

## MAYBE IN MY BACKYARD: A CORRELATIONAL STUDY OF REGISTERED SEX OFFENDER RESIDENCES IN AN URBAN AREA FROM A SOCIAL DISORGANIZATION APPROACH

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Accepted 25 March, 2014

### ABSTRACT

Current post-release sanctions for convicted sex offenders centers on registration, residency restrictions, and treatment. One of the collateral consequences of these policies is the limitation of available housing to registered sex offenders to certain areas. This quantitative study used a correlational design to examine census records and the sex offender registry for a major metropolitan area in an effort to determine if social disorganization within a community is correlated to the presence of sex offenders within the same community. The study involved an examination of the community characteristics of the 787 census tracts and the residential addresses of 5,886 registered sex offenders within Harris County, Texas. It was found that there was a statistically significant correlation between social disorganization and sex offender residences within the community. Sex offender residency is discussed in the context of economic considerations rather than social-familial context. Policy and future research considerations are also discussed.

**Keywords:** sex offender, sex offender registration, collateral consequences, policy implications.

### Introduction

Research indicates that one class of offender is feared above all others: child sex offenders (Levenson & Cotter, 2005a). To combat this fear both the Congress of the United States and several state legislatures have enacted legislation intended to regulate all sex offenders and decrease recidivism using sex offender registries and residential restrictions in an effort to raise public awareness and keep offenders away from possible victims. Current laws require sex offenders to register themselves with local law enforcement, have their addresses, offenses, and other personal information publicly available, and furthermore restrict where they can reside vis-à-vis proximity to schools, daycares, and other locations (Tewksbury & Mustaine, 2008). At present, there are over 600,000 registered sex offenders in local, state, and federal registries (Grubestic, 2010).

The public views sex offenders as a continuing threat to the safety and welfare of their victim pool and society in general; however, recidivism rates for such offenders are lower than that of other offender types (Bureau of Justice Statistics, 2003). And while sex offender registration laws appear to be an operative solution to public fear, it may also provide a false sense of security for those living in the area (Levenson & Cotter, 2005b).

Citizens with Internet access have registrant information available by searching sex offender databases, while those

without such access are not afforded such easy access to registrant information. Furthermore, search engines generally give only basic information regarding the registrant e.g., residential information, whereas places of employment, activity areas, and other demographic and geographic information is not generally provided to the public.

While it can be argued that sex offender registration laws and related initiatives are an outgrowth of the social pressures to protect the public and future potential victims from previously convicted sex offenders and the resulting political answer to this pressure, the addition of economic components of the policy as it relates to offender geography cannot be discounted. The social intent of registration laws is to allow members of the public to take into account the number of sex offenders in an area when purchasing property, selecting schools, and making other life-decisions. A laudable goal, however the quantity and quality of the data collected as well as the methods of dissemination of the data are suspect. It is not merely coincidental that registered sex offenders congregate in low-income neighborhoods, rather it is arguably a function of economics and the ability of area residents to gain access to the information.

The entire history of sex offender registration legislation is fraught with problems and errors. In fact, initial federal sex offender registration legislation, the Jacob Wetterling Act, was named for a victim of a stranger abduction indicates

that sex offender legislation does not necessarily target the deviant subgroup intended. In fact, the initial legislation assumed issues that were not in evidence at the time of the abduction, specifically that the abductor was a previously convicted sex offender. Insofar that the Wetterling kidnapper is still at-large indicates that the conclusion reached by policy makers and the public that a sex offender was responsible for the disappearance was premature. Furthermore, this erroneous conclusion has made convicted sex offenders extraordinary targets for post-release community sanctions.

From a holistic perspective, sex offender registration legislation and policy is a placation to the fears of the public-at-large, whether these fears are rational or irrational. In general, the public fears stranger-child abduction and abuse, and registration legislation and policy are geared to this type of crime. However, the majority of research indicates that non stranger-, or familiar-, victim sexual abuse is more prevalent (Socia & Stamatel, 2010). Furthermore, research indicates that familiar-victim abuse is generally confined to a geographic area close to the victim's residence, stranger-victim abuse occurs at least three miles away from the offenders residence, where the offender is less likely to be known or recognized by local residents (Levenson, 2005). Whether derived from the "stranger-danger" mentality of the 1970s and 1980s or simply the desire to believe that friends and neighbors are not capable of such heinous acts, the reactive nature of sex offender registration legislation brings to question the efficacy of the related policies (Socia & Stamatel, 2010).

The social controls placed on registered sex offenders through legislation can be attributed to the perception that released sex offenders represent a particularly high threat for recidivism (Grubestic, 2010), and that registration will prevent recidivism. However, empirical evidence does not support this proposition. Early pre- and post-registration legislation studies found no significant difference in recidivism rates between sex offenders who were required to register, 19%, and those offenders who were not required to register, 22% (Matson & Lieb, 1996). Other research conducted in the past decade shows similar results (Zevitz, 2006). Furthermore, empirical evidence suggests that, contrary to popular conjecture, sex offenders, regardless of registration requirements, are highly unlikely to be rearrested for new crimes following release from custody or community supervision (Sample & Bray, 2006).

The various iterations of sex offender registration laws allow the community some level of potential awareness that a registered sex offender lives in the area; however, the actual benefit derived from such knowledge varies widely between communities. The benefit(s) is based on two assumptions. First, the community assumes that law enforcement has resources to monitor registered sex offenders within the community and second, that all members of the community has access to the respective databases that contain the sex offender information.

Travis and Visher (2005) note that inmate reentry into society is not only the goal of correctional rehabilitation but the anticipated result of the vast majority of prison sentences. Society in general and the criminal justice system specifically have an expectation that while inmates enter confinement as criminals, they will emerge from incarceration in some way

better equipped to be productive members of society. In short, the entire corrections process, from sentencing to release, is designed to prepare inmates for reentry (Travis & Visher, 2005; Visher, 2006).

Given the particularly heinous nature of sexual offenses, their reintegration into society can present a particular challenge. Unlike other released felons, sex offenders are subject to continued scrutiny by the community-at-large following incarceration, and are thus presented with challenges not faced by other convicted persons. Therefore, successful reentry prospects for convicted sex offenders are bleak, at best. While very little research has been undertaken to determine the efficacy of the individual states' approaches to notification and residency restrictions as they apply to housing opportunities following release, the mere presence of notification and residency restriction laws inherently constrict where released sex offenders may live.

While many released offenders, regardless of criminal act, face obstacles to reentry into society, the ability of a released sex offender to obtain adequate housing is a particular obstacle to successful reentry. Studies indicate that the restrictions vis-à-vis residential proximity to schools, daycares, and other family friendly environments place a unique burden on registered sex offenders (Levenson & Hern, 2007). The legal barriers created by buffer zones are enhanced due to community notification laws thus leaving registered sex offenders with extremely limited housing options. With limited housing available to them, released sex offenders face an uphill battle in their reentry efforts in that stable social and familial support systems, and social bonds may be absent (Levenson & Hern, 2007).

Sex offender registration and community notification laws are based on the proposition that all members of our society have perfect access to information whereby they might gain the intended benefit of increased community safety through the sex offender registration process. However, communities within the general society that suffer in economic and social deprivation do not necessarily have access to such information, and thus may not benefit from the control mechanisms intended. Previous research regarding the preferential residency locations of released sex offenders has been focused on small communities with a limited population of sex offenders (Mack & Grubestic, 2010; Tewksbury & Mustaine, 2008). Furthermore, "research regarding the utility of social disorganization theory for identifying community characteristics associated with varying rates of sex offenses both in general and against children" is lacking vis-à-vis large urban centers (Duwe, Donnay, & Tewksbury, 2008). Specifically, current literature does not offer insight regarding where and how community characteristics in large urban areas correlate to the presence of released sex offenders in the area.

The purpose of this study, applying social disorganization theory measures, is to examine the presence and prevalence of registered sex offenders within the geography of a major metropolitan area. Using data at the census tract level, the research focuses on social disorganization measures such as income deprivation and community stability as well as

other measures including informal social controls and the relative presence of registered sex offenders. Special attention is given to predictive analysis as the efficacy of sex offender registration legislation is examined as part of the overall analysis.

## Literature Review

Studies of sex offender residency issues have been examined through, primarily, two lenses. The vast majority of the literature is based in routine activity theory and examines the residency of sex offenders in relation to places potential targets congregate such as schools, day cares, and parks. These studies show that a routine activities approach to sex offenders and offense propensity are not correlated (Duwe, Donnay, & Tewksbury, 2008). As a result seems a more rational to approach sex offender residency and community conditions is an examination from a social disorganization theory approach (Mulford, Wilson, & Parmley, 2009).

Under the assumption that released sex offenders pose a major threat to the surrounding community, states and localities have adopted residency restriction laws with the goal of curtailing registered sex offender access to the community. Insofar as these restrictions limit where registered sex offenders live to areas outside those frequented by, primarily, children, such as schools, day cares, and parks, the consequences of these restrictions require criminologists to examine the impact of the restrictions on the registered sex offender and the community-at-large. While residency restriction zones surrounding schools, day cares and parks may be seem politically advantageous, this routine activities approach "may have limited relevance for analyzing sex offender residency restrictions (Mulford, Wilson, & Parmley, 2009, p. 4), primarily because a routine activities approach must address the issue of a capable guardian, or absence thereof, in determining the risk of an offense occurring. The issue of capable guardians is often removed from routine activity-centered studies (Mulford, Wilson, & Parmley, 2009).

Registered sex offenders represent a unique class of released offenders. While typical felons released from incarceration do not report that a felony conviction inherently limits their potential to acquire suitable housing, registered sex offenders report that their inclusion in the sex offender registry detracts from their ability to find suitable housing (Tewksbury, 2004, 2005; Mustaine, Tewksbury, & Stengel, 2006a). Generally, research indicates that registered sex offenders typically live in neighborhoods that exhibit a high degree of social disorganization, higher youth populations, lower educational achievement, higher minority populations, and lower income and employment levels (Duwe, Donnay, & Tewksbury, 2008; Mustaine, Tewksbury, & Stengel, 2006a, 2006b). Research also indicates that registered sex offenders tend to reside in areas that provide close proximity to potential victims (Walker, Golden, & VanHouten, 2001).

Perhaps the most significant collateral consequence encountered by RSOs is the issue of housing. Registered sex offenders often have difficulties finding housing. If they are able to find housing, such housing is often located in undesirable, socially disorganized neighborhoods. Significant proportions of registered sex offenders "live in visibly deteriorating

neighborhoods characterized by the presence of litter, junk on lawns, abandoned vehicles, and vacant lots" (Tewksbury & Mustaine, 2008, p. 88). Additionally, census tracts indicative of social disorganization are more likely to be home to clusters of registered sex offenders than census tracts with lower levels of social disorganization (Mustaine, Tewksbury, & Stengel, 2006a).

The congregation of registered sex offenders into socially disorganized neighborhoods is not unexpected. Several studies (Burchfield & Mingus, 2008; Levenson & Cotter, 2005a; Mercado, Alvarez, & Levenson, 2008; Tewksbury, 2004, 2005; Tewksbury & Lees, 2006; Tewksbury & Mustaine, 2006; Zandbergen & Hart, 2006) indicate released sex offenders have difficulty obtaining and maintaining employment and have difficulty finding acceptable housing. While finding employment may be directly linked to the sex offender's registration status, the housing issue is more complicated. Finding suitable housing is a co-function of the offender's registrations status as well as possible residency restrictions in many states and communities (Zandbergen & Hart, 2006).

The issue of suitable housing is significant. One of the impacts of social disorganization is that community residents have a low level of informal social control vis-à-vis other residents within the community. This factor makes it relatively hard for community residents to organize in an effort to protect the community at-large from undesirable individuals, whether a registered sex offender or drug dealer. For this reason, socially disorganized communities offer a relatively easy place for registered sex offenders to reside and integrate into the community; in other words, registered sex offenders are able to hide in plain sight (Tewksbury & Lees, 2006).

Mustaine, Tewksbury, and Stengel (2006a) examined 1,504 registered sex offenders in four urban counties in Florida and Kentucky, comparing census tracts with high concentrations of registered sex offenders and those with low concentrations of sex offenders. They found a positive correlation between indicators of social disorganization and the presence of registered sex offenders. Using resident ages, ethnicity, length of residency, income, and other indicators of social disorganization, the researchers concluded that registered sex offenders live in areas that are not only below the average in the study parameters within the respective counties, but also below the national averages. However, the researchers indicate that the study has limitations. First, the researchers assert that Kentucky and Florida are "ideal locations" for the study of sex offenders due to the heterogeneity of the populations, based solely on previous studies in the localities and the contrasting socioeconomic conditions between the two states (Mustaine, Tewksbury, & Stengel, 2006a). Furthermore, the researchers caution that because of the limited localities, the results can not be generalized. "The counties' studies are primarily urban in nature and represent mid-sized cities. Therefore, the applicability of these findings to more rural or extremely densely populated urban areas is not clear" (Mustaine, Tewksbury, & Stengel, 2006a, p. 345).

Furthering their urban-based research, Tewksbury, Mustaine, and Stengel (2007) applied social disorganization theory to the rural environment. At issue for this study was whether the tenets of social disorganization theory in the context of residency of sex offenders could be applied to rural environments. The study examined 41 counties in Eastern Kentucky comprising the 606 area code. This area was chosen due to the exclusive rural nature of the area as well as the sampling of sex offenders,  $n=831$ , within the geographic parameters. Using 10 indicators of social disorganization, the study found that sex offenders clustered in socially disorganized areas, based on census tract, and that age, race and home ownership were significant indicators of the correlation between social disorganization and the presence of sex offenders.

Further research by Tewksbury and Mustaine (2008) examined sex offender registries in Jefferson County, Kentucky. This locale was chosen due to the absence of residency restrictions at the time of data gathering. During data gathering using the Kentucky sex offender registry, 516 registered offenders were discovered living within the county. Also collected was socioeconomic data covering all 167 census tracts in Jefferson county. Census tract-based data is conducive to registry-based research as census tracts tend to follow visible boundaries; neighborhoods are not generally divided in order to create census tracts. This study concluded that registered sex offenders tend to live in economically disadvantaged neighborhoods. Of particular note, the study failed to show a significant correlation between the residential choice of registered sex offenders and the availability of suitable victims, thus showing a theoretical preference to social disorganization theory over routine activity theory as a basis for further research. The study also noted that further research is needed with larger sex offender population groups, as well as a need for a comparative analysis with restriction zone policies.

Mack and Grubestic (2010) approached the issue of sex offender management from a predictive paradigm. Using social disorganization theory tenets, the authors developed a predictive-analytical framework to determine the best demographic and socioeconomic factors to determine where sex offenders reside. The purpose of the study was to determine the efficacy of current sex offender management practices, specifically the use of restrictive zones, by "providing a robust and repeatable methodological framework for generating important descriptive information about the areas in which these individuals are both permitted and/or choose to reside" (Mack & Grubestic, 2010, p.5). Using their developed *Index of Social Disorganization*, this study examined Hamilton County, Ohio and Jefferson County, Kentucky. Their rationale centered on the fact that each serve as the central county for their metropolitan area, Cincinnati, and Louisville; that each has an easily accessible sex offender registration database from local law enforcement; the diversity of each county with respect to urban and suburban areas and; familiarity of the location to the authors. The authors determined that the best indicators of social disorganization were education, population density, age, race, and median income. The study determined that registered sex offenders gravitated towards neighborhoods with high levels of social disorganization.

The clustering of registered sex offenders into socially disorganized communities should be expected to continue; in fact, it should become commonplace and more powerful due to the increasing enactment of residential buffer zones around schools, daycare centers, parks, and playgrounds routinely frequented by potential victims (Tewksbury & Mustaine, 2008).

Of the issues pertaining to the use of the sex offender registry as a primary means of community notification is the issue of access. The issue of access is two-fold; first is the ability to access registry data and second is the actual retrieval of data from the registry by the public-at-large. The premise of sex offender registration acts is predicated on the concept that the public should be aware that sex offenders reside in their area and that based on this knowledge, they will take appropriate steps to protect possible victims (Caputo & Brodsky, 2003; Levenson, 2007).

While the tenets of routine activity theory (Cohen & Felson, 1979) indicate that sex offender registries would limit the number of suitable targets and create an atmosphere of effective guardianship, the economics of the situation in lower socioeconomic areas obviates the efficacy of community notification. While studies have examined the quality of the data contained in sex offender registries (Levenson, Brannon, Fortney, & Baker, 2007), there has been little exploration into what sector of the public actually accesses the information (Lovell, 2007).

One exception to this has been the study of Anderson and Sample (2008). They conducted a survey of Nebraska residents to ascertain who accessed the Nebraska sex offender registry. The study determined that there were significant differences, based in social disorganization theory, between accessors of the registry. Specifically, the study determined that minorities and those earning less than \$20,000 per year were significantly less likely to access the sex offender registry. The study further indicated that as the level of education among survey respondents increased, so did the level of access to the registry. These indicators show the under use of the registry in socially disorganized settings, and call into question the overall efficacy of sex offender registries vis-à-vis the intent of the policies related to Megan's Law.

## Research Question

Since the inception of sex offender registration laws in the mid-1990s, policy makers, law enforcement, and communities have been attempting to determine how, and possibly more importantly where, to reintegrate released sex offenders within the community. With the enactment of sex offender registration legislation, certain communities have adopted a not-in-my-backyard standard and adopted informal social controls that essentially prevent registered sex offenders from living within the community. As a result, released sex offenders have limited housing options. The research questions for this study are rooted in the reactive and emotional nature of sex offender registration legislation and the guiding principles of social disorganization theory. The current study uses the following research questions to

determine if the implementation of sex offender registration laws has created de facto clusters of sex offenders within a major metropolitan area.

The current study examines the following: What is the relationship, if any, between socially disorganized communities and the presence of registered sex offender within the community?

In examining the research question, the researchers posited the following hypothesis:

- H1. There is a positive correlational relationship between the community's level of social disorganization and the number of registered sex offenders living within the community.
- H1A: There is a negative correlational relationship between the community's level of social disorganization and the number of registered sex offenders living within the community.
- H1N: There is no correlational relationship between the community's level of social disorganization and the number of registered sex offenders living within the community.

Sex offender registration legislation was implemented under the assumption that the legislation would be an avenue for monitoring and encouraging treatment for sex offenders; however, actual implementation of sex offender registries have been interpreted as an extension of the court ordered punishment levied against convicted sex offenders (Farkas & Stichman, 2002). It is therefore necessary to determine whether community characteristics are conducive to the achievement of these goals.

Previous research has focused on the residential locations of registered sex offenders has focused on the structural conditions of individuals within communities from the routine activities perspective. There has been little research done on the socioeconomic and demographic characteristics of such locations. These issues provide the foundation for the current study.

The current study uses census tract-level data to determine the social structure of neighborhoods where registered sex offenders reside. Data was gathered regarding the residential locations of registered sex offenders in Harris County, Texas from the Texas state sex offender registry. In an effort to build upon existing literature, we examine whether registered sex offenders live in neighborhoods with high degrees of social disorganization.

### Assumptions

The current study is based on the following assumptions. First, the current study assumes that all individuals required to register as sex offenders do indeed register and provide their actual and correct residential address to the registry. The second data integrity-related assumption is related to census data. It is assumed that the data garnered from the 2010 census has not significantly changed; that is, the population characteristics and socioeconomic conditions of each census

tract have remained unchanged since the taking of the 2010 census.

### Limitations

There are several limitations to the current study. Due to the use of U.S. Census decennial data, the lag between the publication of the data and the publication of this study, there may be unanticipated changes in the data. Furthermore, the current study does not offer an opinion regarding causation should the hypotheses be validated (Tewksbury & Mustaine, 2008). Indicators of social disorganization are based solely on statistical data and were not directly observed during the course of the current study. While the current study was conducted under a social disorganization lens, other relevant issues such as strong guardianship may be present in a given area that may have had an impact the overall reliability of the current study. Finally, the current study is geographically limited to one major urban county and the findings may not be replicable in other geographic areas (Tewksbury & Mustaine, 2006).

The lack of research into social disorganization factors and registered sex offender clustering in major metropolitan areas provides the foundation for the current study.

The current study uses census tract-level data to determine the social structure of neighborhoods where registered sex offenders reside. Census tract-level residence characteristics were gathered from the 2010 United States census. Census tract-level data from the 2010 United States census was used to determine measures of social disorganization and measures of potential victimization. Sex offender registration data for the current study was garnered from the State of Texas Sex Offender Registry for Harris County, Texas. In an effort to build upon existing literature, the current study examines whether registered sex offenders live in neighborhoods with high degrees of social disorganization and furthermore whether they live in neighborhoods that provide opportunistic access to potential suitable victims.

### Research Design

The current study employs a correlational research approach in order to determine if there is a relationship between the number of registered sex offenders residing within the community and the level of social disorganization present within the community. Furthermore, the current study determines if registered sex offenders live in communities that provide the offender with access to significant pool of suitable victims.

Generally, correlational methodologies are often used in sex offender research studies (Hanson, 2005; Palmer & Begum, 2006). Correlational research is used to identify relationships between two or more variables (Leedy & Ormrod, 2005; Neuman, 2006). Furthermore, correlational research is used to identify the degree to which one study variable is related to other variables within the study.

In order to analyze social disorganization within census tracts, a composite of eleven items used in previous studies to define whether an area is socially disorganized was used. (Tewksbury & Mustaine, 2008). The Census Bureau established the poverty line for 2010, the year the data for the current study is based, at \$22,811 for a family of four (United States Census Bureau, 2012).

Census tract-level residence characteristics were gathered from the 2010 United States census. The census bureau defines census tracts with the intention that these tracts are relatively homogenous vis-à-vis population characteristics, economic status, and living conditions (Tewksbury & Mustaine, 2008). "Census tract-based research is conducive to registry-based research as census tracts tend to follow visible boundaries; neighborhoods are not generally divided in order to create census tracts" (Tewksbury & Mustaine, 2008, pp. 90-91). Census tract-level data from the 2010 United States census was used to determine measures of social disorganization and measures of potential victimization. The two data sets that were used are Summary File 1 and the American Community Survey file. These data flat files were downloaded from the Census Bureau's public site on July 5, 2012 and were converted into usable form per Census Bureau instructions contained in the downloaded file.

Sex offender registration data for the current study was garnered from the State of Texas Sex Offender Registry for Harris County on June 19, 2012. The data from this source was used solely to determine the residential address of registered sex offenders in Harris County, Texas. Harris County is home to Houston, the largest city in the state of Texas and fourth largest city in the United States. The addresses were used to determine the census-tract location of the registered sex offender and compared to the tract-level measures of social disorganization as well as the relative concentration of potential suitable victims. The name of the registered sex offender was stored in the database as a unique identifier, but was not used in conjunction with the final data analysis.

The population for the current study is all registered sex offenders in Harris County, Texas as of June 19, 2012. While this data set changes constantly, on June 19, 2012 the study database was populated with the residential addresses of all registered sex offenders in Harris County. The name of the registered sex offender was stored in the database as a unique identifier, but was not used in conjunction with the final data analysis. The addresses were used to determine the census-tract location of the registered sex offender and compared to the tract-level measures of social disorganization as well as the relative concentration of potential suitable victims. The source database, the Texas Sex Offender Registry, is a public domain database and therefore the participants, by mere registration, have no expectation of privacy vis-à-vis their names, addresses, or physical descriptors. At no time were any of the registrants personally contacted.

The research variables within the current study are (a) social disorganization factors within the community, (b) the presence of potential victims within the community, and (c) the residential location of registered sex offenders.

Based in prior research, the current study examined 11 social disorganization factors. Specifically, the percentage of the population that were age 19 and younger, percentage of the population that are white, percentage of the population with a high school degree, percentage of the population with a four-year college degree, percentage of the population living in owner-occupied homes, percentage of the population that is unemployed, percentage of the households with female heads of household, percentage of the households living below the poverty line, median household income, and median housing value (Tewksbury & Mustaine, 2008).

### **Residential Location of Sex Offenders**

Data from the State of Texas Sex Offender Registry for Harris County was used to determine the residential address of registered sex offenders within the study's geographic parameters.

### **Relationship of the Variables**

Within any given community, location within the community is wholly independent of individuals who reside within the community. While the individuals who reside within the community contribute to the overall social organizational characteristics of the area, locational characteristics, such as census boundary lines, are independent of the community. Census tract characteristics of the community as a whole is the independent variable. The dependent variable is the individuals in the census tract population that are identified as registered sex offenders. The independent variable of community characteristics serves as a predictor of the dependent variable of registered sex offenders within the community. In calculating this variable, the total number of registered sex offenders in each census tract was divided by the total population of each census tract. The result of this calculation was multiplied by 100 to give a percentage of the population in the census tracts that are registered sex offenders (Tewksbury & Mustaine, 2008).

In order to determine a census tract-level of social disorganization, an aggregate level of social disorganization was computed from all census tracts in Harris County.

This mean level of social disorganization was compared to each census tract in order to determine which census tracts can be defined as socially disorganized. In performing the analysis, the individual census tract-level data was subtracted from the mean county-level average for each of the social disorganization variables. Individual census tracts with negative values, following the calculation, will indicate census tracts that are less socially disorganized; similarly, census tracts with positive values on variables represented neighborhoods that are more socially disorganized.

Since this study did not evaluate degrees of internal social disorganization, the raw data was normalized. Following the original raw calculations, data was recorded so that all variables with negative values were recorded as -1; similarly, variables with positive were recorded as +1. Following the coding conversion, the individual values were

aggregated to a composite index of social disorganization to determine a relative level of social disorganization, measured on a spectrum of value from negative eleven to positive eleven. Within the spectrum, negative eleven represents very little social disorganization and positive eleven represents a very high level of social disorganization (Tewksbury & Mustaine, 2008). The first hypothesis was tested by evaluating the relative level of social disorganization vis-à-vis the percentage of the population within the census tract that are registered sex offenders.

## Findings

The predictor variable for the hypothesis was the social disorganization index. The criterion variable is defined as the number of sex offenders within the associated census tract.

Harris County, Texas is comprised of 786 census tracts with a total population of 4,092,459. Demographic data was collected from the 2010 decennial census of the United States with specific reference to Summary File 1, the American Community Survey 5-year estimates 2006-2010, and the 2000 decennial census of the United States with specific reference to Summary File 3. Data regarding the residential addresses of sex offenders was gathered from the Texas Sex Offender registry. No permissions were required to access or use the data gathered for this study as it is publicly available from the publishers of the data. The names of the registered sex offenders were stored in the database as a unique identifier, but were not used in conjunction with the final data analysis.

## Registered Sex Offenders

On June 19, 2012, a list of registered sex offenders was generated for Harris County, Texas. The initial list was populated with 6,922 registered sex offenders. An initial analysis of the list indicated that there were 334 out-of-state offenders with no specific address listed. Out-of-state offenders are listed as "Out of State, Houston, TX" and as such cannot be

geocoded for the purposes of this study. For this reason, out-of-state offenders were eliminated from the list.

The list of 6,588 remaining offenders was further analyzed. It was found that 65 offenders were listed as absconded with no known address; these names were removed as the lack of address makes geocoding not possible. Additionally, 305 offenders were listed as homeless and were on weekly reporting pursuant to Texas registration statutes; similarly, these individuals were removed from the list for geocoding purposes. Finally, a final list analysis was performed to eliminate invalid or inappropriate addresses. In reviewing the list, it was found that 332 registered offenders were incarcerated at the Ben Reed Community Corrections and Rehabilitation Center. Insofar as these offenders (a) did not choose to live there and (b) this facility is a secure facility, it was determined that this address should not be included in the study as it would unnecessarily skew the data for the associated census tract.

Other addresses had multiple offenders; however, these addresses were determined to be voluntary residence shelters, offender-friendly apartment complexes, and non-secure rehabilitation centers. In all, 240 offenders live in these situations. Since these offenders are voluntarily mobile, the addresses remained within the parameters of the study.

The final study list includes 5,886 registered sex offenders. Table 1 details tract averages for sex offenders in Harris County. On average, there are seven registered sex offenders in each census tract. One census tract, corresponding to the central business district of Houston, has 54 registered sex offenders residing within its boundaries, while 56 tracts have zero sex offenders. Demographic information regarding age, sex, income, and other information were not collected on individual offenders as part of the current study.

**Table 1:** Registrant Distribution

Characteristic	Average # RSOs Per Tract (Rate in Tract)	Range (Rate in Tract) RSOs per Tract	Mode
Total Offenders Included in Study (n=5,886)	7.49 (0.16)	0 - 54 (0 - 1.15)	2 (in 82 tracts)

## Results of Analysis

### *Social Disorganization*

In Harris County, tract level population varies from 282 residents to 17,754 residents, with an average of 5,206 residents per tract. Table 2 shows the average values and ranges for the eleven social disorganization variables in Harris County. Due to the wide variances in ordinal population for the tracts within Harris County, percentage data is used.

**Table 2: Social Disorganization Indicators**

<b>Social Disorganization Indicator</b>	<b>Average</b>	<b>Range</b>
Percentage of Population: High School Diploma/GED	76.0%	19.64% - 100%
Percentage of Population: 4-Year Degree	5.9%	0.5% - 58.2%
Percentage of Population: Unemployed	5.2%	0% - 31.5%
Percentage of Families Below Poverty Line	15.1%	0% - 69.56%
Percentage of Population: White	56.4%	1.47% - 94.85%
Percentage of Population: Age 19 and Under	29.9%	3.48% - 45.61%
Percentage of Homes that are Owner Occupied	56.2%	0% - 98.09%
Percentage of Household: Female Head	28.56%	7.56% - 72.11%
Percentage of Population: Same Residence Over 1 yr.	80.4%	0% - 100%
Median Household Income	\$156,330.00	\$9,926 - \$250K
Median Housing Value	\$56,616.00	\$10,000 - \$1M

The first research question examines the relationship, if any, between registered sex offender residences and socially disorganized communities. The predictor variable in this case is the social disorganization index. In calculating this variable, this researcher followed the methods used by Tewksbury and Mustaine (2008).

To investigate whether social disorganization is correlated with the presence of sex offenders, a correlational comparison was done for the two data sets. This result indicates that there is an extremely statistically significant negative correlation between social disorganization and the presence of registered sex offenders.

Further analysis was performed to determine if any one victimization indicator exercised more influence than others. Using non-normalized percentage data, the individual indicators were analyzed against the rate of registered sex offenders within the tract. The data in Table 3 indicates that age of the tract's population and owner occupancy are not significant indicators of registered sex offender residency. The data indicates that unemployment and poverty are the two most significant positive influences affecting the variables and indicating the presence of registered sex offenders within the census tract.



**Table 2: Social Disorganization Indicators**

<b>Social Disorganization Indicator</b>	<b>Pearson's <i>r</i></b>	<b><i>r</i><sup>2</sup></b>
Percentage of Population: High School Diploma/GED	-0.2572*	0.0661
Percentage of Population: 4-Year Degree	-0.1346**	0.0181
Percentage of Population: Unemployed	0.2187*	0.0478
Percentage of Families Below Poverty Line	0.2473*	0.0611
Percentage of Population: White	-0.3556*	0.1264
Percentage of Population: Age 19 and Under	0.0583****	0.0034
Percentage of Homes that are Owner Occupied	0.0567*****	0.0032
Percentage of Household: Female Head	0.2578*	0.0664
Percentage of Population: Same Residence Over 1 yr.	0.1186***	0.0141
Median Household Income	-0.2609*	0.0681
Median Housing Value	-0.2057*	0.0423

\* $p < 0.0001$ , \*\* $p < 0.0002$ , \*\*\* $p < 0.0009$ , \*\*\*\* $p < 0.1004$ , \*\*\*\*\* $p < 0.1120$   
DF=785

## Summary of Findings

The purpose of the first research question is to determine if there was a positive correlational relationship between socially disorganized communities and the presence of registered sex offenders within the community. The hypothesis posited that there is a positive relationship between the community's level of social disorganization and the number of registered sex offenders living within the community. The hypothesis of the current study is not supported by the data and the alternate hypothesis is affirmed.

## Discussion

Public outcry over several highly publicized child abductions, as well as situation specific sexual assaults led lawmakers in the 1980's and 1990's to question the effectiveness of the current public safety paradigm vis-à-vis released sex offenders in the community. The pre-1980's paradigm aligned convicted and/or released sex offenders with other probationers and parolees. While there is no empirical evidence to suggest that sex offenders recidivate at a higher rate than other offenders, public policy suggests that sex offenders should be treated as continuing and ongoing threats to public safety (Hanson & Bussiere, 1998; Hanson & Morton-Bourgon, 2004; Harris & Hanson, 2004; Sample & Bray, 2006). To enforce this perception, sex offenders are required to register with local law enforcement and are required to be included in publically accessible registries. For this reason, one of the collateral

consequences of sex offender registration is the inability of registered sex offenders to find adequate housing (Levenson & Cotter, 2005b). The purpose of this study is to determine if there is a correlation between certain community characteristics and the presence of registered sex offenders in a community.

In summary, the current study focuses attention on the locations where registered sex offenders reside and whether registrants are relegated to socially disorganized neighborhoods. Given that socially disorganized neighborhoods arguably lack informal social controls, the clustering of registered sex offenders in socially disorganized areas would represent a gap in policy effectiveness and the potential for additional criminal activity, specifically sexual re-offending.

## Limitations of the Study

Despite the achievements of this study's objectives, which were to determine if social disorganization and a pool of potential victims are correlated to the presence of sex offenders in a community, this study has several limitations.

One of the limitations is the reliability of the source data. While the United States Census Bureau produces statistically reliable data, many of the data points for this study do not come from the summary files of the decennial census, or the census count. Census data collection is divided into two

parts. The first part is the common count that includes all United States residents and includes basic information regarding number of persons in a household, sex, and age. More complex data such as educational attainment, residency particulars, and disability are included in the American Community Survey, or the census long form. This survey by the census bureau is gathered from a statistically reliable percentage of the community but is not completely inclusive. For this reason, data gathered from the American Community Survey has a margin of error. While it is not believed that this margin of error would change the overall results of this study, the existence of a margin of error in the data indicates a potential margin of error in this study.

Data lag is also a limitation of this study. Data collected for this study is based on three data sets with varying time delays. Data gathered from the 2010 decennial census has the least significant time delay, being 26 months. Data gathered from the American Community Survey is based in 2006-2010 five year estimates, representing a two to six year data delay. Finally, the most recent disability data is from the 2000 census and represents a nearly 12-year data delay. Consequently, time lag considerations may alter the results from this study.

As with all correlational studies, causation is not addressed in this study. Any correlation, or lack thereof, between social disorganization and the presence of sex offenders does not equate to a cause and effect relationship between the variables in either direction. This limitation becomes a foundation for future research to be discussed later.

The Texas Child Safety Zone Act states that the parole panel sets residency restriction requirements based on the individual parolee convicted of sexual offenses against children. Restrictions vary as to distance and place based on the actuarial threat of the individual offender. The default state level restriction places a buffer of 500 feet around schools, playgrounds, and other child-friendly environments where registered sex offenders cannot frequent. However, in 2007, the Texas Attorney General stated that due to the home-rule nature of the state, cities can place greater restrictions vis-à-vis residency.

While the City of Houston, the county seat for Harris County does not have a city-specific ordinance for sex offender residency restriction, Harris County is comprised of several dozen municipalities, some of which have residency restriction ordinances more stringent than the prevailing state law. The varying levels of permissible residences may have influenced the outcomes of this study.

The theoretical approach taken in the current study suggest that, in the context of sex offenders and integration into the community, social disorganization effectively limits the level of community cohesion thereby placing limits on the level of informal social controls that prevents released sex offenders from committing further criminal acts. That being stated, social disorganization theory applies to entire communities rather than the individuals within the community. In other words, while the community as a whole may be more socially disorganized that does not imply that the individuals within the community are not adequate guardians for the community.

Finally, this study does not speak to the issue of recidivism. The premise of registration laws is that sex offenders will recidivate and that the community is entitled to certain protections from prior offenders. This study does not delineate between one time offenders and multiple repeat offenders.

### **Recommendations for Policy and Practice**

Despite the affirmation of the alternate hypothesis in the current study, this research suggests several policy implications for lawmakers, law enforcement and the community at large. The establishment of Child Safety Zones is called into question. This research suggests that registered sex offenders are dispersed across all segments of the community, and are not relegated to socially disorganized or economically disadvantaged neighborhoods. The implied rationale of safety zones rests in the assumption that these zones would prevent contact between registered sex offenders and possible targets. The current study indicates that registered sex offenders do not live in areas populated by a large number of children. This indicates that the establishment of child safety zones may not be consequential to registered sex offender residences.

### **Recommendations for Future Research**

The current study has failed to support the findings of prior research in this area. Previous research in the area of this study has indicated a positive correlation between social disorganization and sex offender residency in rural and small to mid-sized urban areas (Mustaine, Tewksbury, & Stengel, 2006b; Socia K. , 2011; Tewksbury & Mustaine, 2008). Insofar that the current study does not support the previous body of research, additional research is needed to determine at what level, population or otherwise, social disorganization fails to be a predictor of sex offender residency.

As previously mentioned, the lack of a consistent list of quantifiable social disorganization indicators across the existing body of literature represents a limitation to this and other social disorganization studies. Further research is warranted to resolve this controversy.

Contrary to previous findings on the subject, this study does not support the notion that sex offenders cluster in socially disorganized areas. Previous studies have focused on rural and smaller urban areas, while this study focused on a large urban population center. The contrary findings are worthy of note and further investigation.

Qualitative study is also warranted to determine the decision making process employed by registered sex offenders when assessing and selecting places to reside following release and during the course of their required registration period. Additional quantitative study should be explored to research pre- and post-conviction residency characteristics of sex offenders. Turley and Hutzler (2001) indicate that registered sex offenders move more frequently than average, yet the rationale for residency changes remains an unknown. This research may help to understand

the social issues and residency issues faced by offenders as well as address policy issues faced by lawmakers and law enforcement.

## REFERENCES

1. Anderson, A., & Sample, L. (2008). Public awareness and action resulting from sex offender community notification laws. *Criminal Justice Policy Review*, 19(4), 371-396.
2. Burchfield, K., & Mingus, W. (2008). Not in my neighborhood: Assessing registered sex offenders' perceptions of local social capital and its limitations. *Criminal Justice and Behavior*, 35, 356-374.
3. Bureau of Justice Statistics. (2003). *Recidivism of sex offenders released from prison in 1994*. Washington, DC: U.S. Department of Justice.
4. Caputo, A., & Brodsky, S. (2003). Citizens coping with community notification of released sex offenders. *Behavioral Sciences and the Law*, 22(2), 239-252.
5. Cohen, L. E., & Felson, M. (1979). Social change and crime rate trends: A routine activities approach. *American Sociological Review*, 44, 588-608.
6. Duwe, G., Donnay, W., & Tewksbury, R. (2008). Does residential proximity matter?: A geographic analysis of sex offender recidivism. *Criminal Justice and Behavior*, 35(4), 484-504.
7. Farkas, M., & Stichman, A. (2002). Sex offender laws: Can treatment, punishment, incapacitation, and public safety be reconciled. *Criminal Justice Review*, 27(2), 256-283.
8. Grubestic, T. (2010). Sex offender clusters. *Applied Geography*, 30(1), 2-18.
9. Hanson, R. (2005). The characteristics of persistent sexual offenders: A meta-analysis of recidivism studies. *Journal of Consulting and Clinical Psychology*, 73, 1154-1163.
10. Hanson, R., & Bussiere, M. (1998). Predicting relapse: A meta-analysis of sexual offender recidivism studies. *Journal of Consulting and Clinical Psychology*, 348-362.
11. Hanson, R., & Morton-Bourgon, K. (2004). *Predictors of sexual recidivism: An updated meta-analysis*. Ottawa, CA: Public Works and Government Services.
12. Harris, A., & Hanson, R. (2004). *Sex offender recidivism: A simple question*. Ottawa: Public Safety and Emergency Preparedness Canada.
13. Leedy, P. D., & Ormrod, J. E. (2005). *Practical research: Planning and design* (8th ed.). Upper Saddle River, NJ: Pearson Merrill Prentice Hall.
14. Levenson, J. (2005). The impact of sex offender residence restrictions: 1,000 feet from danger, or one step from absurd? *International Journal of Offender Therapy and Comparative Criminology*, 49(2), 168-178.
15. Levenson, J. (2007). The new scarlet letter: Sex offender policies in the 21st century. In D. Prescott, *Applying knowledge to practice: Challenges in the treatment and supervisions of sexual abusers*. Oklahoma City, OK.: Wood & Barnes Publishing and Distribution.
16. Levenson, J., & Cotter, L. (2005a). The impact of sex offender residence restrictions: 1,000 feet from danger or one step from absurd. *International Journal of Offender Therapy and Comparative Criminology*, 49(2), 168-178.
17. Levenson, J., & Cotter, L. (2005b). The effect of Megan's Law on sex offender reintegration. *Journal of Contemporary Criminal Justice*, 21(1), 49-66.
18. Levenson, J., & Hern, A. (2007). Sex offender residence restrictions: Unintended consequences and community reentry. *Justice Research and Policy*, 9(1), 59-73.
19. Levenson, J., Brannon, Y., Fortney, T., & Baker, J. (2007). Public perceptions and community protection policies. *Analysis of Social Issues and Public Policy*, 7(1), 137-161.
20. Lovell, E. (2007). *Megan's Law: Does it protect children?* London, UK: Policy and Public Affairs, NSPCC.
21. Mack, E., & Grubestic, T. (2010). *Sex offenders and residential location: A predictive analytical framework*. GeoDa Center for Geospatial Analysis and Computation. Tucson, AZ: Arizona State University.
22. Matson, S., & Lieb, R. (1996). *Community notification in Washington State: A 1996 survey of law enforcement*. Olympia, WA: Washington State Institute on Public Policy.
23. Mercado, C., Alvarez, S., & Levenson, J. (2008). The impact of specialized sex offender legislation on community reentry. *Sexual Abuse*, 20, 188-205.
24. Mulford, C., Wilson, R., & Parmley, A. (2009). Geographic aspects of sex offender residency restrictions. *Criminal Justice Policy Review*, 20(1), 3-12.
25. Mustaine, E., Tewksbury, R., & Stengel, K. (2006a). Social disorganization and residential locations of registered sex offenders: Is this a collateral consequence? *Deviant Behavior*, 27, 329-350.
26. Mustaine, E., Tewksbury, R., & Stengel, K. (2006b). Residential location and mobility of registered sex offenders. *American Journal of Criminal Justice*, 30(2), 177-192.
27. Neuman, W. (2006). *Social research methods: Qualitative and quantitative approaches*. Boston, MA: Allyn and Bacon.
28. Palmer, E. J., & Begum, A. (2006). The relationship between moral reasoning, provictim attitudes, and interpersonal aggression among imprisoned young offenders. *International Journal of Offender Therapy and Comparative Criminology*, 50, 446-457.
29. Sample, L., & Bray, T. (2006). Are sex offender different? An examination of rearrest patterns. *Criminal Justice Policy Review*, 17(1), 83-102.
30. Socia, K. (2011). The policy implications of residence restrictions on sex offender housing in Upstate New York. *Criminology and Public Policy*, 10(2), 351-389.
31. Socia, K. M., & Stamatel, J. P. (2010). Assumptions and evidence behind sex offender laws: Registration, community notification, and residence restrictions. *Sociology Compass*, 4(1), 1-20.

32. Tewksbury, R. (2004). Experiences and attitudes of registered female sex offenders. *Federal Probation*, 68(3), 30-33.
33. Tewksbury, R. (2005). Collateral consequences of sex offender registration. *Journal of Contemporary Criminal Justice*, 21(1), 67-81.
34. Tewksbury, R., & Lees, M. (2006). Perceptions of sex offender registration: Collateral consequences and community experiences. *Sociological Spectrum*, 26, 309-334.
35. Tewksbury, R., & Mustaine, E. (2006). Where to find sex offenders: An examination of residential locations and neighborhood conditions. *Criminal Justice Studies*, 19(1), 61-75.
36. Tewksbury, R., & Mustaine, E. (2008). Where registered sex offenders live: Community characteristics and proximity to possible victims. *Victims and Offenders*, 86-98.
37. Tewksbury, R., Mustaine, E., & Stengel, K. (2007). Residential concentrations of rural registered sex offenders. *American Journal of Criminal Justice*, 31, 49-63.
38. Travis, J., & Visher, C. (2005). Introduction. In J. Travis, & C. Visher, *Prisoner reentry and crime in America*. New York: Cambridge University Press.
39. Turley, E., & Hutzell, L. (2001). *West Virginia sex offender study*. Charleston, WV: Division of Criminal Justice Services.
40. United States Census Bureau. (2012, February 10). *Poverty*. Retrieved May 17, 2012, from United States Census Bureau: <http://www.census.gov/hhes/www/poverty/data/threshld/index.html>
41. Visher, C. (2006). Effective reentry programs. *Criminology and Public Policy*, 5(2), 299-302.
42. Walker, J., Golden, J., & VanHouten, A. (2001). The geographic link between sex offenders and potential victims: A routine activities approach. *Justice Research and Policy*, 3(2), 15-33.
43. Zandbergen, P., & Hart, T. (2006). Reducing housing options for convicted sex offenders: Investigating the impact of residency restriction laws using GIS. *Justice Research and Policy*, 8(2), 1-24.
44. Zevitz, R. (2006). Sex offender community notification: Its role in recidivism and offender reintegration. *Criminal Justice Studies*, 19(2), 193-208.