ABSTRACT

Title of Thesis: DISORDER, DISSATISFACTION WITH THE

NEIGHBORHOOD, AND DELINQUENCY

Michael Goodier, Master of Arts, 2018

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and Criminal Justice

This study examines the association between neighborhood dissatisfaction and adolescent delinquency. The objectives of this project are to determine (1) whether neighborhood disorder is related to delinquency among adolescents (2) whether adolescents who report increased levels of neighborhood dissatisfaction are relatively more involved in delinquency than their peers, (3) if neighborhood dissatisfaction is especially related to two types of delinquency implicated by strain theory, violence and substance abuse, and (4) if neighborhood dissatisfaction weakens any of the association between neighborhood disorder and crime. Applying stepwise logistical regression, I find little support for the association between disorder and adolescent offending and no association between neighborhood dissatisfaction with either violence or substance abuse when compared to the likelihood of engaging in instrumental crime. These findings raise questions regarding the relationship between disorder and individual levels of delinquency as well as the relationship between disorder and neighborhood dissatisfaction among adolescents.

DISORDER, DISSATISFACTION WITH THE NEIGHBORHOOD, AND DELINQUENCY

by

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Chapter 1: Introduction

Criminological research has focused extensively on understanding the determinants of neighborhood satisfaction among diverse residential populations. Forexample, studies have examined whether living in a neighborhood characterized by high levels of social or physical disorder is tied to a resident's level of contentment with the neighborhood (Chappell et al., 2011; Davis & Fine-Davis, 1981; Fried, 1982; Geis & Ross, 1998). However, neighborhood dissatisfaction may also be integral to understanding the link between disorder and criminal activity. First introduced in James Wilson and George Kelling's 1982 article in *The Atlantic*, broken windows theory connects small forms of disorder, whether actual broken windows and similar forms of physical deterioration like abandoned homes, or behavioral manifestations like loitering, aggressive prostitution, or public drunkenness, to more serious forms of crime. They postulate that, over time, if disorder goes unchecked, residents will withdraw and limit their activities due to a desire to avoid the unpleasant markers of urban decay (Costa, 1984). As a result, with fewer residents to enforce the norms of the neighborhood and exert social control, serious crime ensues.

From an offender's perspective, prior theory and research (Kelling & Coles, 1996; Skogan, 1990; Wilson & Kelling, 1982) suggest that these neighborhoods are perceived as "fair game" as disordered conditions flourish. The conditions of the neighborhood are thought to be attractive to the "pool of individuals predisposed to various predatory-like criminal behaviors," (O'Shea, 2006; 175) because they represent an area where the risk of offending is low. In the mind of would-be

offenders, residents who have failed to intervene and prevent the accumulation of disorder will also be those who are unlikely to report crime (Greenberg & Rohe, 1986; Skogan, 1990). Generally, it is proposed that offenders view disorder as an indicator "that residents are so indifferent to what goes on in their neighborhood that they will not be motivated to confront strangers, intervene in a crime, or call the police," (Greenberg, Rohe, & Williams, 1985: 82). However, this link between disorder and crime may also be driven by individual levels of neighborhood dissatisfaction. The exposure to negative stimuli in the form of disorder is likely to result in feelings of strain among residents (Agnew, 1999). Therefore, rather than offenders seizing on perceived opportunities and a lack of guardianship in the neighborhood, living in these areas may lead to high levels of strain among adolescents – driving them to criminal behavior. This study examines the following research questions, (1) whether neighborhood disorder is related to delinquency among adolescents (2) whether adolescents who report increased levels of neighborhood dissatisfaction are relatively more involved in delinquency than their peers, (3) if neighborhood dissatisfaction is especially related to two types of delinquency implicated by strain theory, violence and substance abuse, and (4) if neighborhood dissatisfaction weakens any of the association between neighborhood disorder and crime.

Chapter 2: Disorder and Crime

The basic premise of the broken windows hypothesis is that "disorder and crime are usually inextricably linked, in a kind of developmental sequence," (Wilson & Kelling, 1982: 30). More specifically, if minor forms of disorder, whether physical or behavioral, are tolerated by the residents of a neighborhood, the accumulation of these markers will eventually result in an environment that is likely to attract crime. Wilson and Kelling (1982) argue that forms of disorder such as graffiti, litter, abandoned buildings, panhandling, or public drinking, for example, signal to criminals that delinquent behavior will not be reported or controlled because no one has yet stepped forward to "clean up" the neighborhood or take charge (Harcourt & Ludwig, 2006). This failure of shared neighborhood standards leaves a community susceptible to crime: "such an area is vulnerable to criminal invasion...drugs will change hands, prostitutes will solicit, and cars will be stripped," (Wilson & Kelling, 1982: 31). However, much of the research aimed at testing the broken windows hypothesis has produced mixed findings. In a classic study, Skogan (1988) found that neighborhood disorder has a positive relationship with the robbery victimization at the neighborhood level. Specifically, he reports that a one unit increase in his measures of disorder, or the extent to which respondents identified items such as litter and abandoned vehicles or buildings as a problem within their neighborhood, to be associated with a 0.05 increase in the proportion of robbery victims within the neighborhood.

However, in his work replicating Skogan's (1988) study after creating a retooled index of disorder and attempting to correct for other methodological issues¹, Harcourt concludes that there is actually no statistically significant relationship between disorder and several different types of crime including burglary, rape, and assault after neighborhood structural characteristics like poverty, residential stability, and the racial makeup of the neighborhood are held constant, (Harcourt, 1998). His study concludes that Skogan's data does not actually support the broken windows hypothesis and that the relationship is spurious (Harcourt, 1998).

Furthermore, other work looking at the link between disorder and crime, such as the landmark systematic social observation study performed by Sampson and Raudenbush (1999) finds that although disorder is initially a moderate correlate of crime, after incorporating neighborhood characteristics such as the concentration of disadvantage or lowered collective efficacy, the relationship disappears for most crime types. The authors find that after controlling for various neighborhood characteristics such as concentrated disadvantage, immigrant concentration, population density, etc., that the direct disorder-crime relationship only exists in terms of officially measured robbery.

However, recent studies also continue to find support for the link between disorder and crime. For example, in their study of disorder and crime across hot spots

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¹ For example, Harcourt contends that one of the surveys used in Skogan's analysis (Skogan & Maxfield, 1981) from which the data for neighborhoods in Philadelphia and San Francisco was taken, does not include any values for key disorder variables including noise, litter, trash, gangs, and public drinking, which make up several of the key variables in Skogan's index of disorder.

in Jersey City, New Jersey, Weisburd and Mazzerole (2000) find that arrests for disorderly behavior, which include offenses such as prostitution, gambling, indecency, public drunkenness, and disturbing the peace, are heavily concentrated in areas that have high rates of more serious types of crime. Although the authors hesitate to imply a causal relationship between disorderly behavior within these areas and crime, their study nonetheless provides evidence to support a connection between various forms of disorder and a co-occurrence of more serious types crime within a select number of areas in Jersey City.

At the individual level, some studies investigate the relationship between living in a neighborhood with high levels of disorder and delinquent behavior. For instance, Gold and Nepomnyaschy (2018) find that experiencing disorder like unlit streets, streets strewn with litter or trash, and abandoned buildings is associated with early delinquency among children. They argue that, young children, whose movements are often more restricted to the neighborhood, are also those who are most frequently exposed to these conditions (Gold & Nepomnyaschy, 2018). As a result, Gold and Nepomnyaschy propose that "disorder may matter for early delinquent behaviors over and above other, more commonly considered indicators of neighborhood disadvantage," (Gold & Nepomnyaschy, 2018: 920). They continue, explaining that physical disorder could potentially impact a child's behavior by increasing their level of stress. With the increased stress of a "low-quality physical home environment" (Gold & Nepomnyaschy, 2018: 920) also comes an increased likelihood of behavioral problems including impulsivity and aggression, both of

which are associated with involvement in delinquency, (Loeber & Farrington, 2000; Gold & Nepomnyaschy, 2018).

Relatedly, Zimmerman (2010), in his study of neighborhood variations in the effects of impulsivity on offending, finds that impulsivity predicts offending in "low-risk neighborhoods," but not in "middle" or "high-risk" neighborhoods. He explains his findings by arguing that individuals living in disadvantaged neighborhoods often feel that they have "nothing to lose," (Harris et al., 2002). Similar to the points raised above regarding Wilson and Kelling's argument on the effects of disorder in welcoming offending, Zimmerman asserts that the setting of a disadvantaged neighborhood invites both impulsive and non-impulsive individuals to engage in criminal behavior. By signaling a lack of control, disorder tempts individuals, rendering impulsivity less important in predicting the risk of offending in such neighborhoods. Collectively, these results contribute support for the general hypothesis that living in a disordered environment is associated with higher rates of delinquency among adolescents.

Finally, a number of other studies lend support for an association between disordered conditions/behavior and crime, albeit somewhat indirectly, by examining the efficacy of policing strategies aimed at reducing disorder (Sampson & Cohen, 1988; Bayley, 1994; Kelling & Coles, 1996; Braga and Bond, 2008). Across a sample of 171 American cities with a population greater than 100,000,² Sampson and Cohen

² The authors chose to focus on cities with a population of 100,000 or more in 1980 in order to certify an accurate estimation of offending rates when broken up by both race and age (Sampson & Cohen, 1988)

find that proactive policing strategies aimed at reducing DUI offenses and other disorderly behaviors are negatively related to robbery rates. This finding lends some support to the idea that more aggressive, order-maintenance tactics aimed at reducing the incidence of disorder are also effective at shrinking rates of more serious offenses. Braga and Bond (2008) also find that situational policing interventions designed to recondition disordered locations such as cleaning vacant lots or demolishing abandoned buildings resulted in significant drops in the number of crime calls for service across all treatment areas. The authors also find no evidence of crime displacement when analyzing the effects of the focused policing strategies and its effects on nearby control places (Braga & Bond, 2008).

In sum, among the studies that have explored the link between neighborhood disorder and crime, there does not seem to be a consensus regarding the relationship. While some studies argue that disorder is inextricably linked with more serious criminal behavior, others find no evidence of this relationship after controlling for potential confounders. There is more support for the link between neighborhood disorder and delinquency at the individual-level, however the current study focuses on adding to this area of the literature by also incorporating aspects of Agnew's General Strain Theory (1992) in an attempt to determine whether disorder may indirectly contribute to crime by triggering negative emotions conducive to criminal coping.

Chapter 3: Disorder and Neighborhood Dissatisfaction

Despite inconsistent evidence of a direct association with crime, manifestations of disorder appear to exert influence on the desirability of neighborhoods. For example, studies find that perceptions of disorder are associated with lower levels of neighborhood attachment and satisfaction among residents (Davis & Fine-Davis, 1981; Duncan et al., 2001). This may be due to the fact that individuals living in environments where disorder is prevalent feel unsafe and lack a sense of pride in their community. Furthermore, living in a neighborhood plagued with disorder is associated with a number of negative emotional outcomes including feelings of anger, anxiety, and depression (Ross, 1993). Generally, research has focused on the impact of disorder on fear in particular (Covington and Taylor 1991; Lewis and Maxfield 1980; Perkins et al. 1990; Perkins and Taylor 1996; Rohe and Burby 1988; Taylor and Covington 1993), but it is unlikely that the negative consequences of disorder are limited to fear alone. Many forms of disorder can be viewed as negative stimuli, which may also spur other negative emotions among residents, particularly anger or depression, which have been connected to specific delinquent outcomes like violence and substance abuse (Agnew & White, 1992; Agnew et al., 1996; Aseltine et al., 2000; Brezina, 1996; Broidy, 2001; Botchkovar & Hughes, 2010; Botchkovar, Tittle, & Antonaccio, 2013; Jang & Johnson, 2003; Mazzerole et al., 2000; Mazerolle, Piquero, & Capowich, 2003).

Furthermore, increased police activity in disordered neighborhoods as a result of order maintenance or "zero-tolerance" policing strategies may also contribute to feelings of dissatisfaction, with some studies asserting that increased police presence

in a neighborhood is related to greater fear among neighborhood residents (Hinkle & Weisburd, 2008), and possibly, dissatisfaction (Roh & Oliver, 2005; Wu et al., 2009). This may be due to the possibility that officers are more likely to utilize aggressive tactics in these locales (Jackson and Wade, 2005). Disorder, which signals a lack of informal social control within a community to patrolling officers, "could invite heavy-handed police tactics" (Gau & Pratt, 2008: 183) as a means of clearing up the crime-contaminated streets for the residents. Alternatively, it may be that these more aggressive tactics are used in these neighborhoods because the residents lack the ability to affect change on their own behalf (Scott, 2002).

Notably, in his work exploring various determinants of neighborhood satisfaction, Hipp (2009) found that individuals living in neighborhoods who perceive more social disorder, such as the presence of youths out of the labor force spending time on street corners, as well as physical disorder, such as graffiti and abandoned buildings, are less satisfied with the neighborhood. Consequently, there is support that disorder, which has been linked to crime, is also connected with increased feelings of neighborhood dissatisfaction. However, the link between neighborhood conditions, strain, and delinquency has not been thoroughly explored. In most studies of the relationship between neighborhood conditions and delinquency, researchers tend to focus on social control (Hirschi, 1969), or limit their analysis to specific types of delinquency and use non-representative samples (Chung & Steinberg, 2006; Jang & Johnson, 2001; Simcha-Fagan & Schwartz, 1986). As I will address in the subsequent section, the negative emotional toll (i.e. strain) of living in a disordered neighborhood

may cause frustration, anger, or depression, which are associated with certain types of delinquency -- in particular, violence and substance abuse (Agnew, 2006).

Chapter 4: Neighborhood Dissatisfaction, Strain, and Delinquency

Most studies consider neighborhood dissatisfaction to be a potential outcome of neighborhood characteristics. However, it may also be a mechanism by which neighborhood characteristics lead to varying levels of crime. Wilson and Kelling propose that residents in disordered neighborhoods eventually withdraw from public life due to a concern for their own safety, thus ceding "public spaces to the criminals who [see] the lack of cohesiveness and control as a prime opportunity to practice their trades," (Gau & Pratt, 2010: 759). The withdrawal of residents due to inundation with negative stimuli within the neighborhood will prevent residents from feeling connected and integrated into their community. Also, they should be less likely to develop a sense of belonging, resulting in greater dissatisfaction (Heller et al., 1981). Without a degree of social integration among residents, individuals are less likely to feel as if they live in a "neighborhood."

Rather than feeling empowered due to the ability to exert a form of informal social control over the neighborhood, residents are left with the expectation that ultimately, the conditions within their neighborhood are determined by forces outside of their control. Geis and Ross (1998) argue that in neighborhoods where mechanisms of social control are working, the residents are confronted with clean, quiet streets. However, in other neighborhoods where mechanisms of social control have failed

leading to the accumulation of disorder, residents are exposed to a variety of negative stimuli. They explain that prolonged exposure to unpleasant or undesirable conditions and events in one's neighborhood reinforces ineffectiveness and an inability to exert control in many important spheres of life. Living within a disordered neighborhood encourages residents to believe that "they cannot achieve a goal most people desire: to live in a clean, safe environment free from harassment, drugs, and danger," (Geis & Ross, 1998: 243). Hence, the disordered conditions of a neighborhood may result in feelings of strain, which likely lead to offending within these neighborhoods.

Building on the findings addressed above, research has found general support that "residing in a noxious neighborhood may be an additional source of stress that results in deviant adaptations for some individuals," (Mazzerole and Piquero, 1998: 200). In their study, in which they administered a survey to 457 undergraduates enrolled in an introductory criminology course, Mazzerole and Piquero found that "neighborhood problems," including physical disorder, were related to anger, which increases the likelihood of deviant adaptations. In his General Strain Theory, Agnew (1992) identifies strains that cause anger as particularly conducive to crime because anger is likely to provoke violence and aggression. Consequently, disorder, which is linked to stress, frustration, and anger, may indeed operate through strain to induce criminal coping.

Specifically, Agnew (1992) argues that strain can result from (1) the removal of positive stimuli, (2) the introduction of a negative stimuli or, (3) the failure to achieve a positively valued goal. He proposes that the reactions to feelings of strain can be affected by the magnitude of the strain, whether or not it is a recurring strain, or if it

influences an individual's level of control. Disorder in a neighborhood as described above theoretically exposes residents to chronic negative stimuli in their environment. Furthermore, disorder serves as a constant reminder to residents that they have failed to achieve a positively valued goal – a safe, peaceful, and clean neighborhood.

Agnew (1999) himself proposes that individuals who reside in "deprived communities" such as those identified above, experience heightened exposure to aversive stimuli, whether directly or indirectly, that include many forms of "undesirable life events and chronic strains," (Agnew, 1999: 136). Agnew identifies a host of issues common in disadvantaged communities including economic deprivation, family disruption, signs of incivility (disorder), and social cleavages, or negative relations among neighbors (Agnew, 1999).

Agnew suggests that individuals often cope with strain by focusing on goals or identities they can "successfully manage," (Agnew, 1992). However, because disadvantaged communities do not provide many opportunities for alternative goals or identities, prosocial methods of coping are limited (Wilson, 1987; Agnew, 1999). For example, Jang and Johnson (2001) propose that conditions of neighborhood disorder present a setting in which adolescents are more likely to initiate and maintain a delinquent behavioral pattern (Jang & Johnson, 2001). Using a sample of 1,087 adolescents taken from the National Youth Survey, Jang and Johnson (2001) find that perceived neighborhood disorder has a positive effect on adolescent use of both marijuana and harder drugs. The authors argue that conditions in a disordered community communicate "a state of normlessness," and a lack of social control which is critical in fostering the impression among adolescents that "that their

neighborhoods and other social institutions like family and school have little ability to provide and enforce conventional norms or standards," (Jang & Johnson, 2001: 115). Although undoubtedly useful in linking neighborhood disorder with adolescent deviance, Jang and Johnson propose different pathways and limit their study to drug use only.

The idea that certain types of stressful life events can produce negative emotions, which are frequently expressed through offending behaviors, is not tied to any specific period or age in the life course – strain can be felt at any age and may result in criminality. However, due to the particularly vulnerable developmental position of adolescents, strain may be especially likely to result in delinquency for youth (Agnew, 2006). Agnew (2006) argues that adolescents are particularly susceptible to strain because they are more likely than children or adults to perceive their environments as adverse. Moreover, due to the incomplete development in the cognitive abilities of adolescents, their perceptions of strains tend to be magnified (Compas et al., 1993). Therefore, feelings of strain are more difficult to cope with for adolescents and the burden of stress can lead to various emotional and behavioral forms of expression, including delinquent behavior (Agnew, 1992). Agnew (2008) proposes that exposure to aversive stimuli (e.g. disorder) produces negative emotional states like anger, which increase the likelihood of engaging in delinquency. He suggests that strains result in feelings of anger are those that are most conducive to crime because anger "reduces an individual's capacity for problem solving, creates a desire for revenge, and energizes the individual for action," (Agnew, 2008:104). Agnew also contends that anger is most associated with crimes of violence and

aggression while feelings of depression or anxiety also have a central role in clarifying the connection between strain and crime (Agnew, 2008). Specifically, the use of alcohol or drugs represents a method of "self-medication" which might deliver a brief feeling of relief from the negative emotions resulting from strain (Neff & Waite, 2007).

To the extent that manifestations of disorder within a neighborhood represent the introduction of or exposure to negative stimuli, Agnew's General Strain Theory (1992) expects higher rates of delinquent involvement among adolescents who live in the most disordered environments. Furthermore, adhering to Agnew's logic, those individuals who experience the strain of exposure to disorder within the neighborhood are also prone to negative emotions like anger and depression, which often result in criminal coping.

The present study builds on prior research on the relationship between neighborhood disorder and involvement in delinquency. This study is unique due to the inclusion of strain as a mechanism which differentiates it from others exploring similar relationships. In sum, the intention of this project is to determine (1) whether neighborhood disorder is associated with individual levels of delinquency among adolescents, (2) whether adolescents who report heightened levels of neighborhood dissatisfaction are relatively more involved in delinquency, (3) if high levels of neighborhood dissatisfaction are related to certain *types* of delinquency more directly implicated by strain theory, and (4) if neighborhood dissatisfaction weakens any of the effects of neighborhood disorder on crime.

Chapter 5: Data and Analytical Method

a. Data

Data for this study are drawn from a sample of adolescents in the National Longitudinal Survey of Adolescent Health (Add Health). Add Health is a nationally representative longitudinal survey of adolescents, beginning with a sample of over 20,000 students enrolled in grades 7-12 during the 1994-1995 academic year, with four additional waves occurring in 1996 (Wave II), 2001-02 (Wave III), 2008 (Wave IV) and most recently, 2016-2018, with data being collected for Wave V. The original sample included 80 high schools and 52 middle schools located across the United States, with particular attention paid to the school selection process in order to ensure representativeness in terms of region, as well as school size and type. Add Health was initially designed with funding from the United States Congress and the National Institute of Health (NIH) to undertake a multidisciplinary approach to the examination of adolescent health outcomes. This multifaceted research design allowed for the examination of adolescent health outcomes from a variety of perspectives, but most importantly for the present study, Add Health provides extensive measures regarding the neighborhood contexts of adolescents. Data were gathered from the adolescents themselves, but additionally, Add Health contains information collected from the parents of respondents, with interview response data from around 17,000 parents included. Due to changes in survey design with the progression of waves, and given the present study's interest in adolescents only, I will use data only from Waves I and II. This study also relies on the public-use sample which includes 6,504 individuals at Wave I, of which 4,834 were re-interviewed at

Wave II³. For the purposes of the current study, the analysis focuses on a subset of 3,522 adolescents for whom data are available on all relevant questions.

b. Measures

Neighborhood dissatisfaction

Neighborhood dissatisfaction is operationalized using a two survey questions regarding the respondents' satisfaction with the neighborhood in which they reside. The first asks "on the whole, how happy are you with living in your neighborhood?" to which respondents have the opportunity to answer (1) that they are "not at all" happy, (2) feel "very little" happiness about living in their neighborhood, (3) are "somewhat" happy, (4) are "quite a bit" happy, or (5) are "very much" happy about living in their neighborhood. The other asks "if for any reason you had to move from here to some other neighborhood, how happy or unhappy would you be?" with respondents having the options to reply that they would be (1) very unhappy, (2) a little unhappy, whether it (3) wouldn't make any difference, or they would be (4) a little happy, and (5) very happy. The first of these items will be reverse-coded such that high values reflect greater dissatisfaction with the neighborhood. Likewise, high values on the second measure communicate greater dissatisfaction with the neighborhood; those who would be happy moving away are presumably displeased with their current residential environment. These two survey items were chosen to represent the respondent's dissatisfaction with their neighborhood. However, these two items were not combined due to only a modest correlation between them (r=-

³ While the overall response rate for Wave II was 88.6%, those respondents who were in 12th grade at the time of the Wave I interview and not part of a genetic pair or the disabled sample were not reinterviewed.

0.4773), suggesting they may represent two distinct components of an underlying dissatisfaction construct. One measure offers a glimpse into the respondent's overall views of their relationship with the neighborhood at the time of the interview while the other asks them to project how happy they would be with a hypothetical scenario of moving away from their current neighborhood. In particular, this second item may depend on the respondent's expectations regarding the type of neighborhood to which they would be most likely to relocate. Nonetheless, the inclusion of both measures allows for a more comprehensive view of dissatisfaction and allows for the ability to examine multiple dimensions of the dissatisfaction construct separately.

Disorder

Additionally, the analysis incorporates four measures of disorder. Two of these items represent the interviewer's perceptions of disorder within the respondent's neighborhood. Because the correlation between the measures of disorder taken from the interviewer and the respondents' parent is fairly weak, I believe that these two sources likely reflect distinct perspectives, one who represents a resident in the neighborhood, and the other, a third-party observer. These questions ask the interviewer to offer judgment on whether the building where the respondent lives has been "well-kept" as well as how "well-kept" the other buildings on the street are. For these two items, the interviewer chose between options of (1) very well kept, (2) fairly well kept (needs cosmetic work), (3) poorly kept (needs minor repairs), or (4) very poorly kept (needs major repairs). Two additional items regarding disorder in the neighborhood from the perspective of the respondent's parent are also included to present an additional method of measuring various neighborhood characteristics.

These two items ask the parent how much of a problem drug dealing and litter or trash on the streets or sidewalks are in their neighborhood. In both instances, the parents can respond that they believe there to be (1) no problem at all, (2) a small problem, or (3) a big problem.

These four measures are intended to represent a comprehensive assessment of disorder within the respondent's neighborhood. Respondents who live in an area where their parents believe trash/litter and drug use or drug dealing to be major problems are thought to reside in a more disordered setting. Additionally, respondents who live in neighborhoods where the interviewer remarks that many of the buildings on the street where the respondent lives, or the respondent's home itself, need repairs or are not "well-kept" are also thought to live in an area with more disorder.

Furthermore, because the parent was asked about litter/trash and drug dealing or drug use while the interviewer was asked about the condition of the buildings on the street, these four measures are intended to reflect different dimensions of disorder.

Delinquency

In order to examine variation in the involvement in delinquency between those who hold differing levels of neighborhood satisfaction, two separate interview questions in which respondents were asked during Wave 2 to report how frequently they engaged in 10 different behaviors in the 12 months prior to the interview are used. Several of the questions ask respondents to report the extent of their involvement in various delinquent behaviors during the previous 12 months, but give options of 0 (never), 1-2 times, 3-4 times, and 5 or more times. Consequently, determining the precise frequency of involvement in a variety of delinquent activities

is not possible. Accordingly, I dichotomized each type of delinquency into two categories: any offending (one or more reported delinquent behaviors) and no offending.

These individual dummy variables were then combined into a general delinquency dummy variable in order to examine any involvement in delinquency

In order to test my research question regarding whether or not neighborhood dissatisfaction is specifically related to violence as implicated by strain theory (Aseltine et al., 2000; Broidy, 2001; Jang & Johnson, 2003; Mazzerole et al., 2000; Mazerolle, Piquero, & Capowich, 2003), I also included a separate outcome dummy variable which measures whether the respondent has been involved in a serious fight, taken part in a fight with a group of friends against another group, hurt someone badly enough this individual needed medical care, or used a weapon in a fight (Cronbach's alpha = 0.6398)⁴. In order to test this hypothesis, I created a dummy variable in which the reference category represents those who have reported involvement in instrumental offending, which strain theory does not connect with feelings of anger or depression. The instrumental crime variable is composed of offenses such as theft, motor vehicle theft, burglary, robbery⁵, and selling drugs (Cronbach's alpha = 0.7287). These individuals are then compared to those who have reported engaging in violent behavior to examine whether higher scores of

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⁴ Cronbach's alpha is a measure of internal consistency or average correlation among items in a scale, index, or composite score. Higher values reflect items more closely related. This measure is often used to interpret the reliability of a scale or index.

⁵ Although characterized by acts of violence, for the purposes of this analysis, robbery was categorized as an instrumental offense due to the underlying motivation of monetary gain central to robbery offenders.

neighborhood dissatisfaction are associated with greater odds of violence than instrumental offending.

Moreover, because strain has been linked to substance use (Agnew & White, 1992; Agnew et al., 1996; Brezina, 1996; Botchkovar & Hughes, 2010; Botchkovar, Tittle, & Antonaccio, 2013), I predict an additional outcome dummy variable to examine substance use. Substance abuse questions ask respondents to enumerate how many times since the month of the last interview they had used or consumed a variety of substances including hard drugs (cocaine, heroin, methamphetamine, PCP, etc.), marijuana, or alcohol (Cronbach's alpha= 0.8248). These are collapsed into dummy variables communicating whether or not the respondent had (yes=1) or had not (no=1) used/consumed drugs or alcohol since the last interview date. Using the same method as before, I then compare a reference category of those who have reported instrumental offending to those who have engaged in any form of substance abuse in order to explore any possible effect of increased neighborhood dissatisfaction on the likelihood of involvement in substance use versus instrumental crime.

Control Variables

Various demographic characteristics of the respondent are controlled for in this analysis. Race is coded as a set of mutually exclusive dummy variables with Black, Hispanic, and "Other" to include those who identify as a different race or ethnicity but do not make up a large proportion of the sample. I also control for sex (male = 1), age (continuous), citizenship status (U.S. citizen = 1), whether or not the respondent's family receives some form of welfare/government assistance (yes = 1). In addition, length of time at residence is included as a control variable due to the

likely connection with both neighborhood satisfaction among respondents as well as the neighborhood characteristics themselves. Finally, measures of school attachment are included based on associations with delinquency and the possibility that they could both be affected by the strain of neighborhood dissatisfaction. School attachment is measured as a scale consisting of three questions regarding perceptions of closeness felt by respondents to other students or teachers their school and whether they either felt happy at their school or felt as though they were integrated into their school (Cronbach's alpha = 0.7776).

c. Analytical Method

As mentioned above, the coding method of the delinquency items made determining the frequency of involvement for each behavior difficult. Therefore, I employ the use of logistic regression which is intended for the analysis of binary dependent variables. Rather than report the original logit coefficients that represent the rate of change in the log odds of the dependent variable as the independent variable changes, I will utilize odds ratios which are far more intuitive. Essentially, when the odds ratio is greater than 1, it represents a positive relationship, while on the other hand, an odds ratio of less than 1 implies a negative relationship. Furthermore, in order to determine whether or not the introduction of the neighborhood dissatisfaction measures weakens the effect of disorder on criminal behavior, I utilize a stepwise regression technique. After running a model to examine the effects of neighborhood disorder on crime including all control variables, I introduce the neighborhood dissatisfaction measures in order to determine whether the magnitude

of the coefficients corresponding to neighborhood disorder are significantly altered by the inclusion of neighborhood dissatisfaction in the model.

Chapter 6: Results

a. General Delinquency

First, I consider the association between the four measures of neighborhood disorder, two from the perspective of the parent of the respondent, and two others taken from the interviewer, and involvement in any delinquency. Contrary to the findings of many previous studies, the results in Model 1 of Table 3 show that only one of the measures of disorder included in this study is significantly related to general delinquency: the interviewer's perceptions of the extent to which the respondent's home is "well-kept." Holding other relevant variables constant, for each increase in the level of disrepair as noted by the interviewer, the odds of engaging in any form of delinquency increase by a factor of 1.1391. Furthermore, gender, age, citizenship status, and school attachment are all significantly related to involvement in delinquency. For example, older respondents tend to be more delinquent while males are more likely than females to have reported involvement in delinquency. Additionally, the predicted odds of engaging in delinquency are higher for those are U.S. Citizens than those who are not. Lastly, respondents who did not report feeling as though they were a part of their school or who reported having few close relationships to others at their school also tended to report greater involvement in delinquent behavior.

In order to determine whether the strain of neighborhood dissatisfaction is associated with involvement in delinquency, I incorporate the two relevant measures into the model. These results, presented in Model 2 of Table 3, show that again, only measure of disorder reflecting the interviewer's perceptions regarding the state of the respondent's home is significantly related to delinquency. Net of controls, for each increase in the level of disrepair as noted by the interviewer, the odds of engaging in any form of delinquency increase by a factor of 1.1193. Furthermore, there were only slight changes in the magnitude of the corresponding coefficients with the percent change ranging from a 1.13%-2.96% decrease. Nevertheless, it is clear that dissatisfaction with one's neighborhood is associated with involvement in delinquency. Net of controls, for each increase in the extent to which the respondent reports they feel unhappy living in their neighborhood, the odds of engaging in any of the various forms of delinquency increase by a factor of 1.2320. Conversely, there does not appear to be a significant difference among those who feel more strongly that moving away from their current neighborhood would be preferable when compared with those who would not be happier moving away. There is little change in the control variables with the addition of the two dissatisfaction variables with citizenship status remaining significant along with age, gender, and school attachment. Once again, those respondents who report feeling less attached to their school being predicted to have higher odds of engaging in delinquency along with males, U.S. citizens, and those who are older.

b. Violence

I now shift the focus away from general delinquency to examine the possible relationship between neighborhood dissatisfaction and acts of interpersonal aggression. These include behaviors such as engaging in a fight (whether alone or with a group of others), harming someone badly enough to need medical assistance, and using a weapon in a fight. I am particularly interested in any association between neighborhood dissatisfaction and acts of violence because Agnew's (1992) general strain theory posits that violence and aggression are likely outcomes of the "negative affective states--most notably anger and related emotions--that result from [strain]," (Agnew & White, 1992: 476). Thus, I would expect increased levels of neighborhood dissatisfaction to be associated with increased odds of engaging in violence when compared to the odds of involvement in instrumental delinquency.

Based on the results presented in the fully specified model (Table 4) looking at the association between neighborhood disorder and violence, an increase in the extent to which the respondent's parent perceives trash or litter to be a problem in their neighborhood increases the odds of a respondent engaging in violence over instrumental delinquency by a factor of 1.3017. However, both measures of dissatisfaction are unrelated to the propensity of committing violence over instrumental delinquency, showing no support for the idea that dissatisfaction is related to strain-specific types of crime.

In terms of the control variables, black respondents report significantly greater odds of aggressive or violent behavior when compared to the reference category (white respondents) while the other racial/ethnic categories respondents do not appear

to differ significantly from white respondents. As with the previous models, an increase in age predicts greater odds of engaging in violent and aggressive behavior compared to instrumental delinquency while male respondents and those who report low levels of school attachment also hold higher odds of violence when contrasted with females or those who are more embedded within their school environment.

c. Substance Abuse

Research has also linked increased strain to substance use (Agnew & White, 1992; Agnew et al., 1996; Brezina, 1996). Prior work shows that some individuals may react to strain with "inner-directed emotions such as depression," which "are more strongly associated with inner-directed forms of deviance such as drug use," (Tittle et al., 2008: 306). Consequently, I would expect increased levels of neighborhood dissatisfaction to be associated with increased odds of substance use when compared to the odds of involvement in instrumental delinquency.

As shown in Table 5, dissatisfaction with the neighborhood is not significantly associated with illicit substance use among adolescents. Relatedly, the measures of neighborhood disorder included in this study to not appear to predict significantly greater odds of participation in substance abuse when compared to the likelihood of instrumental offending. Among the control variables, black respondents have a lower predicted likelihood of substance use when compared to white respondents while a 1-year increase in age is found to be associated with greater odds of substance use. Lastly, male respondents appear to be less likely to engage in substance use than instrumental crime when compared to their female counterparts.

My findings regarding no association between neighborhood dissatisfaction and increased likelihood of engaging in substance use or violent behavior when compared to the odds of instrumental offending do not provide support for the proposal of Agnew's General Strain Theory (1992) that these behaviors represent methods of coping with the negative emotions thought to accompany the strain of disordered neighborhood conditions. Moreover, disorder does not appear to be tied to increased delinquency as proposed by Wilson and Kelling's broken windows hypothesis.

Chapter 7: Discussion

The findings of this study provide mixed results for the hypothesized association between disorder and delinquency. I was only able to identify a single significant relationship among the four measures of disorder included in this analysis and a delinquent outcome. Increased values in the variable corresponding to the interviewer's perceptions of the level of disrepair of the respondent's home are associated with increased odds of engaging in any delinquency, but this represents at best, weak support for the broken windows hypothesis. In terms of my other research questions, when the outcome was disaggregated by crime type in order to analyze the possible role of dissatisfaction in increasing the likelihood of strain-related offending behaviors (violence and substance use) compared to other forms of delinquency (instrumental crime), I found only one instance of a significant relationship. These findings are generally inconsistent with the hypothesis derived from strain theory, specifically that neighborhood dissatisfaction should be associated with anger or

depression and thus, violence and substance abuse. My findings offer an opportunity to explore other negative emotions not specifically implicated by strain theory.

Instead, it is conceivable that neighborhood dissatisfaction produces other negative emotions that are not associated with violence or substance use, for example jealousy or "malicious envy" (Agnew, 2008) which would be most likely to result in other types of delinquent behavior.

First, I would like to address the absence of a relationship between disorder and delinquency in my findings. This departure from prior work may be attributed to the variables used in this study to represent disorder. Responses surrounding perceptions of disorder in the neighborhood were sourced from both the parent of the respondent as well as the interviewer conducting the survey. Although these measures appear to be largely distinct and allow for two unique perspectives regarding the conditions of the neighborhood, I cannot claim to be certain that the perceptions of the parent or the interviewer match those of the respondent. Perceptions of disorder are wholly subjective – the items one individual identifies as disorder or believes to be a problem within their neighborhood, depend completely on their background, prior experiences, and expectations regarding neighborhoods. Although some studies have found that generally, there is high degree of consistency among individuals regarding perceptions of physical disorder (Yang & Pao, 2015), the fact that the interviewers are not themselves residents of the neighborhood may bias their perceptions. The degree of unfamiliarity with the setting experienced by the interviewer may cause them to take note of something that would normally go unnoticed by someone more comfortable in the neighborhood who has become "inoculated" to the various forms

of disorder present there (Hinkle & Yang, 2014: 32). Others have suggested that residents of disordered communities may become used to these conditions over time, rendering them unconcerned or unbothered by various manifestations of disorder (Taylor & Shumaker, 1990; Taylor et al., 1985). With this in mind, it is clear that the views of the respondents themselves regarding the conditions of the neighborhood would be most salient in terms of gauging the effects of disorder on offending behavior.

The initial hypotheses of this study were that neighborhood disorder should be related to delinquency and that neighborhood dissatisfaction may help to explain some of this relationship. However, there was little evidence connecting disorder to offending. Moreover, neighborhood dissatisfaction appeared weakly related to disorder as well. Perhaps adolescents growing up in neighborhoods rife with disorder come to normalize these conditions (Hinkle & Yang, 2014; Taylor & Shumaker, 1990; Taylor et al., 1985) and thus the disordered conditions perceived by the interviewer or parent may not actually play the hypothesized role of welcoming criminal offending for these individuals. Rather, it may be that other aspects of the neighborhood than disorder produce dissatisfaction.

Alternative neighborhood characteristics that may be more central to the development of neighborhood satisfaction are worth exploring in future work. Some possible examples would be friendship networks, proximity to entertainment or other attractive places such as parks (Hur & Morrow-Jones 2008), and the presence of support agencies. Each of these characteristics could perhaps play a role in influencing feelings of dissatisfaction with the neighborhood among adolescents who

may indeed prioritize socialization among peers or options for leisure activities over physical disorder as important components for the formation of attitudes towards the neighborhood. Prior research reveals that crime rates are higher in neighborhoods dominated by family disruption, weak friendship networks, and low participation in local voluntary organizations (Sampson 1986a, 1986b; Sampson and Groves 1989). All three of these features are mentioned by Agnew (1999) as elements that would be likely to result in strain but are also some of those that are often intermingled with elements of physical disorder. These social characteristics may indeed take precedence over physical disorder in the minds of adolescents thus making it necessary to incorporate control variables pertaining to these additional characteristics in future work.

Furthermore, it is possible that my assertion that increased perceptions of disorder among parents would be related to increased delinquency was misguided. Parents who report disorder as more of a problem in their neighborhood may also be those who are more protective of their children because they are far more concerned about the conditions of their neighborhood than those who do not. For example, if a parent believes drug dealing or drug use to be a serious problem in the neighborhood, he or she may decide it is necessary to monitor children more closely. This supervision may then contribute to fewer opportunities for delinquency (Osgood et al., 1996). Thus, parental perceptions of disorder may not be most appropriate for understanding juvenile delinquency and incorporating information regarding parental supervision would be important to consider in future work.

Despite finding that neighborhood dissatisfaction does not appear to operate through strain leading to violence or substance abuse, one may consider the possibility that neighborhood dissatisfaction produces a different negative emotion like jealousy or malicious envy, two emotions that Agnew suggests researchers explore further (Agnew, 2008; 105). For example, in their study examining the spatial dimensions on the effect of neighborhood disadvantage on delinquency, Vogel and South (2016), conclude that, in line with the findings of Graif (2015) and Odgers et al., (2015), living closely to a neighborhood of relative prosperity increases the likelihood of criminal offending. They argue that this may be a product of relative deprivation, with the wealth visible in nearby communities fostering feelings of frustration as adolescents compare their own life circumstances with those who appear to be "better off" (Vogel & South, 2016). These findings stress the importance of the neighborhood environment on involvement in delinquency but also that of nearby communities. Rather than welcoming offending by signaling a lack of social control, an increase in frustration – or possibly jealousy, due to the relative deprivation felt by those living in disadvantaged communities bordered by more affluent ones, may result in delinquent outcomes beyond violence and substance use. The authors find a relationship between "extralocal affluence" and increased offending⁶ but do not specify the types of crime most likely to be expected from feelings of relative deprivation. Additionally, Burton and Dunaway (1994) explored the relationship between feelings of relative deprivation and involvement in

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⁶ Vogel & South (2016) use a variety scale of offenses that includes violent offenses, property offenses, forms of substance use, and instrumental offending behaviors.

delinquency. The authors found that feelings of strain stemming from adolescents' negative self-appraisals in response to comparison with a peer group were positively related to delinquent involvement (Burton & Dunaway, 1994). Again, feelings of relative deprivation, albeit regarding individual characteristics and not neighborhood characteristics, appears to be associated with an increased likelihood of engaging in delinquency among adolescents. Thus, it would be useful for future researchers to consider the level of disadvantage in nearby neighborhoods as well as conditions in a respondent's own neighborhood as a possible factor in explaining delinquent behavior among adolescents.

Moreover, other negative emotional states like jealousy may not be related to one particular branch of offending behavior. For example, an adolescent who feels jealous and bitter regarding their own situation may be likely to lash out with anger at those who he or she believes has committed an injustice against them, but they may also turn to instrumental crime and steal valued goods that they believe they deserve to possess because it is considered unfair that others can obtain these desired items but they cannot (Shelley, 1981). Consequently, feelings of relative deprivation, which could explain dissatisfaction with the neighborhood when compared to those that are "nicer" might also explain why I was unable to observe an association when comparing the likelihood of violence and substance abuse against instrumental offending but found a general relationship between dissatisfaction with the neighborhood and involvement in any delinquency. Future work in this area would benefit from more extensive information regarding the location of the respondent's neighborhood with regards to more affluent communities in order to better capture

whether neighborhood dissatisfaction is related to feelings of jealousy or relative deprivation.

This study is not without other limitations, namely a lack of demographic information regarding the neighborhoods as well as information on the location of self-reported offending. However, most criminals do not generally tend to offend far from their place of residence (Rhodes & Conly, 1981; Rossmo 1993, 1995; van Koppen & Jansen, 1998) because it requires more time, money, and effort to travel and overcome large distances in order to offend (Brantingham & Brantingham, 1981). Therefore, it is unlikely that most adolescents are straying far from the neighborhood in order to offend. Research has generally shown that offenders travel less than 2 miles from their home in order to offend (Rossmo, 1993; 1995) which would mean most of the offending should be originating from those who also live in the neighborhood. More exploration would be necessary to conclude this definitively, but it serves as a suggestion for future research in this area.

The measure of dissatisfaction that asks respondents to project as to how happy or unhappy they would be if they encountered the occasion of moving away from the current neighborhood is also not without its faults. By asking respondents to predict how they would feel, rather than report how they currently feel, it may not perfectly tap into feelings of dissatisfaction. Depending on what the respondent forecasts as the type of location to which they would be likely to move, they may report feeling unhappy to move away even while harboring feelings of dissatisfaction if expectations of their future residential situation are even more bleak. Some respondents, due to their experiences with "marginality" may doubt the possibility of

achieving widely-held prosocial goals and may believe they will forever encounter "severe restrictions imposed by a hostile environment," (Wilson, 1991; 11).

Subsequent studies should address this issue by incorporating further measures of dissatisfaction that look at the "current" attitudes of the respondent rather than asking them to place themselves into a hypothetical future scenario.

Despite the aforementioned limitations, my findings suggest that neighborhood dissatisfaction is related to a greater likelihood of general offending. Thus, although unclear from this analysis, it may be that neighborhood dissatisfaction is associated with criminal behavior through a different negative emotional state than anger or depression. Future work should continue to investigate how adolescents' neighborhoods and their own subjective experiences of those neighborhoods influence offending behavior. However, it is clear from this study, along with countless others in this area, that the neighborhood environment matters. Exploring the link between adolescent offending and the residential setting will allow for a better understanding of the risk factors for juvenile delinquency more generally. Future work should also focus on the components of neighborhood dissatisfaction and how and why it influences adolescent behavior. In turn, this research could help to better implement practical policy initiatives designed to enhance these aspects of the neighborhood environment.

Appendix

Table I. Descriptive Statistics

Table I. Descriptive Statistics					
Variable	N	Mean	SD	Min	Max
Outcome Variables					
General Delinquency	6,504	0.3240	0.4680	0	1
Violence vs. Instrumental	6,504	0.4676	0.4998	0	1
Drug use vs. Instrumental	6,504	0.6256	0.4840	0	1
Violent Delinquency (Interpersonal Aggression)	6,504	0.2108	0.4079	0	1
Instrumental Delinquency	6,504	0.2189	0.4136	0	1
Alcohol Consumption	6,504	0.5870	0.4924	0	1
Marijuana Use	6,504	0.4439	0.4969	0	1
Hard Drug Use	6,504	0.3006	0.4585	0	1
Neighborhood Satisfaction					
Feelings on moving away	6,504	2.4897	1.2008	1	5
Happiness with N.H.	6,504	3.9234	1.0251	1	5
Neighborhood Disorder					
Interviewer Perceptions of R's Home	6,413	1.6231	0.8441	1	4
Interviewer Perceptions of Street	4,639	1.6463	0.7790	1	4
Parent Perception of Drug Dealing/Using in N.H.	5,523	1.4938	0.6577	1	3
Parent Perception of Litter/Trash in N.H.	5,618	1.5370	0.6217	1	3
Control Variables					
White	6,504	0.6602	0.4737	0	1
Black	6,504	0.2280	0.4196	0	1
Hispanic	6,504	0.1142	0.3181	0	1
Other	6,504	0.1086	0.3115	0	1
Age (At Wave 1)	6,504	15.5330	1.7846	11	21
Male	6,504	0.4839	0.4998	0	1
Citizenship	6,504	0.9386	0.2401	0	1
Years at Current Residence	6,504	7.0178	5.720	0	21
School Attachment	4,236	7.3274	2.9502	3	15
Welfare	5,613	0.0916	0.2884	0	1

Table II. Sample Descriptive Statistics (*N*=3,522)

Variable Variable Descriptive Statistics (N=3,522)	Mean	SD	Min	Max
Outcome Variables				
General Delinquency	0.5574	0.4968	0	1
Violence vs. Instrumental	0.4409	0.4966	0	1
Drugs vs. Instrumental	0.6136	0.4870	0	1
Violent Delinquency (Interpersonal	0.4408	0.4965	0	1
Aggression)				
Instrumental Delinquency	0.2198	0.4141	0	1
Alcohol Consumption	0.5823	0.4932	0	1
Marijuana Use	0.4125	0.4924	0	1
Hard Drug Use	0.2760	0.4471	0	1
Neighborhood Satisfaction				
Feelings on moving away	3.5431	1.1828	1	5
Happiness with N.H.	2.0420	1.0032	1	5
Neighborhood Disorder				
Interviewer Perceptions of R's Home	1.5454	0.7978	1	4
Interviewer Perceptions of Street	1.0909	0.9502	1	4
Parent Perception of Drug Dealing/Using in N.H.	1.4665	0.6396	1	3
Parent Perception of Litter/Trash in N.H.	1.5312	0.6144	1	3
Control Variables	1.3312	0.0144	1	3
White	0.6973	0.4595	0	1
Black	0.0773	0.4122	0	1
Hispanic	0.0849	0.2788	0	1
Other	0.0838	0.2771	0	1
Age (At Wave 1)	15.3969	1.6901	12	20
Male	0.4631	0.4987	0	1
Citizenship	0.9551	0.2070	0	1
Years at Current Residence	7.4756	5.7116	0	19
School Attachment	7.2825	2.9397	3	15
Welfare	0.0733	0.2606	0	13
Wenter Comments of the Comment	0.0133	3.2000		1

Table III. Logistic Regression of General Delinquency on Disorder and Other Predictors (*N*=3,522)

	Model 1		Mod	del 2
Variable	Odds Ratio	Standard	Odds	Standard Error
		Error	Ratio	
Neighborhood Dissatisfaction				
Feelings on moving away			1.0245	0.0396
Unhappiness with N.H.			1.2320***	0.0595
Neighborhood Disorder				
Interviewer Perceptions of R's Home	1.1391*	0.0637	1.1193*	0.0629
Interviewer Perceptions of Street	1.0443	0.0482	1.0325	0.0478
Parent Perception of Drug	1.0917	0.0768	1.0594	0.0751
Dealing/Using in N.H.				
Parent Perception of Litter/Trash in	0.9469	0.0685	0.9300	0.0677
N.H.				
Control Variables				
Black	0.8976	0.0881	0.8891	0.0882
Hispanic	1.1507	0.1862	1.1258	0.1832
Other	1.3505	0.2256	1.3665	0.2298
Age (At Wave 1)	1.3004***	0.0314	1.2973***	0.0314
Male	1.4584***	0.1152	1.4687***	0.1164
Citizenship	1.5668*	0.3112	1.5784*	0.3151
Years at Current Residence	0.9985	0.0072	1.0006	0.0073
School Attachment	1.0647***	0.0149	1.0501**	0.0151
Welfare	0.8977	0.1400	0.8745	0.1367
Constant	0.0128	0.0057	0.0097	0.0048
Log Likelihood	-1968.9074		-1958.18	

^{*}*p* < .05. ***p* < .01. ****p* < .001

Table IV. Logistic Regression of Violence on Disorder and other Predictors (N=1,963)

(N=1,903)		
Variable	Odds Ratio	Standard Error
Neighborhood Dissatisfaction		
Feelings on moving away	0.9231	0.0523
Unhappiness with N.H.	1.0281	0.0688
Neighborhood Disorder		
Interviewer Perceptions of R's Home	1.1005	0.0867
Interviewer Perceptions of Street	0.9761	0.0644
Parent Perception of Drug Dealing/Using	0.8485	0.0855
in N.H.		
Parent Perception of Litter/Trash in N.H.	1.3017*	0.1420
Control Variables		
Black	1.4909**	0.2213
Hispanic	1.2611	0.2726
Other	0.9642	0.2045
Age (At Wave 1)	1.2619***	0.0427
Male	1.4558**	0.1671
Citizenship	0.8416	0.2594
Years at Current Residence	0.9882	0.0102
School Attachment	0.9732	0.0191
Welfare	0.9369	0.2126
Constant	0.1176	0.0837
Log Likelihood	-965.23175	

^{*}*p* < .05. ***p* < .01. ****p* < .001

Table V. Logistic Regression of Substance Use on Disorder and other Predictors (N=2,368)

Variable	Odds Ratio	Standard Error
Neighborhood Dissatisfaction		
Feelings on moving away	0.9393	0.0699
Unhappiness with N.H.	0.9991	0.0880
Neighborhood Disorder		
Interviewer Perceptions of R's Home	0.9959	0.1035
Interviewer Perceptions of Street	0.9658	0.0837
Parent Perception of Drug Dealing/Using	0.8703	0.1152
in N.H.		
Parent Perception of Litter/Trash in N.H.	1.0653	0.1506
Control Variables		
Black	0.6509*	0.1200
Hispanic	1.2290	0.3756
Other	0.5983	0.1725
Age (At Wave 1)	1.5891***	0.0772
Male	0.6630**	0.1006
Citizenship	0.6582	0.3036
Years at Current Residence	1.0074	0.0145
School Attachment	1.0115	0.0270
Welfare	1.2277	0.3893
Constant	0.0245	0.0235
Log Likelihood	-640.46581	_

^{*}*p* < .05. ***p* < .01. ****p* < .001

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