5-2019

Mapping Sex Offenders and Treatment Centers in Relation to Social Disorganization

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MAPPING SEX OFFENDERS AND TREATMENT CENTERS

THE UNIVERSITY OF NEW HAVEN

MAPPING SEX OFFENDERS AND TREATMENT CENTERS IN RELATION TO
SOCIAL DISORGANIZATION

A THESIS
Submitted in partial fulfillment
of the requirements for the degree of
MASTERS OF SCIENCE IN CRIMINAL JUSTICE

BY
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West Haven, Connecticut
May, 2019
MAPPING SEX OFFENDERS AND TREATMENT CENTERS IN RELATION TO
SOCIAL DISORGANIZATION

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MAPPING SEX OFFENDERS AND TREATMENT CENTERS

ACKNOWLEDGMENTS

A special thanks to Dr. Kevin Barnes-Ceeney for his expertise, patience, and guidance throughout this entire process. Thank you to Dr. Anne Mahar for her continued support and mentorship as well as her help with the social disorganization factor. Thank you to Dr. Sedelmaier and Dr. Boyd for their support and belief in me. A final thanks to my father, Kamran Amin, for his help with gathering data, and being proud of me for all of my work and my pursuit of higher education.
Abstract

Research shows that the clustering of Registered Sex Offenders (RSOs) is connected to social disorganization. Residential patterns disrupt the reintegration of the RSO population. Utilizing data from Queens and the Bronx, NYC, this study examines RSO clustering in the two boroughs and explores the proximity of community resources to RSO addresses that may assist reintegration. Using data from the New York Megan’s Law and census data for Queens and Bronx Counties, maps were created to study the residential patterns of RSOs. The results show clustering of RSOs in areas with variables pertaining to high social disorganization and a lack of access to resources. It is concluded that RSOs are clustered in neighborhoods with social disorganization and they often have very limited accesses to support or resources.

Keywords: sex offenders, crime mapping, spatial analysis, social disorganization, sex offender resources, residential patterns, New York City, Queens, The Bronx
Table of Contents

Acknowledgments.................................................................................................................... iii
Abstract................................................................................................................................. iv

Mapping Sex Offenders and Treatment Centers in Relation to Social Disorganization .... 1

Literature Review.................................................................................................................... 1
  Policies and Legislation......................................................................................................... 2
    History............................................................................................................................... 2
    Residential Restriction Laws ........................................................................................... 3
  How the System Works ....................................................................................................... 5
  Resources for RSOs............................................................................................................. 8
  Public Opinion .................................................................................................................... 10
  Theory.................................................................................................................................. 14
    Social Disorganization ....................................................................................................... 14
    Labeling Theory................................................................................................................ 18
  Major Studies..................................................................................................................... 21
  Mapping............................................................................................................................... 23
  Community Access to Resources ....................................................................................... 25

Data and Methods ................................................................................................................ 26

Results................................................................................................................................... 29

Discussion............................................................................................................................ 43

References............................................................................................................................ 49
Mapping Sex Offenders and Treatment Centers in Relation to Social Disorganization

There are many negative words that appear in one’s mind when the subject of sex offenders comes up. Words such as monster, evil, and heartless tend to be used to describe sexual offenders. The dehumanization of sex offenders by the public is perpetuated by media reports on violent sex offenders and the inaccurate use of terms such as pedophile. With sex offenders, the punishment continues after sentencing and probation and parole is over. Through the sex offender registry, the label of ‘sex offender’ is attached to ex-offenders, often branding them for life. This collateral consequence makes it difficult for registered sex offenders (RSOs) to reintegrate into communities. Along with labeling sex offenders, policies tend to drive RSOs to find accommodations in fragile communities. These communities are highly socially disorganized and lack the ability to protect against unwanted individuals. Due to this, RSOs cannot reintegrate into communities with strong social ties. This also means lower access to resources and services for sex offenders. Sex offender registration policies may be counter-productive because sex offenders are being pushed into fragile communities that in turn are ill-equipped to provide the resources and support necessary for a positive reintegration and life.

**Literature Review**

Sexual offenders are considered to be some of the most abhorrent criminals due to the level of suffering they inflict upon their victims. People believe that sex offenders can target anyone, regardless of age or gender. This is simply untrue. Many registered sex offenders are labeled as child abusers. This is also untrue as not all RSOs have committed crimes against minors. These misconceptions lead to inaccurate representations of sex offenders. Given the misconceptions, it can be helpful to consider the various typologies of sexual offenders. Lanning (1986) defines a pedophile as a child molester who is attracted to prepubescent children while
defining a hebephile, also spelled as ephebophile, as someone who is attracted to pubescent children. Despite these differentiating categories, child molesters are all commonly referred to as pedophiles. The age of the pedophile is also an important factor as some pedophiles and sex offenders are under the age of 18. The Diagnostic and Statistical Manual of Mental Disorders (DSM) states that the age of a pedophile is set at 16. The media tends to ignore this distinction and focus on crimes with adult offenders and child victims. The confusing nature of the various mental disorders involved with some sexual offending has led to policy and legislative changes that reflect this.

**Policies and Legislation**

Media coverage of sexual assault cases, such as the sexual assault allegations against Supreme Court Justice Brett Kavanaugh, has highlighted the somewhat confusing nature of sexual offense laws. Various laws and specific policies fall under the umbrella term of sex offender legislation. There are both notification laws that involve making public the names, addresses, and crimes of registered sex offenders as well as residential restriction laws that may not allow pedophiles to live within 1000 or more feet of a school or park. Many of these laws have been enacted in response to crimes, committed in the late 1980s and early 1990s, with considerable media attention. The rapes and murders of two children, Megan Kanka (1994) and Adam Walsh (1981), paved the way for the public to intervene and demand reforms within the law, to allow public access, in order to keep children safe from harm.

**History**

Megan’s law was enacted in 1996, mandating all states create community notification standards for registered sex offenders (RSOs) in their area (Gordon, 2013). This includes online databases and door-to-door police notification, involving the police visiting community
members’ homes to inform them of a sex offender living near them, depending on the state. The Adam Walsh Child Protection and Safety Act, enacted in 2006, categorizes sex offenders into tiers based on the severity of their crime. Sex offender tiers are divided by both the severity of the crime as well as the amount of time the offender must be registered as a sex offender. High-level tiers, such as level three, are for offenders who committed crimes that were more violent in nature and must be registered for life. There is also a special tier called “sexually violent predator” where individuals who have a mental illness, determined by the court, that can contribute to their recidivism are subject to special watch and programs. Along with having a registry of sex offenders, several states have created residential restriction laws denying RSOs the right to live where they please. Some state restrictions are more severe than others, pushing RSOs out of communities with less crime and into more crime-ridden ones. These laws create a favorable outcome of resident empowerment by providing the tools necessary for community members to protect themselves and their children from RSOs (Burchfield & Mingus, 2008).

Despite this, states have not seen the full benefits of restricting where RSOs live because of how ineffective residential restriction laws are.

**Residential Restriction Laws**

Experts believe sex offenses are often opportunity crimes and, through the use of community notification, those with prior knowledge are able to protect themselves against any potential threat (Kielsgard, 2014). Along with notification laws, residential restriction laws protect the public from possible RSO recidivism by limiting interaction between these two groups. Residential restriction laws for RSOs are available in approximately 30 states and over several hundred cities (Suresh, Mustaine, Tewksbury, & Higgins, 2010). In fact, since 2005, a large surge of local ordinances has been enacted to regulate sex offender residency by creating
zones and communities that are “sex offender free” (Nieto & Jung, 2006, p. 21). Of course, such a zone is impossible to ensure given that many sex offenders are likely un-convicted and unknown to authorities.

However, there is a major difference between Megan’s law and residential restriction laws. Megan’s law is strictly community notification while residential restriction laws work to displace RSOs by allowing for a strict set of guidelines for residency. Essentially, Megan’s Law works to build a database of all RSOs and to create a system of informing the public if an offender lives in the area.

The residential restriction laws differ significantly by town but, generally, they include living 500 feet or more from an area in which a large number of children congregate such as a school or park. These policies are intended to make it difficult for RSOs to find suitable targets with whom to reoffend, although this policy assumes there is a connection between living near an area with a high density of children and child sexual offending (Socia, 2013). There is very little evidence to suggest that there such a connection between areas with a high-density population of children and RSO recidivism (Socia, 2013). New York City does not have residential restriction laws. However, if the RSO is under parole or probational supervision other stipulations might limit them from living 1,000 feet of a school or child congregated area (New York Sex Offender Registry Frequently Asked Questions, n.d.). Individualized residency conditions stipulated by probation and parole officers are recognized by Human Rights Watch (2007) as best practice for managing the risks particular sex offenders present, and “an integral and important component of effective community supervision” (p. 33). Of course, probation and parole officer stipulated that individualized residency restrictions require careful, collaborative planning with community corrections, housing providers, and private landlords, to avoid
subjecting sexual offenders to transitory, motel-type accommodation on the edge of town. Certainly, insecure housing has been found to have a strong relationship with future recidivism among general offenders (Meredith, Speir, Johnson, & Hull, 2003).

In a lawsuit by the ACLU, the state of Pennsylvania ruled residential restriction laws as a violation of sex offenders’ constitutional rights (American Civil Liberties Union of Pennsylvania, 2008). In a similar case in Iowa, residential restriction laws were removed. In a statement from the Iowa district attorney, the ACLU of Pennsylvania and the PA Institutional Law Project filed a lawsuit, Fross v. Allegheny County, for their strict residential restriction laws which only allowed RSOs to live in forested hilltops and a few high-income areas (Corwin, 2006). Restricting RSOs to only high-income areas, county officials knowingly tried to push sex offenders out of their neighborhoods, violating the Federal Fair Housing Act. After the lawsuit, the laws were struck down by the Pennsylvania Supreme Court and found to be unconstitutional. Residential restriction laws, as Witold Walczak, the ACLU-PA Legal Director notes, are just “political placebos” that trick the public into feeling safe while simultaneously hurting Megan’s Law efforts (American Civil Liberties Union of Pennsylvania, 2008, p. 1). Similarly, there have been many lawsuits filed against states’ and towns’ residential restrictions as they conflict with RSOs’ constitutional right to prohibited after-the-fact punishment. Concerns with this excessive restriction include the lack of correlation between the residential restriction laws and safety, difficulties RSOs have finding places to live, clustering as a result of restrictions, as well as the increase in homelessness among RSOs (Corwin, 2006).

How the System Works

Every state has a different system for categorizing and cataloging RSOs. In New York there are three different levels; level 1 low risk of repeat offense, level 2 moderate risk of repeat
offense, and level 3 high risk of repeat offense and a threat to public safety (Sex Offender Registration Act (SORA), 1995). In addition to these risk levels, an RSO can be designated as a sexual predator, a sexually violent offender, or a predicate sex offender. A sexual predator is someone with a mental abnormality that causes them to commit sexually violent acts. A sexually violent offender is someone convicted of a sexually violent offense such as rape in the first degree. Predicate sex offender means a person who has been previously convicted of a sex offense.

The New York State sex offender registration act was created in 1996. This means that the registry includes RSOs from January 21st, 1996 onward. There are three categories of offenses which require sex offender registration. The first category consists of New York State penal law sex offenses. This category contains offenses such as forcible touching and kidnapping. Within this category, there are 53 offenses. The second category is a felony sex offense from another state, and the third category is any federal offense regarding the exploitation of minors.

There are many offenses listed under the New York sex offender laws. On the site itself, a user can type in a name, zip code, or country in order to get a list of RSOs in the specified area. Each RSOs’ name is a link to more information about that person. This information includes a photo, address, information about the person’s age and appearance, as well as information about the sex crime committed by the RSO. Some challenges arise from using this site for data for this study. For example, when searching for an individual on the sex offender website, several different entries will come up with the same person associated with that entry. This makes data collection a challenge due to the need for intense data clean up. It is difficult to determine why there are several entries for some individuals. It could be that the person was convicted multiple
times or for different sex crimes and these were inputted as separate entries. There is also a possibility that data specialists incorrectly imputed cases into the system resulting in multiple entries. In Tewksbury’s (2002) study a verification process showed that registry addresses are often incorrectly inputted.

Few studies have examined the effectiveness of sex offender registries in protecting the public. Sex offender registries and laws purportedly allow residents access to information about where RSOs are residing and to assist local law enforcement agencies in solving future sex offenses. Proponents of sex offender registries may suggest that such public “naming and shaming” of sexual offenders may have a general deterrent effect (Tewksbury & Lees, 2007). Testing this hypothesis, Sandler, Freeman, and Socia (2008) conducted a time series analysis of New York States’ sex offender registry. They found that there is no support for the effectiveness of registration and community notification laws in reducing sex offenses. This was further explained as the inability to stop rapists, child molesters, sexual recidivism, and first-time sex offenders. The analyses also showed that ninety-five percent of sexual offense arrests were committed by first-time sex offenders. These results suggest that community notification laws are not an effective deterrence for repeat offenders.

Sex crime laws, influenced by high-profile criminal cases rather than research, are not working in the favor of the public, potentially costing taxpayers billions of dollars in maintaining these registries and laws. Sandler et al. (2008) discuss that there is an urgent need to reevaluate sex offender laws and resources. This will allow for a consolidation incorporating what works, rather than limiting resources to policies that are infective and not backed by strong empirical research. Communities with limited resources would be better off strengthening resources rather than stretching them out to fit growing sex offender legislation. Laws such as Megan’s Law can
lead to serious collateral consequences for RSOs, such as job loss and harassment, rather than creating bridges to societal reintegration (Levenson, D’Amora, & Hern, 2007).

**Resources for RSOs**

Court mandated treatments for sex offenders may include several different rehabilitation programs. Similar to general offenders, sex offenders may often present additional criminogenic and non-criminogenic needs in addition to their sexual offending-specific needs. These needs may or may not be related to their sexual and general offending. This is because RSOs may experience a multitude of problems such as drug and alcohol abuse and mental health issues (Marshall, 2007). The most effective treatment is to build a program that attacks most problem areas in order to address critical issues (Lowenkamp, Latessa, & Holsinger, 2006). An RSO may have several issues that need to be addressed through programs. Quite a few RSOs have other problems such as comorbidity of mental illnesses and drug and alcohol abuse. Examining 45 males with a diagnosis of pedophilia, Raymond, Coleman, Ohlerking, Christenson, and Miner (1999) found that 93 percent of the subjects in the study met the criteria for an Axis I diagnosis. Both mood and anxiety disorders were the most common for the population studied. The implications of this are that the treatment of comorbid psychiatric disorders will aid in the holistic treatment of pedophilia. Due to the presence of psychiatric disorders, respondents may have a difficult time responding effectively to sex offender treatment. It is important to add treatments such as drug prescriptions for axis 1 disorders and one-on-one talk therapy to the typical sex offender treatment regimen of CBT and group therapy (Apsche, Bass, & Murphy, 2004). These resources are available to RSOs who are both seeking treatment as well as have mandated treatment. Criminogenic needs, described as the factors that increase risk and are more likely to contribute to crime, are better addressed in groups (Vieira, Skilling, & Peterson-Badali,
Studies support the idea of focusing on four to six criminogenic needs to greatly reduce recidivism, rather than one to three needs, or more than six (Latessa, & Lowenkamp, 2005).

In addition to evidence that notes the strong relationship between psychiatric disorders and sexual offending, there is also considerable research that identifies a correlation between drug and alcohol abuse and sexual offenders. Abracen, Looman, and Anderson (2000) suggest that sexual offenders are more likely to abuse alcohol than nonsexual offenders. Several theoretical models discuss the connection between alcohol and aggressive behaviors. Besides the biological factors that contribute to one’s reaction to alcohol consumption certain psychological factors also have a connection to a person’s level of aggression after drinking or using drugs. Simply put, a person’s beliefs about what alcohol or drugs would do to him or her can influence his or her behavior. Within the Abracen et al., (2000) study 72 rapists and 34 child molesters were compared to 24 nonsexual violent offenders on measures of drug and alcohol abuse. Even though sexual offenders had higher levels of alcohol abuse, nonsexual offenders had more drug and other substance abuse.

Along with the resources that are available to non-sexual offenders there are sex offender specific resources. The Center for Sex Offender Management delivers training programs for probation and parole agencies. They also create a comprehensive list of sex offender management resources through the American Polygraph Association (APA) (Center for Sex Offender Management, 1999). The APA works on having valid and reliable clinical sex offender testing and also trains others to do the same. There is also the Association for the Treatment of Sexual Abusers which is a large group of professionals that work with sex offenders through interdisciplinary actions as well as striving to improve upon techniques for the evaluation and treatment of sex offenders. There are both public and private organizations that work with sex
offenders to treat their issues. This is done through either counseling or assessments of RSOs using testing and management.

In addition, there are specific resources for sex offenders who have committed crimes against children and minors. These resources are tailored to target pedophiles in order to maintain public safety. For example, there are online recovery programs for RSOs who have problems with child abuse images. One such site is called Child Lust Recovery, a site that helps both families and friends of child abuse image users as well as the users themselves (National Sex Offender Resources, n.d). The resources are geared towards pedophiles who have not yet abused a child but recognize that they have a serious problem. This is a public safety initiative but, unfortunately, relies on the pedophile to come to terms with his or her issues in order to reach out for help.

**Public Opinion**

Public satisfaction regarding sex offender legislation is important to focus on when creating reform. Several misconceptions of sex offenders and sex offender legislation leave the general public unsatisfied about the effectiveness of the laws. Perceptions of safety are often connected to one’s understanding of the law. How the justice system should handle violent offenders as well as how they are monitored upon release are important to the public. Applegate, Cullen, and Fisher (1997) examined public opinion of rehabilitative practices for offenders and found that, although it often seems otherwise, the general public does support correctional treatment for violent offenders. Since the early 1990s support for treatment has stabilized. Although the public believes even the most violent offenders deserve rehabilitation there are still many misconceptions about sex offenders held by the public.
Sex offenders are often regarded as being more monstrous than violent criminals such as murderers (Kielsgard, 2014; Nhan, Polzer, & Ferguson, 2012). Both the crime and the person committing the crime are seen as less than human. Megan’s Law and the Adam Walsh Act are two major legislative changes that came about due to sex crimes with large media attention. Benekos and Merlo (1995) describe this reaction to crime control as “bumper-sticker simplicity” (p. 3). Policymakers take measures that are not thought through and are simply quick reactions to situations that they are not fully informed about. Focusing on people’s perceptions of sex offender management in the United Kingdom, Brown, Deakin, and Spencer (2008) found that people believe sex offenders have a high risk of reoffending. In addition, they observe that the public are concerned about community monitoring despite putting a lot of trust in criminal justice professionals for protection and management. When sex crimes are highly publicized, they aim to increase public anxiety. In retaliation, the public reacts by demanding legislative reform. Similarly, in the United States, the public believes RSOS have high recidivism rates, are a high risk to society, and benefit very little from treatment (Levenson, Brannon, Fortney, & Baker, 2007). It is concluded, in the study, that as long as sex offenders are seen differently from regular offenders, they will always be marginalized instead of fitting back into society.

Societal reintegration is based on a complex group of social bonds and ties. Circles of Support and Accountability (COSA), a Canadian support system for high-risk sexual offenders uses community members as support systems (Wilson, Cortoni, & McWhinnie, 2009). COSA is made up of an ex-offender and several community volunteers from different sections of a community, such as law enforcement and businesses. The group meets on a daily basis for up to 90 days after the sex offender is released. Members work on building a strong friendship and a
level of accountability with the sex offender. These community members have the tools and resources necessary for a sex offender reintegrating back into society.

Studies show that sex offenders do not have a high risk of reoffending (Alper, Durose, & Markman, 2018; Meloy, 2005). Despite this, the general public believes that sex offenders are more likely to recidivate leading to community initiatives to push out RSOs. Collective efficacy is when members of a community control the behavior of people and groups within the community through means such as vigilantism and shaming. Due to strong collective efficacy, sex offenders may experience difficulties reintegrating back into society both during and after sex offender registration. They are forced out of socially organized areas due to collective efficacy and therefore must live in areas with low social ties. RSOs living next to community members leads to a perception of an unsafe neighborhood which makes RSO reintegration more difficult. Examining how residents perceive the reputation of their own neighborhoods, Permentier, Bolt, and van Ham (2011) found that people who are satisfied with their neighborhood are less likely to move out. The reputation of a neighborhood is based upon the collective beliefs about the neighborhood’s condition (Permentier et al., 2011). A combination of factors is assessed by the people who live in the neighborhood and are considered before a conclusion can be made. There are very specific factors of neighborhood satisfaction such as approval of neighborhood attributes and the dwelling, objective neighborhood characteristics, and personal and household characteristics. The authors of the above study found that neighborhood satisfaction and perceived reputation are related concepts.

Kielsgard (2014) accurately describes the social and political implications that the myth-driven fear of registered sex offenders cause. He states the public opinion of sex offenders is formed through the assumptions that sex offenders, specifically pedophiles, do not benefit from
mental health treatment (Kielsgard, 2014). These false claims lead to sex offender policies that are not focused on rehabilitation, rather the “warehousing” of RSOs (p. 248). The public supports these policies because of the fear that comes from just the name “sex offender.” It is difficult to tell if the connection between policies and a collective belief system simply exacerbates the problem of RSOs in communities or helps to maintain a safe environment for all.

Kielsgard (2014) accurately outlines myths about sex offenders that both laymen and professionals believe have led to today’s stringent RSO policies. He discusses how laws, such as Megan’s Law and the Adam Walsh Child Protection and Safety Act, were enacted only after two sensationalized and violent sex crimes happened. When these crimes occurred, the media exaggerated them as regularly occurring and highly dangerous crimes that could happen to any child. Megan’s Law is set in place so parents may inform their children to stay away from certain areas or people, as many experts believe that sex offenses are opportunity crimes (Kielsgard, 2014). This belief, although true, is contradictory in a sense because another myth suggests RSOs are generally incurable. RSOs are mainly opportunity criminals, according to Kielsgard, therefore, most times if they are out of the reach of a potential victim, no harm can come. RSOs are generally denied psychiatric help because of residential restriction laws barring them from accesses to mental health facilities. Sex offenders also have the lowest recidivism rate than any other criminal offenders (Kielsgard, 2014). The other side of this is that low recidivism is due to the reality of low reporting and long-term recidivism. Mislabeling is both a legislative and political tool to support a get tough on crime attitude. In fact, RSOs who are in treatment and have found stable jobs are even less likely to recidivate showing that a combination of treatment and employment opportunities can work (Kruttschnitte, Uggen, & Shelton, 2000). These myths
MAPPING SEX OFFENDERS AND TREATMENT CENTERS

are constructed into policies and sentencing guidelines that severely restrict the rights of registered sex offenders well after their punishment in prison.

Theory

Several theories regarding neighborhood characteristics and behavioral characteristics are important for studying sexual offenders. The punishment of sex offenders has unintended consequences such as labeling. Labeling can lead to an increase in recidivism in certain offender groups. Social disorganization and cultural capital are neighborhood theories that contribute to the exclusion of specific groups living in communities with specific characteristics. All of these theories have a significant impact on sex offender clustering and residential patterns.

Social Disorganization

Social disorganization is a characterization of neighborhoods through specific factors ranging from demographic to physical markers. According to Shaw and McKay (1942), social disorganization can be categorized by factors such as racial/ethnic heterogeneity, residential mobility, shared norms and values, and concentrated disadvantage. Racial and ethnic heterogeneity describes when many different races and ethnicities are living in one community. Residential mobility is the rate at which people are moving in and out of the neighborhood. Shared norms and values are the ability of members of a community to control the behavior of individuals and groups in the community (Shaw and McKay, 1942). The concentrated disadvantage is the level of disadvantage a community has based on poverty. While studying juvenile delinquency in Chicago, Shaw and McKay found neighborhoods with high levels of social disorganization to have higher levels of crime. Shaw and McKay (1942) posit that racial and ethnic heterogeneity of neighborhoods coupled with high rates of residential mobility inhibits the development of shared norms and values. In socially disorganized neighborhoods,
Shaw and McKay (1942) suggest, limited shared norms and values lead to the ineffectiveness of community members to control which, in turn, leads to flourishing crime.

**Collective Efficacy**

Research shows RSOs tend to cluster in areas of high social disorganization (Gordon, 2013; Hipp, Turner, & Jannetta, 2010; Socia & Stamatel, 2012). Scholars suggest that there is a lack of collective efficacy in these disorganized neighborhoods. Collective efficacy is the ability of the community to control the behavior of individuals within the neighborhood in order to push out any unwanted persons (Gordon, 2013). Residents of a community work together, whether it be directly or indirectly, to reinforce acceptable behavior that is agreed upon by all members of the community. In this way, community members informally police their own neighborhood and push out crime or potential crime. In fact, most people police each other regularly in order to maintain a level of conformity. Foucault (1977) discusses micro-penalty; where “light physical punishment(s) to minor deprivations and petty humiliations” are used in everyday life to police people (p. 178). These minor punishments correct peoples’ behavior by calling out unwanted actions. Community members can give these punishments if the community itself has adequate collective efficacy. Collective efficacy is built within a community over time through the formation of social ties (Sampson, Raudenbush, & Earl, 1997). The factors that affect social disorganization also affect the strength of collective efficacy. Sampson, Raudenbush, and Earl’s (1997) study in Chicago showed that 70 percent of the variation in collective efficacy was due to concentrated disadvantage, a large population of immigrant residents, and residential stability, therefore, making it an important construct that measures the safety of a neighborhood. Collective efficacy is in connection with systemic social disorganization and social capital (Morenoff, Sampson, & Raudenbush, 2001). Safer, more socially organized neighborhoods, have
higher levels of collective efficacy and social ties, an environment that would foster community and care in others. Social ties are important in that they increase the willingness of residents to engage in surveillance in public spaces (Bellair, 1997).

Unfortunately, strong collective efficacy can result in the systematic removal of people like sex offenders from neighborhoods and communities. Offenders could benefit from a community with strong ties yet become the target that those communities wish to flush out. Gordon (2014) shows that collective efficacy can lead to harassment of RSOs in many different forms such as physical threats, property damage and bullying of RSOs’ family members. Areas with low social disorganization have lower levels of fear and higher trust among residents who wish to intervene in situations that do not benefit the collective community. As such, RSOs are pushed out and into areas of high social disorganization that do not have this trust among community members.

**Cultural Capital**

Bourdieu (2011) discusses cultural capital as an important factor in one’s social life. Cultural capital comprises the embodied state, objectified state, and institutionalized state. An individual acquires certain skills, tastes, education, and other symbolic elements by being part of a particular social class. An embodied state could be an accent while an objectified state of cultural capital may be owning a large house and an expensive item. The institutionalized form of cultural capital is made up of degrees or qualifications. People who live in areas that are more socially organized will have a greater chance to accumulate more cultural capital because of better opportunities. Areas of low social disorganization have people who make more money and have higher education, both important factors of cultural capital.
Sex offenders who are released from prison and who are seeking reintegration need strong cultural capital. Examples of this kind of capital are career skills, qualifications for jobs, and education. Along with cultural capital, reintegrative shaming is essential for sex offenders seeking a better transition back into society. Braithwaite (1989) discusses the theory of reintegrative shaming which emphasizes shame within punishment. Punishments must focus on behavior rather than offender characteristics, such as socioeconomic status. This then strengthens the moral bond between the offender and the community. Successful reentry requires the ability to socialize in a community context, social networks, and well-paying jobs (Burchfield & Mingus, 2008). Recidivism and reintegration are affected by cultural capital. It has been found that offenders who are not exposed to communities with high cultural capital have a higher recidivism rate (Kruttschnitt, et al., 2000).

**Social Capital**

Social capital is another factor discussed by Sampson, Morenoff, and Earls (1999) that is similar to cultural capital in that it is gained through one’s standing in society. Social capital is made up of all the resources acquired by an individual or a group through strong networks and relationships among peers. Relationships with family members, friends, acquaintances, and colleagues all form a stock of social capital that can be leveraged to support community reintegration. As is the same with cultural capital, social capital is beneficial to elites in society who use networking to advance life factors such as careers in which ones needs connections to obtain them. This capital describes the exclusivity of the upper and middle classes (Bourdieu & Wacquant, 1992). Groups use social capital to communicate information and ideas in the community. This can extend to the sharing of information of the residency of RSOs if one is to move into the community geographically. Coleman defines social capital as social action that is
MAPPING SEX OFFENDERS AND TREATMENT CENTERS

trained by social structure while still being goals in the self-interest of the individual while Putnam looks at social capital as a group collective benefit (Tzankis, 2013).

The sharing of information that can keep community members safe is actually helpful in creating a nonviolent living environment (Galea, Karpati, & Kennedy, 2002). Unfortunately, a potential outcome of social capital is those who are not in the social loop are outcasts. RSOs are being forced out of neighborhoods due to the shame and stigmatization that reduces their social capital. Society purposely stigmatizes certain individuals than others and effectively removes RSOs from the community. Conducting anonymous interviews with RSO’s Burchfield and Mingus (2008) found that many sexual offenders expressed a general feeling of anxiety and fear due to the backlash they face from their neighbors. For example, one RSO expressed how when his neighbors posted flyers with his conviction details around town he feared for his own safety. This harassment is demonstrative of a situation where high levels of social capital engender collective efficacy and action, which results in the exclusion of sexual offenders from particular communities. Community members, in socially disorganized neighborhoods, have less ability to maintain guardianship over social spaces to collectively push out RSOs.

**Labeling Theory**

Labeling theory seeks to explain the reason why specific actions are deemed deviant or criminal. Specific actions are not inherently criminal but are defined as such by people in power through laws and the reinforcement of these laws by punishments. Societal norms are supported by the interpretation of what is deviant and what is not deviant (Spector & Kitsuse, 2017). People are then classified as either criminals or as good, hardworking citizens. It is important to distinguish between deviant people and behaviors. Society will label behaviors as deviant and as such “otherize” individuals engaging in these behaviors in order to feel morally superior (Becker,
1963). The labeling of someone as a criminal is considered “secondary deviance” because society condemns the behavior of a person after the crime itself (Lemert, 1972, p. 53).

In the context of sexual crimes, a combination of strict laws and restrictions along with a public misunderstanding of RSOs correlates with an extremely negative effect within the context of labeling theory. Sex crimes are considered far worse than violent crimes, such as murder or homicide because of the widespread belief that pedophilia is incurable and that sex offenders have high recidivism rates (Kielsgard, 2014). Sex offenses are also a personal violation, a taboo, and creates a significant level of psychological harm in victims. Being labeled as a sex offender has many social and political implications. Megan’s Law requires individuals convicted of sexual offenses to register. Registration period depends upon the severity of the crime and the directions of the Judge at sentencing. In some states, the lowest tier requires approximately 15 years of registration and the highest requires a lifetime of registration. The legal label of “sex offender” has social implications as well, forcing RSOs to be defined by their crime and be denied certain rights because of it.

Kielsgard (2014) accurately describes the social and political implications that the myth-driven fear of registered sex offenders engenders. He states the public opinion of sex offenders is formed through the assumptions that sex offenders, specifically pedophiles, have high recidivism rates and sex offenders are incurable and do not benefit from mental health treatment (Kielsgard, 2014). These false claims lead to many of the sex offender policies in place today, such as registration, notification, and residency restrictions. The public supports these policies because of the fear that comes from just the name “sex offender.” Civil servants who write sentencing guidelines and courtroom officials, such as Judges, who choose how long someone is sentenced for based on a particular sentencing range, are not immune from these recidivism myths and may
sentence accordingly (Kielsgard, 2014). This is known as the ‘pendulum-effect;’ when the law of any social issue changes dramatically due to a shift in public attitudes (Brakel & Cavanaugh, 2000). Fear causes people to often react irrationally and because of this RSOs suffer from the myth-driven policies that often result in a denial of help.

Alienation from communities due to the public’s perception of registered sex offenders has been studied in the context of labeling theory. Labeling has a strong effect of isolating sex offenders as many stereotypes and misconceptions are brought to mind when the public is faced with the words “sex offender.” How RSOs are perceived by others greatly affects their management. Surveying 5,000 households in North West England, Brown, Deaken and Spencer (2008) asked the public on their perceptions of RSOs and the management of them by “officials.” The results showed the majority of the public had little faith in how safely sex offenders are managed (Brown et. al., 2008). The public is in a ‘media-controlled panic’ when it comes to sex crimes and the need for community members to protect themselves and their children (McCartan, 2004). There is a prevalent feeling of anxiety over RSOs by families and individuals alike. This may be due, in part, to the general perceived idea that sex crimes are the most heinous of crimes, worse than that of murders or other violent crimes (Brown, et al., 2008).

Another study examined how the sex offender label, when applied to both juvenile and adult sex offenders, effects public opinion (Harris & Socia, 2016). “Sex offender nomenclature” is connected to support for policies that share information about and restrict RSOs (Harris & Socia, 2016, p. 674). The effect labeling has on policy also, in turn, affects RSOs. Fear of community backlash and concerns for the safety of their families causes RSOs to be wary of where they live as well as their actions in public (Burchfield & Mingus, 2008).
As mentioned previously, there is very little support showing that said policies help create a safe environment for communities and RSOs alike. In fact, research shows residents are not aware of sex offenders living in their neighborhoods suggesting that the notification laws that are in place are not working to make communities aware of possible dangers (Burchfield, 2012). The consequences of labeling also are shown in the opinions of professionals, meaning those who work closely with RSOs in the field such as parole officers, and their ability to reinforce these policies. Researchers surveyed 700 community corrections professionals in order to study the relationship between personal demographics and views on RSO policies such as notification laws and residential restriction laws. Professionals who are more conservative and have less work experience are more likely to be supportive of restriction policies (Payne, Tewksbury, & Mustaine, 2013).

Major Studies

Using spatial analysis as a form of analyzing residential patterns of registered sex offenders (RSOs) is important because the RSO population’s perceived effect on others is connected to how close they live to others. Crimes such as rape, burglary, and assault are crimes that need vulnerable and accessible targets. By evaluating the effectiveness of residential restriction laws through mapping, it can be possible to assess the general public’s level of safety. Research conducted by Grubesic (2010) was the prototype for spatial analyses of sex offenders. In his research, Grubesic theorized that sex offender residency restriction laws contribute to the high concentration of RSOs living in certain areas. Through the use of mapping, he was able to identify a phenomenon he calls “clusters.” Clusters of RSOs are areas that have a noticeably higher concentration of sex offenders in comparison to the surrounding areas. This is likely due
to the limited residential options offered to RSOs. Grubesic’s study is one of the first to conduct this type of spatial analysis and sets a precedent for further research.

Having similar conclusions to Grubesic while examining census data and RSO residential zip codes, Gordon (2013) found that RSOs live in areas with high levels of social disorganization. It is difficult to determine what specific factors cause RSOs to live in these areas of social disorganization. Studying all sides of this causal question is essential for understanding these residential patterns. It is also equally difficult to determine if RSOs contribute to social disorganization, if social disorganization attracts RSOs, or if a bi-directional relationship between social disorganization and RSOs exists. Scholars argue that RSOs move into less desirable neighborhoods due to limited housing options (Suresh et al., 2010). Studying the spatial residential patterns of RSOs can help in understanding the experience of living as an RSO in different neighborhoods. Gaining such insight may help in the formulation of policies that both assist sexual offenders’ reintegration into communities while maximizing public safety (Suresh et al., 2010).

Sex offender registration potentially causes collateral consequences for communities by creating housing instability, limited employment opportunities, and limited social support for RSOs (Suresh et al. 2010). Clustering of sex offenders in areas of social disorganization is shown to be greatly affected by economic factors such as income, poverty, and employment. Efforts to legislate sex offender residency has the potential unintended consequence of forcing sex offenders to migrate to communities with greater social disadvantage and other social problems that do not allow them to protect themselves from persecution (Levenson, 2008).
Mapping

The history of using maps as a way to identify geographical patterns of crime and social problems dates back well into the Victorian era. Since the Victorian era, great advances in technology allow us to utilize maps for a multitude of disciplines. Mapping software, such as ArcGIS, offers many different tools in order to statistically analyze these maps as well as build maps from scratch much quicker, a significant improvement from hand-drawn maps in the 1800s. This software can also be used to create more dynamic maps that move or show the change of data over time.

Henry Mayhew, an English social researcher studied the lives of the Victorian poor. In his work (1851) he created detailed maps of London with factors such as criminality, ignorance, number of illegitimate children, and number of early marriages (Mayhew, 1969). At the time these were considered factors contributing to and indicative of poverty. Another researcher, Belgian Mathematician Adophe Quetelet applied probability and statistics to help understand specific factors. For example, Quetelet studied the propensity for crime based on age by tracking criminality in males and females of varying ages (Quetelet, 1984). He also created landmark choropleth maps on crimes in France in 1831. A choropleth map uses gradients and shading to indicate different values within an area.

Mapping has a rich history and many uses outside of criminal justice and sex offender research. English social researcher Charles Booth (1889) mapped, by hand, the different levels of poverty in London. Through this work, Booth found that the growing population of London causes people of different income levels to group together with those experiencing the highest level of poverty located in the center of London (Booth, 1903). The beginnings of social cartography examined income levels in dense and growing cities during the Victorian era. Due to
limited technology researchers would send out groups of people into the city to collect data by hand through observation. Maps were hand drawn and colored. Patterns could then be identified through visual examination of mapped geographies. Such a visual representation of data may present a clearer understanding than numbers within statistical tables.

Mapping is used outside of the justice system as well. For example, many of us use mapping in our day to day lives through GPS tracking. The United States postal system uses mapping to track packages and to send out their mail carriers. Most modern cars have GPS tracking and all modern phones use it as well. The police use mapping in order to identify hot spots of crime (Chainey, Tompson, & Uhlig, 2008). This makes it easier and more efficient to deploy officers to places with high crime. The police also use triangulation of cellphone data to identify whether a suspect is in a particular location. In the criminal justice system, probation and parole utilize GPS for electronic ankle bracelets. This helps to manage house arrests and monitoring curfews. Several sex offender registry sites contain an interactive map of RSOs. This allows users to narrow their searches to areas surrounding their address in order to find out who is living closest to their home. The name of this process is the Sex Offender Registration and Notification Act (SORNA). Geospatial analysis has a very real and important place in both society and the justice system.

Due to its popularity and effectiveness in studying residential patterns, a geospatial analysis was chosen to evaluate the paper’s data. Several researchers have successfully used geospatial analysis to study the residential patterns of RSOs (Grubesic, 2010; Socia, 2013; Suresh et al., 2010). Mapping helps to identify specific factors within a community and see how such variables influence spatial crime patterns. With the use of census data, mapping specific
community and neighborhood factors become easier. Creating a visual representation of the data also conveys a greater understanding of the results.

The software being used in this study is ArcGIS Pro version 2.3.3, a software used in many previous studies regarding sex offender residential patterns. ArcGIS is used for both creating maps as well as running statistical analysis on geographical data. This software contains several tools that allow users to build maps, both static and dynamic, run analyses, and filter through several different factors that may be inputted into the software.

**Community Access to Resources**

Understanding the relationship between residences and community resources within neighborhoods is an important focus of this study. The use of One-Stop-Shops for resources has been a useful way for community members and those in need to have easy and quick access to resources such as health clinics and needle exchanges (Askim, Fimreite, Moseley, & Pedersen, 2011). Victim Support, a charity for victims in Britain, created the concept of the One-Stop-Shop. This is where the police communicate information to victims about their cases such as developments and core arraignments by channeling information from all areas such as the police and the courts through the police (Hoyle, Cape, Morgan, & Sanders, 1998). With this kind of all in one communication, it is hypothesized that victims will have less anxiety and more of an understanding of the criminal justice system. Along with resources that connect the public to criminal justice resources social resources are just as important for reintegration. Public amenities, such as parks and social and cultural services, are resources that allow for health promotion, informal meeting places, and places where social relationships can be created and maintained (Baum, 1999). A study conducted in New Zealand mapped resources such as recreational facilities, educational facilities, and health facilities among others (Witten, Exeter, &
Field, 2003). The authors then looked at the level of accessibility of each of these resources and facilities by using the Community Resource Accessibility Index (CRAI). It was found that this process is helpful in creating maps that show areas of stronger accessibility to resources (Witten et al., 2003). Using this process one can find the different factors in neighborhoods that lead to higher levels of accessibility. Several other others looked at resource accessibility and found that resources can difficult to access due to spatial restriction or demographic constrictions such as gender of the offender (Reisig, Holtfreter, & Morash, 2002; Sloas, Steele, & Hare, 2012).

**Data and Methods**

This quantitative cross-sectional research design draws on spatial analysis to understand the relationships between registered sex offender residences, neighborhood demographics, and community resources. Spatial analysis is a type of geographical analysis that looks at human behavior in a locational way. The purpose is to find patterns of human behavior that are expressed through mathematics and geometry. This type of analysis is the most fitting for this study because the aim is to track the residential patterns of a population of registered sex offenders and to determine what factors may be influencing these patterns. The hypotheses studied in this research as follows: H1: There is a relationship between socially disorganized areas and sex offender clustering. H2: As social disorganization increases sex offender clustering increases. H3: There is a relationship between sex offender clustering and resource availability. H4: As sex offender clustering increases resource availability decreases.

This study focuses on the boroughs of the Bronx and Queens in New York City. To the author’s knowledge, this is the first study of this nature examining sex offender residency patterning in New York City. The Bronx and Queens were identified as suitable locations because of the high presence of sex offenders, the diversity and density of the neighborhoods,
and the prevalence of services. The home addresses of registered sex offenders were gathered from the New York State sex offender registry. There are specific qualifications needed for someone to be registered as a sex offender. In New York, once someone has been arrested for a sex crime a judge, after a court hearing, assigns the offender a risk level. Level two and three offenders’ information are publicly available (Division of Criminal Justice Services, n.d.). Level two and three RSOs and registered for 20 years. Only RSOs who are not currently incarcerated or in custody are represented in this sample population. All identifying factors, besides addresses, are removed to offer some protection to the individual identities of the sample population. In addition to RSO addresses, the addresses of resources for RSOs are in this data set. Some addresses were collected through google maps. Other addresses, such as resources for mental health, were taken from government websites (“Directory of OMH Facilities,” 2019.). Specific services were chosen through collaborative conversations with community corrections specialists. The author spoke to several specialists in the field of community corrections as well as examined the research in order to determine what resources to focus on in the study. The key resources identified are drug and alcohol centers, employment agencies, homeless shelters, mental health facilities, probation and parole offices, soup kitchens, and syringe exchanges. The addresses of these resources were chosen based on their location in Queens and the Bronx in order to study their distance from the RSO addresses.

Along with address data census data was utilized in order to create a level of social disorganization for the Bronx and Queens. This information was obtained from the 2010 national census data made available to the public through the website “American Fact Finder”. Specifically, the census data is from the American Community 5 Year Survey and Estimates between the years 2006 and 2010. The information taken from this census data is related to the
census tracts of Queens and the Bronx. Census tracts are roughly equal to the designated
neighborhoods in an area. They are created by the Census Bureau as a more effective way of
studying populations. This census data contains; total population, percent of all of the races,
percent of occupied and vacant housing, percent of owned and rented housing, percent
unemployed, percent in poverty, and median income.

The social disorganization factor was created by taking the number of rented homes per
census tract, poverty level per tract, and unemployment level per tract. A factor analysis was
used to create coefficients regarding these neighborhood characteristics. The resulting formula is
SD = (rent*.816) + (poverty*.909) + (unemployment*.682). This algorithm comes from
Grubesic’s (2010) study which is the main resource for this paper.

This research uses secondary data to build maps to study geographical patterns. Hotspot
analysis shows what areas have high concentrations of RSOS. The hotspots created are
considered clusters of sex offenders. These clusters of RSOs were used to measure the distance
from resources. Creating an average of RSO addresses, what is being called a cluster, makes it
easier to study the distance of resources. This is because it would be time-consuming to study the
distance of resources from each singular address. The hotspots are created using the Getis-Ord
Gi* statistic (ArcGIS Pro, 2018). This equation outputs Z and P values that describe high and
low values that cluster spatially. Neighborhood characteristics are put into the equation and the
output is the cold and hotspots. The Getis-Ord Gi* statistic is set up as the following:

\[
G^*_i = \frac{\sum_{j=1}^{n} w_{i,j} x_j - \bar{X} \sum_{j=1}^{n} w_{i,j}}{S \sqrt{\frac{[\sum_{j=1}^{n} w_{i,j}^2 - (\sum_{j=1}^{n} w_{i,j})^2]}{n - 1}}}
\]
Along with the Getis-Ord Gi* statistic, ArcGIS measures the distance between RSO clusters and resources. Through these analyses, the residential patterns of RSOs, as well as the availability of resources for RSOs can be evaluated.

In this study, the independent variable is registered sex offenders and the dependent variables are the level of social disorganization and a cluster’s distance from resources and treatment centers.

**Results**

There is a total of 2,294 registered sex offenders in the data set with 881 addresses in Queens and 1,413 in the Bronx. The population of Queens is 2.4 million and the population of the Bronx is 1.5 million. Thus, 0.10% of the total population in both boroughs are registered sex offenders. In Queens County, the median household income is $62,207 with an unemployment rate of 3.7%. In the Bronx County, the median household income is $37,525 with an unemployment rate of 5.7%. Thus, the Bronx has a considerably lower median income and higher unemployment rate than Queens. There are varying numbers of addresses for each of the resources. The resource with the greatest number of addresses is employment agencies at 133. The resource with the least number of addresses is mental health facilities at two. The geoprocessing was based on the census tracts of New York City. Figure 1 depicts large groups of RSOs living very close to each other. The Bronx shows significant clustering in comparison to Queens where clusters are more spread out. This may be due to the significant difference in size.
between the two counties; Queens is much larger than the Bronx, as well as the type of housing available in each borough.
Figure 1

Registered Sex Offender Addresses in Queens and Bronx, NY
Figure 1 does not account for any RSOs living at the same address. RSOs with overlapping addresses are signified with a single dot. For this reason, a hotspot analysis is conducted to more accurately depict clusters. Figure 2 shows the hotspots in both Queens and the Bronx.
Figure 2

RSO Hotspots in Queens and Bronx, NY

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS User Community.
Figure 2 shows significant hotspots with 99% confidence in both boroughs, meaning that 99% of the confidence interval are included within the parameters of the data. There are no cold spots only areas that are not significant due to the fact that there are only two “groups”; RSO and no RSO. The hotspots signify the Z-scores that are the result of the Getis-ord Gi*. Strong, significant, and positive Z-scores support a large number of hotspots in the target areas. This data alone shows that this population has a significant residential stake in Queens and the Bronx County.

Identifying what resources overlap with these hotspots allows for a deeper understanding of how available community resources are to RSOs. Resources were mapped in Figure 3.
Figure 3
Figure 3 shows the overlap of resources and sex offender hotspots. In Queens, the mental health facility, the Creedmoor Psychiatric Center, is located in a strong hotspot in Queens Village. The mental health facility in Morris Park, Bronx, called the Bronx Psychiatric Center, is not located in a hotspot. Since most of the Bronx contains hotspots resources overlap with them. In Queens, there is less of a pronounced pattern. Most areas that are not significant hotspots do not contain any resources. The level of social disorganization was calculated and added to the map to study the demographics of the neighborhoods RSOs tend to live in.

Figure 4 shows the level of social disorganization by census tract. In Bronx County, RSO addresses clearly overlap with areas of high social disorganization. The South Bronx has levels of social disorganization exceeding 198 units. Several points of addresses are on areas that have a social disorganization level of fewer than 51 units. When compared to the hotspot map, Figure 2, there is a slightly stronger correlation between addresses of sex offenders and social disorganization.
Figure 4

Level of Social Disorganization in NYC

<table>
<thead>
<tr>
<th>Level of Social Disorganization</th>
<th>Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>SD</td>
<td>≤25.100521</td>
</tr>
<tr>
<td></td>
<td>≤51.137027</td>
</tr>
<tr>
<td></td>
<td>≤77.959964</td>
</tr>
<tr>
<td></td>
<td>≤107.330971</td>
</tr>
<tr>
<td></td>
<td>≤198.904678</td>
</tr>
</tbody>
</table>

In order to determine if resources are available, and close to RSO clusters, the distance was measured between hotspots and resources. Creedmoor Psychiatric Center of Queens is within a hotspot with an area of approximately 7 square miles. It is also 6 miles from the farthest hotspot and 1.3 miles from the nearest hotspot. The Bronx Psychiatric Center was not within a hotspot. The distance from the farthest hotspot is 8.6 miles. There is a distance of approximately 4.58 miles from the nearest hotspot. In regards to the syringe exchanges, there are four locations, three in Queens and one in the Bronx. All four are located within hotspots. With employment offices, there are so many of them that they are readily available for most RSO clusters. These maps allow for an overview look at the target areas. Data from each census tract can also be evaluated. Table 1 shows the top ten census tracts in the Bronx with the most RSOs.
### Table 1. Neighborhood Characteristics of Top 10 Bronx Census Tracts with the most RSOs

<table>
<thead>
<tr>
<th>Census Tract</th>
<th>RSO</th>
<th>White (%)</th>
<th>Nonwhite (%)</th>
<th>Owned Homes (%)</th>
<th>Rented Homes (%)</th>
<th>Poverty (%)</th>
<th>Median Income ($)</th>
<th>Unemployed (%)</th>
<th>SD Factor</th>
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<tr>
<td>19</td>
<td>107</td>
<td>37.20</td>
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<td>31,000</td>
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<td>114.73</td>
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### Table 2. Neighborhood Characteristics of Top 10 Queens Census Tracts with the most RSOs

<table>
<thead>
<tr>
<th>Census Tract</th>
<th>RSO</th>
<th>White (%)</th>
<th>Nonwhite (%)</th>
<th>Owned Homes (%)</th>
<th>Rented Homes (%)</th>
<th>Poverty (%)</th>
<th>Median Income ($)</th>
<th>Unemployed (%)</th>
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</tbody>
</table>
Table 1 shows the top ten census tracts with the most registered sex offender addresses in the Bronx. The tract with the most RSOs in the Bronx is tract 19. This tract is approximately where Mott Haven is. This tract contains 107 RSOs. Most of these RSOs are located in one spot which is the Willow Ave Shelter. This census tract is 37% white and 32% nonwhite. 6% of homes are owned and 93% of homes are rented. 38% of the population in this tract are living below the poverty line. The median income is $25,093 and 28% of the population is unemployed. The level of social disorganization is 130.53, suggesting that it is very socially disorganized.

The tract with the second largest number of RSO is 418. This tract is approximately where Williamsbridge-Olinvienis is. The number of RSOs in this area is 48. 8% of the population is white and 89% is nonwhite. 22% of homes are owned while 77% are rented. 8% of the population live below the poverty line. The median income is $42,703. 12% of the population is unemployed and the social disorganization factor is 79.3, suggesting that this census tract is not as socially disorganized as the top census tract.

Table 2 shows the top ten census tracts with the most registered sex offender addresses in Queens. The tract with the most RSOs in Queens is tract 1. This is approximately where Woodhaven is. There are 28 RSOs living in this tract. 68% of the population is white and 27% is nonwhite. 24% of homes are owned and 75% of homes are rented. 1% of the population is living below the poverty line. The median income is $117,750. 6% of the population is unemployed. The social disorganization factor is 35.92, suggesting that this census tract does not have as significant of a disorganized community.

The second tract with a large number of RSOs is tract 954 in Queens. There are 17 RSOs living in this tract. This area is approximately where Whitestone is. 27% of the population is
white while 77% of the population is nonwhite, the total comes out to 104% due to rounding. 42% of homes are owned and 57% are rented. 14% of the population is below the poverty line. The median income is $49,762 and 11% of the population is unemployed. The social disorganization factor for this tract is 68.28 this suggests that the social disorganization level is on the high side. This tract is significantly made up of minorities and has a large population that is in poverty and unemployed. The high level of social disorganization within this tract and a large number of RSOs living in this tract show a strong correlation between factors of social disorganization and sex offender clusters.
Figure 5

Race Dot Density NYC
Due to the level of diversity in New York City a dot density map was created to look at any patterns between race distributions in an area and RSO residency. Figure 5 shows the number of people within a certain racial or ethnical group living in Queens and The Bronx. From this map, it shows that RSOs tend not to live near areas with large white populations. A large African American area in Queens has a significant number of RSO addresses. In the Bronx, RSO addresses correlate with a significant Latino population.

**Discussion**

The results of this study indicate pertinent patterns of sex offender residency among in Queens and Bronx counties. The addresses of the registered sexual offenders overlap with areas populated by racial minority groups. Clusters are also extremely apparent in the areas under study. The results support all of the study hypotheses: H1: There is a relationship between socially disorganized areas and sex offender clustering. H2: As social disorganization increases sex offender clustering increases. H3: There is a relationship between sex offender clustering and resource availability. H4: As sex offender clustering increases resource availability decreases. RSOs tend to live in areas of high social disorganization and have apparently limited access to community resources, especially mental health resources.

The maps showing the RSO hotspots and level of social disorganization depict a strong correlation between RSO clusters and high social disorganization. In Queens, and especially the Bronx, RSOs tend to live in areas of high social disorganization. It is important to note social disorganization was operationalized in this study as the combination of rented properties, poverty levels, and unemployment levels. When considering disadvantaged areas, it is essential to examine the community members living in these areas. Members of a socially disorganized community may struggle to protect themselves against outside “threats.” In this case, large
concentrations of RSOs in a disorganized community could pose a “threat” to other community members. Social control is more difficult for people living in socially disorganized areas due to a lack of cultural and social capital (Bourdieu, 2011). This makes it difficult for community members to use forms of informal control to push out “undesirable” people, such as RSOs. Thus, those communities with the least resources may be left shouldering the burden presented by people with complex problems.

The maps also show that areas of high social disorganization tend to contain minorities, such as Latinos and African Americans. This is significantly apparent in the Bronx which has a large Latino population as well as a large RSO population. Latinos and African Americans are extremely marginalized groups. The presence of sexual offenders in communities with high proportions of people of color is indicative of systematic and structural oppression where unfavorable populations are foisted upon under-resourced and disadvantaged communities. Such communities also experience differential policing approaches (Withrow, 2004). In areas with predominantly African American populations, the police often use excessive force and disproportionately conduct more stop and searches (Bowling & Phillips, 2003). African Americans and Latinos in New York are more likely than white people to be stopped, questioned, and frisked (Gelman, Fagan, & Kiss, 2007). Given that community-connection can be an important component of sex offender reintegration, it is unlikely that over-policed, under-resourced communities of color can provide the necessary “caring but ever so watchful eyes” (Petrunik, 2002, p. 506).

Mental illness is higher among ethnic minorities but is also greatly stigmatized by these groups (Knifton, 2012). According to the maps, there are only two psychiatric hospitals available to RSOs in Queens and the Bronx. Many RSOs are homeless and cannot afford private mental
health care. RSOs are likely to have comorbidity with mental illnesses and would benefit greatly from extensive mental health care. It is important to have accessible mental health care in these socially disorganized areas. This is for the benefit of both RSOs and community members.

There is a severe disconnect between some resources, such as mental health facilities, hotspots, and a lack of access to resources. The one resource that is the most accessible is employment agencies. Despite this, it is difficult to locate these resources. The maps show there is no coherent pattern to where the selected resources are located. Also, during the data gathering process, it was very difficult to find legitimate addresses to places such as job employment offices. When trying to find contact information for certain employment agencies there were none. Along with this, when using google maps to see what these agency buildings look like many of them looked out of business. This suggests that RSOs are likely to have difficulties accessing resources. Given the challenges sex offenders face accessing meaningful employment (Tewksbury, 2007), the lack of employment resources is especially problematic.

The need for adequate access to resources is important because many RSOs are homeless. There is an excessive number of RSOs in homeless shelters. It would be helpful for homeless RSOs to have access to resources to help them out of vagrancy. Sex offenders are more likely to become homeless in comparison to the public and are very likely to abscond from registration making it difficult to keep up with where these individuals are residing (Levenson, Ackerman, Socia, & Harris, 2015). Resources to help sex offenders find stable accommodation is particularly important and can assist probation, parole, and police officials manage sex offenders in the community.

The information available in this research can be used by policymakers and police departments to better regulate the RSO population as well as help community members. It is very
important that probation and parole officers, as well as police departments, are made aware of RSO hotspots and clusters. This is because understanding the residential patterns of RSOs allows for efforts to expand help to these areas (Mohler et al., 2015). Along with this, it is important to create a better mental health network. Only two psychiatric hospitals are available for RSOs. New York City should expand the mental health professions. Private mental health professionals tend not to take insurance and charge a lot for sessions (Simon, Ormel, VonKorff, & Barlow, 1995). Mental health services are important for both ex-offenders and the public.

Along with an increase in mental health care, there should be a better way to identify resources such as a database of all resources. This would make it easier for RSOs, and the general public, to find help. In Sweden, all information on healthcare and hospitals are available on an administrative database (Wiréhn, Karlsson, & Carstensen, 2007). This information is an important tool in research and extending it beyond administrative use would allow individuals in the general public to research their own medical and social care and find resources easily.

There are a number of limitations of this study especially in regards to using secondary data. Trusting the reliability of secondary data is a big problem. Sex offender data is fairly unreliable. When the researcher was exploring the online registry there were challenges in extracting data. Several separate entries were made for the same person. It was unclear if these entries were based on recidivism or on yearly updates to the person’s account. Some of these repeat entries were the same person under different aliases. This took some time to sort through so the data set would only have unique RSO addresses only.

Another limitation is that the sex offender registry is not generalizable. It is not a complete sample of the sex offender population. Sex crimes are severely underreported. The dark figure of crime describes the amount of underreported or undiscovered crime. Since it is so
difficult for victims to report sex offenses the registry is not inclusive of all sex offenders. Several things could be different in the registry if sexual offending was more reported. For example, the demographics of RSOs and the amount of RSOs and addresses available would change. It is a limitation when research must rely on unreliable secondary data.

When creating the factor for social disorganization the initial neighborhood characteristics that were going to be a part of the factor included racial demographics of each census tract. Due to the level of diversity in New York City as well as the number of people identifying as “other race” on the census the factor analysis did not work. As a secondary measure, a separate map was created to display race. Certainly, the data on social disorganization and RSO hotspots would be different if race was factored into the social disorganization level. Another limitation is that the social disorganization factor does not truly reflect all of the elements of social disorganization. Other ways of measuring social disorganization and collective efficacy are by looking at crime statistics and the level of community involvement in maintaining a safe neighborhood among community members.

A final limitation is that in figure 1 it is difficult to visualize the number of registered sex offenders in each census tract. This is because, for many of the points on the map, several RSOs are assigned to the same address. This may be due to the fact that some addresses are male shelters that contain many RSOs. In future studies, it would be more efficient to create a graduated symbol map. This will allow for better visualization of the significant number of RSOs living in a single area.

Studying sex offenders is important for the safety of the community. By studying residential patterns of RSOs it will make studying the effectiveness of sex offender legislation more comprehensive. Continuing to study this population and these laws is important so that
policymakers should be aware of how effective or ineffective their laws are for public safety. In future studies, researchers should create a more accurate factor for social disorganization as well as examine different kinds of resources. It would also be interesting to add survey data from the populations within certain registered sex offender hotspots. With this survey, data can be collected on the public’s opinion on sex offender management and feelings on living close to registered sex offenders.
References


MAPPING SEX OFFENDERS AND TREATMENT CENTERS


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https://www.uc.edu/content/dam/uc/ccjr/docs/articles/What_Are_Criminogenic_Needs.df


https://doi-org.unhproxy01.newhaven.edu/10.1177/1043986202018002004


Sex Offender Registration Act (SORA), Correction Law Article 6c (1995).


