HATE CRIME AND CIVIC ENGAGEMENT

A Thesis in
Criminology
by
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Submitted in Partial Fulfillment
of the Requirements
for the Degree of

Master of Arts

May 2020
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This study investigated whether and how civic organizations play a role in reducing bias incidents and hate crimes. Prior research on civic organizations indicated that they played a causal role in the crime decline in urban areas during the 1990s. (Sharkey, Torrats-Espinosa & Takyar 2017). Based on that research, I hypothesized that the rate of hate crimes would be lower in counties with a higher rate of civic organizations and that this reduction would be especially great in counties with high rates of bias incidents and hate crimes.

The data for bias incidents and hate crimes came from the Pennsylvania Human Relations Commission (PHRC) for the years 2000-2011. The PHRC collected this information from media accounts, police reports, and narratives from individuals who gave statements to the PHRC. These PHRC data were aggregated to the county level for each year.

The presence, number, and type of civic organizations at the county-level in Pennsylvania came from the National Center for Charitable Statistics. Descriptive analyses indicated that the number of these civic organizations per county per year ranged from 0 to 304 and the rate per 100,000 citizens ranged from 0 to 38.77.

To study the possible relationship between hate crimes and civic organizations, descriptive statistics, bivariate correlations, and multivariate relationships were examined. Longitudinal methods were used because the study contains 12 years of data. Because hate crimes are rare events, most county-years had zero incidents of hate crime. Therefore, Poisson regression models were used.
Overall analyses indicated that there is not generally a significant association between nonprofit organizations and hate crimes. When interaction terms were added to the models, however, there was a significant, negative association between nonprofits and hate crimes in Philadelphia County compared to rural counties. Thus, this study suggests that in areas with high levels of hate crime the presence of civic organizations can reduce bias incidents and hate crimes.
# TABLE OF CONTENTS

List of Figures .......................................................................................................................... vi

List of Tables ........................................................................................................................... vii

Acknowledgements ............................................................................................................... viii

Introduction .............................................................................................................................. 1

Review of the Literature ......................................................................................................... 3

- Social Disorganization .......................................................................................................... 3
- Resource Competition and Defended Communities ............................................................ 4
- Law Enforcement and Hate Crime ....................................................................................... 7
- Civic Engagement ................................................................................................................. 9
- Social Capital ....................................................................................................................... 9
  - Groups and Organizations ............................................................................................... 11
  - Empirical Studies of Civic Engagement ........................................................................ 12
  - Groups and Hate Crime .................................................................................................. 14
- Contact Hypothesis ............................................................................................................. 15

Current Study ......................................................................................................................... 16

- Hypotheses .......................................................................................................................... 17

Methods .................................................................................................................................. 18

- Hate Crime Data ............................................................................................................... 18
- Explanatory Variables ...................................................................................................... 19

Analysis ................................................................................................................................ 20

- Descriptive Statistics ........................................................................................................ 20
- Bivariate Analysis ............................................................................................................. 22
- Multivariate Analysis ....................................................................................................... 31

Discussion ............................................................................................................................... 36

- Limitations ......................................................................................................................... 37
- Conclusion ........................................................................................................................... 39

Bibliography ............................................................................................................................ 41
LIST OF FIGURES

Figure 1: ......................................................................................................................... 25
Figure 2: ......................................................................................................................... 25
Figure 3: ......................................................................................................................... 26
Figure 4: ......................................................................................................................... 27
Figure 5: ......................................................................................................................... 31
LIST OF TABLES

Table 1: ............................................................................................................................................ 21
Table 2: ............................................................................................................................................ 22
Table 3: ............................................................................................................................................ 24
Table 4: ............................................................................................................................................ 28
Table 5: ............................................................................................................................................ 29
Table 6: ............................................................................................................................................ 30
Table 7: ............................................................................................................................................ 32
Table 8: ............................................................................................................................................ 33
Table 9: ............................................................................................................................................ 35
ACKNOWLEDGEMENTS

I want to thank Andy Gladfelter and Brendan Lantz for letting me have access to the hate crime data from the Pennsylvania Human Relations Commission. I also want to thank Keith Hullenaar for his help with the statistical analyses.

Thanks to Holly Nguyen and Pamela Wilcox for serving on my committee and for their helpful comments.

Thanks especially to Barry Ruback for serving as my advisor, and for always being available and patient throughout the process.
Introduction

Hate crimes harm individual victims, instill fear in vulnerable groups, and undermine relationships within neighborhoods and communities. Victims of hate crimes, compared to victims of non-bias-motivated, comparable crimes, suffer more severe and longer lasting negative outcomes, and they and their social networks experience higher levels of fear of crime (McDevitt, Balboni, Garcia, & Gu 2001; Ignanski 2001; Herek, Gillis, & Cogan 1999). Hate crimes may damage the relations between groups in a community, and may also result in retaliatory hate crimes (Levin & McDevitt 2002).

The popular concern with hate crimes may be due both to their especially damaging outcomes for victims and the community and to the media coverage of celebrated cases. Although hate crimes are relatively infrequent and often go unreported, the media tends to cover especially violent incidents in depth and for long periods of time. The 2016 Pulse Nightclub shooting in Orlando and the 2018 shooting at the Tree of Life Synagogue in Pittsburgh are two recent examples of extreme, violent hate crimes that captured the attention of the public. This coverage may be attributed to the public’s larger concern with such incidents over more common, less immediately serious incidents such as hate speech graffiti.

In 2017, 2,040 police agencies, 13% of those that submitted information to the Federal Bureau of Investigation, reported 8,437 hate crime offenses throughout the country. Most of those offenses, 60.3%, were categorized as crimes against persons, while 36.9% were property crimes. The most common motivation for the crimes (58.1% of cases) was race. The second
most common motivation was religion (22%), and the third was sexual orientation (15.9%) (Department of Justice 2017).

There are many studies of hate crime at either the individual-level or the macro-level. These studies address different outcomes, such as the experience of victimization and the general occurrence of hate crimes. Individual level studies try to understand what motivates an individual to engage in bias-motivated criminal behavior (Craig 2002) and the outcomes of bias-motivated victimization (McDevitt et al. 2001). Studies that examine hate crime at the macro-level are often concerned with larger-scale structural factors such as race and socioeconomic status. Example studies include those seeking to answer where, nationally, hate crime occurs relative to hate groups (Jendryke & McClure 2019) or whether there is a relationship between perceptions of gender roles and anti-gay hate crimes (Alden & Parker 2005).

In addition to these individual-level and macro-level studies, there is a need for research at the community level. Studies examining community-level, predictive factors of hate crime have focused on social disorganization theory (residential mobility, socio-economic status, and racial heterogeneity). Despite the long criminological tradition of studying neighborhood characteristics to better understand neighborhood crime and disorder, going back to the groundbreaking work by Shaw and McKay (1942), there seems to be a gap in knowledge when it comes to the relationship between hate crime and civic engagement.

Community-level research on hate crime may be especially valuable because action, such as the creation of an after-school program, can be taken by community members to make changes at that level. Civic engagement may act as an organizing force by encouraging interaction and familiarization among those in a community. By creating a more socially organized community, civic engagement may reduce hate crime. Additionally, it is possible that engagement in one’s community, particularly if the community is racially or religiously diverse, could decrease prejudice. There have not yet been any studies that have investigated the county-level
relationship between (a) the prevalence of hate crime and bias incidents, and (b) measures related to civic engagement, specifically the prevalence of nonprofit, civic organizations, community-based associations that work to perform functions deemed necessary for that community. The present research aims to fill that gap.

**Review of the Literature**

**Social Disorganization**

One factor about communities that may be related to hate crime is social disorganization – a lack of integration and self-regulation. Social disorganization theory proposes that areas with high residential mobility, racial heterogeneity, and poor economic conditions are areas that are not socially organized (Shaw and McKay 1942). In other words, these areas are ones where people are not familiar with each other, not invested in the community, and not willing to act to preserve order or prevent crime. By contrast, in a socially organized community, community members are familiar with each other, so that, for example, a community member might feel comfortable telling neighbors’ children to leave a street corner or to go to school. Socially disorganized areas have the highest rates of crime and victimization due, in part, to the absence of a shared moral order, in which values are shared and perceived to be shared by residents in a community. Residents of such areas do not know what behavior is expected of them and do not know what behavior to expect of others. This ambiguity may cause feelings of isolation and moral cynicism. This reduction in social organization combined with the lack of opportunities to create a sense of community in such areas may lead some residents to engage in deviant or criminal behavior.

If areas with high residential mobility, racial heterogeneity, and poor economic conditions had stronger institutions of social control, that is, organizations that clarify and enforce behavioral expectations, the area may not have crime rates as high as would otherwise be expected. Civic organizations are one such institution of social control. Sampson and Groves
(1989) found empirical support for these mechanisms in their study of social disorganization in Great Britain. Their hypothesis that “communities with high rates of participation in committees, clubs, local institutions, and other organizations will have lower rates of victimization and delinquency than communities in which participation was low” (780) was supported by their data. The researchers found that areas with “sparse friendship networks, unsupervised teenage peer groups, and low organizational participation had disproportionately high rates of crime and delinquency” (799). By incorporating factors such as informal ties and organizational participation to measure social control, and through the use of nonofficial reports of crime and victimization, the researchers were able to provide support for Shaw and McKay’s theory, beyond the findings of prior studies, which had simply replicated the relationship between social disorganization and crime rates.

**Resource Competition and Defended Communities**

Some studies on the occurrence of hate crimes have examined the relationship between bias crime events and the racial makeup, economic conditions, and residential mobility of a community. Lyons (2007) conducted research on three perspectives to explain the incidence of hate crimes: social disorganization (discussed above), resource competition, and defended communities. Resource competition theory proposes that hate crimes may be more common in areas with less economic resources. Members of the community will be more likely to “align their actions with the interests of their ethnic group” (820) because the labor market is segregated, with little or no overlap between groups. When a new group enters an already occupied labor market, the original group may feel threatened and may attempt to control the situation, for instance, by committing a hate crime.
Similarly, the defended communities perspective predicts that when a community’s identity is threatened by outsiders, hate crimes will increase in that area. According to this perspective, hate crime can function as a sort of social control, which can reinforce norms within a community. So, according to this perspective, more hate crimes would be expected in an area that experienced a recent spike in new members from a different racial group, who likely would be perceived as challenging the norms of the larger community.

The main difference between the resource competition and defended communities perspectives is that resource competition focuses on economic factors, whereas defended communities is related to culture. These hypotheses have elements similar to social disorganization theory, as they use economic conditions, racial makeup, and residential mobility to predict changes in social organization. According to social disorganization theory, areas with low socioeconomic status and high racial diversity will have higher crime rates than other areas. The resource competition perspective states that such areas have limited economic resources. If residents feel their position or opportunity is threatened, they may react to the conditions by committing criminal acts against those who they feel are competing with them, especially those from different racial groups. The theories of defended communities and resource competition are different from social disorganization theory, however, because they study those factors as causes of increased conflict between groups.

Lyons (2007), through his analysis of hate crime and census tract data in Chicago, found support for the defended communities perspective but not for resource competition theory. He found that anti-Black hate crimes were more likely to occur in homogenous, white communities, whereas anti-white hate crimes were more likely to occur in heterogeneous, disorganized areas. He did not find a relationship between economic conditions and hate crimes. Similarly, Green, Strolovitch, and Wong (1998) found a relationship between a community’s racial makeup and racially based hate crimes but failed to find a relationship between economic conditions and racial
hate crimes. The researchers found that anti-racial-minority hate crimes occurred most frequently in racially homogenous, white areas, especially communities that had experienced recent immigration of minority groups.

In contrast to these findings, Grattet (2009), analyzing local police records of hate crime incidents in Sacramento from 1995-2002, did find a relationship between hate crime and concentrated disadvantage, which he operationalized as the number of female-headed households, the number of males below the age of seventeen, the number of non-Hispanic blacks, and the number of people who were unemployed and below the poverty level. Grattet also found results consistent with that of Lyons (2007) and Green et al. (1998) in support of the defended communities perspective. Grattet did not attempt to test the resource competition perspective.

The positive relationship between disadvantage and hate crimes Grattet found may have resulted from the fact that his measure of disadvantage included race, which has been found to be related to hate crime incidence, and other factors that are often confounded with race, such as number of female-headed households.

Research on hate crimes in Pennsylvania at the county level yielded similar, but not identical results. Ruback, Gladfelter, and Lantz (2015) found that areas that had an incident of bias-motivated crime, compared to those that did not have any, were more likely to have the characteristics of social disorganization and low social capital, that is, a more restricted network of relationships between individuals in a society. The researchers found a statistically significant, positive relationship between poor economic conditions and the rate of hate crime in an area.

This difference between the studies by Lyons and Green et al. and the studies conducted by Grattet and Ruback et al. may be due to differences in the areas studied and the data sets that were used in the different analyses. The studies conducted by Lyons and by Green et al. both
investigated community-level data of a single large city over a period of time. Moreover, both used police data, and relying on this type of data may be a serious shortcoming.

The data from police departments are imperfect measurements of hate crime because they do not capture crime that was not reported to the police. Unreported crimes are always an issue when analyzing police data, but they may be especially problematic when it comes to hate crimes, because victims may not be able determine whether the crime was committed because of their group membership. Moreover, even if a victim does recognize and report a hate crime, the police may not always have a procedure for recording the incident and the police may make errors in determining whether the crime was motivated by prejudice (Martin 1995). The victims may also be especially reluctant to report a hate crime to the police when they belong to a group that currently has or historically has had a strained relationship with the police force, such as the Black community and the LGBT community (Pezzella, Fetzer & Keller 2019).

**Law Enforcement and Hate Crime**

Several studies indicate that police statistics on hate crime are likely to be underestimates. Martin’s (1995) analysis of possible bias incidents in Baltimore County indicated that the police response is inconsistent, and therefore that the police statistics likely underrepresent the true incidence of bias activity. At the individual level, police response may vary because officers have diverse perceptions of and experiences with biases. Additionally, not all officers may have been trained about the police department’s policies regarding dealing with incidents of possible bias crimes.

Similarly, Lantz, Gladfelter, and Ruback (2019), studying county-level data from Pennsylvania, found evidence of the unreliability of policing data for estimating hate crimes. Analyzing data from the National Crime Victimization Survey, the authors found that hate
crimes, compared to other crimes, were less likely to be reported to the police and less likely to result in arrest. Similar to the Martin study, the Lantz et al. study found that ‘normal hate crimes,’ those that fit the mental schema of the public, are likely to be overrepresented in policing data compared to less stereotypical hate crimes. For example, a normal hate crime would be a violent hate crime by a white person against a Black person, because it fits the collective narrative of a bias-motivated criminal incident.

Ruback, Gladfelter, and Lantz (2015) addressed the inaccuracies of policing data by using a different data source for their analysis, data collected by the Pennsylvania Human Rights Commission (PHRC). The PHRC dataset is described in more detail in the methods section of this paper. With this data set, the researchers were able to include incidents that were not reported to the police and incidents, such as those against gay or lesbian individuals, which would not be considered hate crimes under Pennsylvania’s legal definition of ethnic intimidation.

Additionally, while the other studies analyzed data only from major urban areas, Ruback et al.’s study investigated data from the entire state of Pennsylvania. The inclusion of rural counties may have contributed to the researchers finding a statistically significant relationship between economic factors and hate crime, which had not been consistently found in previous research.

The nature of a community may be important, because factors of social disorganization may have a different relationship with the rate of hate crime in an area based on the context of the community. For example, a poor, rural community with a recent influx of members of a minority group may be more likely to experience hate crime than a poor city that has historically included members of a minority community. As suggested by resource competition theory and the defended communities perspective, the minority members of the rural community may be more visible and seemingly culpable for the economic conditions than those in the urban area, because they are new community members and may be seen as a threat or competition by others in the
community. The researchers may have also found a statistically significant relationship between economic factors and the incidence of hate crimes because their study had a greater number of cases, and therefore greater statistical power, than previous ones. By using data that covered an entire state and were collected by an agency outside the police, the researchers may have been able to more accurately capture the relationship between the factors of social disorganization and the occurrence of hate crimes.

Civic Engagement

Social Capital

More recently, as data has become more available and more reliable and statistical techniques have become more advanced, researchers have been able to study the mechanisms through which the ecological conditions of poverty, heterogeneity, and mobility lead to higher crime rates. In other words, researchers have begun to examine more directly indicators of social disorganization. Some scholars have been able to study these mechanisms through the study of social capital, the benefits people gain from their social connections to others. Putnam (2000), in his extensive examination of American communities, traced the definition of social capital, and wrote, “the core idea of social capital theory is that social networks have value” (19). He made five arguments; (1) that there are different kinds of social capital, (2) social capital helps to create and maintain social norms and values, (3) it has both private and public aspects, (4) it can be used like physical capital, and (5) it can be used for negative, as well as positive change or outcomes. Given the rich and complex nature of social capital, there are different ways in which it can be defined, classified, and studied.
In line with this argument, Beyerlein and Hipp (2005) investigated the relationship between different types of social capital and crime rates in United States counties. Importantly, the article distinguished between bonding and bridging social capital. Bonding social capital refers to internal linkages within an already existing group, whereas bridging social capital refers to connections between members in a group and those who are outside of that group. The authors argued that the distinction is important because the difference can help to demonstrate that social capital is not always linked to positive outcomes. According to Beyerlein and Hipp, areas with high levels of bonding social capital and low levels of bridging social capital may have higher crime rates because the area would not have the social control needed to address crime or crime-producing conditions.

The authors tested their hypothesis by examining different religious groups. Evangelical Protestants represented bonding social capital because, compared to mainline Protestants and Catholics, they do more work within their in-group and less work in the larger community. Mainline Protestants and Catholics represented the bridging social capital groups because they are linked to volunteering and work in the community. Consistent with their hypothesis, the authors found that areas with higher populations of Evangelical Protestants had higher rates of crime than areas with higher proportions of Catholics and mainline Protestants. The findings regarding the different crime rates supported the idea that bridging social capital may be more effective than bonding social capital in creating a more socially organized society. Religious organizations, however, are only one source of social capital.

Rosenfeld, Messner, and Baumer (2001) examined the relationship between social capital and homicide rates in the United States. The researchers theorized that communities with higher social capital would have lower rates of homicide because there would be (a) less social disorganization and anomie and (b) more informal and formal social control. The authors measured social capital as a combination of trust and civic engagement. Trust was measured
aggregating responses to three relevant questions from the General Social Survey. The questions assessed how fair, helpful, and trustworthy respondents generally found others to be. Civic engagement was measured as a combination of the proportion of the eligible public who voted and who were involved in a charitable organization. Researchers concluded that there is a strong, statistically significant, inverse relationship between social capital and homicide, and that the relationship is evident even when controlling for customary predictors of violent crime. For example, the article found that accounting for social capital largely explained why homicide rates in Southern states are higher than those in the North.

Groups and Organizations

Groups and organizations often play a significant role in the production of social capital. In particular, civic organizations can strengthen the cohesion and efficacy of communities because these organizations are concerned with helping the community (e.g., charities, nonprofits). These organizations can create ties in a community by connecting individuals to each other and to other organizations, and these ties increase social capital. For instance, researchers have found that after participating in jury deliberations, jurors were likely to become more active participants in local politics (Gastil, Deess, and Weiser 2002).

In a similar manner, participation or membership in civic organizations may increase residents’ interest, understanding, and presence in their community. Once community members are engaged in an organization, they may be seen more often around the community for events involving that organization, or visiting friends they made through their involvement. As individual involvement grows, an organization may begin new projects or increase outreach to address weaknesses in a community.
If a community is able to address its weaknesses and build social cohesion, it may also be able to decrease crime rates. When community members are actively participating in these organizations, their community may have a better understanding of social expectations or norms and may better exercise social control, which would discourage criminal behavior. Areas characterized by presumed ecological causes of social disorganization (poverty, heterogeneity, mobility), but with many civic organizations, nonetheless, may not experience as high a crime rate.

The role of civic organizations in social life is a common topic in sociology. Classical theorists such as de Toqueville commented on the novelty of public associations in the United States, writing “Nothing, in my opinion, is more deserving of our attention than the intellectual and moral associations of America” (201). Similarly, Shaw and McKay (1942) included a treatment of the role groups can play in social organization:

In the middle class areas and the areas of high economic status moreover, the similarity of attitudes and values as to social control is expressed in institutions and voluntary associations designed to perpetuate and protect these values. Among these may be included such organizations as the parent-teachers association, women’s clubs, service clubs, churches, neighborhood centers, and the like (165).

Despite the importance of civic organizations in sociological theory in general, the relationship between organizations and crime has not been the subject of much empirical study (Triplett, Gainey, and Sun 2003; Slocum, Rengifo, Choi, and Herrmann 2013; Wo, Hipp, and Bossen 2016). A major reason for this absence of research on the relationship between organizations and crime is that organizational membership is often difficult to measure. There may not be records of certain organizations, such as church groups, and it may be very difficult to obtain data to study the social networks of communities.
Empirical Studies of Civic Engagement

Empirical research on the connections between civic organizations and deviant behavior is a product of the past two decades. Initial studies found no relationship between civic organizations and the crime rate. Research on crime, social disorganization, and organizations in census block groups in the South Bronx overall concluded that, “like Skogan (1988), we find no relationship between the presence of voluntary organizations and local crime” (Slocum et al. 206). Studies that investigated the link between different types of institutions, such as bars, subway stations, and recreation centers, in neighborhoods also generally failed to find consistent, statistically significant relationships between the presence of organizations and neighborhood crime (Peterson, Krivo, and Harris 2000; Groff and Lockwood 2014). Importantly, however, Slocum et al. did find that organizations that bridge to the wider community were the most strongly associated with a reduction in violent crime.

More recent studies have produced stronger evidence of the relationship between crime and organizations in a community. Wo, Hipp, and Boessen (2016) argued that a more accurate picture of the relationship between organizations and local crime could be found if researchers accounted for the length of time that an organization had been in the community. In their study of organizations in census blocks across ten cities in the United States, the authors found that organizations do have a crime reducing effect, but the reduction came several years after the introduction of an organization. The effect was lagged probably because it takes a few years for an organization to be established and to become embedded in a community. In particular, the researchers found that bridging organizations took more time than bonding organizations to have an impact, probably because it takes more time to create and build relationships outside the home area.
Another study specifically looked at the relationship between nonprofit organizations and violent crime. Sharkey, Torrats-Espinosa, and Takyar (2017) studied the role that local nonprofit organizations played in the drop in violence experienced by the United States from the 1990s to 2014. They tested the idea that internal forces, such as these civic organizations, can play a significant role in increasing social capital or cohesion, which in turn contributes to a reduction in violence. In their longitudinal, city-level analysis of over 20 years of data from 264 cities, they found a statistically significant, likely causal relationship between the presence of nonprofits in an area and a decrease in crime rates.

Groups and Hate Crime

Groups play a role in hate crimes and in a community’s response to hate crimes. Hate groups may distribute literature or hold rallies to promote their beliefs, but these activities are protected under the First Amendment, as long they do not incite “imminent lawless action” (Brandenburg v Ohio). The most recent data, from The Southern Poverty Law Center (2018), tracked 1,020 hate groups in the United States. Despite their widespread range, however, the majority of hate crimes, are not committed by these groups. Research has found that the majority of such groups’ activities are noncriminal (Ruback et al. 2015). Although hate crimes are most often committed by individuals or small groups, formally organized hate groups may inspire individuals or small groups to commit hate crimes.

Groups also play an important role in preventing or dealing with the aftermath of hate crimes. Local groups can provide support to specific communities in several ways. For example, LGBT support groups may advocate for non-discrimination legislation (Lambda Legal) or help connect members with resources such as medical professionals who are sensitive to issues surrounding that group (GLMA: Health Professionals Advancing LGBTQ Equality).
groups that are designed specifically for advocating for minority populations, civic organizations in general may help lessen the rate of hate crime or bias activity in a community.

As previously discussed, civic organizations may help to decrease crime in an area by establishing and solidifying social norms, and by increasing social capital. Civic organizations may be notably effective in decreasing the rate of hate crime and bias activity, especially in diverse, disorganized areas, as these organizations increase the contact between diverse people, and, as described below, contact may reduce prejudice. To my knowledge, no studies have investigated the possible moderating effect of the presence of civic organizations.

Organizations that work with children may be especially effective in decreasing prejudice. Children’s beliefs may not be as deeply ingrained as those of adults, and positive interactions with people who are different from them may be especially influential in either reducing or preventing bias. Additionally, these children may discuss these friends from different backgrounds with their parents, which could possibly reduce a parent’s biases as well. Other organizations that work together towards a common goal, such as those whose goal is to increase the safety of a community, may lead to a reduction of biases in its members.

**Contact Hypothesis**

Social psychological theory and research have suggested the possibility that interactions between members of a community, which may be facilitated by civic organizations, can lead to a reduction in bias. Gordon Allport’s contact hypothesis (1954) proposed that, “prejudice (unless deeply rooted in the character structure of the individual) may be reduced by equal status contact between majority and minority groups in the pursuit of common goals” (267). Civic organizations may be particularly effective in reducing prejudice as they bring different individuals together, within the same level of the organization, to work towards the same goal.
The presence of these organizations may be related to a lower incidence of hate crimes and bias-motivated noncriminal incidents, as they may reduce prejudices, both implicit and explicit, among community members. Organizations with diverse members that stress the equality of their members and that work towards a common goal would be the most effective at reducing prejudice. Additionally, nonprofits that target children may also be especially effective at reducing prejudice by putting children from different backgrounds in a situation where they have equal status and are working towards similar goals. However, the effects of such organizations would likely not be immediately evident, but may be seen in a reduction of future hate crime and bias activity.

In the 65 years since the publication of Allport’s book, the contact hypothesis has withstood multiple tests by social scientists. The most convincing evidence is Pettigrew and Tropp’s (2006) meta-analysis of 515 studies, which found a statistically significant negative effect size of intergroup contact on prejudice. Given the reliability of the evidence for the contact hypothesis and the findings on the relationship between civic organizations and crime rates, there is reason to suspect that civic organizations can play a role in reducing the rate of hate crime in an area.

**Current Study**

The current study adds to current knowledge about hate crimes and to knowledge of the relationship between civic engagement and crime rates. The study tests the hypothesis that civic engagement moderates the relationship between the presumed ecological causes of social disorganization and hate crime. The measure of civic engagement in this study is the rate of nonprofits in a county. Areas with high levels of poverty, heterogeneity, and mobility, but with
high rates of nonprofit organizations, are hypothesized to have lower rates of hate crime than similar areas with less civic organizations. Economically advantaged, homogenous, stable areas, however, are hypothesized to have lower rates of hate crimes than similarly disorganized areas with lower amounts of civic engagement. Socially organized areas, however, are not free from hate crime. Previous studies have found that homogenous, economically advantaged areas are more likely to have anti-black hate crimes (Gladfelter et al. 2017). Higher levels of civic engagement in such areas may decrease that likelihood because citizens may feel that they have sufficient political power, and may not feel the need to commit defensive hate crimes.

**Hypotheses**

1. There will be lower rates of hate crime in areas with higher rates of civic organizations compared to areas with lower civic engagement.

   Areas with higher rates of civic organizations are more socially organized than those with lower rates of those factors. More socially organized areas should experience lower rates of criminal activity. Certain civic organizations might increase contact between diverse populations in a community, which may reduce the prejudice that is a necessary component of bias crimes.

2. The negative relationship between civic organizations and hate crime will be strongest in more urban county types, such as Philadelphia.

   According to the contact hypothesis, prejudice can be reduced when people have contact with others unlike themselves. Large urban areas are more diverse than smaller urban areas
or rural areas, therefore those who live in these counties have a higher likelihood of this type of contact. In less diverse counties, contact with different types of people may not be possible.

**Methods**

**Hate Crime Data**

The primary source of data for bias incidents and hate crimes in this study, both incidents reported and incidents not reported to the police, was the Pennsylvania Human Relations Commission (PHRC) for the years 2000-2011. The PHRC collected this information from media accounts, police reports, and narratives from individuals who gave statements to the PHRC. Ruback, Gladfelter, and Lantz (2015) collected the raw data from the PHRC. Two researchers coded the incident reports from the PHRC to create an individual-level data set. The inter-rater reliability was high, between 90%-100% for the variables of interest. For the present study, these PHRC data were aggregated to the county level.

Analyses indicate that the PHRC data are generally consistent with the UCR (Ruback et al. 2019). The PHRC, however, also provides information on incidents that are especially underreported by the UCR, such as those that occur in rural areas and those that are less serious. On the other hand, false positives are possible, in that the PHRC may include incidents that were not truly bias-motivated incidents.
Explanatory Variables

The presence, number, and type of civic organizations at the county-level in Pennsylvania came from the National Center for Charitable Statistics (NCCS). The NCCS provides publicly accessible data on nonprofit organizations for the use of researchers, policymakers, and those involved in nonprofits. In addition to providing data, the NCCS publishes statistical information about the nonprofit sector. The nonprofits in the data-set were categorized as organizations that ran substance abuse prevention programs, those that ran activities for youth, those that provided workforce readiness services for disadvantaged populations, those that addressed neighborhood development, and those that were created for crime prevention. The nonprofit data were coded consistently with the method of Sharkey et al. 2017. Nonprofit organizations were classified as “crime prevention,” “neighborhood development organizations,” “substance abuse programs,” “workforce development organizations,” and “youth programs” according to their NTEE-CC codes. Two researchers independently coded the data and had 100% inter-coder reliability. The different types of nonprofits were studied in the descriptive analysis, but in the multivariate analysis, in order to have a better measurement, only a measure of the total rate of civic organizations in a county was used.

Voter registration was used as a control variable. The data on voter registration in Pennsylvania by county for the years 1998-2012 came from the Pennsylvania Department of State, which has public voter registration data available online from 1998-May 2019. The data used in this study are the voter registration totals by county from November of the year being studied. The data for the other control variables, such as population size, racial makeup of counties, and residential mobility are from the American Community Survey (ACS), which is operated by the U.S. Census Bureau. Yearly data on a variety of social topics such as employment, housing, and education are provided by responses to the survey.
The analysis proceeded from simple description to bivariate analyses, and then to multivariate analyses. First, I examined the descriptive statistics of the variables of interest. Second, in terms of bivariate comparisons, I conducted one-way analyses of variance of the primary dependent and predictor variables. Then, to examine bivariate relationships in terms of changes in variables across time, I created graphs of hate crime incidents and nonprofits over time (Figures 1-4). Next, I correlated the dependent and predictor to further study bivariate relationships, and to make sure there were no collinear variables.

Then, in terms of multivariate analysis, I estimated pooled and panel, random effect Poisson regression models in order to determine whether there is a statistically significant relationship between aspects of civic engagement and the occurrence of hate crime, while controlling for other relevant variables. Lastly, I estimated pooled and panel Poisson models with interactions so that I could test the hypothesis that the presence of nonprofits is associated with lower rates of hate crime in more socially disorganized areas than in socially organized ones.

**Descriptive Statistics**

Tables 1 and 2 provide descriptive statistics for the variables in the study. Table 1 includes the main variables of interest: hate crime and nonprofit organizations. Overall, the sample contains data for 804 cases (12 years of data for each of 67 counties). The
maximum number of hate crimes committed in a county in a single year, according to the PHRC data, was 65. According to the same data, the mean number of hate crimes per county per year was 1.60. Also listed in Table 1 are the total PHRC events, as well as the number of PHRC noncriminal bias events. The maximum number of nonprofits that existed in a single year in a county was 304. The mean number of nonprofits per county per year was 21.40. The UCR data were not used in the analysis, as there were too few cases of hate crimes to analyze. Only PHRC crimes were analyzed, however, total events were included in this table to provide descriptive data.

Table 1. Descriptive Statistics of Main Variables of Interest

<table>
<thead>
<tr>
<th>Hate Crime</th>
<th>Observations</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHRC Total events</td>
<td>804</td>
<td>4.40</td>
<td>9.1</td>
<td>0</td>
<td>106</td>
</tr>
<tr>
<td>PHRC Crime</td>
<td>804</td>
<td>1.60</td>
<td>4.53</td>
<td>0</td>
<td>65</td>
</tr>
<tr>
<td>UCR Crime</td>
<td>804</td>
<td>1.20</td>
<td>4.55</td>
<td>0</td>
<td>53</td>
</tr>
<tr>
<td>PHRC Noncriminal Bias Events</td>
<td>804</td>
<td>2.80</td>
<td>5.41</td>
<td>0</td>
<td>51</td>
</tr>
</tbody>
</table>

Each observation is a county in a given year from 2000-2011.

<table>
<thead>
<tr>
<th>Nonprofits</th>
<th>Observations</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crime Prevention Orgs.</td>
<td>804</td>
<td>1.19</td>
<td>2.55</td>
<td>0</td>
<td>23</td>
</tr>
<tr>
<td>Neighborhood Development Orgs</td>
<td>804</td>
<td>8.47</td>
<td>20.18</td>
<td>0</td>
<td>158</td>
</tr>
<tr>
<td>Substance Abuse Orgs.</td>
<td>804</td>
<td>1.88</td>
<td>3.64</td>
<td>0</td>
<td>24</td>
</tr>
<tr>
<td>Workforce Development Orgs.</td>
<td>804</td>
<td>1.30</td>
<td>3.55</td>
<td>0</td>
<td>25</td>
</tr>
<tr>
<td>Youth Programs</td>
<td>804</td>
<td>8.55</td>
<td>12.42</td>
<td>0</td>
<td>81</td>
</tr>
<tr>
<td>Total</td>
<td>804</td>
<td>21.40</td>
<td>40.45</td>
<td>0</td>
<td>304</td>
</tr>
</tbody>
</table>

Table 2 provides descriptive information for the other relevant variables in the study, including factors of socially disorganized areas such as poverty and mobility. The poverty measure indicates the percentage of the county that was in poverty in a given year. The mobility measure represents the percentage of the population who had lived in
the same residence for the past five years, measured in 2000. The range of these variables demonstrate the wide variety of social contexts in different counties in Pennsylvania. The percentage of the population that is Black is measured, as is the percentage of the population that is Hispanic. The minimum population of a county in Pennsylvania from 2000-2011 was 4,989 people. The maximum population was 1,539,022. The percentage of Black people in the county population ranged from .21 to 46.56 in a county-year according to ACS data.

Table 2. Descriptive Statistics of Independent and Control Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of Black Pop.</td>
<td>804</td>
<td>4.46</td>
<td>6.49</td>
<td>0.21</td>
<td>46.56</td>
</tr>
<tr>
<td>Poverty</td>
<td>804</td>
<td>11.70</td>
<td>3.47</td>
<td>4.20</td>
<td>27.90</td>
</tr>
<tr>
<td>Percentage of Hispanic Pop.</td>
<td>804</td>
<td>2.73</td>
<td>3.21</td>
<td>0.35</td>
<td>19.80</td>
</tr>
<tr>
<td>Percentage of Registered Voters</td>
<td>804</td>
<td>62.20</td>
<td>5.78</td>
<td>41.46</td>
<td>82.56</td>
</tr>
<tr>
<td>Perct. of Population in the Same Residence</td>
<td>804</td>
<td>65.21</td>
<td>4.70</td>
<td>46.90</td>
<td>74.40</td>
</tr>
<tr>
<td>Population</td>
<td>804</td>
<td>186514.10</td>
<td>263599</td>
<td>4989</td>
<td>1539022</td>
</tr>
</tbody>
</table>

**Bivariate Analyses**

To further examine the differences in these social factors in Pennsylvania counties, I conducted ANOVA tests of difference to observe possible differences in means between four types of counties: rural, urban, Allegheny, and Philadelphia. Table 3 displays the means of the main variables of interest in this study. Counties are labeled as rural or urban based on the census-based classification by The Center for Rural Pennsylvania. Allegheny County (Pittsburgh) and Philadelphia County are separated
from the urban category due to their uniqueness in terms of population size and
demographic breakdown relative to Pennsylvania’s other urban counties.

The results of the F-tests for difference between means show that for all variables
examined, there is a statistically significant difference between the means of the different
types of counties at the p<.001 level. Within a column, means not sharing a common
superscript are significantly different according to a Tukey post-hoc test (p<.05). The
post-hoc tests demonstrate that there is a statistically significant difference between all
county types for the mean number of hate crimes and the mean percentage of the
population that is Black. Philadelphia had the highest Black population and highest
number of hate crimes, Allegheny County had the second most, followed by urban
counties. Rural counties had the lowest number of hate crimes and the lowest rate of
Black population. Allegheny County and rural counties had the lowest mean percentage
of Hispanics, followed by urban counties, then Philadelphia. The rate of nonprofits was
lower in rural and urban counties than in Philadelphia County and Allegheny County.
Poverty was lowest in urban counties, and highest in Philadelphia County. Rural
counties had the lowest mean percentage of voter registration, which was significantly
different from all the other county types.
Table 3. Means and F-Tests of Main Variables of Interest

<table>
<thead>
<tr>
<th></th>
<th>Rural</th>
<th>Allegheny</th>
<th>Philadelphia</th>
<th>Urban</th>
<th>F-Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>588</td>
<td>12</td>
<td>12</td>
<td>192</td>
<td></td>
</tr>
<tr>
<td>Mean Hate Crime</td>
<td>0.57a</td>
<td>7.08b</td>
<td>31.08c</td>
<td>2.54a</td>
<td>633.46***</td>
</tr>
<tr>
<td>Mean Rate of Nonprofits</td>
<td>10.24a</td>
<td>15.12b</td>
<td>17.62b</td>
<td>10.13a</td>
<td>11.94***</td>
</tr>
<tr>
<td>Mean Percent Black</td>
<td>2.75a</td>
<td>13.48b</td>
<td>46.06c</td>
<td>6.53a</td>
<td>671.68***</td>
</tr>
<tr>
<td>Mean Poverty</td>
<td>12.55a</td>
<td>11.78a</td>
<td>23.59b</td>
<td>9.90a</td>
<td>120.17***</td>
</tr>
<tr>
<td>Mean Percent Hispanic</td>
<td>1.78a</td>
<td>1.26a</td>
<td>10.64b</td>
<td>5.27a</td>
<td>118.95***</td>
</tr>
<tr>
<td>Mean Pct. Voter Reg.</td>
<td>61.20a</td>
<td>72.90b</td>
<td>68.33b</td>
<td>64.18a</td>
<td>35.51***</td>
</tr>
</tbody>
</table>

p<.05* p<.01** p<.001***
Note: Within rows, different superscripts indicate statistically significant differences according to a post-hoc Tukey’s test (p<.05)

To further examine differences between county types, I created graphs of hate crime and nonprofits over time. Figures 1 and 2 display the relationship between hate crime incidents in the four types of counties over time. The difference between Philadelphia County and Allegheny County, which both contain two major American cities, and the average rural and urban county is easily visible in Figure 1. Even in Figure 2, where population is taken into account, the rates of hate crimes in Philadelphia and Pittsburgh are large compared to the average rate of hate crimes in the urban and rural counties, except for in 2009. From 2000-2009, in Philadelphia and Allegheny Counties, hate crimes had a decreasing trend. In 2010, both counties had an uptick in the number and rate of hate crimes reported to the PHRC. By contrast, in rural and urban counties, hate crimes were rare and occurred at approximately a steady rate.
Figures 3 and 4 illustrate the trends of nonprofits per county type over time. The rate of nonprofits per 100,000 people increased from 2000-2011 for all county types.
Philadelphia had the greatest overall number of nonprofits and the highest rate of nonprofits. Urban counties had greater average numbers of nonprofits than rural counties, but the average rate of nonprofits appears similar for both county types. In all four types of counties, the rate of nonprofits generally follows an increasing trend over time. Although urban counties have a higher number of nonprofits compared to rural counties, the rate of nonprofits in urban and rural counties appear almost identical.

Figure 3. Average Number of Civic Nonprofit Organizations from 2000-2011 by Type of County
Tables 4-6 display the correlations and their statistical significance between the variables in the study. Table 4 has the overall bivariate relations across all four county types. Tables 5 and 6 show the correlations between the variables for each of the rural and urban counties. The rate of nonprofits is significantly correlated with almost all other variables of interest. However, there is no statistically significant correlation between the rate of nonprofits per county-year and the percentage of Hispanics, voters, the population, and the rate of substance abuse organizations. Most importantly, overall there is not a statistically significant correlation between the rate of nonprofits and the rate of hate crime. In Allegheny County, as well as rural counties, there is not a significant correlation between hate crime and nonprofits. In Philadelphia County and the urban counties, however, there is a statistically significant correlation between the rate of hate
crime and the rate of nonprofits. In Philadelphia County, the correlation is negative and strong, but in urban counties, the correlation is positive and weak.

Table 4. Correlation Matrix of Variables of Interest

<table>
<thead>
<tr>
<th></th>
<th>Rate of Crime</th>
<th>Poverty</th>
<th>Rate of Nonprofits</th>
<th>Rate of Hispanic</th>
<th>Rate of Voter Registration</th>
<th>Year</th>
<th>Population</th>
<th>Rate of Same Residence</th>
<th>Rate of Neighboorhood Prevention Org.</th>
<th>Rate of Substance Abuse Orgs.</th>
<th>Rate of Workforce Development Orgs.</th>
<th>Rate of Youth Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
</tr>
<tr>
<td>-0.02</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
</tr>
<tr>
<td>0.01</td>
<td>0.30***</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
</tr>
<tr>
<td>0.11**</td>
<td>-0.07*</td>
<td>0.16***</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
</tr>
<tr>
<td>-0.04</td>
<td>-0.04</td>
<td>-0.19***</td>
<td>0.01</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
</tr>
<tr>
<td>0.05</td>
<td>-0.02</td>
<td>0.15***</td>
<td>0.09***</td>
<td>0.32***</td>
<td>0.01</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
</tr>
<tr>
<td>-0.04</td>
<td>0.19***</td>
<td>0.15***</td>
<td>-0.17***</td>
<td>-0.13***</td>
<td>0.00</td>
<td>0.32*</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
</tr>
<tr>
<td>-0.01</td>
<td>0.06</td>
<td>0.37***</td>
<td>0.13***</td>
<td>-0.24***</td>
<td>0.02</td>
<td>0.06</td>
<td>-0.12***</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
</tr>
<tr>
<td>0.04</td>
<td>0.31***</td>
<td>0.74***</td>
<td>0.03</td>
<td>-0.18***</td>
<td>0.16***</td>
<td>0.15**</td>
<td>0.17***</td>
<td>0.24***</td>
<td>1.00</td>
<td></td>
<td></td>
<td>1.00</td>
</tr>
<tr>
<td>-0.05</td>
<td>0.13**</td>
<td>0.01</td>
<td>-0.03</td>
<td>0.11**</td>
<td>0.03</td>
<td>0.09**</td>
<td>-0.13***</td>
<td>-0.01</td>
<td>0.10***</td>
<td>1.06</td>
<td></td>
<td>1.00</td>
</tr>
<tr>
<td>0.00</td>
<td>-0.03</td>
<td>0.29***</td>
<td>0.05</td>
<td>0.03</td>
<td>0.00</td>
<td>0.23**</td>
<td>-0.13***</td>
<td>0.17***</td>
<td>0.15***</td>
<td>-0.07*</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>0.00</td>
<td>0.09**</td>
<td>0.08***</td>
<td>0.15***</td>
<td>-0.09*</td>
<td>0.16***</td>
<td>0.01</td>
<td>0.21**</td>
<td>-0.03</td>
<td>0.13***</td>
<td>-0.16**</td>
<td>0.95</td>
<td>1.00</td>
</tr>
</tbody>
</table>

* p < 0.05; ** p < 0.01; *** p < 0.001

Inference for the past 5 years, measured in 2000.
<table>
<thead>
<tr>
<th></th>
<th>Rate of Crime</th>
<th>Poverty Rate</th>
<th>Rate of Nonprofits</th>
<th>Rate of Hispanic Population</th>
<th>Year</th>
<th>Population * Organ.</th>
<th>Rate of Substance Abuse Orons.</th>
<th>Rate of Developent Orens.</th>
<th>Rate of Youth Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate of Crime</td>
<td>1.00</td>
<td>-0.07</td>
<td>0.30***</td>
<td>0.14**</td>
<td>0.05</td>
<td>1.00</td>
<td>-0.30***</td>
<td>-0.06</td>
<td>1.00</td>
</tr>
<tr>
<td>Poverty</td>
<td>-0.01</td>
<td>1.00</td>
<td>0.01</td>
<td>0.02</td>
<td>0.41***</td>
<td>0.19***</td>
<td>0.27***</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Rate of Nonprofits</td>
<td>0.04</td>
<td>-0.04</td>
<td>0.16**</td>
<td>0.16**</td>
<td>0.05</td>
<td>0.37***</td>
<td>-0.28***</td>
<td>-0.06</td>
<td>0.18***</td>
</tr>
<tr>
<td>Rate of Hispanic Population</td>
<td>0.01</td>
<td>-0.01</td>
<td>-0.16**</td>
<td>-0.01</td>
<td>0.15***</td>
<td>0.68***</td>
<td>0.06</td>
<td>-0.10*</td>
<td>0.14**</td>
</tr>
</tbody>
</table>

Table 5. Correlations of Variables of Interest in Rural Counties N=588
<table>
<thead>
<tr>
<th>Variable</th>
<th>Rate of Crime</th>
<th>Nonprofit</th>
<th>Hispanic</th>
<th>Registration</th>
<th>Year</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>N=192</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

```
1  1
** 0.14  1
  0.20**  0.05***  1
  -0.02 -0.02 -0.38***  1
  0.42***  0.31***  0.27***  0.25**  1
  -0.45***  0.01 -0.04  0.31***  0.05  1
  0.27*** -0.22** -0.05 -0.21**  0.00 -0.84***  1
  -0.06  0.23**  0.26*** -0.13  0.05  0.14 -0.08  1
  ** 0.31***  0.78***  0.18*  0.01  0.29*** -0.14 -0.07  0.07  1
  -0.16*  0.01  0.07  0.12 -0.06  0.21** -0.31***  0.11 -0.28***  1
  * -0.15* -0.19**  0.14* -0.09 -0.05  0.18* -0.10 -0.38***  0.21**  1
  *** 0.01  0.00***  0.61*** -0.09  0.27***  0.07 -0.28***  0.12  0.55*** -0.11 -0.23**  1
```

Table 6. Correlations of Variables of Interest in Urban Counties N=192
Multivariate Analyses

Poisson regression models were used in this study because of the distribution of the hate crime variable. Figure 5 is a histogram of the PHRC hate crime data, which demonstrates the acute right skew of the distribution. The mode of the count of hate crimes per county-year is zero. Of the 804 county-years, 435 had no incidents of hate crime according to the PHRC data.

![Figure 5. Histogram of Hate Crime Events for 804 County-Years](image)

Table 7 contains the results of the Poisson regression models. The first column contains the regression coefficients of the pooled model, where each county-year is counted as a unit of analysis. In this model, only measures of social disorganization, (poverty, percentage of the population that is Black and Hispanic, and the measure of mobility) were statistically significant. The second column displays the regression coefficients of the pooled model, which includes county type, with rural counties as the base category. The coefficients for the county types were all statistically significant, suggesting that controlling for the other variables in the model, there is a greater
probability of hate crime in Allegheny County, Philadelphia County and urban counties compared to rural counties.

The third and fourth column contain the regression coefficients from random-effects longitudinal models. The standard errors in these models are clustered to provide a more conservative estimate that allows the inclusion of county type variables. In the pooled model in the first column, only measures of social disorganization (percentage of the population that is Black, that is Hispanic, and that falls below the poverty line, and the measure of mobility) were statistically significant. In the longitudinal analysis, urban counties were the only county type that was a statistically significant predictor of hate crime.

Table 7. Poisson Regression of Social Disorganization Predictors and Civic Engagement Factors on Hate Crime Incidents, 2000-2011

<table>
<thead>
<tr>
<th>Percentage Black</th>
<th>0.101 ***</th>
<th>5.4E-02 ***</th>
<th>0.157</th>
<th>0.176</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poverty</td>
<td>-0.107 ***</td>
<td>-7.9E-02 ***</td>
<td>-0.165 **</td>
<td>-0.084 *</td>
</tr>
<tr>
<td>Rate of Nonprofits</td>
<td>-0.044</td>
<td>-2.8E-02 **</td>
<td>0.038</td>
<td>0.041</td>
</tr>
<tr>
<td>Percentage Hispanic</td>
<td>0.030 *</td>
<td>1.7E-02</td>
<td>0.016</td>
<td>-0.030</td>
</tr>
<tr>
<td>Rate of Voter Registration</td>
<td>0.010</td>
<td>1.3E-02</td>
<td>0.042</td>
<td>0.122</td>
</tr>
<tr>
<td>Perct. of Population living in the Same Residence for 5 yrs.</td>
<td>-0.035 ***</td>
<td>-5.6E-02 ***</td>
<td>-0.036</td>
<td>-0.031</td>
</tr>
</tbody>
</table>

Table 8 contains a logistic model where the outcome is dichotomous variable that indicates whether a county-year had no hate crimes or at least one. The logistic model, in addition to the Poisson models, was conducted to examine whether there is a fundamental
difference between counties that have any incidents of hate crimes in order to test
whether the key difference between counties was in the presence/absence of hate crimes
rather than in the number of hate crimes. In this model, as in the Poisson model, the
statistically significant predictors of hate crime are those that are factors of social
disorganization (percent Black, percent Hispanic, and percent in poverty). The main
difference between the models is the significance of mobility as a predictor. Both
models, however, indicate that the rate of nonprofits is not a significant predictor of either
the number of hate crimes in a county-year, or whether there was a hate crime incident.

Table 8. Logistic Regression of Social Disorganization Predictors and Civic Engagement Factors
on Hate Crime Incidents, 2000-2011

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Logistic Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent Black</td>
<td>1.49E-01 **</td>
</tr>
<tr>
<td></td>
<td>4.81E-02</td>
</tr>
<tr>
<td>Poverty</td>
<td>-1.57E-01 *</td>
</tr>
<tr>
<td></td>
<td>6.89E-02</td>
</tr>
<tr>
<td>Rate of Nonprofits</td>
<td>-4.03E-02</td>
</tr>
<tr>
<td></td>
<td>2.43E-02</td>
</tr>
<tr>
<td>Percent Hispanic</td>
<td>1.58E-01 *</td>
</tr>
<tr>
<td></td>
<td>6.57E-02</td>
</tr>
<tr>
<td>Percent of Registered Voters</td>
<td>1.84E-02</td>
</tr>
<tr>
<td></td>
<td>2.88E-02</td>
</tr>
<tr>
<td>Perct. of Population Living in</td>
<td>-6.55E-02</td>
</tr>
<tr>
<td>the Same Residence for 5 yrs.</td>
<td>4.93E-02</td>
</tr>
</tbody>
</table>

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

Table 9 contains the regression coefficients and the incidence rate ratios for
pooled and panel models that include an interaction term that tests the hypothesis that
nonprofits will have a greater, negative effect on hate crimes in more urban counties. In
the pooled analysis, while holding the other variables in the model constant, nonprofits in
Philadelphia County compared to nonprofits in Pennsylvania rural counties are associated
with a .162 unit decrease in the log of the expected number of hate crimes. This association is statistically significant; it is stronger and statistically significant in the longitudinal model. The interactions between the rate of nonprofits in Allegheny County compared to the rate in rural counties, and the rate of nonprofits in urban counties compared to the rate in rural counties, are not statistically significant. When Philadelphia County is the reference category in the model, there are significant differences between the interaction in all the county types compared to Philadelphia. In Allegheny County compared to Philadelphia County, a one unit increase in the rate of nonprofits is associated with a .23 unit increase in the log of the expected number of hate crimes.
Table 9. Poisson Regression of Social Disorganization Predictors and Civic Engagement Factors and Interaction Effects on Hate Crime Incidents, 2000-2011

<table>
<thead>
<tr>
<th></th>
<th>Pooled County Types</th>
<th>Panel County Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent Black</td>
<td>5.36E-02 ***</td>
<td>0.13</td>
</tr>
<tr>
<td></td>
<td>8.10E-03</td>
<td>0.17</td>
</tr>
<tr>
<td>Poverty</td>
<td>-5.46E-02 ***</td>
<td>-0.03</td>
</tr>
<tr>
<td></td>
<td>1.27E-02</td>
<td>0.03</td>
</tr>
<tr>
<td>Rate of Nonprofits</td>
<td>-1.54E-02</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td>1.06E-02</td>
<td>0.09</td>
</tr>
<tr>
<td>Percent Hispanic</td>
<td>2.80E-02 **</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td>1.06E-02</td>
<td>0.09</td>
</tr>
<tr>
<td>Percent of Registered Voters</td>
<td>-5.49E-03</td>
<td>-0.01</td>
</tr>
<tr>
<td></td>
<td>6.80E-03</td>
<td>0.01</td>
</tr>
<tr>
<td>Perct. of Population Living in the Same Residence for 5 yrs</td>
<td>-5.28E-02 ***</td>
<td>-0.03</td>
</tr>
<tr>
<td></td>
<td>9.03E-03</td>
<td>0.03</td>
</tr>
<tr>
<td>Allegheny</td>
<td>1.34E+00</td>
<td>1.54 *</td>
</tr>
<tr>
<td></td>
<td>9.53E-01</td>
<td>0.75</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>4.82E+00 ***</td>
<td>2.67</td>
</tr>
<tr>
<td></td>
<td>5.80E-01</td>
<td>6.04</td>
</tr>
<tr>
<td>Urban</td>
<td>1.23E+00 ***</td>
<td>1.53</td>
</tr>
<tr>
<td></td>
<td>2.10E-01</td>
<td>0.80</td>
</tr>
<tr>
<td>Allegheny:Nonprofits</td>
<td>4.91E-02</td>
<td>-0.02</td>
</tr>
<tr>
<td></td>
<td>0.29E-02</td>
<td>0.11</td>
</tr>
<tr>
<td>Philadelphia:Nonprofits</td>
<td>-1.62E-01 ***</td>
<td>-0.25 **</td>
</tr>
<tr>
<td></td>
<td>3.28E-02</td>
<td>0.09</td>
</tr>
<tr>
<td>Urban:Nonprofits</td>
<td>-2.92E-02</td>
<td>-0.06</td>
</tr>
<tr>
<td></td>
<td>2.05E-02</td>
<td>0.09</td>
</tr>
</tbody>
</table>

p<.05 * p<.01 ** p<.001 ***
Discussion

Hate crime was generally unrelated to the variables of interest. In particular, and contrary to Hypothesis 1, over all 67 counties and across all time periods, hate crime was not significantly related to the rate of nonprofits in a county. Only in Philadelphia was the predicted negative relationship significant. This significant relationship for Philadelphia was also significant in multivariate analyses, consistent with Hypothesis 2. That is, the rate of nonprofits in Philadelphia, compared to the rate of nonprofits in rural counties, was significantly associated with a decrease in hate crimes, controlling for other relevant variables.

The significance of the social disorganization variables makes sense and is consistent with previous findings. As the Black population increased, so did hate crime. This finding is intuitive because in Pennsylvania most counties have very few, if any, Black residents. It is very hard to have a racially based hate crime in a white, racially homogenous area. As poverty and mobility decreased, hate crime increased, which is consistent with the defended communities perspective. Residents of areas with low rates of poverty and mobility as compared to those in impoverished, high-mobility areas, may feel more threatened by people of different ethnicities moving in and therefore may be more likely to commit hate crime. Additionally, hate crimes were much more common in large urban areas, which are also areas with high rates of poverty and mobility.

It is possible that hate crime and nonprofits function as a feedback loop, wherein response to hate crime, nonprofits are created. Although this may explain part of the
relationship between hate crime and nonprofit organizations, it is unlikely to wholly explain it. During the time studied, nonprofit organizations increased in all county types, while hate crimes generally followed a decreasing trend. Additionally, some types of nonprofits are likely not related to hate crime; for example, substance abuse organizations would not theoretically be created in response to hate crimes.

It is also possible that intergroup contact overall, not necessarily because of nonprofit organizations can explain the difference in hate crime between more urban counties and rural counties. Those who live in Philadelphia, whether or not they are members of any civic organizations are more likely to come in contact with people of a different race than are those who live in a rural county. Different organizations such as churches or schools may allow the type of contact described by Allport that reduces prejudice. It would be interesting to do a study of a particular neighborhood in order to determine where, when, and how people most often come in contact with those of a different race or religion. The data used in this study are not sufficient to test whether or not civic organizations compared to normal neighborhood interactions or interactions in other institutions such as churches, have a greater effect on reducing hate crime.

**Limitations**

Although the results did not demonstrate an overall relationship between hate crime and civic engagement, they did not disprove the possibility of such a relationship. There are several important limitations to this study, which may have contributed to the lack of evidence of the relationship between hate crime and civic engagement. First, hate crimes are relatively rare events. Despite having over ten years of data, the limited numbers of hate crimes meant the statistical power to detect effects in this study is low.
If more data were available, for example, if the same data used in this study were available for 20 or 30 years, the results would have had more statistical power. And, with greater statistical power, a researcher could better estimate the true relationship between the concepts with greater confidence.

A second limitation to this study in terms of examining the relationship between hate crime and civic engagement was that the data came solely from Pennsylvania. The results of this analysis may not be generalizable outside of the state and the timeframe in which the data were collected. Other states may have greater numbers of minorities, different demographic distributions, different historical contexts, and differences in law enforcement policies regarding hate crimes. All of these factors may lead to differences in the occurrence of hate crime and its relationship with civic engagement.

A third limitation is that I was unable to examine how the type of civic organization might affect hate crime. As noted above, organizations concerned with substance abuse would probably be unlikely to affect hate crime. However, organizations aimed at increasing equal status contact among juveniles, such as sports teams and social clubs, may be effective.

These results were not as compelling as those found in the Sharkey et al. study. The lack of significance of the results of the current study may be because I examined a rarer event; hate crimes occur less often than violent crime. Additionally, the current study examines data throughout Pennsylvania, while Sharkey et al. studied only urban areas, where crime rates are often high. Nonprofits may have an effect on crime in major urban areas because they act as a socially organizing force. An extension of the current
study could examine the relationship between hate crimes and nonprofits only in the largest urban areas in the country.

Despite the limitations and overall lack of significant findings, the results from the models that include interactions provide support for the hypothesis that nonprofits in socially disorganized areas lead to a decrease in hate crime. This finding can be used to support policies that would establish more nonprofits in more socially disorganized areas. These nonprofits can act as an organizing force, which discourages delinquent behavior. They may also increase contact between different groups, which may also discourage prejudice, a necessary component of hate crime.

In 2019, hate crimes reported to the UCR reached a 16-year high. Hate crimes against Latinos in particular increased during that time period (Hassan 2019). As Latino immigrants moved into rural areas in Pennsylvania, as well as other areas in the Northeast, there may have been an increase in hate crime. Additionally, political rhetoric surrounding immigrants, especially those from Latino countries, became increasingly prominent and heated during the 2016 election. Future research could study the rate of hate crimes against Latinos in areas with different numbers of civic organizations.

This study could be revisited in a few years in order to draw stronger conclusions about the possible relationship between hate crime and civic organizations in Pennsylvania. As hate crime increases in rural areas, the effect of nonprofits on hate crime in Philadelphia may decrease in relation to rural counties. The data from the PHRC could be a valuable resource in researching these possible trends and relationships.
Conclusion

In conclusion, although rare, hate crimes are serious events that have harmful consequences to both victims and communities. The results of this study, that there is an association between factors of social disorganization and hate crime, were consistent with findings of previous studies. This study sought to explore the possibility that civic engagement moderates the relationship between hate crime and social disorganization in Pennsylvania. Measures of civic engagement, including the rate of nonprofits in a county were overall not related to hate crime.

When interaction effects were added to the model, however, there was a significant, negative relationship between the rate of nonprofits in Philadelphia, compared to the rate of nonprofits in rural counties, and hate crime. These results for Philadelphia suggest that in large urban areas where hate crimes are more common, civic organizations may have beneficial effects.
Bibliography


