2, while controlling for adherence to the code and violent delinquency, along with other relevant controls, measured at Wave 1.

The dependent variable of violent delinquency was constructed by using eight questions that assessed the frequency of their violent offending during the previous year. Approximately 28 percent of the sample reported participation in violent delinquency. The key independent variable was adherence to the street code. This variable was created by using a 7-item scale that asked the adolescents to what extent they agreed that it was justified or to their advantage to use violence. A few examples of the questions asked include: 1) “When someone disrespects you, it is important that you use physical force or aggression to teach him or her not to disrespect you;” 2) “People will take advantage of you if you don’t let them know how tough you are;” and 3) “Sometimes you need to threaten people in order to get them to treat you fairly” (Stewart & Simons, 2006, p. 12).

Other independent variables included neighborhood violence, neighborhood disadvantage, the family characteristics of “decent” family and “street” family, and discrimination. Neighborhood violence was measured with a 7-item scale that asked respondents the extent to which various violent acts occurred in their neighborhood (1 = *not at all a problem* to 3 = *a big problem*). To measure neighborhood disadvantage, five census variables were used including: 1) proportion of female-headed households; 2) proportion on public assistance; 3) proportion unemployed; 4) proportion of households below the poverty line; and 5) proportion African-American. To measure whether a family was “decent” or “street,” observational data from videotaped family interactions were used. The “decent” family construct was created by using a summed measure across seven observational scales including: consistent discipline, child monitoring, positive reinforcement, quality time, warmth/support, inductive reasoning, and prosocial behavior. The scales were 5-point scales ranging from 1 = no evidence of the behavior to 5 = extreme evidence of the behavior. The “street” family construct was created by also using a summed measure across seven observational scales including: inconsistent and harsh discipline, hostility, physical attacks, parental violence, verbal abuse, antisocial behavior, and child neglect. The same response scale used for the items measurement of “decent” families was used for the items measuring “street” families. Discrimination was created by using 13 items from the Schedule of Racist Events that measured the frequency of various discriminatory events the respondents had experienced over the past year.

Their analysis revealed support for all of their hypotheses and therefore overall support for much of Anderson’s previous work. Neighborhood structural characteristics, living in a “street” family, and discrimination were all significantly associated with adopting the code. However, contrary to their hypothesis, living in a “decent” family was not significantly

negatively associated with adhering to the code. Further, the analysis indicated that the code mediated approximately 26 percent of neighborhood violence effects and approximately 20 percent of the effects of neighborhood disadvantage and discrimination on violent delinquency. However, the code mediated only about four percent of the effects of family characteristics on violent delinquency.

***Multi-Level Test of the Code on Delinquency.*** Stewart and Simons (2010) was the first multi-level empirical test of the code of the street. The goal of their study was to assess whether, above and beyond an individual's own adherence to the code, neighborhood culture had an effect on adolescent involvement in violence. To test the validity of the code of the street being a multilevel phenomenon, Stewart and Simons (2010) used the first to waves of the FACHS, the same data set they used from Stewart and Simons (2006). The specific sample used in Stewart and Simons (2010) analysis consisted of 763 African American children between the ages of 12 and 15 that came from a variety of community settings and families.

Using a dichotomous measure of violence, they predicted the effect of street culture on violence at Wave 2, while controlling for violence from Wave 1. At Wave 1, approximately 17 percent of the sample had participated in violent delinquency, but by Wave 2, 28 percent of the sample had participated in violent delinquency. The key independent variable of neighborhood street culture was comprised of a nine-item scale measuring the primary caregivers' agreeability to the use of violence being supported in their neighborhood (1 = strongly disagree to 4 = strongly agree). It was measured at Wave 1. To create the neighborhood-level measure of culture, individual primary caregivers' responses were aggregated to the neighborhood level. To measure the adolescents' adherence to a street culture, they used a seven-item scale measuring the adolescent's agreeability to the use or justification of violence in certain situations. This is



the same measure of adherence to street culture as was used in the researchers' previous work (Stewart & Simons, 2006).

After finding significant variation in violent delinquency across neighborhoods, Stewart and Simons (2010) examined the influence of neighborhood street culture, controlling for the adolescents' individual adherence to the code, on violent delinquency. They did find a contextual effect of neighborhood street culture on violent delinquency. Further, even after controlling for disadvantage and homicide rate at the neighborhood-level, the contextual effect of neighborhood street culture remained. Next, Stewart and Simons (2010) controlled for violent delinquency at Wave 1 in addition to the other controls. The analysis revealed that, even after controlling for previous violent delinquency, neighborhood street culture and the adolescents' adherence to the code remained significant predictors of violent delinquency. For adolescents residing in neighborhoods where the code was prevalent, their likelihood of being involved in violence increased by 14 percent; those adolescents who adhered to the code themselves had a 25 percent increased likelihood of being involved in violence.

In further analysis, Stewart and Simons (2010) found a significant positive cross-level interaction between adolescents' adherence to the code and neighborhood street culture. The interactions indicated that individual adherence to the code has a stronger effect on violent delinquency in neighborhoods where the code is more pervasive in comparison to neighborhoods where the code is not as pervasive. Overall, the analysis and findings of Stewart and Simons (2010) is very promising for the empirical validity of Anderson's work.

***Victimization and the Code.*** According to Anderson, individuals adopt the code due to the structural deprivation and the lack of trust in law enforcement to provide personal safety. Therefore, some individuals adhere to the code to increase their personal safety and reduce their

risk of victimization (see also Brezina et al., 2004). Theoretically then, it is presumed that individuals who abide by the code would experience lower levels of victimization than those who do not. However, the existing research is largely mixed and it appears unclear as to whether individuals who abide by the code experience higher or lower rates of victimization than those who do not. The research indicating that individuals who adhere to the code experience higher rates of victimization provides evidence contrary to the notion that individuals adhere to the code to increase their safety and reduce the likelihood of experiencing victimization.

While much of the earlier research on the code and victimization is plagued with several methodological limitations, the research is suggestive that adhering to the code may serve as a protective factor in certain contexts. Baron, Kennedy, and Forde (2001) used a sample of 125 homeless male street youths to study street code behaviors and victimization. They found that adhering to a street culture was negatively associated with victimization—that is, those street youths that were least likely to be victimized were those that reported more attitudes supportive of using violence to handle disputes. The authors presumed that the adoption of a street code served as a mechanism to limit victimization risk. However, these results should be considered with caution. Not only did this study use a snowball sampling design and was cross-sectional, the sample was small in size and very exclusive. To be included in the sample, the respondent had to meet three criteria: 1) 24 years of age or younger; 2) had finished school or dropped out; and 3) spent at least three hours a day, three days a week out on the street or in the mall.

Anderson's thesis is much more inclusive in that he would argue that the street code is influential in the lives of most that live in neighborhoods experiencing concentrated disadvantage and social isolation. Nowhere in Anderson's discussion does he discuss a unique influence of the code

among the homeless. Therefore, the results from Baron et al. (2001) should be read with caution and may only be generalizable to homeless men.

Qualitative research has also indicated that adhering to a street code may serve as protection against victimization. Through in-depth interviews with 33 street offenders, Jacobs (2004) concluded that the offenders he interviewed used the threat of retaliation to minimize the risk of victimization. Further, the threat of retaliation served not only to reduce their risk of victimization, but also to build a “tough” reputation and respect on the street. Although the main purpose of Jacobs’s (2004) research was to create a typology for retaliation, his work provided insight on the type of retaliation most effective within a street culture and its connection with victimization. Specifically, face-to-face retaliation is essential to the street culture in that, “An essential part of payback is for the violator to know unequivocally that he or she has been put in his or her place by the specific person he or she wronged. Without this knowledge, the violator may be led to believe that the victim has accepted the affront and is ‘soft’” (Jacobs, 2004, p. 314). According to the street code, if the individual affronted does not stand up for himself or herself, they could quickly obtain the reputation of being weak, a “sucker,” and a “chump.” With a reputation such as this, according to Anderson (1999), they may become a prime target within the community for someone who is trying to campaign for respect.

Rich and Grey’s (2005) study of recurrent injury echoes the conclusions of Jacobs (2004) in that transgression cannot go unnoticed and retaliation is necessary when a street culture is present. Their sample consisted of 49 Black males between the ages of 15 and 30 who had been shot, stabbed, or physically assaulted and hospitalized for their injury. Individuals that were under arrest, incarcerated, experiencing severe head trauma, or diagnosed with a severe psychiatric disorder were excluded. Of those interviewed, approximately one-third claimed to be

innocent bystanders and their victimizations were unprovoked (i.e., robbery victim), another one-third claimed their injury was the result of an escalating argument, and 25 percent claimed their injury was due to revenge or retaliation (Rich & Grey, 2005).

The respondents in Rich and Grey's (2005) study indicated that those individuals who have a reputation of being a "punk" or "sucker" are at risk of repeated victimization because potential transgressors view them as easy targets and unlikely to defend themselves. However, when someone with the reputation of a "punk" or "sucker" attempts to change their reputation by retaliating, they further place themselves at risk for subsequent victimization.

Overall, while these qualitative pieces are merely suggestive, they do indicate that adherence to the code of the street sometimes requires physical retaliation or the threat thereof in an effort to reduce risk of victimization and build respect. However, because of the coercive process between individuals abiding by the code, it is not clear as to whether the relationship between adhering to the code and victimization is positive or negative.

For example, Stewart, Schreck, and Simons (2006) found that those individuals who adopted the code experienced *higher* levels of victimization, and these levels of victimization were above and beyond what would be expected for living in neighborhoods suffering from disorganization and high crime rates. Using a longitudinal sample of 720 black adolescents from 259 neighborhoods, Stewart et al. (2006) took advantage of the longitudinal design of the data and better estimated the causal order between code adoption and victimization. They used violent victimization at Wave 2 as their dependent variable, controlling for violent victimization at Wave 1. Key independent variables included neighborhood violence, neighborhood disadvantage, and the adoption of the street code. Additionally, several controls that have previously been correlated with violent victimization were included in the models. For example,

family SES, family structure, gender, parental supervision, parental violence, school attachment, violent delinquency, peer delinquency, and region were all included as control variables. When adoption of the code was included in the model, it was positive and significantly associated with violent victimization. The results of this model could be interpreted as follows: a one unit increase in adopting the code was associated with a 17% increase in violent victimization. Their next model included neighborhood characteristics, and it showed that living in a violent neighborhood was associated with a significant increase in victimization. Their final model combined the effects of adopting the code and the neighborhood characteristics on violent victimization. Even with the inclusion of all the controls and neighborhood characteristics, the adoption of the code was positively and significantly associated with violent victimization.

To further dissect the relationship between adopting the code and violent victimization, Stewart et al. (2006) included an interaction terms between the adoption of the code and the neighborhood characteristics. This was explored because, according to Anderson, the adoption of the code may serve as a buffer against victimization in the community context in which the code is most likely to develop—a violent and disadvantaged community. Interaction terms were constructed that represented the multiplicative effects between: 1) violence and the code, and 2) disadvantage and the code. The interaction term between adopting the code and neighborhood violence was significant—specifically, neighborhood violence was associated with higher levels of violent victimization for those individuals that adopted the code; however, for those individuals who do not adopt the code, neighborhood violence was not associated with violent victimization. According to Stewart et al. (2006), it appears that adopting the code serves more as a risk factor for victimization rather than a protective factor.

To summarize the above review of the research of the relationship between the code and victimization, qualitative research has found that individuals that live in a community where the code is present do adhere to the code because they think they are safer or have less of risk of becoming a target if they do. However, some quantitative research, specifically Stewart et al. (2006), found that adhering to the code actually increased the risk of victimization. It may be, then, that while individuals who adhere to the code do experience higher rates of victimization, their *perceived* risk of victimization decreases due to adherence to the code.

## SUMMARY

Dating to the work of Shaw and McKay, the role of culture has been a part of the community tradition within U.S. criminology. The attention paid to community culture has waxed and waned over the years, depending upon the particular version of community-based theory “in vogue” at the time. Further, the nature of culture’s influence has been described in various ways over the years – from one of “cultural attenuation” to one involving adherence to a “code of the street.”

Anderson, and the empirical research on the “code of the street,” indicates that there are multiple ways in which the “code” may influence offending. First, at the individual-level, an individual’s own values and beliefs may influence their likelihood of being involved in offending. Recent research has suggested that perceived blocked opportunities and previous victimization are associated with an increased likelihood of adopting the code (Brezina et al., 2004). However, adopting the code appears to be a risk factor for further victimization, rather than a protective factor (Stewart et al., 2006). This contradicts Anderson’s (1999) claim that adhering to the code serves a self-protection function. Research has also demonstrated that not

only do neighborhood structural characteristics, family characteristics, and discrimination influence whether individuals adopt the code directly, but they also affect violence indirectly through the adoption of the code. An alternative path by which the “code” may influence an individual’s involvement in criminal behavior is that, the adherence to the “code of the street” is not only an attribute of an individual, but it is also an emergent property of collectives—*that is, independent of an individual’s adherence to the “code,” the subculture of a community has an effect on its residents criminal involvement.* This path speaks of a contextual effect of the “code.” It the contextual effect of the “code of the hallway” that is the focus of this dissertation.

While the role of culture in explaining offending was initially studied within the context of neighborhoods or communities, research has begun to reveal that other contexts are appropriate for understanding the relationship between culture and offending. For instance, qualitative and quantitative research has begun to explore the importance of school subculture on delinquency. The next chapter discusses the theoretical concept of the “code of the hallway,” summarizes the literature on school effects, including the subcultural effects on delinquency.

## CHAPTER 3. THE SCHOOL AS A CONTEXT FOR SUBCULTURE

### THE CODE OF THE HALLWAY

The “code of the hallway” is a set of attitudes, values, and beliefs that go against conventional attitudes, values, and beliefs. It does not refer to a unique set of values that are specific to the school context. Rather, the school provides a unique context where students spend a significant amount of time interacting with one another; and as a result, the school provides a unique context for cultural values to be transmitted. It is not proposed that these values are only transmitted in school—that is, these values do cut across the various contexts in which youth function; however, because the institution of the school brings students together, it is likely that these values are transmitted in the school just as they can be transmitted in the community. The “code of the hallway” refers to a set of antisocial values that promote the use of violence under certain circumstances, encourages the use of criminal acts to achieve goals (i.e., build a tough reputation), and this “code” allows those who follow it to minimize the harms caused by their delinquency through rationalizations.

The “code of the hallway” recognizes that for youth, the school is a prime context to shape their reputation, obtain respect from their peers, and build and maintain status. Similar to Anderson’s “code of the street,” the “code of the hallway” is a set of informal rules that dictates the behavior of students in their interactions with one another. According to the “code of the hallway,” it is permissible to use violence and other antisocial behavior to build a “tough” reputation, to send the message that an individual is not to be “messed with,” and gain status and respect among the student body. Similar to the way the “code of street” was conceptualized



above, the “code of the hallway” is broadly a set of antisocial attitudes, values and beliefs that uses retaliation, is predatory, and victimizing.

The “code of the hallway” refers to a multi-level process where first, an individual’s adherence to the code places them at a higher risk for involvement in delinquency. Second, it is presumed that the “code of the hallway” has a contextual effect on delinquency. While at the individual-level, the stronger the student’s adherence to the “code of the hallway,” the more likely they are to be involved in offending, the school-level subculture has an independent effect above and beyond the individual’s subcultural values. That is, the subculture of the school, or the degree to which the school adheres to the “code of the hallway,” has an independent effect on an individual’s involvement in delinquency above and beyond the individual’s own adherence to the “code of the hallway.” This effect of the “code of the hallway” is referred to as a contextual effect because it is not an attribute of an individual that is influencing the behavior but rather the attribute of a context. Further, it is also presumed that the effects of the “code of the hallway” also influence behavior that occurs out of the school. This is likely the case because cultural values are not necessarily context specific—that is, individuals carry their cultural values with them from one context to another. It is in this vein, that it is expected for the school subculture to influence behavior that takes places out of the school, as well as inside the school. It is also likely that community subculture influences behavior that occurs in school and helps shape school subculture. To this end, school subculture and community subculture are very closely linked.

In sum, the “code of the hallway” is a collection of informal rules or cultural values that guide interpersonal behavior in school and it is likely that this “code of the hallway” also influences behavior occurring out of school. The “code of the hallway” is presumed to influence

behavior in two ways. First, an individual's own set of values—that is, how strongly he or she adheres to the “code of the hallway”—increases the likelihood of their involvement in delinquency. Second, the school's adherence to “the code of the hallway” influences an individual's involvement in delinquency above and beyond their own adherence to the “code of the hallway.” That is, the “code of the hallway” has a contextual effect on an individual's involvement in delinquency. While the focus of this dissertation is to study the effects of school-based culture, previous research has indicated several other important school-based effects to consider in explaining delinquency and victimization. The next section summarizes this research.

### **STRUCTURAL AND ORGANIZATIONAL SCHOOL-BASED EFFECTS**

Within criminology, the most common context researched is the community; however, rather recently criminologists have recognized that other contexts may have important influences on crime and victimization outcomes. The school is one of these contexts. Further, school-based research has borrowed several theoretical concepts and characteristics from the community research and applied them to the school context. While the school-based literature lacks the consensus of the terminology used and the measurement of these concepts in comparison to the community literature, common themes have begun to surface.

Most previous studies of school-based effects on delinquency or victimization have emphasized demographic, social structure, or structural organizational characteristics of schools. This body of research has found that a number of demographic, structural, and organizational characteristics are important in understanding the delinquency and victimization rates of schools. For delinquency and victimization, the research demonstrates that the demographic composition

of the student body matter. Schools with a larger proportion of minorities, larger proportions of students from single-parent, and lower-income homes tend to suffer from higher rates of delinquency and victimization. These findings parallel the conclusions drawn from the community literature in that communities with a higher proportion of minorities, more female-head households, and of lower SES, tend to have higher crime and victimization rates. Structural characteristics of schools also influence their rates of delinquency and victimization. For example, larger schools, public schools, urban schools, and those with a higher student-teacher ratio tend to experience higher rates of delinquency and victimization.

Certain organizational school factors influence delinquency and victimization rates of schools as well. For example, the school literature has borrowed the theoretical concepts of collective efficacy, incivilities or social disorder, and community subculture from the community literature. Within this literature, collective efficacy is often referred to as “school efficacy” or “communal school.” School efficacy refers to the extent to which the school’s teachers, principals, and other officials have shared values and norms, are able to work together to solve problems, possess strong informal social control, and are able to *activate* that informal social control. School disorder largely refers to the physical incivilities in school or on school grounds. Frequent measures of school disorder include: broken lockers, broken windows, graffiti, poorly maintained school grounds, or unsupervised groups of youths. The school-based research, to date, indicates that many concepts that have been applied to the community are also important to understanding the school context. Schools with higher school efficacy, consistent discipline, student participation, and strong school attachment tend to have lower rates of delinquency and victimization. Table 3.1 below summarizes this literature.

**Table 3.1: Summary of the Effects of Structural and Organizational Characteristics of Schools on Delinquency and Victimization**

<b>Authors</b>	<b>Data Source</b>	<b>Dependent Variable(s)</b>	<b>School-Level Variables</b>	<b>Significant Effects</b>
Anderson (2002)	Gang Resistance Education and Training (GREAT)	Delinquency (person, property, and status offenses)	Family Structure (proportion of students living in a single-parent home)	Family Structure (proportion of students living in a single-parent home) (+)
Benbenishty & Astor (2005)	National School Violence Survey (Israel - 1999)	In-School Victimization	Community SES; School Level; School Type; School Size; Class Size; Teachers' Support; Anti-Violence School Policy; Student Participation; Proportion Male	Teacher Support (+); Anti-Violence School Policy (-); Student Participation (-); Proportion Male (+)
Bradshaw, Sawyer, & O'Brennan (2009)	Maryland Public Schools (2005-2006)	Frequently Bullied	Urbanicity; Student/Teacher Ratio; Percent Free or Reduced Lunch; School Suspension Rate; Student Mobility; School Type (elementary or middle school)	Suburban School (+); Student-Teacher Ratio (+); Percent Free or Reduced Lunch (+); Student Mobility (+) (for middle schools)
Burrow & Apel (2008)	School Crime Supplements to the NCVS (2001 and 2003)	Assault and Larceny Victimization	Public School; Middle School; School Disorder; Physical Security; Non-Physical Security; Rule Clarity	School Disorder (+); Rule Clarity (-)
Campbell Augustine et al. (2002)	Kentucky Youth Survey (1997)	School-based Violent Victimization School-based Property Victimization	School-Size; Metropolitan Status	School Size (+); Metropolitan Status (-) (for high schools) Metropolitan Status (+ for high schools and - for high schools)
Crooks et al. (2007)	The Fourth R	Violent Delinquency	School Size; School Location; Academic Success; School Safety; Parental Nurturing; School Connectedness; Community Connectedness)	Perceived School Safety (-)

<b>Authors</b>	<b>Data Source</b>	<b>Dependent Variable(s)</b>	<b>School-Level Variables</b>	<b>Significant Effects</b>
Hoffman & Dufur (2008)	National Education Longitudinal Study (NELS) and Add Health	Delinquency	School Efficacy (schools are fair, teachers care about and trust students, schools function well); academic emphasis, school size, percentage of students who receive free or reduced lunch (as a proxy for school-level SES); percentage students from single-parent families; percentage minority students, private versus public school; school location; school safety	School Efficacy (-); Academic Emphasis (+); School Safety (-); Percentage Minority (+); Rural (-)
Hoffman & Xu (2002)	NELS-1992	In and out of school Delinquency, school disciplinary actions	Racial Composition; Student-teacher ratio; type of school (private/public); school location (urban, rural, or southern)	Student/Teacher Ratio (-); South (-); Private school (-)
George & Thomas (2000)	NELS-1988	Victimization	School Size; School SES (poverty); Type of School (public, private, Catholic); School Location (urban, suburban, rural)	School Size (+); School SES (+); Private and Catholic (-); Urban and Rural (+)
Gottfredson et al. (2005)	National Study of Delinquency Prevention in Schools	At-School Teacher Victimization, At-School Student Victimization, Student Delinquency	Proportion of Males; Poverty; Proportion of Minority Students and Teachers; Consistent discipline; Psycho-Social Climate	Proportion of Males (+); Poverty (+); Proportion of Minority Students and Teachers (+); Consistent discipline (-)
Khoury-Kassabir, Benbenishty, Astor, & Zeira (2004)	National School Violence Survey (Israel - 1999)	In-School Victimization	Community SES; School Level; School Type; School Size; Class Size; Teachers' Support; Anti-Violence School Policy; Student Participation; Proportion Male	Community SES (+); School Level (+); Class Size (+); Teacher Support (+); Anti-Violence School Policy (-); Student Participation (-); Proportion Male (+)

<b>Authors</b>	<b>Data Source</b>	<b>Dependent Variable(s)</b>	<b>School-Level Variables</b>	<b>Significant Effects</b>
Kumar et al. (2002)	MTF (Institute for Social Research at the University of Michigan)	Substance Use	School's Tolerance for substance use	School's Tolerance for substance use (+)
Lo et al. (2011)	Alabama Student Survey (conducted by the Substance Abuse Services Division of the Alabama Department of Mental Health and Mental Retardation)	At-School Delinquency	School Type (elementary, middle/junior high, secondary, combined); Prosocial School Climate	Prosocial School Climate (-)
Payne (2008)	National Study of Delinquency Prevention in Schools	In-School Delinquency (Theft, Vandalism, and Assault)	Communal School Organization (supportive and collaborative relations, common goals and norms); Proportion of Minority Students; Proportion of Minority Teachers; Low SES; Gender composition; School Enrollment; Urbanicity	Communal School Organization (supportive and collaborative relations, common goals and norms) (-); Proportion of Minority Students (+); Low SES (+)
Skubak Tillyer, Fisher, & Wilcox (2011)	Rural Substance Abuse and Violence Project (First Wave)	Serious Violent, In-School Victimization	School-Efficacy; Police Involvement; Metal Detectors; Locker Checks; Backpacks and Book Bags Banned; School Delinquency	School Delinquency (+)
Stewart (2003)	NCES (Second Wave)	School Misbehavior	School Size; Proportion Nonwhite; School Poverty; School Location; School Social Problems (tardiness, absenteeism, physical contacts, gang activity, possession of weapons, drug/alcohol use, physical or verbal abuse of teachers, racial/ethnic conflict); School Cohesion	School Size (+); School Location (+)

<b>Authors</b>	<b>Data Source</b>	<b>Dependent Variable(s)</b>	<b>School-Level Variables</b>	<b>Significant Effects</b>
Welsh, Stokes, & Greene (2000)	U.S. Census, Philadelphia Public School Data, and Police Data	Delinquency and School Misbehavior	School Size; School Stability	School Stability (-)
Wilcox & Clayton (2001)	Sub-sample of Rural Substance Abuse Violence Project	Carrying a Weapon to School	Proportion Nonwhite; Proportion Male; Proportion Free or Reduced Lunch; Type of School (middle or high school); School deficits (proportion of students afraid, proportion of students threatened, proportion of students; mean school problem behavior, etc.); School Capital (mean school attachment, mean church attendance, mean religious commitment)	School-Level SES (proportion of students receiving free/reduced lunch)
Wilson (2004)	Safe Communities-Safe Schools Initiative (University of Colorado-Boulder)	Aggression; Victimization of Aggression	School Size; Percent Nonwhite; School Performance; School Connectedness (positive attitudes toward school)	School Size (+); Percent Nonwhite (+); School Performance (-); School Connectedness (positive attitudes toward school) (-)

In contrast, a relatively small amount of research has applied the community-based cultural theory described in the previous chapter to the school context, thus exploring the role of school subculture on student delinquency. This next section in this chapter reviews in detail these relatively few studies and then provides an overview of the research questions guiding the present study of the relationship between school subculture and student offending.

### **COMMUNITY SUBCULTURE, SCHOOL SUBCULTURE, VIOLENT AND NON-VIOLENT OFFENDING**

Researching schools as cultural contexts for delinquency seems reasonable and potentially lucrative since schools have been identified as a primary staging area for street codes (Anderson, 1999). In Anderson's work, he even makes the reference that, "the hallways of the school are in many ways an extension of the street" (1999, p. 22). Adolescents spend a significant amount of time at school interacting with one another. This provides ample time and opportunity for cultural values to be transmitted and for respect to be gained or lost among their peers.

Much of the qualitative research exploring the potential role of school subculture on delinquency and victimization has proposed that school subcultures and community subcultures, and their respective effects on violence, are overlapping, with the lines blurred between the two realms (Brunson & Miller, 2009; Miller, 2010). For example, Brunson and Miller (2009) examined how conflicts are influenced by the school setting and how these conflicts may spill into the community and vice versa. To investigate these two research questions, they used in-depth interviews and surveys from 38 African American male high school students from St. Louis, Missouri. All of the boys resided in disadvantaged neighborhoods and were selected from



general public schools, two alternative high schools, and a community organization that was housed in a recreation center. The sample was purposive in nature because the researchers wanted at-risk youths who had experiences with violence as perpetrators, victims, or witnesses.

Many of their findings echoed previous studies regarding school violence in that the boys reported that violence, especially serious violence, was more likely to occur in the community rather than at school. Their findings also revealed that several characteristics of the conflicts occurring in school parallel those characteristics of conflicts occurring in the community such that conflicts are likely to lead to violence when status or respect is being challenged. Regardless of the context, the boys indicated that the cause of most fights revolved around individuals trying to maintain, protect, or gain status among their peers. These public fights served as campaigns for respect.

However, the boys did indicate some unique characteristics about the school context that could escalate a situation to violence. They identified how the continual interaction with one another, and often the inability to avoid contact with certain individuals, because of a shared class or lunch, can precipitate an altercation and sometimes violence. Students being in such close proximity to one another at school also promote gossip and rumors. If these rumors challenge an individual's status or reputation, the subculture of the school may encourage him or her to respond with violence to protect his or her reputation. One of Brunson and Miller's (2009) respondents explained that they believed most fights were about, "like who runs it...who's dominant between everybody...It's like a showcase here, you know, a lot of people, they just want people to watch 'em...they try to make theyself look hard" (p. 197). This quote from one of the respondents exemplifies how some individuals use the public setting of the school to show dominance and gain or maintain their status among their peers. Here, yet is another illustration

as culture as performance. From this excerpt, it appears that perhaps the violence would never occur if there was not an audience. It is a show or a performance with the goal to “save face” or maintain their “tough” reputation, not an internalization of violent values.

The respondents also indicated that when a fight broke out in school, the observers often encouraged the continuation and even escalation of the fight. They further commented that it was unlikely for a bystander to intervene during the fight. This also speaks to the school subculture and parallels discussions of community subculture. For example, Anderson (1999) discussed how residents in neighborhoods that abide by the code are less likely to intervene when observing interpersonal disputes.

One of the primary themes revealed throughout Brunson and Miller’s (2009) qualitative analysis was the various ways in which conflicts cut across contexts—that is, between the school and the neighborhood. The respondents highlighted how an ongoing feud from the neighborhood or a violent incident that occurred on the streets could lead to conflicts at school. They specifically emphasized how gang violence, especially when someone’s reputation is at stake, can be carried into the school. However, the respondents also indicated that while tensions often escalated during school hours, the conflicts and tensions were not usually resolved with violence *until after school and outside of school*. Sometimes conflicts were intentionally handled outside of school and the school was used to threaten and build tensions. Brunson and Miller’s (2009) overarching conclusion is that while schools and neighborhoods each have some unique dynamics that lead to violence and conflict, there is also significant overlap between the contexts of school and the neighborhood.

## Potential Gendered Effects of Subculture

In Jody Miller's (2010) book, *Getting Played: African American Girls, Urban Inequality, and Gendered Violence*, she provided an in-depth examination of the violence experienced in Black urban communities that are plagued by concentrated disadvantage—the exact context that Anderson (1999) proposed as leading to the code of the street. Miller (2010) placed emphasis on understanding the contextual influences on females, including the influence of culture on these inner-city Black females. Miller revealed that the subculture of these neighborhoods and inner-city schools do affect females; and more specifically, these violent subcultures influence females differentially by placing them at an increased risk of being the victim of sexual harassment, sexual assault, and rape.

Through Miller's (2010) detailed qualitative work she draws attention to a neglected demographic—young, Black, females, living in poor inner-city neighborhoods. Previous qualitative work, especially Anderson (1999) focused on how subculture influenced the victimization and involvement in violence for young males, largely neglecting how a subculture of violence influences females. It has also been proposed that violent subcultures have stronger influences on male outcomes compared to females. By focusing specifically on the role of culture in these young, Black females' lives, Miller (2010) reveals that the violent subculture has very real effects on their lives. Her analysis demonstrated how violent subcultures provide a context that promotes “gendered victimization” which refers to structural discrimination that contributes to the perpetuation of violence toward females. Miller's (2010) work provides support that researchers should consider and examine the potential gendered effects of subculture.

In sum, the relevant qualitative research has indicated that school subculture is likely to have influences on delinquency. Further, it is likely that the influences of school subculture cross over into the streets and, similarly, that the subculture of the community likely spills into the hallways of the school. Simply put, the lines are blurred between school and community subculture as well as between the violence that occurs in school versus community domains. As such, school subcultures can readily impact not only school-based violence, but also violence that occurs outside of school. Qualitative work has also indicated that violent subcultures in schools and communities are likely to have differential effects on females compared to males. Specifically, these violent codes are presumed to more strongly influence the *offending* behavior of young males (in comparison to females). At the same time, the codes appear to promote a gendered violence in that, embedded within the codes, are norms regarding the sexual harassment and assault of young women.

### **Quantitative Research on School Subculture and Delinquency**

While quantitative studies examining the effects of school structural characteristics on delinquency are plentiful (again, see Table 1 for a review of these studies), the literature examining the subcultural effects of schools on delinquency is rather limited. At the time of this writing, there have only been two quantitative studies examining the influence of school subculture on delinquency. The first quantitative study on school subculture and its influence on delinquency was produced by Felson, Liska, South, and McNulty (1994). In their study, they used the first two waves of Youth in Transition data set, a multi-wave panel study. The first wave included 2,213 sophomore boys, and the second wave, which was conducted at the end of their junior year, consisted of 85% of the respondents from the first wave. The respondents

attended 87 randomly selected public high schools. The data consisted of 1) interviews and surveys administered to students, and 2) surveys administered to principals.

Felson et al. (1994) used three dependent variables—an interpersonal violence index, a theft and vandalism index, and a school delinquency index. The interpersonal violence index tapped behaviors, such as robbery, assault causing bodily harm, and assault towards one of the respondents' parents. The theft and vandalism index consisted of 9 items, including theft, trespassing, purposively damaging school property, and auto theft. The school delinquency index measured less serious behaviors such as tardiness to school, truancy, and cheating.

The key independent variable at the individual-level was the adherence to a subculture of violence. This measure was comprised of six responses tapping to what extent the respondent approved of nonaggressive responses to some type of provocation. Therefore, the more a respondent disagreed with ignoring or using a nonaggressive response to provocation, the stronger the respondent adhered to a subculture of violence. Felson et al. (1994) also included the relevant control variables of race, SES, academic achievement, family stability, and residential stability at the individual and school levels. Additional controls at the school-level, included school size and city size.

Felson, Liska, South, and McNulty's analysis revealed a contextual effect of school subculture on interpersonal violence, theft/vandalism, and school delinquency. That is, net all individual and school-level controls, and above and beyond the individual's own adherence to a subculture of violence, the subculture of the school influenced individual delinquency.

In 2005, Ousey and Wilcox published the second quantitative study on the influences of school subculture on violence. This dissertation is a direct extension of their work. Using the first wave of the same data used in this dissertation, their sample consisted of 3,690 seventh-graders

from 65 Kentucky public schools. After omitting those cases with missing data on any of the variables examined in their analysis, 2,904 students were included. The dependent variable for their study was school-based violent behavior. This measure was created by summing three survey items tapping the frequency of the following behaviors during the present school year: 1) physically attacking someone at school; 2) forcing someone to give up his or her property at school; and 3) touching someone in a sexual manner without their consent or against their will at school.

The key independent variable was the subculture of violence of the school. This was a school-level variable, and its effect was estimated net of individual-level adherence to a violent code. The same set of survey items was used to measure both school-level subculture and individual-level adherence to the code—four questions tapping values such as: 1) In order to gain respect from your friends, it is sometimes necessary to beat up other kids; 2) It is alright to beat up another person if he/she called you a dirty name; 3) It is alright to beat up another person if he or she started the fight; and 4) Hitting another person is an acceptable way to get him or her to do what you want. For the individual-level measurement of adherence to the code, individual responses to the four items were summed. To measure the school-level subculture of violence, the individuals' responses were aggregated to the school level. Analyses also controlled for parental and school attachment, race, and gender at both the individual and school levels. At the individual-level only, impulsivity and violent peers was also controlled.

The analytic technique used to examine possible contextual effects of school subculture on violence was hierarchical linear modeling. After finding significant variation in violence across schools, Ousey and Wilcox (2005) proceeded with a model that included their school-level variables. They found that school subculture was significant, net all other school-level

predictors. However, when they controlled for all individual-level variables, the contextual effect of school subculture disappeared. Meanwhile, the individual-level variable measuring the respondents' adherence to a subculture of violence remained significant. Their analysis indicated that it was the individuals' adherence to the subculture that predicted violence, not a contextual school subculture of violence.

The findings of Ousey and Wilcox (2005) contradict the findings Felson et al. (1994). A number of possible reasons exist for the contradiction, including use of different samples and different measures. For instance, it should be recognized that Felson et al. (1994) did not employ a measure that separated out in-school versus out-of-school delinquency. Ousey and Wilcox (2005), on the other hand, specifically measured violence that occurred within schools. This means that Felson et al. (1994) might have been picking up the effect of school subculture on delinquency that occurred out of school. Therefore, the reason Ousey and Wilcox did not find a contextual effect of culture might be due to the influence of culture on out-of-school delinquency being stronger than its effect on in-school delinquency. However, because Felson et al.'s data could not be disaggregated by in-school versus out-of-school delinquency, this remained an empirical question. Further lending credence to the possibility that school subculture might have a larger impact on out-of-school delinquency among its students than in-school delinquency, Ousey and Wilcox (2005) discuss the idea that schools are tightly-controlled and regimented contexts compared to the community, providing fewer opportunities for the expression of a violent subculture. As such, it is plausible that the influence of school subculture may be expressed in contexts outside of school.

Therefore, it is important to examine the effects of school subculture on delinquency that occurs both in school and out of school. The analysis presented in this dissertation is, in some

respects, a direct extension of Ousey and Wilcox (2005). In an attempt to revisit and reconcile the discrepancies between the findings in Felson et al. (1994) and Ousey and Wilcox (2005), this analysis focuses on separating out the influence of school subculture on delinquency that occurs within schools versus delinquency occurring outside of school. If the analysis reveals a contextual effect for school subculture on delinquency that occurs outside of school but not for delinquency that occurs within schools, this will provide some support for the idea that it was the impact on out-of-school delinquency specifically that was largely driving the contextual effect of school subculture on delinquency in Felson et al.'s (1994) study. It will also provide some preliminary quantitative support for the qualitative research reviewed earlier – suggesting that the lines are blurred between school subculture, community subculture, and their related acts of violence.

The analyses presented here, however, go beyond the question of how a school subculture affects in-school versus out-of school delinquency. This dissertation will also examine the potentially multifaceted nature of a school code by exploring its effects on physical violence, sexual violence and non-violent delinquency. While previous research has provided preliminary findings that school subculture and community subculture have generalized effects on delinquency and crime, this idea warrants further and more explicit investigation. For example, Felson et al. (1994) certainly hints that school subculture has generalized effects on a variety of forms of misconduct; and more recently, McGloin, Schreck, Stewart, and Ousey (2011) found that the effects of a subculture of violence are not isolated to violence but also influence property crime as well. Finally, this analysis extends all previous work to date by exploring the extent to which school subcultural effects on delinquency are potentially gendered. These effects of



school sub-culture are examined while also controlling for the important school-related correlates of delinquency found in previous studies (see Table 3.1).

## **RESEARCH QUESTIONS**

The main research questions and hypotheses of this dissertation are as follows:

RQ1: Are students who more strongly adhere to the “code of the hallway” more likely to be involved in violence, sexual offending, and non-violent offending?

H1: The more strongly a student adheres to the “code of the hallway,” the more likely they are to be involved in violence, sexual offending, and non-violent offending. As such, the effects of individual-level adherence to a code of the hallway are posited to be general as opposed to specific to physical violence.

RQ2: Controlling for the individual student’s adherence to the “code of the hallway,” are students who attend a school that adheres to the “code of the hallway” more likely to be involved in violence, sexual offending, and non-violent offending?

H2: Students who attend a school that adheres to the “code of the hallway” are more likely to be involved in violence, sexual offending, and non-violent offending. Further, the direct effects of the school-level code are posited to be general as opposed to specific to physical violence.

RQ3: What are the differential effects of contextual school subculture (“code of the hallway”) on delinquency that occurs in school compared to that which occurs outside of

school? In other words, is the effect of contextual school subculture stronger for out-of-school delinquency compared to in-school delinquency? Is contextual school subculture significant for out-of-school but not in-school delinquency?

H3: Based on the two quantitative studies of contextual school subculture, it is hypothesized that contextual school subculture will have stronger effects on delinquency that occurs outside of school compared to delinquency that occurs within schools.

Here it is hypothesized that the influence of school subculture will have stronger effects for offending that occurs out of school for a few reasons. First, as proposed by Ousey and Wilcox (2005) school are more controlled contexts than that of the street and students likely have more opportunity for offending in contexts out of school. Second, suggested by qualitative work such as Brunson and Miller (2009), conflicts often cut across various contexts and a verbal altercation that begins in school may be carried out into the community and lead to violence. Taking these two ideas together, it is presumed that while school –based subculture is a characteristic of the school, it is likely that the subculture and the values of the subculture are exhibited in various social fields such as the street and places between the school and home (i.e., the walk home from school or the bus) and perhaps, even more likely to be expressed in social fields outside the school.

RQ4: Do the effects of contextual school subculture vary across different types of delinquency—more specifically, what are the effects of contextual school subculture on physical violence, sexual offending, and non-violent delinquency?

H4: It is hypothesized that contextual school subculture will have similar effects on violent delinquency, sexual offending, and non-violent offending.

Here, it is argued that contextual school subculture will be significantly correlated with all three types of offending. If contextual school subculture is significantly associated with all three offending behaviors, it will be concluded that this research finds strong support for the notion that school subculture has general effects. If contextual school subculture is only significantly correlated with two of the three types of offending, it will be concluded that there is moderate support for general effects. Finally, if contextual school subculture is only significantly related to one type of offending, it will be concluded that school subculture does not have general effects.

RQ5: Are the effects of contextual school subculture gendered? That is, is contextual school subculture more influential in explaining male delinquency versus female delinquency?

H5: Based on the qualitative research on violent subcultures, it is hypothesized that the effects of contextual school subculture on delinquency will be stronger for males than females.

In the chapter to follow, the data and analytical strategy used to answer these research questions are discussed.

## CHAPTER 4. METHODOLOGY

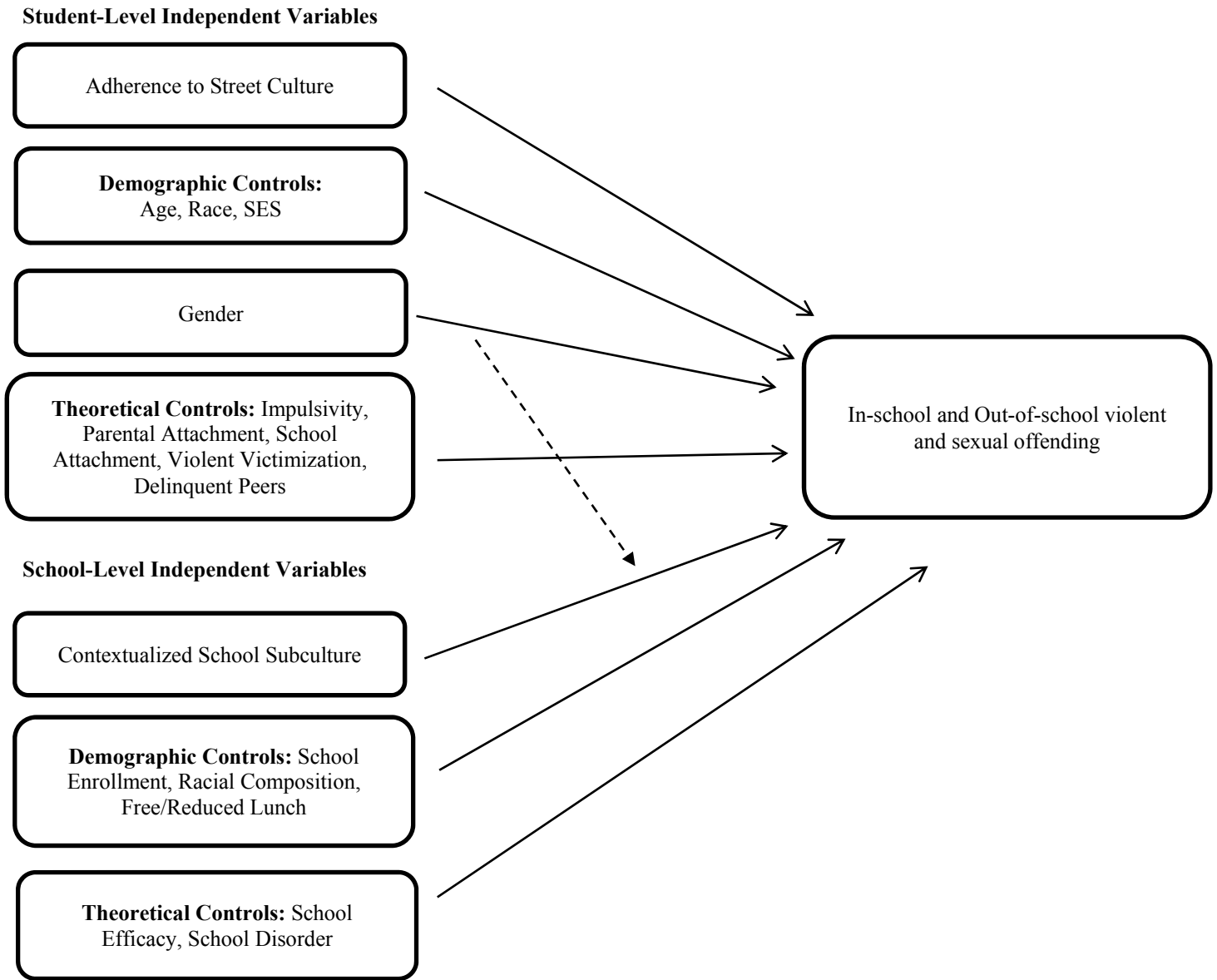
The specific overall conceptual model tested in this dissertation is presented in Figure 4.1 below. It proposes, foremost, that school subculture will exert an influence on violent, sexual, and non-violent delinquency, while controlling for the individual respondent's adherence to the "code of the hallway," impulsivity, parental attachment, delinquent peers, and the demographic characteristics of the respondent. The model further proposes that contextualized school subculture (i.e., code of the hallway) will continue to influence in-school and out-of-school delinquency while controlling for school enrollment, racial composition of the school, SES of the school, the level of school efficacy, and school disorder. The model also tests the cross-level interaction between the respondent's gender and the "code of the hallway" to address the possibility of the gendered effects of school subculture on delinquency. This effect is indicated by a dashed line in Figure 4.1, below.

### DATA

#### Sample

The analysis presented herein primarily uses student survey data from the *Rural Substance Abuse and Violence Project (RSVP)*, funded by the National Institute of Drug Abuse (DA-11317). This was a prospective longitudinal study conducted between the years of 2001 and 2004. For the present study, all four waves of the student component of the RSVP were used. The student data consist of annual survey responses from a panel of students who were enrolled in seventh grade during the 2000-2001 academic year. The student panel was selected

**Figure 4.1 Proposed Conceptual Model<sup>3</sup>**



<sup>3</sup> Figure 4.1 presents the theoretical model. The dashed arrow illustrates the interaction between gender and school-level “code of the hallway.” According to previous theory, it is hypothesized that the effect of the school’s subculture is conditioned by the student’s gender. In the operational model, however, this interaction effect is actually estimated by using school subculture as a predictor in an equation that estimates the slope variance for gender. This interaction considers whether the strength and direction of the effect for gender on offending is influenced by school-level “code of the hallway.”

using a multi-stage procedure beginning with a stratified sampling of 30 of Kentucky's 120 counties. Within the 30 selected counties, principals from all public schools containing 7<sup>th</sup> graders were contacted for inclusion in the study, with 65 of the 74 schools agreeing to participate. A total of 9,488 seventh graders were contained within the 65 participating schools, and all were targeted for inclusion in the sample. Active parental consent was obtained for 4,102 of the targeted students, for a 43 percent response rate. Completed surveys were received from 3,692 students in Wave 1, 3,638 students in Wave 2, 3,050 students in Wave 3, and 3,040 students in Wave 4. Overall, there was participation from 3,976 students in one or more waves of the study. Teachers from each school containing sampled students in any year of the study were also targeted for survey data collection.

On the same day that student surveys were administered, a faculty/staff survey was group-administered to teachers in each school containing students in the sample. The faculty/staff survey focused largely on teachers' perceptions of various aspects of the school climate, including perceptions of disorder, crime, and social integration among and between students, parents, teachers, and administrators. In total, approximately 4,500 teacher surveys were completed over the course of the study. To create the school-level measures of disorder and efficacy, individual teacher perceptions about these aspects of climate were aggregated within schools. Finally, several additional school-level enrollment and demographic characteristics are measured utilizing data from the Kentucky Department of Education.

The 3,976 students who provided data in at least one wave were embedded within a total of 115 unique school contexts over the course of the four-year study, as most students crossed from an elementary or middle school to a high school. In order to optimize the number of school contexts represented in the analyses presented below, the student data was pooled across all four

waves of the study, creating 13,420 observations (student-years) across 115 school contexts.

After listwise deletion of cases with missing data on either individual- or school-level measures, 12,729 observations within 103 school contexts remained for analysis.

## Measures

**Dependent Variables.** The present analysis uses six dependent variables: 1) in-school physical violence; 2) out-of-school physical violence; 3) in-school sexual offending; 4) out-of-school sexual offending; 5) in-school non-violent delinquency; and 6) out-of-school non-violent delinquency. *In-school physical violence* was created by summing the following two items, “In the present school year how often have you forced someone *at school* to give up their money or property?” and “In the present school year how often have you physically attacked someone *at school* (punched, slapped, kicked)?” Each of the five items had an associated ordinal scale ranging from 1 = “never” to 5 = “daily or almost daily.” Descriptive statistics shown in Table 2 reveal that, on average, the level of in-school physical violence was 2.32 and the standard deviation was 0.97.

*Out-of-school physical violence* was created by summing the same two items as for in-school physical violence but it asked for physical violence that occurred outside of school. The same ordinal response scale was used for each item in the overall measure. Descriptive statistics shown in Table 2 reveal that, on average, the level of out-of-school physical violence was 2.44 with a standard deviation of 1.12.

*In-school sexual offending* was created by summing the following two items: “In the present school year, how often have you said unwelcomed sexual remarks to someone at school?” and “In the present school year, how often have you touched someone in a sexual

manner without their consent or against their will?” Each of the five items had an associated ordinal scale ranging from 1 = “never” to 5 = “daily or almost daily.” Descriptive statistics reveal that, on average, the level of in-school sexual offending was 2.36 with a standard deviation of 1.12. Summing the same two items as for in-school sexual offending created out-of-school sexual offending; however, the questions captured sexual offending that occurred out of school. Descriptive statistics shown in Table 4.2 indicate that, on average, the level of out-of-school sexual offending was 2.4 with a standard deviation of 1.23.

*In-school non-violent delinquency* is a single-item measure asking, “In the present school year, how often have you stolen someone’s money or property at school?” The response to this item was an ordinal scale ranging from 1 = “never” to 5 = “daily or almost daily.” Descriptive statistics indicate that the average level of in-school non-violent delinquency was 1.1 with a standard deviation of 0.46. *Out-of-school non-violent delinquency* was measured by using the same single-item but for theft that occurred out of school. Descriptives reveal that the average level of out-of-school non-violent delinquency was 1.13 with a standard deviation of 0.51. It is recognized that this is a limited measure of non-violent delinquency. However, due to data limitations, this is the only non-violent delinquency measure that differentiates whether the delinquency occurred in or out of the school. Diagnostics of the dependent variables revealed that each dependent variable was highly skewed. To address this, the dependent variables were logged, and it is the logged variables that are used in the analysis. After logging the dependent variables, the distributions were reexamined. By using the logged values, the distributions of the dependent variables more closely approximated a normal distribution.<sup>4</sup>

---

<sup>4</sup> The following are the descriptives for the logged dependent variables: In-School Physical Violence (M = .79; s.d. = 0.26); Out-of-School Physical Violence (M = 0.83; s.d. = 0.30); In-School Sexual Offending (M = 0.80; s.d. = 0.29); Out-of-School Sexual Offending (M = 0.81; s.d. = 0.31); In-School Nonviolent Delinquency (M = 0.06; s.d. = 0.23); and Out-of-School Nonviolent Delinquency (M = 0.07; s.d. = 0.26).



**Key Independent Variables.** The key independent variable is contextual school subculture. Similar to Ousey and Wilcox (2005), it is measured while also controlling for individual-level adherence to street values in order to disentangle contextual and compositional effects. In fact, all of the survey items used in Ousey and Wilcox (2005) are used here, in addition to four antisocial values, in the creation of these two measures. A summed measure of eight survey items is used to capture the *individual's adherence to the "code of the hallway."* In these items, the respondents were asked how much they agreed with a series of statements. These statements tap two general facets of the "code of the hallway"—the willingness to use violence under certain circumstances and a general set of antisocial values. The eight items used to create the "code of the hallway" measure include: 1) In order to gain respect from your friends, it is sometimes necessary to beat up other kids; 2) It is alright to beat up another person if he/she called you a dirty name; and 3) It is alright to beat up another person if he/she started the fight; 4) Hitting another person is an acceptable way to get him/her to do what you want; 5) It's okay to break the law if you can get away with it; 6) To get ahead, sometimes you have to do things that seem wrong; 7) Most things that adults call "crime" don't really hurt anyone; and 8) It's okay to break the law if nobody is hurt by it. The scale of this variable ranged from 8 to 64, with the higher the value indicating a stronger adherence to the "code of the hallway." However, for this sample, the values for adherence to the "code of the hallway" ranged from 8 to 32. The average for adherence to the "code of the hallway" was 12.85 (s.d. = 5.2, Cronbach's  $\alpha = 0.88$ ). Summed scale values for individual students were aggregated to the school-level to serve as the measure of contextual school subculture.<sup>5</sup> The average contextual school subculture was 13.99 (s.d. = 2.37). This indicates rather little variation in contextual school subculture across schools

---

<sup>5</sup>Factor analysis was conducted to ensure that the eight measures used in this index were tapping the same construct. Factor analysis confirmed that all of the items in the index loaded on the same factor explaining 86 percent of the variance.

included in the sample. Further, that the average school's subculture leans more towards the conventional end of the continuum than the delinquent end. Descriptives for these variables are summarized in Table 4.1 below.

***Control Variables.*** Although the key focus of this dissertation is the influence of school subculture on delinquency, and whether these influences are compositional or contextual, several additional variables are controlled (see Table 4.1). At the student-level, the following variables are controlled: impulsivity, delinquent peers, violent victimization, school attachment, parental attachment, parental socioeconomic status (SES), race, wave (grade-level), and gender.

*Impulsivity* was measured with the average score from an 11-item index assessing multiple dimensions of low self-control, including frustration, temper control, attention span, and restlessness (Cronbach's  $\alpha = .91$ ). Each of the eleven items used a four-point Likert response scale (1 = low to 4 = high). *Delinquent peer associations* was measured with a 17-item measure asking respondents whether their closest friends participated in a series of delinquent behaviors during the present school year (1 = yes, 0 = no). These behaviors included things such as drug and alcohol use, truancy, drunk driving, school suspension, carrying a weapon at school, being arrested, drug dealing, theft, assault, and vandalism. To calculate the respondents' exposure to delinquent peers, the responses to these 17 dichotomous items were averaged (Cronbach's  $\alpha = .92$ ).

*Violent victimization* was a dichotomous measure that was created by collapsing four items asking about specific violent victimization experiences. The questions asked, "in the current school year, how many times have the following things actually happened to you on school grounds or during school-related activities:" 1) someone used force to take money or property from you; 2) pulled a gun on you; or 3) pulled another weapon on you such as a knife.

**Table 4.1: Descriptive Statistics, Variables, and Scales**

<b>Variables</b>	<b>Scale</b>	<b>Mean</b>	<b>S.D.</b>	<b>Range</b>	<b>N</b>
<i>Dependent Variables</i>					
In-School Violent Delinquency	(Summed score; 2 = low to 10 = high)	2.32	0.97	2 - 10	12,566
Out-of-School Violent Delinquency	(Summed score; 2 = low to 10 = high)	2.44	1.12	2 - 10	12,580
In-School Sexual Offending	(Summed score; 2 = low to 10 = high)	2.36	1.16	2 - 10	12,599
Out-of-School Sexual Offending	(Summed score; 2 = low to 10 = high)	2.39	1.23	2 - 10	12,761
In-School Non-Violent Delinquency	(1 = low to 5 = high)	1.10	0.46	1 - 5	12,790
Out-of-School Non-Violent Delinquency	(1 = low to 5 = high)	1.13	0.51	1 - 5	12,782
<i>Individual-level Independent Variables</i>					
Adherence to "street values"	(8 = Low to 64 = High)	12.85	5.2	8 - 29	12,342
Impulsivity	(1 = Low to 4 = High)	1.81	0.68	1 - 4	12,571
Delinquent Peers	(0 = No, 1 = Yes)	0.25	0.27	0 - 1	12,729
Violent Victimization	(0 = No, 1 = Yes)	0.13	0.52	0 - 1	12,533
Sexual Victimization	(0 = No, 1 = Yes)	0.46	0.50	0 - 1	12,692
Nonviolent Victimization	(0 = No, 1 = Yes)	0.48	0.50	0 - 1	12,736
School Attachment	(1 = Low to 4 = High)	3.17	0.56	1 - 4	12,818
Parental Attachment	(1 = Low to 5 = High)	3.73	0.77	1 - 5	12,544
Parental SES	(1 = Low to 7 = High)	4.31	1.54	1 - 7	11,358

<b>Variables</b>	<b>Scale</b>	<b>Mean</b>	<b>S.D.</b>	<b>Range</b>	<b>N</b>
Race	(0 = White, 1 = Nonwhite)	0.1	0.3	0-1	12,689
Wave	(1 = 7th grade to 4 = 10th grade)	2.4	1.11	0 - 4	12,729
Gender	(0 = Male, 1 = Female)	0.53	0.5	0-1	12,729
<i>School-Level Independent Variables</i>					
Contextual School Subculture of Violence	(8 = Low to 64 = High)	13.99	2.37	8 - 29	103
School Enrollment	(Number of student enrolled)	660.42	374.29	109 - 2,051	103
Gender Composition	(Percent Male)	51.68	2.77	43.82-59.25	103
Racial Composition	(Percent non-white)	9.61	12.06	0 - 52.77	103
Free/Reduced Lunch	(Percent of students receiving free/reduced lunch)	45.94	20.81	3 - 93	103
School Efficacy	(Mean Level of School Efficacy as reported by teachers)	3.38	0.35	2.84 - 4.37	103
School Disorder	(Mean Level of School Disorder as reported by teachers)	1.81	0.34	1.15 - 2.85	103

A dichotomous measure was then created (0 = “not violently victimized” and “1” “violently victimized”). The descriptive statistics indicate that 13% of the sample experienced school-based violent victimization. *Sexual victimization* was a dichotomous measure that was created by collapsing two items asking about sexual victimization experiences. The questions asked, “in the current school year, how many times have the following things actually happened to you on school grounds or during school-related activities:” 1) received unwelcomed sexual remarks from someone and 2) been touched by someone in a sexual manner without your consent or against your will. A dichotomous measure was then created (0 = “not sexually victimized” and 1 = “sexually victimized”). The descriptive statistics indicate that 46% of students had experienced at least one incident of sexual victimization. *Non-violent victimization* was a dichotomous measure of property victimization. The items asked respondents “in the current school year, how many times has property or money been stolen from you on school grounds or during school-related activities?” A dichotomous measure was then created (0 = “has not experienced property victimization” and 1 = “experienced property victimization.” According to the descriptive statistics, over 46% of students had experienced at least one incident of property victimization during the current school year.

To measure *school attachment*, an index that averaged student responses across six items was used. The questions used were measured with a four-point Likert scale, and the items asked how strongly the students agreed or disagreed with various statements about their relationships with teachers, the importance of education, and their attitudes towards school (Cronbach’s  $\alpha = .70$ ). The sample’s average level of school attachment was 3.17 (s.d. = 0.56). To measure *parental attachment* a 24-item index was used, with each item utilizing a five-point Likert response scale. The items captured specific aspects of the respondents’ relationships with both

their mothers and fathers, including the level of love and respect, degree of communication, and level of supervision provided. The responses to these 24 items were then averaged (Cronbach's  $\alpha = .93$ ). The sample's average parental attachment was 3.73 (s.d. = 0.77).

Respondent's *race* was measured as a dichotomous measure of nonwhite (nonwhite = 1) or white (white = 0). The sample was comprised of 10 percent nonwhites. An indicator variable for respondent's *gender* was included (0 = male; 1 = female); the sample was comprised of 53 percent females. The *wave* variable is used to measure the grade-level of the respondent and to control for temporal auto-correlation among panel subjects. The *wave* variable ranges from 1 to 4 (Wave 1 = 7<sup>th</sup> grade through Wave 4 = 10<sup>th</sup> grade). To measure *socioeconomic status*, the average of two seven-point scale items asking about the educational attainment of the respondent's father and mother was used. The response categories for each item ranged from 1 ("completed grade school or less") to 8 ("graduate or professional school"), with an average of 4.31 for the sample.

At the school-level, control variables for school size, gender composition, racial composition, and the socio-economic status of the school, (indicated by the percent of students receiving free- or reduced-price lunches), school efficacy and school disorder are included.

*School efficacy* was measured as the within-school average teacher-reported cohesion, trust, and cooperation at school. This variable was created by averaging the responses from a 19-item index for each teacher-respondent (Cronbach's  $\alpha = .84$ ). The 19 items each used a Likert scale and asked the respondent to indicate to what extent they agreed with statements such as "The administration and teachers collaborate toward making the school run effectively," "The administration is supportive of teachers," "Students don't really care about this school," and "Teachers and students get along well at this school." *School-level disorder* was measured as the

within-school average teacher-reported incivilities. This variable was created by first averaging the responses from an eight-item index for each teacher (Cronbach's  $\alpha = .84$ ). Teachers were asked to indicate to what extent they agreed that things such as broken windows and lockers, graffiti, and litter/trash, poor lighting peeling paint, and poorly maintained school grounds were problematic at their school (1 = strongly disagree to 5 = strongly agree). Average index scores for each teacher were aggregated within schools to create the school-level measures of school efficacy and school disorder. The average level of school disorder was 1.81 (s.d. = 0.34) and the average level of school efficacy was 3.38 (s.d. = 0.35). In other words, the average school has a relatively low level of disorder and moderate collective efficacy. The school-level variables are summarized in Table 4.1, below. However, preliminary analysis indicated that most of these controls were not significant and they did not influence any of the results. Therefore, the controls that were non-significant in the final model reported herein are not presented.<sup>6</sup>

### **Analytic Strategy**

To address the research questions proposed in this dissertation, I use a hierarchical linear modeling (HLM) approach and the HLM 6 software specifically (Raudenbush & Bryk, 2002). HLM is appropriate due to the clustered data of students nested within schools non-randomly. These models are capable of appropriately recognizing that students within the same school are likely more similar to one another than they are to students from a different school. In other words, HLM recognizes the non-independence among students nested within school contexts. Neglecting to account for this non-independence can result in biased standard errors, thus increasing the likelihood of reaching erroneous conclusions (Raudenbush & Bryk, 2002). The

---

<sup>6</sup>The data for creation of these structural characteristics of the schools were obtained from the Kentucky Department of Education.

second benefit of using multilevel modeling to address the current research questions is that HLM is capable of simultaneously investigating the variance components of the outcome variables at multiple levels—that is, the student-level and school-level variance components, in this study specifically—while maintaining the appropriate level of analysis for the independent variables. HLM analysis will assist in disentangling whether the effect of subcultural values on violent delinquency is an individual-level process (in other words, a compositional effect), or whether it is a contextual effect – that is, above and beyond an individual’s own adherence to street values, the school-based subculture places them at risk for involvement in violence.

The analysis proceeds with the following steps. First, for all six dependent variables—in- and out-of-school physical violence, in- and out-of-school sexual offending, and in- and out-of-school nonviolent delinquency—null models are estimated to determine if significant variation across schools exists. The null model reveals whether the intercept of the dependent variable varies significantly across schools. If it does, it is appropriate to proceed with estimating a contextual model. Second, once significant variation is confirmed, contextual school subculture is entered into each model. Third, adherence to street values and all control variables are entered into each model. Finally, a cross-level interaction between gender and contextual school subculture is entered in each model to explore potential gendered effects of school subculture on violence and sexual offending. The interaction terms were computed and their effects were estimated because theory suggested they should be, not because preliminary models suggested that the slope for gender was significantly variable. However, post-hoc analyses indicated that the level-two variance components for gender were, indeed, significant in the two-level models estimating each of the six dependent variables.



## CHAPTER 5. ANALYSES AND RESULTS

This chapter presents and discusses the analyses and results of this dissertation. First, the bivariate correlations among the student-level variables, and then among the school-level variables, are presented and discussed. Second, I present the multivariate hierarchical linear regression analyses for all six dependent variables included in this dissertation. During this discussion of the HLM models each of the research questions is addressed.

### BIVARIATE ANALYSIS

Table 4.1 displays the bivariate correlation coefficients among the student-level independent variables and dependent variables. Most of the correlations are significant at a probability level of  $p < 0.01$ . Due to the rather large sample size ( $N = 11,821$ ), these levels of significance are expected. Most importantly, however, all correlations are in the direction expected by theory. Additionally, it is noteworthy that the sizes of the correlations among the independent variables are weak (though statistically significant). Hence, multicollinearity is likely a minimal threat to the multivariate analyses that follow. In contrast, the correlations among the different dependent variables are quite strong, suggesting a good deal of overlap in the antisocial behaviors measured.

The bivariate correlations between the independent and dependent variables are, again, all significant and in the expected direction. Adherence to the “code of the hallway,” impulsivity, delinquent peers, violent victimization, sexual victimization, nonviolent victimization, and race are expected to be positively correlated with students’ offending behaviors. Table 4.1 indicates that with they are positively associated with students’ offending.

In contrast, but still consistent with theoretical expectations, school attachment, parental attachment, parental SES, age, and gender are negatively associated with students' offending. Some of the weakest correlations with the dependent variables are the correlations of parental SES, race, and age (wave). The correlations between adherence to the "code of the hallway" and the six dependent variables are, on the other hand, among the highest correlations. The correlations between individual-level adherence to the "code of the hallway" and the dependent variables range from 0.311 (out-of-school non-violent delinquency) to 0.705 (out-of-school physical violence).

### **School-Level Bivariate Associations**

Table 4.2 shows the bivariate correlations among the school-level independent variables and dependent variables. None of the school-level independent variables, including school-level "code of the hallway," are significantly correlated with the dependent variables. The correlations between the school-level variables and the dependent variables range from 0.003 to 0.141. On the one hand, this may imply that it is largely individual-level processes that explain students' offending behaviors or that this study does not measure the school-level variables that are most important in understanding school-level variation in offending. On the other hand, the non-significance of these correlations may be partly a function of school-level sample size. It is important to keep in mind that there are only 103 units at the school-level in this multilevel analysis.

Despite their non-significance, most of the correlations between the school-level independent variables and the dependent variables are consistent with theory. However, the fact that the bivariate correlations between the individual-level independent variables and the dependent

variables indicate stronger relationships compared to those between the school-level independent variables and the dependent variables, it might suggest that individual-level factors are more important in explaining the mean-level of offending across schools. The correlations that contradict theory include: school-level “code of the hallway” is negatively associated with in-school physical violence and in-school sexual offending. These correlations suggest that school-level subculture may not be all that important in understanding in-school physical and sexual violence. This may be true for two reasons. First, as proposed by Ousey and Wilcox (2005), schools may be too controlled of a context for the school-level subculture to influence these outcomes in schools; or second, it perhaps it is that these behaviors (as measured in this sample) are so pervasive within schools. Further, school enrollment is negatively associated with all dependent variables; school efficacy is positively associated with out-of-school physical violence; and school disorder is negatively associated with both in-school and out-of-school physical violence. In terms of the intercorrelations among the school-level independent variables, all such relationships shown in Table 4.2 are weak. Of the correlations, only four are statistically significant, and only two of those are significant at a  $p < 0.01$  level. The two exceptions are 1) the moderate correlations between “free/reduced lunch” and “school enrollment,” with a correlation of -0.487, and 2) the association between “gender composition” and “school enrollment,” with a correlation of -0.290. Hence, once again, the potential for multicollinearity problems within the multivariate analyses to follow appears minimal.

**Table 4.1 Student-Level Bivariate Correlations**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
1 In-school Violent Delinquency	1																		
2 Out-of-School Violent Delinquency	.705**	1																	
3 In-School Sexual Offending	.489**	.442**	1																
4 Out-of-School Sexual Offending	.450**	.467**	.810**	1															
5 In-School Nonviolent Delinquency	.469**	.446**	.432**	.405**	1														
6 Out-of-School Nonviolent Delinquency	.509**	.514**	.413**	.432**	.672**	1													
7 Adherence to the "code of the hallway"	.348**	.371**	.338**	.355**	.286**	.311**	1												
8 Impulsivity	.305**	.328**	.250**	.263**	.214**	.231**	.410**	1											
9 Delinquent Peers	.268**	.287**	.277**	.298**	.243**	.272**	.388**	.307**	1										
10 Violent Victimization	.277**	.268**	.223**	.217**	.223**	.197**	.222**	.232**	.192**	1									
11 Sexual Victimization	0.124**	.123**	.165**	.167**	.073**	.088**	.110**	0.169**	.183**	.220**	1								
12 Nonviolent Victimization	.129**	.142**	.107**	.099**	.129**	.119**	.128**	.166**	.159**	.268**	.276**	1							
13 School Attachment	-.240**	-.252**	-.224**	-.236**	-.212**	-.217**	-.409**	-.338**	-.293**	-.227**	-.059**	-.072**	1						
14 Parental Attachment	-.157**	.177**	-.146**	-.158**	-.135**	-.152**	-.272**	-.278**	-.275**	-.117**	-.129**	-.091**	.382**	1					
15 Parental SES	-.055**	-.054**	-0.017	-.021*	-.022*	-.035**	-.085**	-.143**	-.101**	-.045**	-.009	0.013	.086**	.144**	1				
16 Race	.080**	.088**	.048**	.069**	.053**	.060**	.077**	.047**	.026**	.028**	.026**	.024**	-.048**	-.114**	0.011	1			
17 Wave	-.082**	-.121**	-.012**	-.020**	-.026**	-.027**	.023*	-.087**	0.263	-.068**	-.021*	-.047**	-.104**	-.113**	0.006	-.012	1		
18 Gender	-.152**	-.140**	-.203**	-.191**	-.121**	-.100**	-.198**	-.050**	-.027**	-.154**	.256**	.040**	.199**	-.019*	-.032**	-.012	0.006	1	

\* p < .05, \*\* p < .01

**Table 4.2.School-Level Bivariate Correlations and Dependent Variables**

	1	2	3	4	5	6	7	8	9	10	11	12	13
1 In-School Physical Violence	1												
2 Out-of-School Physical Violence	.741**	1											
3 In-School Sexual Offending	.529**	.480**	1										
4 Out-of-School Sexual Offending	.490**	.503**	.817**	1									
5 In-School Nonviolent Delinquency	.593**	.526**	.471**	.439**	1								
6 Out-of-School Nonviolent Delinquency	.552**	.591**	.451**	.467**	.702**	1							
7 Contextualized School Subculture	-0.031	0.016	-0.039	0.23	0.092	0.103	1						
8 School Enrollment	-0.08	-0.106	-0.036	-0.052	-0.059	-0.017	0.092	1					
9 Gender Composition	0.135	0.037	0.011	0.05	0.051	0.14	-0.090	-.290**	1				
10 Racial Composition	-0.108	-0.096	-0.013	0.003	0.043	0.109	0.188	.312**	-.203*	1			
11 Free/Reduced Lunch	0.033	0.011	-0.004	-0.011	0.141	0.111	0.076	-.487**	0.177	-.209*	1		
12 School Efficacy	-0.127	0.099	-0.064	-0.092	-0.059	-0.017	0.166	-.096	-.070	0	-.156	1	
13 School Disorder	-0.076	-0.063	0.096	0.03	0.059	-0.083	0.162	-.045	-.055	0.119	0.067	-.244*	1

\* p < .05, \*\* p < .01

## MULTIVARIATE ANALYSES

This next section presents the multivariate multilevel analyses and these results are displayed in tables 5.3 through 5.5. The analyses include six dependent variables. The analysis is conducted in the same order and manner for each dependent variable. In-school and out-of-school physical violence are discussed first.

### **In-School and Out-of-School Physical Violence**

The first step in any two-level analysis is to assess whether the dependent variable varies significantly across the unit of analysis at the second level, which in this study is schools. This is done in a model with only an intercept (i.e. no predictors), with that intercept specified as varying at both levels. This initial model is referred to as the null model or the intercept-only model. In this analysis, the null models revealed significant cross-school variation for both *in-school physical violence* (variance component = 0.001, s.d. = 0.036,  $p < 0.000$ ) and *out-of-school physical violence* (variance component = 0.003, s.d. = 0.053,  $p < 0.000$ ) vary significantly across schools (indicating that it is appropriate to proceed with a multilevel model). The intra-class correlation values were 0.019 and 0.030, respectively, indicating that approximately 2 percent of the variation of in-school physical violence falls between schools and 3 percent for out-of-school physical violence. This indicates that the majority of the variation in mean cross-school physical violence is explained by individual-level factors.

Due to the key theoretical focus of this dissertation being the effect of school-level subculture (code of the hallway), the second step of the analysis is to enter school-level subculture into the model. The results from this model are shown in table 4.3. School-level

subculture is positive and significantly associated with both *in-school physical violence* ( $p = 0.004$ ; coeff. = 0.012) and *out-of-school physical violence* ( $p < 0.000$ ; coeff. = 0.018). It is also important to note that when school-level subculture is entered into the models, the variance component for the level-2 intercept in the in-school physical violence model, the level-2 intercept variance component remains the same; however, in the out-of-school physical violence model the level-2 intercept variance component declines by 16 percent.<sup>7</sup> This provides some evidence that school-level subculture is perhaps more important in understanding cross-school variation in out-of-school physical violence compared to in-school physical violence.

**Table 4.3: Hierarchical Linear Model for Physical Violence with School-Level “Code of the Hallway”**

	In-School		Out-of-School			
	Coefficient	SE	Coefficient	SE		
<b>Level 1</b>						
Intercept (Physical Violence)	0.797**	0.004	0.833**	0.006		
<b>Level 2</b>						
"Code of the Hallway"	0.012**	0.004	0.018**	0.004		
<hr/>						
Random Effects	Variance Component	SD	Chi-Square	Variance Component	SD	Chi-Square
Level-2 Intercept	0.001**	0.033	278.647	0.002**	0.048	371.672
Level-1 Error	0.052	0.228		0.092	0.303	

\*\*  $p \leq .01$ ; Schools ( $N = 103$ ); Individuals ( $n = 11,821$ )

\* $p \leq .05$

<sup>7</sup> Throughout the results reduction in the level-2 intercept variance is discussed. To calculate this reduction in the level-2 intercept variance, the value of the level-2 intercept variance component from the model with school-level subculture was subtracted from the level-2 intercept variance component from the null model, and that difference was divided by the level-2 intercept variance component from the null model. For example,  $(0.00132 - 0.00111)/0.00132 = 0.15909$ .

However, to determine whether school-level culture has a contextual effect on in-school and out-of-school physical violence, it is necessary to control for the individual's adherence to the "code of the hallway" and other relevant controls at the individual- and school-level. Table 4.4 presents the results from the model controlling for all individual-level controls. This model reveals that for *in-school physical violence*, school-level subculture becomes non-significant net individual-level factors. However, the individuals' adherence to the "code of the hallway" is significant. Therefore, regarding *in-school physical violence*, it does not appear that school-level subculture has a contextual effect; and it is the individual-level adherence to the "code of the hallway" that matters. The only non-significant individual-level control with *in-school physical violence* is parental SES. All other variables were significant and in the direction expected by theory. By adding in the individual-level controls, the level-2 intercept variance component is reduced by 44 percent. This implies that a large proportion of the cross-school variation for in-school physical violence is actually attributed to individual-level factors.

On the other hand, for *out-of-school physical violence*, school-level subculture remains significant even after controlling for the individuals' adherence to the "code of the hallway" and all other relevant individual-level controls. Again, the only non-significant control with *out-of-school physical violence* is parental SES, with all other effects significant and in the expected direction. This model indicates that, net the individual's adherence to the "code of the hallway" and other individual-level controls, the school-level subculture does significantly influence an individual's involvement in physical violence that occurs out of school. This lends support that school-level subculture does have a contextual effect on *out-of-school physical violence*. However, when the individual-level controls are included in the model, the variance component continues to decline, and more specifically declines by 71 percent, suggesting that a substantial



proportion of the cross-school variation in *out-of-school physical violence* is attributed to individual-level factors. Additionally, other school-level effects could also be important in explaining *in-school* and *out-of-school violence*. Therefore, the next step in the analysis is to include school-level controls in the same model with the individual-level controls and school-level subculture to see if this contextual effect holds, net other school-level controls.

Table 4.5 presents the results from the two-level hierarchical linear models for *in-school* and *out-of-school physical violence* with an emphasis on school-level “code of the hallway” net of individual- and school-level control variables and on the cross-level interaction between gender and “code of the hallway.”<sup>8</sup> At the individual-level, the students’ adherence to the “code of the hallway,” impulsivity, delinquent peers, violent victimization, and race (non-white) are positive and significantly associated with both *in-school* and *out-of-school physical violence*. School attachment, gender, and wave are negative and significantly associated with *in-school* and *out-of-school physical violence*. Therefore, as students’ level of school attachment increases, their level of involvement for in-school and out-of-school physical violence decreases. Females are less likely than male students to be involved in physical violence and as students progressed through 7<sup>th</sup> to 10<sup>th</sup> grades their involvement in physical violence both in school and out of school decreased. While parental attachment is negatively associated with both *in-school* and *out-of-school physical violence*, the effect is only significant in the *out-of-school physical violence*

---

<sup>8</sup> The model displayed in 4.5 also controlled for school enrollment and free/reduced lunch. However, since these variables are not significant for either in-school or out-of-school physical violence, they are not presented in the table.

**Table 4.4: Physical Violence with Individual-Level Controls**

	In-School		Out-of-School			
	Coefficient	SE	Coefficient	SE		
<b>Level 1</b>						
Intercept (Violent Delinquency)	0.796**	0.004	0.832**	0.004		
Adherence to "Code of the Hallway"	0.009**	0.001	0.012**	0.001		
Impulsivity	0.048**	0.006	0.053**	0.006		
Delinquent Peers	0.146**	0.015	0.203**	0.018		
Violent Victimization	0.108**	0.011	0.104**	0.014		
School Attachment	-0.013*	0.006	-0.021**	0.007		
Parental Attachment	-0.004	0.004	-0.009*	0.004		
Parental SES	0.000	0.002	0.001	0.002		
Race	0.044**	0.011	0.047**	0.013		
Wave	-0.024**	0.003	-0.042**	0.003		
Gender	-0.038**	0.006	-0.036**	0.006		
<b>Level 2</b>						
"Code of the Hallway"	0.003	0.003	0.007*	0.003		
<hr/>						
	Variance Component	SD	Chi-Square	Variance Component	SD	Chi-Square
Random Effects						
Level -2 Intercept	0.001**	0.025	220.504	0.001**	0.024	191.493
Level-1 Error	0.052	0.228		0.067	0.258	

\*\*  $p \leq .01$ ; \* $p < .05$ ; *Schools* ( $N = 103$ ); *Individuals* ( $n = 11,821$ )

model. The only individual-level variable that is not significantly related to either in-school or out-of-school physical violence is parental SES.

At the school-level, the only variable significantly associated with *in-school physical violence* is school efficacy. School efficacy is negatively associated with in-school violence; indicating that schools with stronger or higher school efficacy tend to have lower levels of in-school physical violence. The inclusion of the school-level controls only reduced the cross-school variance component for in-school physical violence by 6 percent. None of the other school-level variables are significantly related to in-school physical violence, including the “code of the hallway.” These results indicate the variation in in-school physical violence is largely explained by individual-level indicators, including individual adherence to the “code of the hallway.” The results herein do not provide any support that the “code of the hallway” has contextual effects on *in-school physical violence*.

However, regarding *out-of-school physical violence*, three school-level variables are significant—racial composition, school disorder, and the “code of the hallway.” By including the school-level controls, the level-2 intercept variance component is further reduced by 20 percent. Table 4.5 shows that the relationships with racial composition and school disorder are negative. This indicates that students who attend a school with a higher proportion of white students and those who attend schools with less disorder are more likely to be involved in violence that occurs out of school. The “code of the hallway” is positive and significantly associated with *out-of-school physical violence*. This provides support that school subculture or the “code of the hallway” does have a contextual effect on *out-of-school physical violence*.

For both, *in-school* and *out-of-school physical violence*, the cross-level interaction between gender and school-level “code of the hallway,” is negative and significant. This

**Table 4.5: Physical Violence Hierarchical Linear Model**

	In-School		Out-of-School			
	Coefficient	SE	Coefficient	SE		
<b>Level 1</b>						
Intercept (Violent Delinquency)	0.796**	0.004	0.831**	0.004		
Adherence to "Code of the Hallway"	0.009**	0.001	0.011**	0.001		
Impulsivity	0.048**	0.006	0.053**	0.006		
Delinquent Peers	0.146**	0.015	0.202**	0.018		
Violent Victimization	0.108**	0.011	0.104**	0.014		
School Attachment	-0.013*	0.006	-0.021*	0.007		
Parental Attachment	-0.004	0.004	-0.009*	0.005		
Parental SES	0.000	0.002	0.001	0.002		
Race	0.045**	0.011	0.042**	0.013		
Wave	-0.023**	0.003	-0.041**	0.004		
Gender	-0.038**	0.006	-0.036**	0.006		
<b>Level 2</b>						
"Code of the Hallway"	0.006	0.003	0.006*	0.003		
Racial Composition	-0.000	0.000	0.001*	0.000		
School Efficacy	-0.026*	0.011	-0.015	0.009		
School Disorder	-0.018	0.010	-0.026*	0.010		
<b>Cross-level Interaction</b>						
Gender*"Code of the Hallway"	-0.015**	0.005	-0.012*	0.006		
<hr/>						
Random Effects	Variance Component	SD	Chi-Square	Variance Component	SD	Chi-Square
Level-2 Intercept	0.001**	0.024	202.806	0.001**	0.022	172.634
Level-1 Error	0.052	0.228		0.067	0.258	

estimate indicates that the effect of school subculture on violence is weaker for females compared to males. That is, the code of the hallway is more important in explaining male violence than it is for female violence. This provides support that the effects of school-level subculture have gender-specific effects, in regards to explaining in-school and out-of-school violence.

The main findings for *in-school* and *out-of-school physical violence* include first, that at the individual-level, the stronger the student's adherence to the "code of the hallway" the more likely they are to be involved in violence both in and out of school. Second, there does appear to be a contextual effect of school-level subculture on violence that occurs outside of school but not for delinquency that transpires in school. Third, for both *in-school* and *out-of-school physical violence*, the analysis provides support that the effects of school-level subculture on violence are gendered, with the effect of school-level subculture being stronger for males.

### **In-School and Out-of-School Sexual Offending**

Similar to the null models for *in-school* and *out-of-school physical violence*, the null models for sexual offending revealed significant cross-school variation for both *in-school sexual offending* (variance component = 0.0015, s.d. = 0.040,  $p < 0.000$ ) and *out-of-school sexual offending* (variance component = 0.0020, s.d. = 0.045,  $p < 0.000$ ), again indicating that it is appropriate to proceed with a multilevel model. The intra-class correlation values were 0.017 and 0.020, respectively, indicating that almost 2 percent of the variation of in-school sexual offending falls between schools and 2 percent for out-of-school sexual offending. Again, this indicates that while there is statistically significant variation in sexual offending across schools, the vast majority of the variation in mean cross-school physical violence is attributed to individual-level factors.

Next, school-level “code of the hallway” was entered into the models for *in-school* and *out-of-school sexual offending* to determine whether school-level subculture is significantly associated with sexual offending. The results from these models are presented in table 4.6. School-level subculture is positive and significantly associated with both *in-school sexual offending* and *out-of-school sexual offending*, both with a p-value of 0.000, with coefficients of 0.018 and 0.022, respectively. While, school-level subculture is significantly correlated with sexual offending regardless of context in this model, it is important to note that the level-2 intercept variance component for *out-of-school sexual offending* is reduced by 38% once school-level subculture is added to the model and the variance for the intercept of mean *in-school sexual offending* is reduced by 32%.

**Table 4.6: Hierarchical Linear Model for Sexual Offending with School-Level “Code of the Hallway”**

	In-School		Out-of-School	
	Coefficient	SE	Coefficient	SE
<b>Level 1</b>				
Intercept (Sexual Offending)	0.795**	0.004	0.807**	0.005
<b>Level 2</b>				
"Code of the Hallway"	0.018**	0.004	0.022**	0.005

Random Effects	Variance Component	SD	Chi-Square	Variance Component	SD	Chi-Square
Level-2 Intercept	0.001**	0.032	243.236	0.001**	0.035	255.060
Level-1 Error	0.087	0.295		0.097	0.311	

\*\*  $p \leq .01$ ; Schools ( $N = 103$ ); Individuals ( $n = 11,821$ )

\* $p \leq .05$

The third step in the analysis is to add the individual-level controls, including the individual's adherence to the "code of the hallway" to determine whether the significance of school-level subculture on sexual offending holds when taking these individual-level factors into account. Table 4.7 presents the results from these models for both in-school and out-of-school sexual offending. The models reveal that when individual-level factors are controlled, school-level subculture becomes non-significant for in-school sexual offending; however, the effect of the individual's adherence to the "code of the hallway" is significant. Only three of the ten control variables are not significantly associated with *in-school sexual offending*. These include school attachment, parental attachment, and race (non-white). At this stage in the analysis, the level-2 intercept variance component was only reduced by 8.7 percent upon inclusion of the individual-level controls. This is a rather modest reduction, suggesting that relatively little of the cross-school variation in offending is due to the composition of the schools based on individual characteristics.

Alternatively, the *out-of-school sexual offending* model indicates that school-level subculture remains a significant factor in explaining out-of-school sexual offending net individual-level controls. The individual's adherence to the "code of the hallway" is significantly associated with *out-of-school sexual offending* along with all other individual-level controls except for parental attachment. The inclusion of the individual-level controls reduced the variance component by 40 percent, indicating that a substantial amount of the cross-school variation in *out-of-school sexual offending* is actually due to individual-level factors. However, this model provides support that school-level subculture might have contextual effects on *out-of-school sexual offending*. However, it could be that other school-level variables are also

**Table 4.7: Sexual Offending with Individual-Level Controls**

	In-School		Out-of-School			
	Coefficient	SE	Coefficient	SE		
<i>Level 1</i>						
Intercept (Sexual Offending)	0.795**	0.004	0.807**	0.004		
Adherence to "Code of the Hallway"	0.010**	0.001	0.011**	0.001		
Impulsivity	0.034**	0.006	0.038**	0.007		
Delinquent Peers	0.180**	0.016	0.204**	0.017		
Sexual Victimization	0.082**	0.007	0.079**	0.007		
School Attachment	-0.010	0.006	-0.018*	0.007		
Parental Attachment	-0.004	0.004	-0.004	0.005		
Parental SES	0.005*	0.002	0.006**	0.002		
Race	0.018	0.017	0.043*	0.018		
Wave	-0.010**	0.003	-0.015**	0.003		
Gender	-0.111**	0.006	-0.104**	0.009		
<i>Level 2</i>						
"Code of the Hallway"	0.006	0.004	0.009*	0.004		
<hr/>						
	Variance Component			Chi-Square		
Random Effects		SD			SD	
Level-2 Intercept	0.001**	0.031	232.564	0.001**	0.027	198.731
Level-1 Error	0.069	0.262		0.076	0.275	

\*\*  $p \leq .01$ ; Schools ( $N = 103$ ); Individuals ( $n = 11,821$ )

\* $p < .05$



important in understanding *out-of-school sexual offending*. The next model includes both individual-level and school-level controls.

Table 4.8 presents the results from the two-level hierarchical linear models for *in-school* and *out-of-school sexual offending* focusing on school-level “code of the hallway” and the cross-level interaction between gender and school-level “code of the hallway.”<sup>9</sup> At the individual-level, the student’s adherence to the “code of the hallway,” impulsivity, delinquent peers, sexual victimization, and race are positive and significantly associated with both *in-school* and *out-of-school sexual offending*. For *out-of-school sexual offending*, parental SES is also positive and significantly associated with *out-of-school sexual offending*, indicating that students whose parents are of higher SES tend to be more likely involved in *out-of-school sexual offending*. Wave (age) and gender (female) are negative and significantly associated with both in-school and out-of-school sexual offending. These effects indicate that as students progress from 7<sup>th</sup> through 10<sup>th</sup> grades, their involvement in sexual offending decreases, and that female students are exhibit lower levels of sexual offending than male students.

At the school-level, for both *in-school* and *out-of-school sexual offending* the only significant variable is school-level subculture. As would be expected then, the variance components were only marginally reduced by 8.5 percent and 4 percent, respectively. The school-level variables of school efficacy, school disorder, school enrollment, proportion receiving free/reduced lunch, and racial composition were all non-significant. These models indicate that school-level “code of the hallway” remains significantly associated with *in-school* and *out-of-school sexual offending* even after controlling for individual-level and school-level controls, lending support that contextual effects of school-level subculture exist. Consistent with

---

<sup>9</sup> The models displayed in Table 4.8 controlled for all school-level variables included in this dissertation; however, only the coefficients for those school-level variables that are significant in either model are presented in the table.

**Table 4.8: Hierarchical Linear Model for Sexual Offending**

	In-School		Out-of-School			
	Coefficient	SE	Coefficient	SE		
<b>Level 1</b>						
Intercept (Sexual Offending)	0.792**	0.004	0.806**	0.004		
Adherence to "Code of the Hallway"	0.009**	0.001	0.011**	0.001		
Impulsivity	0.034**	0.006	0.038**	0.007		
Delinquent Peers	0.180**	0.016	0.204**	0.017		
Sexual Victimization	0.083**	0.007	0.080**	0.008		
School Attachment	-0.010	0.006	-0.018*	0.007		
Parental Attachment	-0.005	0.004	-0.004	0.005		
Parental SES	0.005	0.002	0.006*	0.002		
Race	0.018**	0.017	0.042*	0.018		
Wave	-0.010**	0.003	-0.015**	0.003		
Gender	-0.111**	0.008	-0.104**	0.008		
<b>Level 2</b>						
"Code of the Hallway"	0.010*	0.004	0.012**	0.004		
<b>Cross-level Interaction</b>						
Gender*"Code of the Hallway"	-0.024**	0.007	-0.018*	0.007		
	Variance Component	SD	Chi-Square	Variance Component	SD	Chi-Square
Random Effects						
Level-2 Intercept	0.001**	0.029	210.502	0.001**	0.027	185.954
Level-1 Error	0.068	0.261		0.078	0.275	

\*\*  $p \leq .01$ ; Schools ( $N = 103$ ); Individuals ( $n = 11,821$ )

\* $p \leq .05$

the physical violence models, for both *in-school* and *out-of-school sexual offending*, the cross-level interaction between gender and school-level “code of the hallway” is negative and significant. The effect indicates that the influence of school-level “code of the hallway” on sexual offending is weaker for females than males. In other words, the influence of school-level subculture is stronger for males in explaining their sexual offending compared to females. This provides support that the effects of school-level “code of the hallway” on sexual offending have gender-specific effects.

The main findings for *in-school* and *out-of-school sexual offending* include first, that at the individual-level, as the student’s adherence to the “code of the hallway” increases so does their involvement in-school and out-of-school sexual offending. Second, the two-level hierarchical linear models indicate that net individual-level and school-level controls, the significant effect of school-level “code of the hallway” on *in-school* and *out-of-school sexual offending* persists. Third, the models also provide support that the effects of school-level subculture are gendered—indicating that the effect of school-level subculture on sexual offending is stronger for male students.

### **In-School and Out-of-School Nonviolent Delinquency**

Similar to the null models for *in-school* and *out-of-school physical violence* and *sexual offending*, the null models for nonviolent delinquency indicated significant cross-school variation for both *in-school nonviolent delinquency* (variance component = 0.001, s.d. = 0.024,  $p < 0.000$ ) and *out-of-school nonviolent delinquency* (variance component = 0.001, s.d. = 0.031,  $p < 0.000$ ), again indicating that it is appropriate to proceed with a multilevel model. The intra-class correlation values were 0.010 and 0.014, respectively, indicating that only 1 percent of the

variation of in-school nonviolent delinquency falls between schools and 1.4 percent for out-of-school nonviolence. Similar to physical violence and sexual offending, this indicates that the majority of the variation in cross-school nonviolent delinquency is explained by individual-level factors.

Next, school-level “code of the hallway” was entered into the models for *in-school* and *out-of-school nonviolent delinquency* to determine whether school-level subculture is significantly associated with nonviolent delinquency. The results from these models are presented in table 4.9. School-level subculture is positive and significantly associated with both *in-school* and *out-of-school nonviolent delinquency*, both with a p-value of 0.000 and coefficients of 0.011 and 0.013, respectively. It is also important to note that the variance component for

**Table 4.9: Hierarchical Linear Model for Nonviolent Delinquency with School-Level “Code of the Hallway”**

	In-School		Out-of-School			
	Coefficient	SE	Coefficient	SE		
<b>Level 1</b>						
Intercept (Nonviolent Delinquency)	0.056**	0.003	0.070**	0.004		
<b>Level 2</b>						
"Code of the Hallway"	0.011**	0.003	0.013**	0.003		
<hr/>						
Random Effects	Variance Component	SD	Chi-Square	Variance Component	SD	Chi-Square
Level-2 Intercept	0.0004**	0.019	186.765	0.001**	0.025	218.706
Level-1 Error	0.055	0.234		0.067	0.258	

\*\* p ≤ .01; Schools (N = 103); Individuals (n = 11,821)

\*p ≤ .05

*in-school* and *out-of-school nonviolent delinquency* is reduced by about one-third once school-level subculture is added to the model, thus indicating that school-level subculture has similar importance in explaining cross-school variation in both *in-school* and *out-of-school nonviolent delinquency*.

To determine whether school-level subculture continues to significantly influence nonviolent delinquency once individual-level factors are taken into account, the third step in the analysis is to add the individual-level controls, including the individual's adherence to the "code of the hallway." Table 4.10 presents the results from these models for both *in-school* and *out-of-school nonviolent delinquency*. The models reveal that when individual-level factors are controlled, school-level subculture becomes non-significant for both *in-school* and *out-of-school nonviolent delinquency*. Regarding *in-school nonviolent delinquency*, the only non-significant individual-level variable is parental attachment. As with the other outcome variables, the individual's adherence to the "code of the hallway" is positively and significantly related to nonviolent delinquency occurring in school. The inclusion of the individual-level controls reduced the level-2 intercept variance component by 32 percent, indicating that a substantial proportion of the variance in the cross-school variation of *in-school nonviolent delinquency* is associated with individual-level factors.

Alternatively, the *out-of-school nonviolent delinquency* model indicates that three of the individual-level variables are non-significant, including parental attachment, parental SES, and race. However, the individual's adherence to the "code of the hallway" is significantly associated with *out-of-school nonviolent delinquency*. Similar to *in-school nonviolent delinquency*, by adding the individual-level controls to the model, the variance component was reduced by 41 percent, again indicating that individual-level factors are important in explaining

**Table 4.10: Nonviolent Delinquency with Individual-Level Controls**

	In-School		Out-of-School			
	Coefficient	SE	Coefficient	SE		
<b>Level 1</b>						
Intercept (Nonviolent Delinquency)	0.054**	0.003	0.068**	0.003		
Adherence to "Code of the Hallway"	0.007**	0.001	0.008**	0.001		
Impulsivity	0.016**	0.005	0.023**	0.005		
Delinquent Peers	0.130**	0.015	0.172**	0.016		
Property Victimization	0.026**	0.004	0.023**	0.005		
School Attachment	-0.030**	0.005	-0.028**	0.006		
Parental Attachment	-0.002	0.003	-0.006	0.004		
Parental SES	0.003*	0.002	0.002	0.002		
Race	0.023*	0.009	0.019	0.011		
Wave	-0.013**	0.003	-0.017**	0.003		
Gender	-0.029**	0.004	-0.022**	0.005		
<b>Level 2</b>						
"Code of the Hallway"	0.003	0.002	0.004	0.003		
<hr/>						
	Variance		Chi-	Variance		Chi-
Random Effects	Component	SD	Square	Component	SD	Square
Level-2 Intercept	0.0003**	0.016	161.157	0.0004**	0.019	180.316
Level-1 Error	0.044	0.210		0.054	0.232	

\*\*  $p \leq .01$ ; Schools ( $N = 103$ ); Individuals ( $n = 11,821$ )

\* $p < .05$

the cross-school variation in *out-of-school nonviolent delinquency*. Overall, these models reported in Table 4.10 do not provide support that school subculture might have contextual effects on nonviolent delinquency whether it occurs in or out of school. From these models, it appears that the “code of the hallway’s” influence on nonviolent delinquency is primarily at the individual-level.

Table 4.11 presents the results from the two-level hierarchical linear models for *in-school* and *out-of-school nonviolent delinquency* focusing on school-level “code of the hallway” and the cross-level interaction between gender and school-level “code of the hallway.”<sup>10</sup> At the individual-level, the student’s adherence to the “code of the hallway,” impulsivity, delinquent peers, and property victimization are positive and significantly associated with both *in-school* and *out-of-school nonviolent delinquency*. Race (non-white) is also positive and significantly associated with *in-school nonviolent delinquency*, indicating that non-white students are more likely to be involved in *in-school nonviolent delinquency*. School attachment, wave (age), and gender (female) are negative and significantly associated with both *in-school* and *out-of-school nonviolent delinquency*. These effects indicate that as students’ attachment to school increases, their involvement in nonviolent delinquency decreases and as students progress from 7<sup>th</sup> through 10<sup>th</sup> grade their involvement in nonviolent delinquency also decreases. Similar to the other offending behaviors, males are involved in greater levels of nonviolent delinquency compared to females.

At the school-level, for both, *in-school* and *out-of-school nonviolent delinquency*, school-level subculture is non-significant (as it was in the previous models with only individual-level controls). The school-level variables of school efficacy, school disorder, and school enrollment

---

<sup>10</sup> The models displayed in Table 4.11 controlled for all school-level variables included in this dissertation; however, only the coefficients for those school-level variables that are significant in either model are presented in the table.

**Table 4.11: Hierarchical Linear Model for Nonviolent Delinquency**

	In-School		Out-of-School	
	Coefficien t	SE	Coefficien t	SE
<b>Level 1</b>				
Intercept (Sexual Offending)	0.052**	0.003	0.064**	0.003
Adherence to "Code of the Hallway"	0.007**	0.001	0.008**	0.001
Impulsivity	0.017**	0.005	0.024**	0.005
Delinquent Peers	0.130**	0.015	0.173**	0.015
Property Victimization	0.026**	0.004	0.022**	0.005
School Attachment	-0.030**	0.005	-0.027**	0.006
Parental Attachment	-0.002	0.003	-0.006	0.004
Parental SES	0.002	0.002	0.000	0.002
Race	0.022*	0.009	0.014	0.012
Wave	-0.014**	0.003	-0.019**	0.003
Gender	-0.030**	0.004	-0.023**	0.005
<b>Level 2</b>				
"Code of the Hallway"	0.004	0.003	0.004	0.003
Free/Reduced Lunch	-0.001**	0.000	-0.001*	0.000
Racial Composition (Proportion Non-White)	-0.000	0.000	0.001**	0.000
<b>Cross-level Interaction</b>				
Gender*"Code of the Hallway"	-0.012**	0.004	-0.012*	0.005
	Variance	Chi-	Variance	Chi-
Random Effects	Component	SD	Square	Component
Level-2 Intercept	0.0002**	0.014	144.199	0.0002**
Level-1 Error	0.044	0.210		0.054
				SD
				Square
				147.943
				0.232

\*\* p ≤ .01; Schools (N = 103); Individuals (n = 11,821)

\*p ≤ .05



are also non-significant in both models. The only school-level variable significant for both *in-school* and *out-of-school nonviolent delinquency* is free/reduced lunch, indicating that those schools with a higher proportion of students receiving free/reduced lunch, students are less likely to be involved in nonviolent delinquency. Racial composition (proportion non-white) is positive and significantly associated with *out-of-school non-violent delinquency*, indicating that students that attend a school with a proportion of non-white students are more likely to be involved in *out-of-school nonviolent delinquency*. The inclusion of the school-level controls reduced the variance component by 24 percent for *in-school nonviolent delinquency* and 49 percent for *out-of-school nonviolent delinquency*. Overall, these models indicate that school-level “code of the hallway” is no longer significantly associated with *in-school* and *out-of-school nonviolent delinquency* after controlling for individual-level and school-level controls. This does not provide support that school-level “code of the hallway” has contextual effects for either in-school or out-of-school nonviolent delinquency. Rather, these models support that the influence of the “code of the hallway” on nonviolent delinquency is largely at the individual-level.

Consistent with the physical violence and sexual offending models, for both *in-school* and *out-of-school nonviolent delinquency*, the cross-level interaction between gender and school-level “code of the hallway” is negative and significant. This effect indicates that the influence of school-level “code of the hallway” on nonviolence is weaker for females than males. In other words, the influence of school-level subculture is stronger for males in explaining their nonviolent delinquency compared to females. This provides support that the effects of school-level “code of the hallway” on nonviolent delinquency are gender-specific.

The main findings for *in-school* and *out-of-school nonviolent delinquency* include first, that at the individual-level, as the student’s adherence to the “code of the hallway” increases so

does their delinquent involvement in *in-school* and *out-of-school nonviolent delinquency*.

Second, the two-level hierarchical linear models indicate that net of individual-level and school-level controls, the significant average effect of school-level “code of the hallway” on *in-school* and *out-of-school nonviolent delinquency* does not hold. However, third, the models do provide support that the effects of school-level subculture are gendered—indicating that the effect of school-level subculture on nonviolent delinquency is stronger for male students.

## Summary

This chapter provided first, an overview of the bivariate relationships between all study variables and second, a detailed discussion of the multivariate multilevel analyses. The analysis revealed that regardless of the context—in or out of school—and regardless of the offending behavior—physical violence, sexual offending, or nonviolence—the individual’s adherence to the “code of the hallway” significantly influenced their behavior. That is, the stronger a student adhered to the “code of the hallway,” the more likely they were to be involved in physical violence, sexual offending, and nonviolent delinquency both in and out of school. The results for school-level subculture were less consistent. For physical violence, the analysis provided support that school-level subculture had contextual effects on physical violence that was committed out of school but not for physical violence occurring in school. For sexual offending school-level subculture had contextual effects both in and out of school. Finally, for nonviolent delinquency, the analysis revealed that regardless of context, school-level subculture did not have contextual effects.

Regarding potential gendered effects of school-level subculture, the cross-level interaction between gender and school-level subculture was consistently negative and significant

across models, indicating that the influence of school-level “code of the hallway” is more influential in male offending compared to females regardless of the type of offending or the context in which the offending occurred. The analysis herein provides mixed results regarding the research hypotheses presented. While some hypotheses are strongly supported by the analyses, for others, the analysis provides mixed and sometimes no support. A more detailed discussion of the results is provided in the following chapter.

## CHAPTER 6: DISCUSSION AND CONCLUSION

This chapter provides a summary of the findings from the analysis conducted. This chapter also includes a discussion of whether each research hypothesis was supported by the analysis. Additionally, implications for policy and practice are presented, and the limitations of this research and directions for future research are also considered.

### SUMMARY OF FINDINGS

Table 6.1 provides a summary of the findings of this dissertation with an emphasis on the relationships between the key independent variables and each of the dependent variables. First, at the individual-level, the student's adherence to the "code of the hallway" was positive and significant across all models. In other words, students whose values more strongly adhered to the "code of the hallway" were more likely to be involved in physical violence, sexual offending, and nonviolent delinquency, both in and out of school. The coefficients for individual-level adherence to "the code" ranged from 0.006 to 0.010 in the final models across the six dependent variables. Second, the significance of school-level subculture on offending was much less consistent, and somewhat consistent regarding context. The school-level "code of the hallway" was positive and significant for *out-of-school physical violence* and for *in-school* and *out-of-school sexual offending*. Third, the cross-level interaction of gender and school-level "code of the hallway" was negative and significant across all models. That is, the effect of school-level subculture on *in-school* and *out-of-school physical violence, sexual offending, and nonviolent delinquency* is weaker for females than it is for males. The analysis provides support for some of the hypotheses but not for others. The sub-sections to follow break down each hypothesis and

**Table 6.1 Overview of the Findings**

	<b>In-School Physical Violence</b>	<b>Out-of-School Physical Violence</b>	<b>In-School Sexual Offending</b>	<b>Out-of-School Sexual Offending</b>	<b>In-School Nonviolent Delinquency</b>	<b>Out-of-School Nonviolent Delinquency</b>
<i>Key Independent Variables</i>						
Individual Adherence to the "Code of the Hallway"	+	+	+	+	+	+
School-Level "Code of the Hallway"	NS	+	+	+	NS	NS
Gender * School-Level "Code of the Hallway" Interaction	-	-	-	-	-	-

discusses: 1) whether the analysis provides support for each hypothesis, 2) whether the results of the analysis are consistent with previous research, and 3) how the analysis extends previous research. This information is summarized in Table 6.2.

### **Student's Adherence to the "Code of the Hallway"**

The first research hypothesis stated that the stronger a student adhered to the "code of the hallway," the more likely they would be involved in physical violence, sexual offending, and nonviolent delinquency. The analysis revealed consistent support for this hypothesis. In all six models, the student's adherence to the "code of the hallway" was positive and significant. While student's adherence to the "code of the hallway" was statistically significant in all of the models, it did not tend to be one of the largest coefficients. Previous victimization and delinquent peers tended to be two of individual-level variables with the largest coefficients. Still, these results are consistent with previous research regarding the adherence to violent subcultures such as those presented by Anderson (1999) and also in research studying school subculture. As previously mentioned, Stewart and Simons (2006, 2010) found that an individual's adherence to the "code of the street" is positive and significantly associated with violence. Felson et al. (1994) found that a student's adherence to an oppositional school subculture is positive and significantly associated with not only violence, but also nonviolent delinquency, and minor deviant acts. Most recently, Ousey and Wilcox (2005) also found that a student's adherence to school subculture is positive and significantly related to violence. Not only is the analysis testing this hypothesis consistent with previous research, but it also extends previous work by disaggregating students' offending that occurs in school and out of school. This analysis allowed for offending

that took place out of school to be isolated and the analysis demonstrated that a student's adherence to the "code of the hallway" also influences students' behavior out of school.

### **Significance of School-Level Subculture**

The second hypothesis stated that students who attended schools that more strongly adhered to the "code of the hallway" (school-level subculture) would more likely be involved in physical violence, sexual offending, and nonviolent delinquency. The analysis provided consistent support for this hypothesis. For all offending behaviors, school-level subculture was positive and significant. In other words, students who attended schools that more strongly adhered to the "code of the hallway" were more likely to be involved in physical violence, sexual offending, and nonviolent delinquency, regardless of whether this offending occurred in or out of school. While finding that school-level subculture is positive and significant in explaining cross-level variation in offending, these results are only preliminary in that these models included no control variables at the individual- or school-level. While the previous research is somewhat limited, this is consistent with the findings reported by Felson et al. (1994) which found that school-level subculture was predictive of violence, nonviolent offending, and even with minor deviant acts. This step in the analysis extends previous research by disaggregating offending that occurs inside schools compared of out of schools.

### **Exploring Contextual Effects of School-level Subculture**

The third hypothesis stated that net the student's adherence to the "code of the hallway" the school-level subculture would continue to significantly influence offending. The support for this hypothesis was mixed and specific to the type of offending and to the context in which the

<b>Hypothesis</b>	<b>Supported/Not Supported</b>	<b>Consistent with Previous Research</b>	<b>Extends Previous Research</b>
H1: The stronger a student adheres to the "code of the hallway," the more likely they are to be involved in physical violence, sexual offending, and nonviolent delinquency.	Consistent Support	This analysis is consistent with previous research studying the individual's adherence to a violent school subculture on violence (Ousey and Wilcox, 2005) and general delinquency (Felson et al. (1994). It is also consistent with research that has examined the influence of community violent subculture on violence (see, Stewart & Simons, 2006; 2010).	This research reveals that students' adherence to the "code of the hallway" also influences their behavior out of school.
H2: Students who attend a school that more strongly adheres to the "code of the hallway" are more likely to be involved in offending, above and beyond their own adherence to the school subculture.	Consistent Support	This analysis is consistent with previous research by indicating that school-level subculture is related to offending (see, Felson et al., 1994).	This analysis extended previous research by disaggregating offending by in-school vs. out-of-school. This analysis was able to examine whether school-level subculture influences offending that occurs out of school.
H3: The effects of school-level subculture are stronger for offending that occurs out school compared to in school.	This hypothesis is partially supported. School-level subculture was significant for out-of-school but not in-school physical violence. School-level subculture was significant for both in-school and out-of-school sexual offending and not significant for either in-school or out-of-school nonviolent delinquency.	This analysis supports the hypothesis presented by Ousey and Wilcox (2005) that possibly the in-school violence was washing out the contextual effect of school-level subculture.	This analysis extends research by disaggregating offending by in-school vs. out-of-school. The analysis was also able to examine whether the effects of school-level subculture differed from offending that occurs in school compared to out of school.



<p>H4: The effects of school-level subculture will be similar on physical violence, sexual offending, and nonviolence.</p>	<p>This hypothesis is partially supported for physical violence, fully supported for sexual offending, and not supported for nonviolent delinquency.</p>	<p>This research is partially consistent with Felson et al. (1994) in that school subculture did significantly influence physical violence that occurred out of school but it did not significantly influence physical violence in school, or nonviolent delinquency regardless of context.</p>	<p>This analysis extends previous research by disaggregating offending into physical violence, sexual offending, and nonviolence. Further it was able to isolate a contextual effect of school subculture on sexual offending. Specifically, the analysis extended Ousey and Wilcox (2005) by disaggregating physical violence by in- and out-of-school.</p>
<p>H5: The effects of school-level subculture are stronger for males than females.</p>	<p>Consistent Support</p>	<p>This research is consistent with previous quantitative research that has suggested that violent subcultures are more influential for males (i.e., Anderson, 1999) and work that has suggested culture influences females differently (i.e., Miller, 2010).</p>	<p>This analysis extended previous research by quantitatively testing whether school-level subculture has gendered effects. The results provide empirical support for claims made in qualitative research.</p>

---

offending occurred. Regarding *out-of-school physical violence*, net individual- and school-level controls, school-level subculture continued to have a positive and significant effect. On the other hand, the effect of school-level subculture on *in-school physical violence* did not hold once individual- and school-level controls were taken into account. For sexual offending, school-level subculture appears to have a contextual effect for both *in-school* and *out-of-school sexual offending*. Finally, for nonviolent delinquency, both in school and out of school, the effect of school-level subculture becomes non-significant once other relevant controls are taken into account.

Thus, school-level subculture does not have similar effects on physical violence, sexual offending, and nonviolence, net of individual- and school-level control variables. However, despite the inconsistency, these findings do indicate that the “code of the hallway” is important for understanding a wider variety of offenses beyond physical violence. More specifically, the results demonstrate that the “code of the hallway” is also influential in sexual offending. In general, the support for the hypothesis that the “code of the hallway” has general effects on various types of offending is weak to modest and more research in this area is needed.

### **Effects of School-Level Subculture on In-School vs. Out-of-School Offending**

The fourth research hypothesis stated that school-level subculture will have stronger effects on offending that occurs out of school compared to in school. This hypothesis was only supported with physical violence. The effect of school-level subculture on *out-of-school physical violence* persisted once individual-level and school-level variables were taken into account where the effect did not hold in the *in-school physical violence model*. For sexual offending, school-level subculture is important in explaining both *in-school* and *out-school*

*sexual offending*, net all controls. On the other hand, school-level subculture is not significantly associated with *in-school* or *out-of-school nonviolent delinquency*. In general, the analysis does not support the hypothesis that the “code of the hallway” will be more important in explaining behavior that occurs out of school compared to in school. However, the hypothesis is supported for physical violence.

The finding of the contextual effect of school-level subculture for *out-of-school physical violence* but not for *in-school physical violence* supports a suggestion presented by Ousey and Wilcox (2005). They offered that one of the reasons they might not have found a contextual effect of school-level subculture on in-school violence was that schools were a very controlled environment, compared to that of the community. Therefore, not as many opportunities to express the values of the “code of the hallway,” including the use of violence, would be available in school compared to out of school. By disaggregating physical violence that occurred in school compared to out of school, this analysis was able to test this claim. The analysis found support for Ousey and Wilcox’s claim—the contextual effect of school-level subculture on *in-school physical violence* disappeared when control variables are taken into account just as it did in their analysis. However, for *out-of-school physical violence*, the effect of school level subculture held, even after all relevant controls were entered into the model. This finding in and of itself extended the previous research.

### **Exploring Gendered Effects of School-Level “Code of the Hallway”**

The last hypothesis stated that the effect of school-level subculture would be stronger for males compared to females. The analysis revealed consistent support for this hypothesis. For all dependent variables, both in-school and out-of-school offending, the cross level interaction

between gender (female) and school-level subculture was negative and significant, demonstrating that the effect of school-level subculture on offending is weaker for females than males. This finding is consistent with previous quantitative research that has suggested that subcultural effect may be especially important for explaining male violence (Anderson, 1999). Additional qualitative work has also explored the differential ways in which community and school subculture may influence female offending and victimization compared to that of males (Miller, 2010). This analysis extends this line of research by assessing potential gender effects using quantitative techniques.

### **Summary of Support for Hypotheses**

For three of the five hypotheses, strong consistent support is provided by the analysis. First, as the student's adherence to the "code of the hallway" increases, so does their involvement in *in-school* and *out-of-school physical violence, sexual offending, and nonviolent delinquency*. Second, school-level subculture is positive and significantly associated with all six dependent variables. This does provide preliminary support that school-level subculture is important for understanding students' offending; however, once controls are added the support is less clear. School-level subculture, while in some models statistically significant; it is not ever one of the variables with the highest coefficients, especially when compared to the individual-level factors. This could imply that while statistically significant, school-level subculture may not be all that important, substantively. Further, across all three offending behaviors examined, the vast majority of the variation is attributed to individual-level factors compared to school-level factors. Third, the analysis provided consistent support that school-level "code of the

hallway” has gendered effect on offending. School-level subculture is more important for explaining the cross-school variation in male offending than female offending.

Regarding the other two hypotheses, the analysis provides at best partial support. First, the analysis does not provide strong support that the effects of school-level subculture are general. School-level subculture was not significantly associated with *in-school* or *out-of-school nonviolent delinquency*. It appears that regarding subcultural effects, it is the student’s adherence to the “code of the hallway” that influences their level of involvement in nonviolent delinquency. However, for *in-school* and *out-of-school sexual offending* and *out-of-school physical violence*, school-level subculture was positive and significant. It is possible that the reason school-level “code of the hallway” was not significant for *in-school physical violence* is that the school context is likely more controlled than the street context outside of school and therefore may provide less opportunity for violence to occur. However, descriptive indicate that one of the items used to create the measure of physical violence—pushing and shoving—does actually occur rather frequently in school. Therefore, it might be that school subculture is not that important in understanding the type of violence that occurs in schools.

If it is that schools are a more controlled context, then why did the school-level subculture continue to have an effect on *in-school sexual offending*? This is likely tied up in the measure of sexual offending. The sexual offending measure includes unwelcomed sexual remarks and unwelcomed touching. There is more opportunity to make an unwelcomed sexual remark or touch someone sexually without their permission in the hallways of schools compared to committing assault, or a much more serious sexual assault, such as rape in the controlled context of the school. In other words, it is more likely for students to perceive that they will get away with making an unwelcomed sexual remark or touching someone in a sexual manner in

school than assault or robbery; and therefore, the restricted environment is likely to influence the commission of physical violence more than sexual offending as measured here in this study.

This is actually supported in the RSVP data, used herein, in that sexual victimization as measured here occurs very frequently. For example, 57 percent of females and 29 percent of males indicated that they had been sexually harassed and 39 percent of females and 21 percent of males had been sexually assaulted in school.

Second, the hypothesis that the effects of school-level subculture would be more apparent for out-of-school offending than in-school offending also received only partial support. For physical violence, the hypothesis was supported but for the other two dependent variables, it was not. School-level subculture was significantly associated with both in-school and out-of-school sexual offending. However, it was not significantly associated with either in-school or out-of-school nonviolent delinquency. The analysis reveals that the effects of school-level subculture are not general across types of offending nor across the contexts on in school and out of school.

## **IMPLICATIONS FOR THEORY AND PRACTICE**

This section discusses the implications the research presented in this dissertation has for theory and practice. First, the implications for theory are discussed highlighting the contributions this research has made for the cultural perspective and how these contributions should be considered in future research on the cultural perspective and more specifically, cultural research focusing on the school context. Second, implications for practice are presented. Throughout this discussion a few school-based prevention programs that address school-level culture are summarized.

## **Implications for Theory**

The results from this dissertation have five major implications for theory: 1) Cultural influences develop in other contexts than that of the community; 2) Violent or antisocial subcultures have influences in other settings than that of urban, poor, and predominantly African American contexts as that studied in Anderson (1999); 3) Cultural influences appear to be stronger for males than females, or it may be that different aspects of culture are important for females that are not included in current measures of culture; 4) Cultural influences appear to have contextual influences on a broader variety of offenses than physical violence, including sexual offending; and 5) School-based subcultural influences appear to cut across contexts and are not necessarily isolated to the school. Each of these implications is discussed, in turn, below.

First, this research demonstrates that theory should consider other contexts when examining cultural influences on offending outcomes. As previously discussed, much of the research on the cultural perspective focuses on community culture; but this dissertation highlights that other contexts, specifically the school, are likely to generate cultural effects on offending. If cultural theorists want to fully understand cultural influences on crime, they can no longer neglect the important context of the school. Further, while it remains an empirical question, theorists should consider the potential cross-over of community and school culture. Not only should the school context continue to be studied regarding cultural influences but other context may also be research worthy such as the family.

Second, much of the qualitative and, to some extent, the quantitative research on community culture has emphasized the importance of cultural influences on offending that occurs in a context of concentrated disadvantage--specifically urban, poverty stricken, socially isolated, predominantly Black neighborhoods. This research, that uses a sample of public

schools from Kentucky, demonstrates that violent and antisocial subcultures can and do develop in other contexts; suggesting that the cultural perspective is more generalizable than initially thought. While the magnitude of the cultural effects may be stronger in areas of concentrated disadvantage, the potential for cultural influences in neighborhoods or schools not experiencing concentrated disadvantage, cannot be dismissed.

Third, this research reinforces qualitative research that has implied that cultural influences are especially important for explaining male offending. However, it is likely that it is not that culture is not important for female offending but rather that the way we currently measure culture does not capture some of the components of culture that are more likely to influence female offending. For example, females gain status and respect among their peers differently than males in contexts that adhere to an oppositional culture. Females gain status by the having babies and through the males with whom they associate (Anderson, 1999). Cultural views on romantic relationships, pregnancy, and more passive means of retaliation should be explored. Theorists should consider exploring other components of culture that are especially important to females and our empirical tests should then include these measures.

Fourth, this research demonstrates that school-based subculture has influences not only on physical violence but also on sexual offending. Much of the theoretical and empirical work on the cultural perspective has largely emphasized understanding physical violence (for an exception see, Miller, 2010). Cultural theory should give more attention to how violent and antisocial subcultures can help us understand sexual offending by identifying what cultural values or components are likely to lead to sexual offending (i.e., males making sexual and deeming comments to females may help them build status among his peers).



Fifth, it appears that cultural influences are not limited to the context in which individuals are exposed to the culture. For example, this dissertation demonstrates that a school-based subculture can influence offending that occurs out of school. Just as individual's cultural values cut across contexts, the contextual influences of culture also appear to cut across contexts. However, this research only measures school-based subculture. To better understand the nature of culture cutting across contexts, community culture should be measured as well. Theorists should develop a cultural theory that considers multiple contexts and the possible interactions between the various contexts and also potential reciprocal effects of the various subcultural influences.

### **Implications for Policy and Practice**

This research has illustrated that schools do serve as a prime context for culture to develop and further that school-based subculture influences student offending. As such, these findings are supportive of the continued funding and increased use of school programs designed to change the environment of schools. This section discusses some of the more successful school programs targeting middle and high schools that emphasize changing the school environment, including the school-based subculture.

Project *Positive Action through Holistic Education* (Project PATHE), was a school-based prevention program funded the Office of Juvenile Justice and Delinquency Prevention (OJJDP) as part of the office's Alternative Education Initiative. This program targeted the organization and management structures of seven secondary schools in the early 1980s. The goals of the program included increasing staff and student participation in such school improvements followed by the implementation of school-level interventions. The results of the evaluation

revealed that compared to the control schools, those that participated in PATHE, reported significantly less delinquency, drug use, and suspensions one year after the program (Gottfredson, 2001).

Another program, referred to as the *Law-Related Education* program (LRE), focused on teaching student's about America's laws, promoting political involvement—and most closely related to culture—the development of moral and ethical values in conjunction with analytical skills (Gottfredson, 2001). Evaluations of the LRE program have shown promise. For example, Johnson (1984) showed that those schools participating in the LRE program reported an effect size of .22. However, this program was most successful at reducing minor deviant or delinquent acts compared to physical violence.

Finally, the program Student Training through Urban Strategies (STATUS), also funded under OJJDP's alternative education initiative, has shown positive effects on delinquency. Most relevant to culture, the program targeted informal codes of conduct and the formal rules of behavior, along with social contracts and their role in American society (Gottfredson, 2001). Evaluation of STATUS demonstrated reductions in delinquency and drug use with effect sizes ranging from -.07 to -.42 (Gottfredson, 1990).

The main point of reviewing these few programs that have reduced delinquency is to demonstrate that school interventions are capable of addressing the school climate and therefore, are likely to directly address school culture. While some of these programs indirectly addressed culture or addressed some components of school culture, none of them were specifically designed to address school-based subculture. This research presented herein supports the continued use of such general “school climate” programs but also supports the development of school interventions that directly target the school-based culture of schools.

## **Summary**

This section has briefly covered the implications of this dissertation for theory and practice. In general, the implications for theory revolve around further theory development that includes studying alternative contexts than that of the community, other offending outcomes than physical violence, recognizing cultural influences in contexts other than those characterized by concentrated disadvantage, and further considering the gendered effects of culture. For policy and practice, this research supports the continual funding of school interventions that target changing the environment of schools, and possibly developing programs that more directly target school-based subculture.

## **LIMITATIONS OF STUDY**

While this dissertation does address important research questions and does contribute to the body of work examining cultural influences on delinquency, and more specifically, school-based cultural influences, key questions remain unanswered. Along those lines, while this study has several strengths there are a few limitations that deserve attention. This section briefly presents these limitations and then discusses how these limitations can be addressed in future research. The major limitations largely involve the research methods used or the measures used (or not used) to measure the key theoretical concepts.

## **Research Methods**

First, due to the research design used in this dissertation, it not possible to determine with certainty the temporal order between subculture and delinquency. In the analysis presented in

this dissertation, the data is pooled across four years. This essentially makes the analysis a cross-sectional study. Therefore, conclusions about correlations can be made, but assertions of causality cannot be made. That is, while the analysis presented herein does indicate that the student's adherence to the "code of the hallway" is significantly associated with offending, this research design does not allow me to discern whether adhering to the "code" leads to offending, or, alternatively, whether offending behavior leads to an adherence to the "code." While this research provides some of the initial steps in understanding the school-level subcultural effects on offending, future research should use research designs that allow the research to tease out temporal order. Such suggestions for future directions are discussed in more detail in the following section.

The second limitation of using pooled data involves the issue of correlated error. By using this method, each data point is treated as a unique individual when, due to the pooling the data, it is possible that the same individual is in the data set four separate times. To assess to what degree correlated error may be influencing the results previously presented and discussed, some ancillary analyses were conducted. Three-level models parallel to the two-level models estimated with HLM for all dependent variables were run with Stata in order to better control for the correlated error that might have been generated by pooling the data. This analysis revealed that, when comparing the results from the two-level models against the three-level models, all coefficients that were significant in the two-level model remained significant, and at the same level of significance, in the three-level models. While there were minor changes in the standard errors across the two-level and three-level models, the reductions or increases in the standard errors were relatively small. For example, when examining the three-level models compared to the two-level models for physical violence the robust standard errors for both individual-level

adherence to the “code of the hallway” and school-level subculture was very similar. For individual-level subculture the standard error was .00315 in the three-level model and .00323 in the two-level model. For school-level subculture the standard error was .01944 in the three-level model and .00941 in the two-level model. Further, the individual adherence to the “code of the hallway” and school-level subculture were both significantly associated with in-school and out-of-school violence. However, similar to the two-level models performed in HLM, school culture, at the individual- or school-level, were not among the highest coefficients. This additional analysis demonstrates that pooling the data across years, and each repeated measure as a unique individual data point does result in biased estimates due to intra-individual correlated error.

While the research design used here has limitations, it also has advantages and the approach of pooling across years was chosen, systematically, for several reasons. First, this approach maximizes the number of individual data points and, most importantly, the number of different contexts. The maximum number of contexts in any one wave of data was 65 schools. Furthermore, students changed schools between each of the first three waves of data. Thus, only Waves 3 and 4 could really be used in a longitudinal analysis involving any lagged effects of school context. Finally, it can be argued that a cross-sectional model better represents the likely “situational” effects of a school subculture; the likelihood that subcultural effects are one-year lagged effects seems a stretch. This leads to the second major limitation of the analysis.

### **Measures of Key Theoretical Concepts**

Much of the qualitative work studying the role of school subculture and its influences on delinquency discuss how the effects of school subculture and community culture are intertwined

or overlap with one another. The data used in this analysis do not contain any measure of community culture; therefore, it is not possible to model potential reciprocal effects of school subculture and community subculture. Further, it is not possible to control for community culture effects to assess whether the effect of school-based subculture holds once taking community culture into account. In this light, the measure of school culture used herein might actually be a measure of community culture that has been imported into the school, with community culture exerting the true cultural influence with regards to cross-school variation in offending.

Another limitation is that the measure of school-level subculture is merely the group-mean of the individual-level adherence to the “code of the hallway.” This line of research could benefit from using an independent measure of school-based subculture. Perhaps a measure could be created from teacher and/or school administrators. Again, this issue is further discussed as a direction for future research in the following section.

Last, while this research is able to control for many of the individual-level and school-level factors that are also likely influential in students’ offending, it should be kept in mind that there are likely other unmeasured mechanisms at work in explaining students’ offending. For example, at the school-level, the number of delinquents that attend the school is likely to be important. Future research, should consider other possible mechanisms that may help explain students’ offending and control for those in future tests of school subculture.

## **DIRECTIONS FOR FUTURE RESEARCH**

This section discusses the various avenues for future research regarding the cultural perspective, and more specifically, the line of inquiry studying school-based subculture. The recommendations or considerations involve four different areas, and many stem from the major limitations of the present study, discussed above: 1) Improve or use alternative research methods/designs and analytic techniques to study school subculture; 2) Improve measures of school-level subculture and incorporate community-level variables; 3) Begin exploring the influences of school subculture on students' victimization; 4) Focus on potential theoretical developments and considerations such further teasing out the "culture as values" vs. "culture as performance" for the cultural perspectives, focusing on the school context.

### **Research Methods and Design**

While this dissertation does provide some support that school-level subcultural has important influences on students' offending, the research design did not allow for causality to be determined. Future research should utilize research designs and analytic techniques that allow for temporal order to be established. The data used herein do allow for the examination of effects of school-level subculture on offending at a later point in time. Future analyses can thus check the validity of the results obtained here by using two consecutive waves of the four wave panel design rather than pooling across the four waves. For example, future analyses should examine the effects of individual-level adherence to the "code of the hallway" and school-level subculture from Wave 3 on Wave 4 offending. Another, and more sophisticated approach, would be to use structural equation modeling. This would not only allow for temporal order to

be determined but it would also allow for reciprocal effects to be estimated. It remains an empirical question as to whether school subculture—at the individual- or school-level—have reciprocal effects. Research has demonstrated or theorized that some social processes in the community such as, collective efficacy (Morenoff et al., 2001), coerced mobility (Rose & Clear, 1998), and disorder (Steenbeek & Hipp, 2011) have reciprocal effects. It is plausible then that school subculture and crime may also have similar reciprocal effects. Using structural equation modeling, an analysis of reciprocal effects is possible. Again, the RSVP data used here will allow for this sort of analysis, and this sort of model will thus be assessed in the near future, as an extension to the work presented here.

### **Improving and Expanding Measures**

Here, the measure of school-level subculture is merely a measure of the students' adherence to the "code of the hallway" aggregated to the school-level. Future research could benefit from using an independent measure of school-level culture. For example, teachers and other school officials could serve as a good source to create a school-level culture measure. Unfortunately, these data do not present an opportunity for such measures. Hopefully future data-collection endeavors will be able to include various measures of school-subculture. However, in the meantime, there are perhaps alternative ways to use these RSVP data in order to create alternative measures of school-based subculture. One of the weaknesses of using the school-level mean of the individual students' adherence to the "code of the hallway" rests in the notion that schools with either the same or similar means are treated as having "equal" or the same school-based subcultures. However, for one school, the standard deviation may be much smaller than another. In this case, the schools' cultures are actually probably very different. For



example, a school that has a high mean on school-level subculture but a small standard deviation could be viewed as a school that has a true deviant subculture and more in line with a cultural deviance approach. In other words, a large proportion of the school adheres to the “code” and there is not much deviation from that level of adhering to the “code.” This indicates a higher degree of consensus on school cultural values. On the other hand, a school that has a high mean value of school subculture but a much larger standard deviation, could be translated into a school that is experiencing a deviant subculture but it is attenuated by those segments of the school population that do not adhere to the deviant subculture. The larger deviation indicates that less consensus in the school cultural values exist. Considering alternative measure for the school-level culture, not only would allow potentially better measurements of the concept, but it also has implications for future theoretical development regarding the cultural perspective. This is discussed in more detail shortly.

While some of the theoretical basis for this dissertation discusses the potential reciprocity of community-culture and school-culture effects -- or how the two likely overlap -- this research cannot disentangle the effects of the types of subculture. The data do not contain measures of community culture, and therefore analyses with the data cannot control for community culture effects. It very well might be that the significant effects of school-based subculture on offending are not truly a school-based effect but rather an effect of community subculture being imported into the school. On the other hand, this research cannot determine for sure that it is or isn't school-based culture that is influencing offending that occurs out of school. It is very plausible that school-based culture spills into the community also influencing offending that occurs out of school. This is exactly what is proposed in this research. However, to be certain community subculture should be included.

Another layer of this idea that school culture and community culture are linked or overlap is whether this overlap varies across neighborhoods. It is likely that the extent to which these two cultural influences overlap is dependent on the type of neighborhoods in which the students are embedded. For example, it might be that for students who reside in a rural or suburban neighborhood, there is less overlap between the two cultural domains. In these types of neighborhoods, there is less structural density compared to urban neighborhoods. It is thus plausible that less dense neighborhoods would not have a code that overlaps with a “code of the hallway” because structural density is one of the main factors that allows for the “code of the street” to prevail. In rural and suburban neighborhoods, students do not walk out of their front door to big groups of kids playing in the street; rather they often attend “play dates” arranged by their parents. In this context it is difficult for a “street culture” to develop. However, for rural or suburban kids, they have ample opportunity for interaction and the transmission of cultural values in school. In this light, for rural and suburban students, school culture may be more important and there may be less overlap between school culture and community culture. On the other hand, for urban students, where there is much great structural density, community culture may be more influential and there may be more overlap between the cultural domains.

Future research should aim to include both school-based and community-based subculture measures. Better yet, if these effects can be assessed overtime it would be possible to examine whether community-based and school-based subculture have reciprocal effects as has been implied by qualitative research. Further, with community measures, a three-level model could be used to examine whether the school-level culture effect remains significant controlling for community culture, or is the community culture more important than the school-based culture in explaining offending?

## **Theoretical Advancements**

The last major area for research to explore includes pursuing further teasing out the various cultural perspectives, with an emphasis on cultural deviance vs. attenuated culture or “culture as values” vs. “culture as performance.” As previously discussed in Chapter 2, throughout the development of social disorganization, culture has been presented to play various roles, and often competing roles. Future research should focus on trying to tease out whether school-based cultural influences are better conceptualized from a cultural deviance or cultural attenuation perspective. Is it that a truly deviant culture, where the deviant values are internalized, form in school that, in turn, influence student’s behavior; or is it that under certain conditions the conventional culture is weakened allowing for more delinquency to occur? While the community culture literature still has not reached a verdict, those interested in understanding school-based cultural effects, should start to consider these theoretical issues.

Related, Sampson and Bean (2006) have recently divided the culture into two perspectives—culture as values and culture as performance. The frequently cited work of Anderson (1999) presents elements from both perspectives. However, these perspectives contradict one another and arguably, cannot be integrated. Cultural theory should consider and explore whether it is possible for these two perspectives to be valid and perhaps these two perspectives function within the same context. For example, it might be that those residents (when considering community culture) and those students (when considering school culture) that are the most criminal or deviant have truly embraced a deviant culture where they have actually internalized antisocial values. However, it might also be that for most residents or students, they have not internalized the antisocial values of a deviant subculture but rather “perform” or act in deviant and criminal ways for protection or to “save face.” These ideas should be theoretically

considered and followed by empirical testing. In general, it is still unclear as to what role culture plays in understanding offending. More advancement in cultural theory is necessary to make this determination.

## CONCLUSION

Even when considering the limitation aforementioned, this dissertation makes an important contribution to this line of inquiry by providing further support for and extending previous research in several ways. First, this research found that similar to community culture research, the individual's adherence to the "code of the hallway" increases the student's risk of being involved in offending. Second, the analysis presented here reconciled the discrepancies found between Felson et al. (1994) and Ousey and Wilcox (2005). Felson et al. (1994) found a contextual effect of school-level subculture on violence but Ousey and Wilcox (2005) did not. When disaggregating offending by in-school vs. out-of-school, the analysis here found that school-level subculture had a contextual effect for out-of-school violence but not for in-school violence. It appears that reason Ousey and Wilcox did not find a contextual effect of school-level subculture is because they only looked at in-school violence where Felson et al. (1994) examined violence, regardless of where it occurred. Third and related to the last comment, this dissertation extends previous research by disaggregating offending by in-school and out-of-school offending in an attempt to determine whether school-level subculture had similar or different effects on offending that occurred in and out of school. While disaggregating offending by in-school and out-of-school offending is a step in the right direction, it is also likely that the boundaries of contexts are not this clear-cut or simple. For example, it is possible that the space

between school and home or the school bus should be considered as additional contexts where the “code of the hallway” is likely to have an influence on behavior.

Fourth, delinquency was disaggregated into violent offending, sexual offending, and non-violent offending to determine whether the effects of school-level subculture vary across type of offense. This research demonstrated that school-level subculture is influential in out-of-school physical violence and for in-school and out-of-school sexual offending. Fifth, this dissertation was able to provide support for the qualitative research that has suggested that cultural effects are especially important for understanding male offending. This dissertation quantitatively examined whether school-level subculture influenced delinquency differently for males compared to females. The analysis revealed that yes, school-level subculture is more important for understanding the cross-school variation in offending for males than females.

In closing, this research highlights the importance of examining other contexts than that of the community when attempting to explain offending outcomes, with a specific focus on cultural influences of the school context. This research provides further support that context does matter and more specifically, the school context and the school culture matter in understanding not only offending that occurs in school but also out of school for some types of offending. Future research should continue to explore the importance of the school context and the interaction of the school and community contexts.

## REFERENCES

- Anderson, A. (2002). Individual and contextual influences on delinquency: The role of the single-parent family. *Journal of Criminal Justice, 30*, 575-587.
- Anderson, E. (1999). *Code of the street: Decency, violence, and the moral life of the inner city*. New York: W. W. Norton and Company.
- Baron, S., Kennedy, L., & Forde, D. (2001). Male street youth's conflict: The role of background, subcultural and situational factors. *Justice Quarterly, 18*, 759-789.
- Bellair, P. (1997). Social interaction and community crime: Examining the importance of neighbor networks. *Criminology, 35*, 677-703.
- Brezina, T., Agnew, R., Cullen, F. T., & Wright, J. P. (2004). 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, 2*, 303-328.
- 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.
- Brunson, R. K., & Miller, J. (2009). Schools, neighborhoods, and adolescent conflicts: A situational examination of reciprocal dynamics. *Justice Quarterly, 26*, 183 - 2010.
- Bursik, R. J., Jr., & Grasmick, H. B. (1993). *Neighborhoods and crime*. New York: Macmillan.
- Carr, P. J., Napolitano, L., Keating, J. (2007). We Never Call the Cops And Here Is Why: A Qualitative Examination Of Legal Cynicism In Three Philadelphia Neighborhoods. *Criminology, 45*, 445-480.
- Clear, T. R. (2008). The effects of high imprisonment rates on communities. *Crime and Justice, 37*, 97-132.
- Clear, T. R. (2007). *Imprisoning communities: How mass incarceration makes disadvantaged neighborhoods worse*. New York: Oxford.
- Cloward, R. A., & Ohlin, L. E. (1960). *Delinquency and Opportunity: A Theory of Gangs*. New York: The Free Press.
- Cohen, A. K. (1955). *Delinquent Boys. The Culture of the Gang*. New York: The Free Press.
- Crooks, C. V., Scott, K. L., Wolfe, D. A., Chiodo, D., & Killip, S. (2007). Understanding the link between childhood maltreatment and violent delinquency: What do schools have to add? *Child Maltreatment, 12*, 269-280.

- Cullen, F. T., & Wilcox, P. (forthcoming). *Communities and Crime: An Enduring American Challenge*. Philadelphia, PA: Temple University Press.
- George, R., & Thomas, G. (2000). Victimization among middle and high school students: A Multilevel analysis. *The High School Journal*, 84, 48-57.
- Gottfredson, G. D., Gottfredson, D. C., Payne, A. A., & Gottfredson, N. C. (2005). School climate predictors of school disorder: Results from a national study of delinquency prevention in schools. *Journal of Research in Crime and Delinquency*, 42, 412-444.
- Heimer, K. (1997). Socioeconomic status, subcultural definitions, and violent delinquency. *Social Forces*, 75, 799-833.
- Hoffmann, J. P., & Dufur, M. J. (2008). Family and school capital effects on delinquency: Substitutes or complements? *Sociological Perspectives*, 51, 29-62.
- Hoffmann, J. P., & Xu, J. (2002). School activities, community service and delinquency. *Crime and Delinquency*, 48, 568-591.
- Kasarda, J. D., & Janowitz, M. (1974). Community attachment in mass society. *American Sociological Review*, 39, 328-339.
- Kirk, D. (2009). Unraveling the contextual effects on student suspension and juvenile arrest: The independent and interdependent influences of school, neighborhood, and family social controls. *Criminology*, 47, 479-520.
- Krivo, L. J., & Peterson, R. D. (1996). Extremely disadvantaged neighborhoods and urban crime. *Social Forces*, 75, 619-650.
- Kornhauser, R. (1978). *Social Sources of Delinquency*. Chicago: University of Chicago Press.
- Kumar, R., O'Malley, P. M., Johnston, L. D., Schulenberg, J. E., Bachman, J. G. (2002). Effects of school-level norms on substance abuse behavior. *Prevention Science*, 3, 105-124.
- Lo, C. C., Kim, Y. S., Allen, T. M., Allen, A. N., Minugh, P. A., & Lomuto, N. (2011). The impact of school environment and grade level on delinquency: A multilevel modeling approach. *Crime and Delinquency*, 57, 622-657.
- McGloin, J. M., Schreck, C. J., Stewart, E. A., & Ousey, G. C. (2011). Predicting the violent offender: The discriminant validity of the subculture of violence. *Criminology*, 49, 767-794.
- Miller, J. (2008) *Getting played: African America girls, urban inequality, and gendered violence*. New York: NYU Press.

- 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.
- Ousey, G. C. (2000). Deindustrialization, female-headed households, and Black and White juvenile homicide rates, 1970-1990. *Sociological Inquiry*, *70*, 391-418.
- Ousey, G. C. (1999). Homicide, structural factors, and the racial invariance assumption. *Criminology*, *37*, 405-426.
- Pattillo, M. E. (1998). Sweet mothers and gangbangers: Managing crime in a middle class neighborhood. *Social Forces*, *76*, 747-774.
- Payne, A. A. (2008). A multilevel analysis of the relationships among communal school organization, student bonding, and delinquency. *Journal of Research in Crime and Delinquency*, *45*, 429-455.
- Raudenbush, S. W., & Bryk, A. (2002). *Hierarchical linear models: Applications and data analysis methods* (2<sup>nd</sup> ed.). Thousand Oaks, CA: Sage.
- Rose, D. A., & Clear, T. R. (1998). Incarceration, social capital, and crime: Implications for social disorganization theory. *Criminology*, *36*, 441-479.
- 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, and J. Hagan (Eds.), *The many colors of crime: Inequalities of race, ethnicity, and Crime in America*. New York: New York University Press.
- 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., Morenoff, J. D., Raudenbush, S. (2005). Social anatomy of racial and ethnic disparities in violence. *American Journal of Public Health*, *95*, 224-232.
- Sampson, R. J., & Raudenbush, S. W. (1999). Systematic social observation of public spaces: A new look at disorder in urban neighborhoods. *American Journal of Sociology*, *105*, 603-651.
- Sampson, R. J., Raudenbush, S., & Earls, F. (1997). Neighborhoods and violent crime: A multilevel study of collective efficacy. *Science*, *277*, 918–924.
- Sampson, R. J., & Wilson, W. J. (1995). Toward a theory of race, crime and urban inequality. In J. Hagan and R. D. Peterson (Eds.), *Crime and Inequality*, pp. 37-54. Stanford, CA: Stanford University Press.
- Shaw, C. R. (1966). *The jack roller: A delinquent boy's own story*. Chicago: The University of Chicago Press.
- Shaw, C. R., & McKay, H. D. (1942). *Juvenile Delinquency and Urban Areas*. Chicago: University of Chicago Press.



- Shaw, C., Zorbaugh, F., McKay, H., & Cottrell, L. (1929). *Delinquency Areas*. Chicago: University of Chicago Press.
- Shihadeh, E. S., & Ousey, G. C. (1996). Metropolitan expansion and black social dislocation: The link between suburbanization and center-city crime. *Social Forces*, 75, 649-666.
- Skubak Tillyer, M., Fisher, B. S., & Wilcox, P. (2011). The effects of school crime prevention on students' violent victimization, risk perception, and fear of crime: A multilevel opportunity perspective. *Justice Quarterly*, 28, 249-277.
- Steenbeek, W., & Hipp, J. R. (2011). A longitudinal test of social disorganization theory: Feedback effects among cohesion, social control, and disorder. *Criminology*, 49, 833-871.
- Stewart, E. A. (2003). School social bonds, school climate, and school misbehavior: A multilevel analysis. *Justice Quarterly*, 20, 575-604.
- 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.
- 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., & Simons, R. L. (2006). Structure and culture in African American adolescent violence: A partial tells of the "code of the street" thesis. *Justice Quarterly*, 23, 1-33.
- Swartz, K. (2010). Anderson, Elijah: Code of the Street. In F. T. Cullen and P. Wilcox (Eds.), *Encyclopedia of Criminological Theory*, pp. 46-51. Thousand Oaks, CA: Sage.
- 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.
- Warner, B. D. (2003). The role of attenuated culture in social disorganization theory. *Criminology*, 41, 73-97.
- Welsh, W. N., Stokes, R., & Greene, J. R. (2000). A macro-level model of school disorder. *Journal of Research in Crime and Delinquency*, 37, 243-283.
- Wilcox, P., & Clayton, R. R. (2001). A multilevel analysis of school-based weapon possession. *Justice Quarterly*, 18, 509-541.
- Wilson, D. (2004). The interface of school climate and school connectedness and relationships with aggression and victimization. *Journal of School Health*, 74, 293-299,

Wilson, W. J. (1987). *The truly disadvantaged: The inner city, the underclass, and public policy*. Chicago: University of Chicago Press.