
Contemporary Journal of Anthropology and Sociology

Neighborhood Context and Fear of Crime: The Story of Four Neighborhoods

Rachel E. Stein¹
West Virginia University

Abstract: Empirical research on the fear of crime has established the importance of collective efficacy and perceptions of disorder. Much of this research, however, is focused on one neighborhood or area within a city. Few researchers have considered how fear levels may differ across neighborhoods in the same city. In the current study, I examine the relationship between measures of collective efficacy, perceptions of disorder, and the fear of crime across four neighborhoods in a Northeast city. These four neighborhoods are characterized as relatively high crime areas. The results indicate low collective efficacy among residents and the prevalence of social disorder increase the fear of crime. In addition, people who live in the neighborhood for extended time periods have a greater fear of crime. Some of the differences across neighborhoods are accounted for by the demographic characteristics of the residents. The results present neighborhood factors are indeed relevant when considering residents' differing levels of fear across locations.

Keywords: fear of crime, collective efficacy, perceptions of disorder

¹ Department of Sociology and Anthropology, West Virginia University, PO Box 6326, Morgantown, WV 26506-6326. rachel.stein@mail.wvu.edu / 304-293-8806

INTRODUCTION

Residents' fear of crime affects their behaviors, including how people interact with their neighbors. These interactions are linked to feelings of collective efficacy and perceptions of neighborhood disorder (Skogan, 1990; Skogan & Maxfield, 1981; Taylor, 2001; Warr, 1990). If residents maintain high levels of fear, they are more likely to avoid certain places in their neighborhood (Taylor, 2001; Taylor, Shumaker, & Gottfredson, 1985). Fearful residents may have an increased distrust of other residents in their neighborhood and may be unwilling to build social networks with those neighbors (Skogan, 1990). Understanding how the fear of crime affects residents in a particular neighborhood is important for crime reduction policies to be effective (Roh & Oliver, 2005; Taylor & Hale, 1986).

Empirical research indicates crime reduction strategies should address elements of disorder in the neighborhood and should focus on building collective efficacy among residents (Sampson & Raudenbush, 1999; Skogan, 1990; Wilson & Kelling, 1982). Only if residents can work together to identify a common goal and strive towards that goal can the neighborhood crime rates truly be affected (Sampson & Raudenbush, 1999). The formal and informal structures in neighborhoods affect the fear of crime. It should not be assumed that disorder and social control are similarly related to fear across neighborhoods; neighborhoods are themselves different in make-up and structure. An analysis of the relationship between the fear of crime, collective efficacy, and perceptions of disorder across neighborhoods can further the understanding of what leads to the fear of crime. If the relationship does not remain consistent across neighborhoods, this suggests something about the neighborhood is affecting the levels of fear.

Swatt, Varano, Uchida, and Solomon (2013) find the relationships between fear of crime, collective efficacy, and perceptions of disorder do indeed vary across neighborhoods. These researchers focus on four neighborhoods in Miami. The results cannot be generalized to all neighborhoods across the US (Swatt et al., 2013). The current research builds on the research conducted by Swatt and colleagues by examining the relationship among the neighborhood variables to assess the fear of crime held by residents in a Northeast city. Previous research indicates strong relationships between disorder and fear of crime, which also influences the level of social control within neighborhoods (Bursik & Grasmick, 1993; Skogan, 1990; Wilson & Kelling, 1982). The results provide important information regarding the ability to generalize results about how collective efficacy and perceptions of disorder relate to the fear of crime.

Fear of Crime

The perceptions of risk for victimization have been used as a proxy for the fear of crime. The level of fear held by residents affects their everyday behaviors. If residents are afraid of being victimized, they are less likely to be engaged in the public sphere (Liska, Sanchirico, & Reed, 1988). The relationship between fear and constrained behaviors is reciprocal. Residents who are afraid to go out for fear of victimization also have increased fear due to their disengagement in activities outside of the home. The perceived risk of victimization and changes in behavior are linked to the actual and perceived conditions of the neighborhood environment (Liska et al, 1988). In addition, the social and demographic characteristics of residents influence their perceptions of risk (Ferraro & LaGrange, 1987; LaGrange & Ferraro, 1989; Rountree & Land, 1996; Warr, 1987).

The measure of fear as perceptions of risk stems from one of the first measures used to assess neighborhood safety, the National Crime Survey (NCS). The NCS contained a single question about how safe respondents felt walking alone at night in their neighborhood. This measure of safety was widely used in empirical research as a proxy for fear (Baumer, 1985; Maxfield, 1984; Skogan & Maxfield, 1981). Studies on the fear of crime eventually added an additional measure, which incorporated how safe respondents felt walking alone in their neighborhood during the daytime hours (Covington & Taylor, 1991). While these questions were used to assess fear, the central component in both questions is the perceived risk of victimization.

Fear of crime has been measured in a number of ways in empirical research. In addition to perceptions of safety, researchers have defined fear according to people's concern about crime, the emotional response to victimization, and perceptions of the crime problem (Dubow, McCabe, & Kaplan, 1979). Different definitions and proxy measures of fear produce different results (LaGrange & Ferraro, 1989; Rountree & Land, 1996). Taylor (2001) identifies the psychological assessment of perceived risk as one of the prominent schools of thought in the fear of crime literature. Perceptions of safety take into account how residents interpret threatening neighborhood conditions. The reports of safety represent the unique circumstances surrounding each individual (Taylor, 2001). Even so, these measures serve only as a proxy for fear, as they do not incorporate the emotional response to crime (Ferraro, 1995; Ferraro & LaGrange, 1987; Merry, 1981; Rader, Cossman, & Porter, 2012; Scarborough, Like-Haislip, Novak, Lucas, & Alarid, 2010; Taylor, 2001).

Collective Efficacy and Perceptions of Disorder

Empirical research has established the connection between the fear of crime, collective efficacy, and perceptions of disorder (Bursik & Grasmick, 1993; Doran & Lees, 2005; Skogan, 1990; Taylor, 2001; Warr, 1990). In their review of the fear of crime literature, Bursik and Grasmick (1993) find fear represents a symbolic response to neighborhood conditions. These conditions include the collective efficacy and presence of physical and social disorder in the neighborhood. The level of fear held by residents differs across different neighborhoods, as neighborhoods are unique in their construction.

Residents' fear of crime is, in part, conditioned by the collective efficacy present in the neighborhood. Collective efficacy is comprised of cohesion, trust, and shared expectations (Sampson & Raudenbush, 1999). Neighborhoods with high levels of collective efficacy function as a unit of social control. These neighborhoods have lower rates of crime than communities lacking in collective efficacy (Sampson & Raudenbush, 1999). Residents who are comfortable and confident in the safety of their neighborhood are more likely to socialize with the people who live in close proximity. Open communication among neighbors leads to the identification of common goals, and a willingness to work together toward these goals (Sampson & Raudenbush, 1999; Skogan, 1990). The goals are centered on building and maintaining strong ties among residents in a community and ensuring that the neighborhood has relatively low levels of crime and disorder (Janowitz, 1975; Wilson & Kelling, 2006). When residents establish bonds of trust in a neighborhood, they are more likely to intervene to stop certain disruptive behaviors, such as loitering teens or vandalism.

Residents who work together toward common goals are likely to care about their community and, therefore, put more effort into the upkeep of the neighborhood (Skogan, 1990). The concept of disorder in criminological theory consists of physical disorder and social disorder (Sampson & Raudenbush, 1999; Wilson & Kelling, 1982). Both forms of disorder emphasize the effect the environment has on criminal behavior. Physical disorder refers to the dilapidated conditions of the neighborhood while social disorder focuses on the disruptive activities of the people who live in the neighborhood (Wilson & Kelling, 1982). Empirical research indicates neighborhoods with higher levels of physical disorder are also exposed to increased occurrences of social disorder (Braga et al., 1999; Skogan, 1990; Wilson & Kelling, 1982).

Sampson and Raudenbush (1999) find high levels of collective efficacy in a neighborhood are effective at reducing the level of social disruptions, physical disorder, and even some types of criminal behaviors. Residents who exert informal social control in their neighborhood positively and directly limit the prevalence of social disorder. This reduction, in turn, decreases the visible elements of physical disorder in the neighborhood (Novak & Seiler, 2001; Sampson, Raudenbush, & Earls, 1997; Skogan, 1990; Wilson & Kelling, 1982). A decrease in disorder lowers the perceptions of disorder held by residents, which increases the feelings of safety (Lagrange, Ferraro, & Supancic, 1992).

The signs of disorder in neighborhoods are not themselves frightening, but indicate threats of safety for some residents (Bursik & Grasmick, 1993). Areas represented by high levels of physical dilapidation are likely to be viewed as unsafe. In addition, common social disruptions indicate a lack of social control in the area. Fear is the

frequent response to social disorder because there is the potential for violence (Skogan, 1990). A neighborhood in which residents perceive high levels of disorder is likely to have low levels of community cohesion (Skogan, 1990). Environments characterized by high levels of dilapidation are indicative of residents who do not care, or a community that lacks adequate self-control. If communities lack cohesion and trust, the standard for behavior is diminished. People no longer know what to expect from others and residents' fear levels increases (Skogan, 1990).

As the level of disorder changes in the neighborhood, residents' perceptions of the neighborhood change as well. Increases in disorder decrease the familiarity that residents feel and residents take on a greater fear of crime (Bursik & Grasmick, 1993; Skogan & Maxfield, 1981; Warr, 1990). In neighborhoods characterized by high levels of disorder and high crime rates, these elements become a part of residents' everyday existence. Perkins, Wandersman, Rich, and Taylor (1993) report people become desensitized to disorder in these neighborhoods through daily exposure. Residents in these areas often do not perceive of disorder as a problem unless there is a marked change in the level of visible disorder (Taylor, 2001). The change in disorder must reach a higher threshold in high crime neighborhoods for residents to perceive a problem, as compared to the smaller change in disorder necessary in low crime areas.

Not all empirical research supports the contention that people who live in high crime neighborhoods will become desensitized to disorder and crime. In fact, Skogan (1990) indicates residents in high crime neighborhoods may actually over-report the level of disorder in their community. If people do not feel safe in their neighborhood they are more likely to

see threats in their everyday surroundings. Taylor (2001) finds residents with longer tenure in the neighborhood have a greater fear of crime than those who have not lived as long in the community. Regardless of the actual relationship between crime and perceptions of disorder, the perceptions held by residents ultimately affect their behavior. The level of fear impacts whether or not people stay in the area, how long they stay in the neighborhood, and how they interact with their neighbors (Sampson, 2009).

The relationship between these three elements of collective efficacy, perceptions of disorder, and the fear of crime has been widely studied in empirical research. There are mixed findings of the relationships and strength of the relationships between each of these elements. Many studies are limited by the fact they only take into account residents who live in a particular area in one city. Swatt et al. (2013) incorporate four separate neighborhoods in the city of Miami in their study of the fear of crime. These researchers report there is a significant difference across neighborhoods in how collective efficacy is related to levels of fear. In fact, collective efficacy serves as a predictive factor for fear in two of the four neighborhoods in the analysis. The impact of disorder, or incivilities; however, is more consistent across neighborhoods. The authors report the relationship between perceived disorder and the fear of crime remains consistent across each of the four neighborhoods in the study.

The current research follows the lead of Swatt et al. (2013) in efforts to expand the research on a comparison of the fear of crime across neighborhoods. Specifically, I evaluate the relationship between collective efficacy, perceptions of disorder and the fear of crime across four neighborhoods in a Northeastern city. In line with previous research, I expect to find an inverse relationship between collective efficacy and

the fear of crime across the neighborhoods (Sampson and Raudenbush, 1999; Sampson et al., 1997). I also expect to find a positive relationship between disorder and fear across the four neighborhoods (Wilson & Kelling, 1982). If neighborhood factors do indeed influence residents' fear of crime, there will be differences across the neighborhoods when measures of collective efficacy and perceived disorder are considered.

DATA AND METHODS

The data for the current research were collected as part of a larger project on situational policing (Nolan et al., in press). The full data set contains participant survey information, systematic social observation data, and police surveys from sixteen neighborhoods across four cities in the U.S. The current study uses information from four neighborhoods in the Northeastern city, Central, Hilltop, South, and Shadyside. Each of the neighborhoods is defined according to census tract boundaries; three of the neighborhoods are comprised of two census tracts. Census tract boundaries are defined according to population characteristics, economic status, and living conditions to contain relatively homogeneous populations (US Census Bureau, 2000). All neighborhoods are characterized as low income, high crime areas. The neighborhoods are located across the city, not adjacent to one another.

All four of the neighborhoods are located on the north side of the central business district, the downtown area of Northeast city. Historically, this area north of the main city was designed to be its own separate city. The Central neighborhood was designed as a central point of the stand-alone city, and was occupied primarily by wealthy residents. In the mid-nineteenth century, the Northeast city forcibly annexed Central and surrounding neighborhoods,

which led to a major restructuring of the communities. As the neighborhood structure changed, the population underwent major transitions. Central has suffered from high levels of crime and disorder over the past several decades. Almost half of the city blocks in Central are occupied by abandoned or boarded up houses. The neighborhood is also littered with excessive trash on the majority of the street blocks and sidewalks. Graffiti is visible on structures throughout the neighborhood.

Further north than Central, South is located on a the top of a hill. The unique location of South provides natural borders for the neighborhood. South was originally developed as a streetcar suburb to the Northeast city. Historically, European immigrants populated this neighborhood. Over the past several decades, the neighborhood has experienced white flight. The number of people who moved out of the neighborhood was by far greater than the number of people who were moving in. The population has decreased to one third of the original population over the past five decades. This population turnover highlights the large number of abandoned and boarded up houses in the neighborhood; almost 60% of the city blocks have at least one abandoned house. Excessive trash on the streets and sidewalks is also a problem, with almost half of the blocks littered with trash.

In contrast to Central and South, Hilltop and Shadyside are composed primarily of white residents. Historically, German immigrants who worked in the steel mills populated Hilltop. Many of the current residents of Hilltop are descendants of these immigrants. As a result, the sense of community is stronger in this area than areas that undergo more residential turnover. Of the four neighborhoods, Hilltop has the fewest number of abandoned or boarded up

houses. Shadyside also has a low number of abandoned houses located throughout the neighborhood. The majority of the streets and sidewalks are free of excessive trash in both neighborhoods, giving the appearance of a well-kept area. Shadyside historically has been home to a number of different ethnic groups. This neighborhood has gone through several transitions, more so than the area of Hilltop. In fact, the name of the neighborhood has changed multiple times over the past several decades.

The four neighborhoods differ in racial composition and home ownership, but are relatively similar across the demographic characteristics of age and sex. Table 1 presents census data for each of the four neighborhoods. Hilltop is the only neighborhood in the current study that is comprised of a homogenous racial population; 98% white residents in the population. Central, South, and Shadyside are more racially heterogeneous. The majority of residents in Shadyside are white (67%), but a larger proportion of the population is African American (31%) as compared to Hilltop. The majority of residents in Central and South are African American, 56% and 67% respectively.

The majority of residents in Shadyside own their home, approximately 70%. Over half of the residents in Hilltop and South are also homeowners, 62% and 56% respectively. The lowest home ownership is in Central, where only 38% of residents own their homes. The total population under 20 years of age is similar across neighborhoods, ranging from 21% in Shadyside to 32% in South. Males comprise the majority of the population in Shadyside, 61%. The sex proportion of the population is more evenly split in other neighborhoods, ranging from 46% males in South to 52% males in Central.

Table 1. Census Demographic Information

	Neighborhood			
	Central	Hilltop	South	Shadyside
	%	%	%	%
Own Home	37.7	61.6	56.5	69.1
Race				
White	41.8	97.6	32.2	66.8
African American	56.5	1.3	66.7	31.2
Latino/Other Race	1.7	1.1	1.1	2.0
Age				
Total under age 20	22.6	21.5	31.7	20.7
Sex				
Proportion Male	52.3	47.8	45.9	61.3

The initial data collection plan was designed as a random sample of respondents; the surveys collected were limited by the availability of residents who were home. Information was collected from residents in each neighborhood by a team of researchers who went door to door to a selected sample of houses in the neighborhoods. The sampling procedure was based on the systematic selection of houses located on a particular block (Nolan et al. in press). The surveys were self-administered; the research team hand-delivered the surveys to selected households and picked up the completed surveys several hours later. For each neighborhood in the study, the researchers had a known population parameter based on the demographic characteristics of the residents. The percentages from the sample of respondents who completed surveys were compared to the known parameter. The true population parameter fit within the confidence intervals of the sample estimate. This verifies that the sample adequately represents the population of each of the neighborhoods.

The majority of the surveys were distributed during the daytime hours on weekdays; several surveys were distributed during the day on weekends. The survey

distribution affects the sample demographics, as older people and those who are unemployed are more likely to be at home during this time frame. A total of 336 residents were surveyed across the four neighborhoods in the Northeastern city. A total of 91 surveys were completed in Central, 72 surveys in Hilltop, 84 surveys in South, and 89 surveys in Shadyside.

Variables

The dependent variable in this study is the fear of crime, defined as how safe people feel in their neighborhood (Taylor, 2001). The neighborhood survey includes two questions that assess the level of fear. These include, (1) being out alone in your neighborhood during the day and (2) being out alone at night in your neighborhood. Respondents were asked to rank whether they felt very safe, safe, unsafe, or very unsafe in both of the situations. The questions were summed and averaged to create an index; higher numbers on the combined index equals greater levels of fear, or lower levels of safety. The fear of crime index has good internal consistency, with a Cronbach alpha coefficient of .735.

Measures of residents' collective efficacy were captured through ten questions

focused on two central components: (1) social cohesion and trust and (2) shared expectations for social control. The survey questions on collective efficacy parallel the questions used by Sampson and Raudenbush (1999) in their research on Chicago neighborhoods. Social cohesion and trust are measured by the following five statements: (1) people are willing to help their neighbors, (2) this is a close-knit neighborhood, (3) people in this neighborhood can be trusted, (4) people in this neighborhood generally don't get along with each other (reverse coded), and (5) people in this neighborhood do not share the same values (reverse coded). Shared expectations are measured by five questions that ask residents of the likelihood that their neighbors could be counted on to take action if: (1) children were skipping school and hanging out on a street corner, (2) children were spray painting graffiti on a local building, (3) children were showing disrespect to an adult, (4) a fight broke out in front of their house, and (5) the fire station closest to home was threatened with budget cuts. For each question on collective efficacy, respondents ranked their assessment on a four-item Likert scale, ranging from very unlikely to very likely. The measures were summed and averaged to create an index that represents the level of collective efficacy in the community. A higher value on the collective efficacy scale indicates increased levels of social cohesion, trust, and shared expectations. The scale represents good internal consistency with a Cronbach alpha coefficient of .858.

Perceptions of disorder are measured as social disorder and physical disorder. Specifically, social disorder is captured through five situations including, (1) people who say insulting things or bother people when they walk down the street, (2) groups of teenagers hanging out, (3) the amount of noise in the area, (4) bad elements moving

in, and (5) people fighting and arguing. Perceptions of physical disorder include questions about the presence of (1) vandalism, like people breaking windows or spray painting buildings, (2) vacant houses, (3) people who don't keep up their properties or yards, (4) litter and trash in the streets, and (5) vacant lots with trash or junk. For each item, residents indicate whether the issue is a big problem, somewhat of a problem, or not a problem at all in their neighborhood. The measures were summed and averaged to create an index for social disorder and an index for physical disorder. Higher scores on the index represent disorder is a bigger problem in the neighborhood. The Cronbach alpha coefficient for the social disorder index is .861; the Cronbach alpha coefficient for the physical disorder index is .825.

In addition to measures of collective efficacy and perceptions of disorder, control variables are included for the length of residence and the demographic characteristics of age, sex, and race. Residents who live in a neighborhood for a longer period of time tend to have a greater fear of crime (Taylor, 2001). The length of residence is assessed in the survey by the number of years the respondents lived in their current neighborhood. The variable was coded for zero to represent less than one year in the neighborhood.

The demographic characteristics of sex and age have also been linked to the fear of crime. Specifically, females and older people are more fearful of crime than young males (Braungart, Braungart, & Hoyer, 1980). The relationship between race and fear has been found to be dependent on the racial diversity of the neighborhood (Braungart et al., 1980; Bursik & Grasmick, 1993). In the current study, age is recorded in years and sex is coded male (1) and female (0). The race of the respondent includes white as the comparison category,

Black/African American, and other. The other category consists of American Indian, Asian Indian, Chinese, Filipino, other Pacific Islander, or some other race.

RESULTS

The mean scores across the variables for each neighborhood can be found in Table 2. The descriptive indicators highlight the levels of fear, collective efficacy, and perceptions of disorder are relatively similar across all neighborhoods in the analysis. In fact, most respondents report a low to midrange level of fear, averaging 1.90 on a scale from 1 to 4, with 4 representing high levels of fear. Respondents in South report the highest mean level of fear, 2.08, while respondents in Shadyside report the lowest levels of fear, 1.75. The respondents report relatively high levels of collective efficacy

across neighborhoods, ranging from 2.77 in South to 3.19 in Central. These scores indicate residents have high levels of social cohesion and are likely to intervene in troublesome situations that erupt in their neighborhood.

The perceptions of disorder are measured on a scale from 1 to 3, with higher numbers representing perceptions of more disorder. Residents across the neighborhoods perceive social disorder to be somewhat of a problem. The mean score of social disorder ranges from 1.47 in South to 1.99 in Hilltop. On average, residents in Hilltop perceive physical disorder to be more problematic than residents in other neighborhoods. The mean score on the physical disorder index is 2.09 in Hilltop, with an overall average of 1.93 across all four neighborhoods.

Table 2. Descriptive Statistics

	Neighborhoods									
			Central		Hilltop		South		Shadyside	
	Min	Max	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Fear of Crime	1	4	1.85	0.61	1.90	0.69	2.08	0.79	1.75	0.70
Collective Efficacy	1	4	3.19	0.51	2.87	0.54	2.77	0.61	2.90	0.65
Social Disorder	1	3	1.53	0.50	1.99	0.66	1.47	0.58	1.56	0.61
Physical Disorder	1	3	2.00	0.57	2.09	0.55	1.84	0.61	1.80	0.67
Length of Residence	0	90	11.88	13.50	20.67	19.45	18.99	16.26	17.99	21.25
Age of Respondent	16	91	47.34	13.46	51.37	18.75	50.00	15.35	50.75	16.75
Sex (Male)	0	1	0.48	0.50	0.43	0.50	0.38	0.49	0.40	0.49
African American	0	1	0.40	0.49	0.10	0.31	0.73	0.45	0.47	0.50
Other Race	0	1	0.06	0.23	0.03	0.16	0.06	0.23	0.02	0.15

Residents with the shortest tenure live in Central, with an average of almost 12 years in the neighborhood, while residents of Hilltop have lived in that neighborhood for an average of 21 years. The respondents in South and Shadyside have longer tenure than Central, averaging about 18 years. As expected, due to the methods of survey

distribution, the majority of respondents are older, with an average age of 50 years across the four neighborhoods. Approximately 42% of the sample is male across the neighborhoods. The majority of respondents in South are African American, 73%; only 10% of the residents who completed the survey in Hilltop are African American. The

sample in Central consists of 40% African American residents and 47% of the sample in Shadyside is comprised of African American residents. Fewer than 6% of the respondents are Latino or other race across the four neighborhoods.

The results from the bivariate correlations are presented in Table 3. The correlations represent the respondents from across all four neighborhoods in the analysis. There is a statistically significant relationship between collective efficacy, perceptions of disorder, and the fear of crime. Respondents who perceive high levels of collective efficacy in their neighborhood are likely to have a lower fear of crime than those people who report low levels of collective efficacy. Higher levels of perceived disorder reflect increased fear of crime among respondents. This is true for both types of disorder, social and physical. In addition, those residents who live in their neighborhood for a longer period of time have an increased fear of crime. An inverse relationship between sex of the respondent and fear indicates male respondents have a

lower fear of crime than females. The bivariate relationships between demographic measures of age and race and fear of crime do not reach statistical significance.

While the bivariate correlations between the independent variables and the fear of crime reach statistical significance across respondents in all neighborhoods, the regression analyses suggest there are differences in the fear of crime across the neighborhoods. The results of the regression analyses are presented in Table 4. Model 1 of Table 4 presents the results of collective efficacy and the measures of disorder regressed on the fear of crime. Residents who perceive high levels of collective efficacy report lower fear of crime. Respondents exposed to more social disruptions in their neighborhood are likely to have a higher level of fear. While the bivariate correlation results suggest the impact of physical disorder on fear, the multivariate analysis indicates social disruptions are more important than physical cues of disorder.

Table 3. Bivariate Correlations Across all Neighborhoods

	1	2	3	4	5	6	7	8
1 Fear of Crime								
2 Collective Efficacy	-0.337 ***							
3 Social Disorder	0.328 ***	-0.478 ***						
4 Physical Disorder	0.236 ***	-0.266 ***	0.692 ***					
5 Length of Residence	0.202 ***	-0.034	-0.025	-0.090				
6 Age of Respondent	0.021	0.137	-0.186 **	-0.185 **	0.488 ***			
7 Sex (Male)	-0.135 *	-0.075	-0.017	-0.066	-0.027	-0.081		
8 African American	0.041	-0.030	-0.166 **	-0.206 ***	-0.179 **	-0.114 *	-0.061	
9 Other Race	-0.012	-0.045	-0.149 *	-0.114 *	0.005	0.017	0.006	-0.182 **

***p<.001, **p<.01, *p<.05

Table 4. Regression on the Fear of Crime (n=178)

	Model 1	Model 2
Constant	2.31 *** (0.38)	2.13 *** (0.46)
Collective Efficacy	-0.25 * (0.10)	-0.26 ** (0.10)
Social Disorder	0.30 * (0.13)	0.29 * (0.13)
Physical Disorder	0.01 (0.11)	0.04 (0.11)
Length of Residence		0.01 ** (0.00)
Age of Respondent		0.00 (0.00)
Sex (Male)		-0.19 * (0.10)
African American		0.10 (0.12)
Other Race		0.06 (0.25)
Central	-0.15 (0.14)	-0.03 (0.15)
Hilltop	-0.32 * (0.15)	-0.26 (0.16)
Shadyside	-0.32 * (0.14)	-0.28 * (0.14)
R ²	0.184	0.253

***p<.001, **p<.01, *p<.05

Model 2 of Table 4 presents the full results of the regression analysis, including the demographic characteristics. The inverse relationship between collective efficacy and fear maintains statistical significance, as does the positive relationship between social disorder and fear of crime. The length of time residents have lived in the neighborhood is also statistically significant for respondents across the neighborhoods.

People who have lived in the area for a longer period of time have a greater fear of crime. Female respondents report higher levels of fear than do males across the neighborhoods. The full model explains 25% of the variance in the level of fear reported by residents across the four neighborhoods.

The regression models indicate there are differences in the level of fear across the four neighborhoods in the analysis. The results presented in Models 1 and 2 of Table 4 show residents located in the Central, Hilltop, and Shadyside neighborhoods have less fear than those who reside in South neighborhood. Importantly, residents in South report the lowest levels of collective efficacy as compared to the other neighborhoods. In Model 1 of Table 4, the difference in levels of fear reaches statistical significance for residents in Hilltop and Shadyside. With the addition of demographic control variables in Model 2 of Table 4, only Shadyside maintains statistical significance. The demographic variables account for differences in fear for those residents in Hilltop.

DISCUSSION

The results demonstrate an inverse relationship between collective efficacy and the fear of crime. In addition, the perceptions of social disorder are an important factor influencing residents' fear levels. The findings offer support for the existing literature on how collective efficacy and social disorder relate to the fear of crime. The current research extends the understanding of fear crime by considering four different neighborhoods in the analysis. The results indicate neighborhood factors do indeed impact the fear of crime, even when controlling for the demographic characteristics of the respondents.

The results of the bivariate correlations show the relationships between fear of crime and collective efficacy, social disorder, and physical disorder reach statistical significance. Residents who live in areas with strong collective efficacy have less fear of crime. That is, these residents are more comfortable as they engage in daily activities in their neighborhood. They are likely to know their neighbors and interact

with them on a routine basis. Residents who live in areas characterized by high levels of collective efficacy are at ease walking alone in their neighborhood, and are likely to encounter people they know. Neighborhoods with high levels of efficacy function well together as a unit of social control (Sampson & Raudenbush, 1999; Sampson et al., 1997). The inverse relationship between collective efficacy and perceived risk of victimization is maintained in the regression analysis. Collective efficacy remains an important predictor of fear even when perceptions of disorder and the demographic characteristics of the residents are considered in the model.

Previous research indicates physical disorder provides the environmental cues that are seen as danger signs, or signs of crime (Skogan, 1990). The bivariate statistics support this contention; however, the relationship between physical disorder and fear of crime loses statistical relevance when social disorder and collective efficacy are taken into account in the multivariate model. The presence of physical disorder might indeed indicate a lack of community self-control (Skogan, 1990), but the visibility of social disruptions is more likely to invoke fear among residents. Residents are likely to associate social disorder as a threat to their safety, and perceive these situations as having the potential for violent victimization (Bursik & Grasmick, 1993; Skogan, 1990). Respondents who are exposed to social disruptions more frequently are less willing to walk alone in their neighborhood; the feelings of safety are diminished in the absence of community social control.

The current research finds residents who live for a longer period of time in a neighborhood have a greater fear of crime. Residents who live an area for an extended period of time experience changes in the level of crime and disorder in that area (Taylor, 2001). If crime or disorder

increases, the level of fear also increases (Skogan & Maxfield, 1981; Warr, 1990). The results also indicate females have a greater fear of crime than do males. This finding is consistent with much of the literature on fear of crime. Even though males are more likely to be victimized than are females, research consistently finds females to have a greater fear of crime (Braungart et al., 1980; Ferraro, 1995). Females are likely to feel more vulnerable to attack when they traverse in the public sphere on a regular basis (Killias & Clerici, 2000).

The results of the multivariate analysis indicate there is indeed a difference across neighborhoods in terms of the level of fear held by residents. People who live in Central, Hilltop, and Shadyside have less fear of crime than the residents in South. When collective efficacy and perceived disorder are held constant, the residents in Hilltop and Shadyside experience greater fear than those residents in South. The statistically significant difference between fear of crime for residents in Hilltop and South disappears when demographic characteristics are controlled for in the regression model. The respondents' demographic indicators account for the differences in fear levels between these two neighborhoods. The residents in Shadyside report less fear than those situated in South, even when the respondents' age, race, sex, and the length of residence are held constant. This suggests there is something unique about the Shadyside neighborhood that is influencing the level of fear held by residents.

The difference in fear levels across neighborhoods highlights crime prevention and control efforts should take into account neighborhood factors. While Swatt et al. (2013) finds collective efficacy impacts fear differently across four Miami neighborhoods, the findings of the current

research indicate that even when collective efficacy is held constant, there is something about the neighborhood that differentially influences fear. Efforts at crime control or community crime prevention programs need to account for not only measures of collective efficacy and perceptions of disorder, but should also recognize neighborhoods differ on other factors as well (Roh & Oliver, 2005; Taylor & Hale, 1986).

The census data offer potential explanations for the differences in the level of fear across neighborhoods; however, further research is warranted to empirically examine the role of structural measures. Shadyside, for example, is a neighborhood characterized as having a larger number of homeowners than the South neighborhood. This suggests South is a more transient neighborhood; residential turnover is greater than in Shadyside. Even so, it is important to note Central has the least number of homeowners, which does not significantly impact the level of fear held by residents in this location.

The age structure of the neighborhood population might also have an impact on fear levels. Younger people are more likely to be victims and offenders of crime (Hindelang, Gottfredson, & Garofalo, 1978). Neighborhoods with a larger proportion of young people have an influx of people who are engaged in social disruptions. Approximately 32% of the population of the South neighborhood is comprised of people under 20 years old. The other neighborhoods have about 20% of the population comprised of teenagers and young adults. Increased visibility of social disorder, or even the prominence of young people traversing the public sphere might heighten the level of fear held by residents.

Race as an individual demographic characteristic does not reach statistical significance in the bivariate or multivariate models; however, the racial diversity of the

neighborhood might be influencing residents' fear levels. Several researchers indicate the racial heterogeneity of the neighborhood affects how comfortable people feel in their surroundings (Braungart et al., 1980; Bursik & Grasmick, 1993; Covington & Taylor, 1991; Merry, 1981). If people are not at ease in their neighborhoods, this likely affects the level of collective efficacy and the perceptions of disorder held by residents. In neighborhoods characterized by low levels of social control, residents are more likely to perceive crime as a problem. Residents in neighborhoods with weak social networks are also likely to perceive more physical and social disorder (Novak & Seiler, 2001; Sampson et al., 1997; Skogan, 1990; Wilson & Kelling, 1982).

FUTURE RESEARCH AND LIMITATIONS

The results of the current research highlight there are differences in residents' fear of crime across neighborhoods. The level of collective efficacy, perceptions of disorder, and the respondents' demographic characteristics do not account for all of the neighborhood differences in fear. There are, however, several important limitations of the current study that need to be recognized. First, the survey data used in this study was collected at one point in time, and therefore, the changes in disorder and crime cannot be assessed. It would be informative to go back to the neighborhoods and survey the residents again to evaluate changes over time. In addition, the current data is limited to the individual level of analysis. The findings suggest a multilevel approach that incorporates neighborhood characteristics is an important next step to further the understanding of the fear of crime. The racial diversity of the neighborhood may be an important factor leading to the fear of crime, or at least deserves further

consideration. Other structural factors of the neighborhood should also be taken into account in future research. The demographic composition of the population, including the proportion of adolescents and young adults, might offer insight to what is affecting the level of fear held by residents.

REFERENCES

- Baumer, T. L. (1985). Testing a general model of fear of crime. *Journal of Research on Crime and Delinquency*, 22, 239-256.
- Braga, A. A., Weisburd, D. L., Waring, E. J., Mazerolle, L. G., Spelman, W., & Gajewski, F. (1999). Problem-oriented policing in violent crime places: A randomized controlled experiment. *Criminology*, 37, 541-580.
- Braungart, M. M., Braungart, R. G., & Hoyer, W. J. (1980). Age, sex, and social factors in fear of crime. *Sociological Focus*, 13, 55-66.
- Bursik, R. J. & Grasmick, H. G. (1993). *Neighborhoods and crime: The dimensions of effective community control*. Lanham: Lexington Books.
- Covington, J. & Taylor, R. B. (1991). Fear of crime in urban residential neighborhoods: Implications of between and within-neighborhood sources for current models. *Sociological Quarterly*, 32, 231-249.
- Doran, B. J. & Lees, B. G. (2005). Investigating the spatiotemporal links between disorder, crime, and the fear of crime. *The Professional Geographer*, 57, 1-12.
- Dubow, F., McCabe, E., & Kaplan, G. (1979). *Reactions to Crime: A Critical Review of the Literature*. Washington, DC: Government Printing Office.
- Ferraro, K. F. (1995). *Fear of Crime: Interpreting Victimization Risk*. New York: SUNY Press.

- Ferraro, K. F. & LaGrange, R. L. (1987). The measurement of the fear of crime. *Sociological Inquiry*, 57, 70-101.
- Hindelang, M. J., Gottfredson, M. R. & Garofalo, J. (1978). *Victims of personal crime: An empirical foundation for a theory of personal victimization*. Cambridge, MA: Ballinger Publishing Company.
- Janowitz, M. (1975). Sociological theory and social control. *American Journal of Sociology*, 81, 82-108.
- Killias, M. & Clerici, C. (2000). Different measures of vulnerability in their relation to different dimensions of fear of crime. *British Journal of Criminology*, 40, 437-450.
- LaGrange, R. L. & Ferraro, K. F. (1989). Assessing age and gender differences in perceived risk and fear of crime. *Criminology*, 27, 697-719.
- LaGrange, R. L., Ferraro, K. F. & Supancic, M. (1992). Perceived risk and fear of crime: Role of social and physical incivilities. *Journal of Research in Crime and Delinquency*, 29, 311-334.
- Liska, A. E., Sanchirico, A. & Reed, M. D. (1988). Fear of crime and constrained behavior: Specifying and estimating a reciprocal effects model. *Social Forces*, 66, 827-837.
- Maxfield, M. G. (1984). The limits of vulnerability in explaining fear of crime: A comparative neighborhood analysis. *Journal of Research in Crime and Delinquency*, 21, 223-250.
- Merry, S. E. (1981). Defensible space undefended: Social factors in crime control through environmental design. *Urban Affairs Quarterly*, 16, 397-422.
- Nolan, J., Althouse, R., Stein, R. E. & Bennett, S. (In Press). *Situational policing* Washington, DC: Office of Community Oriented Policing Services, U.S. Department of Justice.
- Novak, K. J. & Seiler, C. L. (2001). Zoning practices and neighborhood physical disorder. *Criminal Justice Policy Review*, 12, 140-163.
- Perkins, D., Wandersman, A., Rich, R. & Taylor, R. (1993). The physical environment of street crime: Defensible space, territoriality and incivilities. *Journal of Environmental Psychology*, 13, 29-49.
- Rader, N., Cossman, J. S., & Porter, J. R. (2012). Fear of crime and vulnerability: Using a national sample of Americans to examine two competing paradigms. *Journal of Criminal Justice*, 40, 134-141.
- Roh, S. & Oliver, W. M. (2005). Effects of community policing upon fear of crime: Understanding the causal linkage. *Policing: An International Journal of Police Strategies and Management*, 28, 670-683.
- Rountree, P. W. & Land, K. C. (1996). Perceived risk versus fear of crime: Empirical evidence of conceptually distinct reactions in survey data. *Social Forces*, 74, 1353-1376.
- Sampson, R. J. (2009). Disparity and diversity in the contemporary city: Social (dis)order revisited. *The British Journal of Sociology*, 60, 1-31.
- Sampson, R. J. & Raudenbush, S. W. (1999). Systematic social observation of public spaces: A new look at disorder in urban neighborhoods. *The American Journal of Sociology*, 105, 603-651.
- Sampson, R. J., Raudenbush, S. W., & Earls, F. (1997). Neighborhoods and violent crime: A multilevel level study of collective efficacy. *Science*, 277, 918-924.
- Scarborough, B., Like-Haislip, T. Z., Novak, K. J., Lucas, W. L., & Alarid, L. F. (2010). Assessing the relationship between individual characteristics, neighborhood context, and fear of crime. *Journal of Criminal Justice*, 38, 819-826.

- Skogan, W. G. (1990). *Disorder and decline: Crime and the spiral of decay in American neighborhoods*. Berkeley: University of California Press.
- Skogan, W. G. & Maxfield, M. G. (1981). *Coping with crime*. Beverly Hills: Sage Publications.
- Swatt, M. L., Varano, S. P., Uchida, C. D., & Solomon, S. E. (2013). Fear of crime, incivilities, and collective efficacy in four Miami neighborhoods. *Journal of Criminal Justice*, 41, 1-11.
- Taylor, R. B. (2001). *Breaking away from broken windows: Baltimore neighborhoods and the nationwide fight against crime, grime, fear, and decline*. Boulder: Westview Press.
- Taylor, R. B. & Hale, M. (1986). Testing alternative models of fear of crime. *Journal of Criminal Law and Criminology*, 77, 151-189.
- Taylor, R. B., Shumaker, S., & Gottfredson, S. (1985). Neighborhood level links between physical features and local sentiments: Deterioration, fear of crime, and confidence. *Journal of Architectural Planning and Research*, 21, 261-275.
- US Census Bureau (2000). *Census tracts and block numbering areas*. http://www.census.gov/geo/www/cen_tract.html. Last accessed January 8, 2013.
- Warr, M. (1987). Fear of victimization and sensitivity to risk. *Journal of Quantitative Criminology*, 3, 29-46.
- Warr, M. (1990). Dangerous situations: Social context and fear of victimization. *Social Forces*, 68, 891-907.
- Wilson, J. Q. & Kelling, G. L. (1982). The police and neighborhood safety: Broken windows. *Atlantic*, 127, 29-38.
- Wilson, J. Q., & Kelling G. L. (2006). A quarter century of broken windows. *The American Interest*, September/October, 168-172