Residency Restrictions: A Geospatial Analysis of Sex Offender Movement over Time

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Abstract

This study assesses the geospatial effects of sex offender residency restrictions in one Florida county at two time points. Data were used to determine if sex offenders were spatially clustered, if tougher restrictions increased clustering, and how residency restrictions affected areas with high concentrations of children and areas of low income. Findings indicate that while minor offender clustering is occurring, in general offenders became more widely dispersed throughout the county as a result of a more restrictive residency ordinance. Results demonstrate that current restrictions do not prevent convicted offenders from living in areas with the highest concentrations of children under age 18 and that a large number of offenders were not in compliance with current restrictions, indicating difficulties with implementation of enforcement.

Since the early 1990s, sex offender policies have focused on protecting the public against sexual victimization by unknown offenders, also known as "stranger danger." Despite studies that show that the majority of sexual crimes are committed by offenders who are known to their victim (Snyder, 2000), researchers have been able to do little to alleviate the public fears about stranger-related sexual crimes. Whereas once sex offenders were viewed as needing treatment to help cure their disordered behavior (Jenkins, 1998), the pendulum has now swung to an environment where there is an overwhelming public and political need for protection against these deviants. This atmosphere of fear has led to post-release requirements for convicted sex offenders such as mandatory registration, community notification and residency restrictions. These policies were implemented to help protect the public from future victimization by convicted offenders, though there is little if any empirical evidence of their effectiveness (Levenson, 2005).

The relative paucity of research into the effects of residency restrictions leaves many questions unanswered. The aim of the current study is to determine how sex offender residency restrictions have changed the spatial dispersion of sex offender residences in one county in Florida using Geographic Information System software. The theoretical and empirical rationale for examining potential relationships between sex offender residency and crime is partially established by a strong literature relating crime and geographical space generally. For example, some research finds a direct link between crime-related decision making and geographical patterns of individual-level offending, perhaps involving a rational calculus to evaluate factors such as target attractiveness and spatial opportunity in the urban context (Brantingham & Brantingham, 1984; Capone & Nichols, 1976). The remaining rationale comes from the strong policy implications frequently championed in the residency restriction movement. Both of these rationales are addressed. While not intended as an

explicit assessment of the ability for residency restrictions to reduce recidivism, this study looks at the potential clustering effects that may be caused by residency restrictions due to the limited housing options available to sex offenders. In addition, this study explores how patterns of sex offender residency relate to areas that may possess a high risk of victimization, particularly areas of low income and areas densely populated with children age 17 and under. Given that main premise of residency restrictions is to decrease contact between offenders and potential victims, the results of this investigation can inform more effective policies for reducing sexual recidivism.

LITERATURE REVIEW

Sexual offenders are the only class of felons required to register their location and have their names and photos accessible to the general public. Further, policies that increasingly limit the freedoms of these offenders even after they have served their court mandated sentences continue to be enacted (Durling, 2006). Residency restrictions seek to control where sex offenders can and cannot live when reentering the community post-conviction and are among the newest restrictions implemented. As of 2008, thirty states and hundreds of smaller jurisdictions have enacted laws that prohibit convicted sexual offenders from living within a specified proximity to "sensitive" areas, and bills to establish residency restriction are currently pending in 12 states (Meloy, Miller & Curtis, 2008). These sensitive areas generally include parks, schools, and day care facilities, but can encompass many more areas that fall within the prohibition of "areas where children congregate" (Stromberg, 2007). Currently, the least restrictive distance requirement is 500 feet, though the standard for many states is to restrict offenders from living within 1,000 feet of designated areas (Levenson, 2005; Levenson & Cotter, 2005). In the last few years, many individual jurisdictions have increased the buffer zones to 2,500 feet, which is the most restrictive distance requirement to date (Levenson, 2005).

Most sex offender policies are based on three assumptions: 1) "All sex offenders reoffend", 2) "Treatment does not work", and 3) "There is a pervasive threat of stranger danger" (Levenson, 2005, p. 3). Research on these three assumptions shows them to be flawed (Levenson, 2005; Zimring, Piquero, & Jennings, 2007). In regards to the first assumption that all sex offenders inevitably reoffend, a recent study by Sample and Bray (2003) found that although sex offenders are more likely to be rearrested for a new sex crime than non-sexual offenders, sexual offenders still recidivate at lower rates than other violent offenders, with an overall rearrest rate for any offense of 45.1% within five years. Compare this to a rearrest rate of 74.9% for those whose most serious offense was robbery, 66% for burglary, 58% for non sexual assault, and 52.9% for larceny. Complimenting this study, a meta-analysis by Hanson and Bussiere (1998) found that sex offenders recidivate at a rate of about 13% within 5 years from release. These studies indicate that it is incorrect to assume that sexual offenders inevitably reoffend.

Perhaps exacerbated by the overall belief in criminology that rehabilitation does not work (Martinson, 1974), sexual offender policies shifted away from rehabilitative programs from the 1970s through the 1990s (Jenkins, 1998). A recent meta-analysis of sex offender treatment programs challenges the assumption that rehabilitation does not work for sexual offenders. Findings show that cognitive-behavioral treatment programs can reduce recidivism by as much as 40% (Hanson et al., 2002). These findings clearly refute the idea that sex offenders cannot be successfully treated.

Finally, the fear of stranger victimization, or "stranger danger," is difficult to assuage in light of highly publicized accounts of heinous sexual crimes of children by strangers. Still, according to a study from the Bureau of Justice Statistics on the sexual assault of young children, over 90% of child victims of sexual abuse are victimized by a family member or an acquaintance (Snyder, 2000). In contrast, 7% of child victims of sexual assault (those age 17 and under) were victimized by a stranger (Snyder, 2000). Although a 7% victimization rate by strangers is certainly worth acknowledging, these statistics illustrate the need for the public to understand that sexual victimization is more likely be perpetrated by someone known to the victim.

Another main assumption specific to residency restriction is that proximity to potential targets, such as children, increases the likelihood of recidivism. This assumption is supported by research suggesting that proximity to an offender increases the likelihood of victimization, identified as distance decay (Rengert, Piquero & Jones, 1999). However, peer reviewed research has not demonstrated that proximity to places where children *congregate* increases recidivism or that housing restrictions reduce recidivism (Levenson, 2005). Looking at the potential efficacy of residency restrictions, Duwe, Donnay and Tewksbury (2008) examined sexual offenders who recidivated in Minnesota from 1990 to 2002 and found it was unlikely that any of the 224 new sex crimes that involved an arrest, conviction, and reincarceration would have been prevented had residency restrictions been in place. This is because most of the crimes did not involve strangers, and most occurred within a mile of the victim's home, a school, park, or a playground. The authors concluded that there is little evidence to suggest that residency restrictions are a viable method for preventing future sex crimes by released sex offenders. Coming to the same conclusion, a review of the frequency of charges for sex crimes in Iowa before and after the implementation of a 2,500 foot residency restriction showed the number of charges to be increasing, instead of decreasing after the restriction was put in place (Blood, Watson & Stageberg, 2008).

Research examining the relationship between proximity to areas where children congregate and recidivism rates found conflicting results. A study done by the Colorado Department of Public Safety (2004) found that child molesters who recidivated did not live any closer to schools or day care centers than molesters who did not commit a new sexual offense. Colorado researchers concluded that residency restrictions should not be considered as an efficacious mechanism for mitigating sex offender recidivism. An analysis of the reoffense patterns of 224 recidivist sexual offenders released between 1990 and 2002 indicated that a residency restriction law would have deterred none of the 224 recidivistic sexual crimes (Minnesota Department of Corrections, 2003).

While the studies by the Colorado Department of Public Safety and the Minnesota Department of Corrections indicate that proximity to targets does not influence recidivism, some research shows the opposite to be true. Walker, Golden and VanHouten (2001) analyzed the residential locations of sex offenders in Arkansas and found that 48% of registered sex offenders with minor victims lived within 1,000 feet of schools, parks and day care facilities, versus only 26% of registered sexual offenders with adult victims. Though this study did examine recidivism, the authors argued from a Routine Activities perspective that sex offenders with minor victims might be situating themselves to be in close proximity to potential targets. Maghelal and Olivares (Unpublished Manuscript) reinforced the belief that sex offenders reside close to potential targets when they determined that 55.4% of sexual offenders living in Brazos County, Texas lived within 1,000 feet of schools, parks, day care facilities. Questioning whether the percentages of sexual offenders living in close proximity to areas of interest mirrors that of the general population, Zgoba, Levenson and McKee (2008) demonstrated that 88% of sexual offenders and 80% of non offending citizens lived by schools, parks, churches, or day care facilities. Chajewski and Mercado (2008) also found that while sex offenders tended to live closer to schools than randomly selected members of the community, sex offenders with adult victims lived closer to schools than sex offenders with child victims.

Looking at offenders' residences and distance to crime, Beauregard, Proulx, and Rossmo (2005) performed a meta-analysis of literature on various types of crimes and found that most offenders commit their crimes in close proximity to their home base. However, only one study examined by the authors looked specifically at offenses against children (homicides of children) and that particular study found that 91% of offenses occurred within 5 miles of the offender's home. Overall, the relationship, if any, between proximity to targets and offense rates, as well as the difference between sexual offenders and non-sexual offenders in residential distance to schools, parks and day care facilities is still unclear. Ultimately, more research needs to be undertaken before any definitive conclusions can be made.

While researchers continue to explore the relationship between proximity to targets and offense rates, literature has also focused on the general effects of these policies. Studies show that as the distance requirements for residency restrictions increase, housing options for offenders become seriously limited (Barnes, Dukes, Tewksbury & DeTroye, 2008; Chajewski & Mercado, 2008; Levenson & Cotter, 2005; Mustaine, Tewksbury & Stengel, 2006; Zandbergen & Hart, 2006; Zgoba et al., 2008). In some cases, sex offenders can essentially be prohibited from living in entire cities or counties, leading scholars to question whether current residency restrictions are the equivalent of societal banishment seen throughout history (Petracca, 2006; Yung, 2007). In one extreme example, sex offenders in Miami, Florida were forced to take permanent refuge under a bridge because they could not find adequate housing due to the city's 2,500 foot residency restrictions (Zarrella & Oppmann, 2007).[1] Although these laws infringe on basic freedoms of sex offenders, courts have ruled that such infringements are superseded by the compelling interest of the state to protect its citizens (Doe v. Miller, 2005). The American Civil Liberties Union has asked the U.S. Supreme Court to rule on this issue, but the court has declined (Levenson, 2005). However, despite the lack of a widespread ban on residency restrictions, some individual jurisdictions, such as Jacksonville, Florida, recently ruled residency restrictions to be unconstitutional (Florida v Schmidt, 2007).

Researchers have examined the extent to which residency restrictions limit housing options for sexual offenders in various locations. A study of residency restrictions in Orange County, Florida revealed that 95.2% of all residential land fell within a 1,000 ft prohibitive buffer zone, and 99.7% of residential land fell within a 2,500 ft buffer zone when including schools, parks, day care facilities, and bus stops as restricted areas (Zandbergen & Hart, 2006). Chajewski and Mercado (2008) found that if implemented, 1,000 foot and 2,500 foot residency restriction in New Jersey would create residency shortages for sex offenders, with 2,500 foot boundaries in urban areas leaving virtually no available space for sex offenders to live. In response to pending legislation of a 1,000 foot residency restriction, or a one mile restriction from areas where children congregate in South Carolina, Barnes et al. (2008) examined the effects that implementing the suggested residency restrictions would have in four counties in the state. The authors found that if the legislation required sex offenders to move out of restricted areas (making the policy retroactive), 19.5% of the offenders would be required to move, and 45.6% of the available residential area would be off limits under a 1,000 ft. residency restriction. Should the 5,280 ft. (1 mile) residency restriction be enacted, 80.9% of the sample would be required to move, and 81.3% of the available residential area would be restricted for these offenders. Consequently, researchers have questioned whether these restrictions will lead offenders to cluster in the limited residential areas available to them (Levenson & Cotter, 2005).

Given the limited housing options available to released sex offenders, Mustaine et al. (2006) found that most sex offenders live in areas that contain at least one trait consistent with social disorganization. The findings of this study raise questions as to whether or not sex offenders are being forced into areas with high concentrations of structural disadvantage, as areas of low socioeconomic status are more likely to be socially disorganized (Sampson & Groves, 1989; Shaw & McKay, 1942). Aside from the challenges for sex offenders to locate stable jobs and maintain a high quality of life, the implications of residents living in areas in which sex offenders take up residence is unknown. One possibility is that children in socially disorganized areas could be increasingly at-risk for sexual victimization due to the preponderance of known sex offenders residing next door and throughout these neighborhoods if the aforementioned theory of distance decay is true (Rengert et al., 1999). In contrast to the finding by Mustaine et al., recent research shows that in Hamilton County, Ohio, areas prohibiting sex offenders due to residency restrictions were actually more disorganized than other areas (Grubesic, Murray & Mack, 2008). While the authors found no support for the assumption that residency restrictions force sex offenders to live in undesirable areas, they contend that just because

1 As of February 6, 2008, those sex offenders residing under the Julia Tuttle Causeway were ordered by local law enforcement to leave the premises and find actual housing, though the 2,500 foot restrictions are still in place (Fox News, 2008).

an area is not off limits to offenders, it does not mean that offenders will be able to find affordable housing in those areas, or won't face community bylaws prohibiting their residency.

Levenson and Cotter (2005) surveyed 135 sex offenders from Florida about their perceptions of residency restrictions and reported that the majority of offenders were unable to live with supportive family members due to residency restrictions. The results also indicated that many offenders suffered financial and emotional hardships due to the restrictions. Further, Mercado, Alvarez and Levenson (2008) found that 34% of respondents sampled from New Jersey reported being unable to live with supportive family members. Each of these studies concurred with prior research on other sex offender policies in reporting that offenders suffered emotional and financial hardships due to the restrictions, which led to decreased stability for the offenders (see e.g., Tewksbury, 2005). Another finding of the study discussed earlier by the Colorado Department of Public Safety found that offenders who had social and family support in their lives were significantly less likely to recidivate (Colorado Department of Public Safety, 2004). Barnes et al. (2008) found that implementing the pending legislative policy of a one mile residency restriction in South Carolina would increase the distance of offender to treatment facilities by 14.2% (approximately 29,000 feet) creating additional burdens to helping offenders successfully rehabilitate. Thus, concern is rising that residency restrictions may be creating environments that are detrimental to offenders' successful reintegration into the community. As residency restrictions limit the ability of released sexual offenders to live with supportive friends and family members, they may lack the support shown to be a significant predictor of successful probation survival for sexual offenders (Hepburn & Griffin, 2004).

Aside from the difficulties created by limited housing options for sexual offenders, there may be difficulties implementing and enforcing residency restrictions themselves. Tewksbury and Mustaine (2006) concluded that one-half of their sample of offenders from Seminole County, Florida was in compliance with local residency restrictions. These findings bring to light the need for research investigating how law enforcement agencies are handling the increased workload associated with record-keeping, home visits, community notification, and other surveillance logistics. Another issue creating problems for law enforcement agencies is the problem of losing track of sexual offenders because they have absconded from registration and effectively disappeared (Human Rights Watch, 2007). As one sheriff in Iowa reported, "We went from knowing where about 90 percent of them were. We're lucky if we know where 50 to 55 percent of them are now…because what the law did is it created an atmosphere that these individuals can't find a place to live. So what that causes them to do is come in and lie about where they're at or maybe they just don't come in at all" (Stachura, 2006).

In sum, research on sexual offender residency policies suggests that while these policies represent an attempt to prevent sexual offenders from reoffending, research has not verified that residency restrictions reduce recidivism. Furthermore, research suggests that residency restrictions are based on flawed assumptions, create difficulties for offenders trying to find housing, and may actually be contributing to sex offender recidivism by increasing hardships on released sexual offenders attempting to reintegrate into the community (Levenson & Cotter, 2005; Mercado et al., 2008).

As residency restrictions continue to be implemented in jurisdictions throughout the United States, it is important to understand the consequences of these restrictions on communities. Research on residency restrictions raises the question of whether offenders are clustering together residentially due to limited housing options (Levenson & Cotter, 2005), and whether sex offenders are moving disproportionately into areas of low socioeconomic status (Mustaine et al., 2006). Also, there is increasing concern over the ability of law enforcement to correctly and consistently implement these policies (Human Rights Watch, 2007; Stachura, 2006; Tewksbury & Mustaine, 2006).

The study at hand attempts to answer several of these questions and to determine the nature and magnitude of geospatial effects of residency restrictions. The area of focus for the analysis is Alachua County, Florida, a medium sized, semi-rural county located in central Florida. The analysis examines the residential movement of released sexual offenders over a four-year period from 2003 to 2007.

During this period the residency restrictions for the county seat, Gainesville, were increased from the statewide standard (for sex offenders who victimized minors) of 1,000 feet from schools, parks and day care facilities to a citywide ordinance restriction of 2,500 feet from the same areas. It was believed that this increased restriction would illustrate a higher intensity of geospatial effects, if any, of residency restrictions. This study focuses on four main research questions:

1. Are sex offender residences clustered in space?
2. Does the spatial distribution of sexual offenders change with the implementation of more restrictive residency restrictions?
3. How do residency restrictions relate to areas that may be at heightened risk of victimization, such as low income areas and areas densely populated with children under age18?
4. Do offenders move into areas that are subject to residency restrictions?

It is hypothesized that low income areas may be at increased risk of victimization not only because more offenders may be living there (Tewksbury & Mustaine, 2006), but because areas of low income tend to have higher proportions of single parent households, which may lead to decreased supervision of children in the area. It is hypothesized that areas densely populated with children age 17 and under may be at heightened risk of victimization due to the increased number of potential targets.

DATA & METHODS

DATA

Data for the present study were collected from several official sources. First, residential addresses and criminal history data for sex offenders as of March 2007 were provided by the Florida Department of Law Enforcement (FDLE) via public records request. Second, residential addresses and criminal history data for sex offenders as of May 2003 were obtained from the Florida Geographic Data Library, a data warehouse maintained at the University of Florida's GeoPlan Center. In both cases, the data contained fields that included the physical address and victim type for registered sexual offenders located in Florida. Next, a variety of supplemental layers were acquired from the City of Gainesville's Planning Department. These layers included locations of schools, daycare facilities, and public parks, all of which are relevant to city ordinances restricting sex offender residence.[2] Finally, standard layers for the county boundary and block group divisions were acquired from the 2000 U.S. Census in order to map patterns of economic distribution and residential distributions of children younger than 18 years of age.

METHODS

Exploratory spatial data analysis begins with locating the phenomena of interest. To this end, we employed ESRI's ArcGIS 9.1 software together with the two sex offender datasets to geocode physical locations and to filter offenders based on whether the victim was a minor. Geocoding is an iterative process whereby a test address is spatially located through matching to a reference layer containing addresses of known locations (e.g., land parcels) or street segments representing address ranges. In this case, a county-wide street centerline was utilized for geocoding. Results were highly accurate, with a 95% successful geocoding rate.[3] This yielded an overall N of 236 for the 2003 list and 249 for the 2007 list. After geocoding, sex offenders were further filtered according to whether

2 Some studies on sex offender residency restrictions incorporate public school bus stops in analyses of geographical proximity. However, under Florida law, bus stops are considered restricted places as a special condition of release supervision that only applies to certain offenders as determined by the Florida Department of Corrections. Our data do not feature details on specific conditions of release, and as such, we have excluded these locations from this analysis.

3 Geocoding rates can be somewhat misleading. For example, it is possible to configure ArcGIS to match addresses that are less than perfect in order to account for variations and human error in data entry (e.g., transposition of digits) or address standardization (e.g., "STREET" instead of "ST"). Furthermore, the positional accuracy of certain geocoding techniques introduces additional error into street-level spatial analyses (see e.g., Zandbergen & Hart, 2009, for a full discussion). For the present analysis, the criteria specified were only addresses that were 100% matches to our reference centerline. "Ties," which occur when one test address can be plotted in two different spatial locations, were excluded. Also, the authors attempted to manually match records in instances where automated geocoding failed; this resulted in a slight improvement to the overall success rate, from approximately 92% successful with fully automated matching to 95% successful with a combination of automated and manual matching.

they were convicted of a crime involving a minor victim. This division yielded an N of 178 for the 2003 list (75.4%) and 197 for the 2007 list (79.1%).

The layers for schools, daycare facilities, and parks were used to create spatial buffers as specified in the ordinance, a nominal radius of 2,500 feet. Although centroids and polygons were both available for buffer creation, the preferred basis is polygons, because it is conceivable that the perimeter of a very large park or school may fall outside of the radius extending outward from the centroid. By selecting polygons, we conservatively display the minimum distance from any portion of the relevant parcel, not just the minimum distance from the center of that parcel. Finally, buffers were joined to create a contiguous "no residence" layer showing areas within the city and county off-limits to sex offenders. This buffer area can be overlaid with the geocoded sex offender residence locations to show how many registered offenders are living in areas that are prohibited under county ordinance or state law. It is important to state that the 2,500 foot residency restriction imposed in 2005 only supplanted the state imposed 1,000 foot residency restriction in the city of Gainesville, not the entire county of Alachua. Though this study mapped 2,500 foot residency restrictions throughout the entire county for the second time period (2007), the result of the study should not be compromised because the majority of the restricted areas (schools, parks and day care facilities) fall within Gainesville city limits, and only one offender in the sample who relocated between the two time periods fell within a 2,500 foot buffer zone that was outside of the city limits. Additionally, this one offender relocated within a 1,000 foot restricted area, and therefore the fact that the buffer is established at 2,500 feet should not unduly influence the results of the analysis.

The 2000 U.S. Census layers were used to identify clustering of household income and population age. Specifically, maps were created using GeoDa 0.9.5-i (Anselin, Syabri, & Kho, 2006) at the block group unit of analysis to show spatial concentrations of three key measures. The basis for each of the maps is the local indicators of spatial autocorrelation, or LISA, which demonstrates statistically significant values for the measure of choice in relation to neighboring units (Anselin, 1995). In this example, each block group (N =121) may be assigned one of four LISA categories: high-high, low-low, high-low, or low-high, depending on the value for the variable of interest for that block group as well as the range of values for all of the block groups that share a common border. Examinations of spatial processes are partly contingent upon the definition of neighboring units included in the analysis, as well as their hypothesized relationships. Defining a systematic proxy for these relationships is necessary because the precise relationships between all observed units are unknown (see Baller, Anselin, Messner, Deane & Hawkins, 2001). The present study utilizes the queen criterion, which specifies that neighbors are defined as those units sharing a border and a common corner. This method provides a common and reasonable approximation of physical neighborhoods. The LISA maps presented here exhibit univariate comparisons across geography rather than bivariate associations; the comparisons that form the basis for LISA categories are between a given block group and neighboring block groups rather than between two separate variables in the dataset. Thus, LISA maps in this analysis not only identify block groups that have significantly high or low values for social variables like socioeconomic status, they also depict the spatial concentration of those block groups relative to the range of values for neighboring block groups.

The measure of income selected was median family income. Two separate age measures were used: percentage of residents under age five and percentage of residents between ages 5 and 17. Because residency restrictions are intended to provide protection to children and adolescents under age 18, both of these categories were deemed relevant to our research questions and used in the analysis. Hypothetically, by identifying where younger children are more densely clustered, it may be possible to test whether residency restrictions for registered sex offenders are preventing the offenders from living in areas that contain more potential victims.

Extant research suggests that sex offenders face a variety of challenges resulting from increasingly punitive residency restrictions (Levenson & Cotter, 2005; Mustaine et al., 2006; Tewksbury &

Mustaine, 2006; Zandbergen & Hart, 2006), but the aggregate spatial effects have not been examined in great detail. A full examination of the residency restriction effects requires both a spatial analysis and a temporal analysis to ascertain changes in spatial patterns over time. This analysis incorporates both aspects by providing exploratory spatial data analysis for the residential locations of registered sex offenders before and after a local ordinance went into effect in November of 2005 which increased residency restrictions from 1,000 feet to 2,500 feet for registered offenders convicted of sexual crimes against minors. The location selected for this analysis provides an interesting case study because one would expect that any effects on the residential locations of sexual offenders due to residency restrictions would be exacerbated by more restrictive residency restrictions due to the decreased residential areas available to sexual offenders. While there is a limited amount of time between the analysis and the implementation date, the analysis can still provide valuable insight into the spatial effects of this policy, even if the study can only provide conservative results.

The primary objective for exploratory spatial data analysis is to map physical locations and observe spatial relationships between potentially related phenomena (see Anselin, 1995; Messner et al., 1999). More specifically, this exploratory spatial data analysis offers insight into sex offender residency restrictions by revealing four trends of interest. First, identifying the basic residential tendencies of sex offenders can be illustrative – whether they are, in fact, clustered tightly together or more randomly distributed in space is pertinent for a variety of theoretical and policy-oriented reasons. To address this question, we present maps depicting spatial concentrations of the proportion of registered sex offenders relative to the population within a given block group. Proportions were calculated by dividing the number of registered sex offenders with minor victims[4] per block group by the general population of the block group.[5] Using proportions helps to alleviate problems that would be found comparing sparsely populated areas to densely populated areas.

Identifying any potential changes in the spatial distribution of registered sex offenders over time, the second research question, is important to better understand the effects of increasingly punitive residency restrictions. We present evidence in the form of mean interpoint distances from 2003 and 2007 and subject these measures to significance testing.

Another critical issue in the management of released sex offenders is addressed in the third research question, which explores the relationships between the locations of registered sex offenders and areas that may be at heightened risk of victimization. We demonstrate these relationships with maps showing the proportions of sex offenders with minor victims to children under age 18, as well as the proportions of sex offenders to the general population, stratified by median income. Proportions were calculated to compare areas densely populated with children to sex offenders by dividing the number of sex offenders with minor victims in a block group by the number children under age 18 in the same block group. These proportions were created for both 2003 and 2007 and were used to create maps illustrating spatial densities for each of the proportions in each block group relative to neighboring groups. Census block groups were then split into three categories: low population of children under age 18, medium population of children under 18, and high population of children under age 18.[6] Statistical tests were employed to compare the proportion of sex offenders to the

4 Sex offenders with adult victims are excluded from this analysis as residency restrictions in the county of Alachua, Florida, as well as the entire state are only imposed on offenders with minor victims.

5 Calculating these proportions using general population values rather than the number of adults 18 years or older per block group is conceptually appropriate, since some sexual offenders may themselves be juveniles. For a comprehensive discussion of juvenile sexual offenders, including policy considerations, see Barbaree and Marshall (2008).

6 The proportions were created by dividing the range of existing values for each of the census variables (median family income, children under age 5, children ages 5 to 17) into three approximately equal terciles, with each level containing 40 census block groups. The division into equal terciles is imperfect, but our belief is that separating block groups using alternatives (e.g., standard deviations from the mean across all block groups) impairs the analysis because the intrinsic ordering into "high, medium, low" categories is lost when relying on central tendency. For example, using standard deviations could naturally result in too few observations (block groups) in a given category, because using categorizations based on mean or median values rather than terciles or other "cut point" methods places great emphasis on the normality (or lack thereof) of the distribution for the census measures under study. While median family income was somewhat normally distributed across block groups in this county for the 2000 census, the distributions for children under age 5 and for children age 5 to 17 were highly skewed.

population for all three groups. Mean income was used to separate the block groups into low income, middle income, and high income, as provided by the Census.[6] One block group (of 121 block groups) was removed from this part of the analysis because there was no mean family income provided in the Census data. Each income category (low, medium, and high income) contained 40 block groups. After separating the block groups, the proportion of sex offenders with minor victims was compared for each category of block groups using significance tests to determine if there were differences in the proportion of sexual offenders based on the socioeconomic status of the block group. This analysis was performed for both time periods.

Finally, to answer the question of whether offenders are moving into restricted areas, maps showing the locations of offenders with minor victims were examined. The number of offenders moving into a 1,000 foot buffer zone as well as the number of offenders moving into a 2,500 foot buffer zone was divided by the total number of offenders who moved between 2003 and 2007 to determine the percentage of offenders not in compliance with the residency restrictions. Only offenders who moved between the two time periods were included in this part of the analysis because residency restrictions are not retroactive, and therefore an offender may be living in a restricted area but still be compliance with the law because they acquired their residence before the areas was restricted to them. It is possible that increasing the restricted areas from 1,000 feet from areas where children congregate to 2,500 feet from these areas will increase the total number of offenders in restricted areas, but the phenomenon will not impact the result found here, because only offenders with minor victims who moved between the time points are analyzed.

RESULTS

RESIDENTIAL CLUSTERING

Geocoding the residential locations of sex offenders with minor victims showed that these individuals were distributed widely throughout Alachua County, with denser concentrations within the incorporated urban area of the county seat, Gainesville (see Figures 1a and 1b). Within the urban area, there was a somewhat tighter concentration of sex offenders living within the city core, while points were more widely distributed at the fringes. Proportions of sex offenders with minor victims in relation to the overall population were created for each block group. LISA maps showed some clustering of sex offenders with minor victims in the Northwest area of Alachua County in 2003, an area characterized as a middle class suburban area (see Figure 2a). Figure 2b displays clustering of offenders in the center of Alachua County in 2007. This area is characterized by lower socioeconomic status on the east side of the Gainesville, the most populous city in the county. The figures show clustering of sex offenders in a small number of census blocks. This clustering effect changed over time from the suburban middle class area of the northwest to a few, lower income, more urban areas in the center of the county. However, despite these few areas with a higher proportion of sexual offenders, overall there did not appear to be well-defined clustering within the county.

CHANGES IN SPATIAL DISTRIBUTION OF SEXUAL OFFENDERS

We next examined patterns of movement for registered sex offenders with minor victims who relocated within the county between 2003 and 2007. Out of the original sample of correctly geocoded registered sex offenders in Alachua County, 40 were identified as relocated between the two time periods.[7] These offenders were mapped and the resulting layers indicated that residential mobility among registered sex offenders did not increase clustering or geographical concentration. To complement the visual assessment provided by Figures 3a and 3b, interpoint distances between the residential locations of all sex offenders with minor victims were calculated for each time period. The

7 Relocation is operationalized here as an individual offender present in both the 2003 and 2007 datasets with different residential addresses at time 1 and time 2. Offenders were matched on FDLE ID number to ensure accuracy. Offenders whose residential address corresponded to a correctional facility (e.g., currently incarcerated) in one or both datasets were removed from the analysis, as they were unaffected by residency restriction policy changes.

Figure 1a. Spatial distribution of registered sex offenders in Alachua County, Florida in 2003 (N = 242).

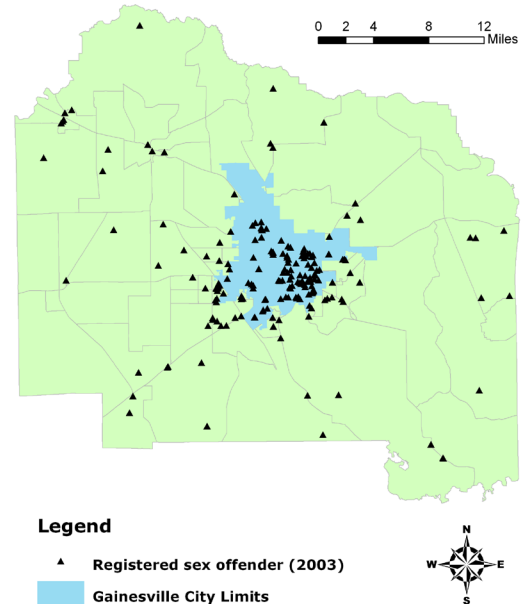


Figure 1b. Spatial distribution of registered sex offenders in Alachua County, Florida in 2007 (N = 249).

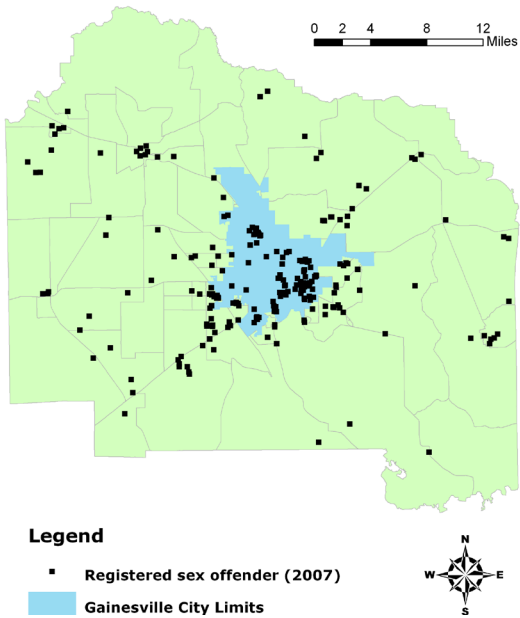


Figure 2a. Spatial concentration of proportion of sex offenders to total population in 2003.

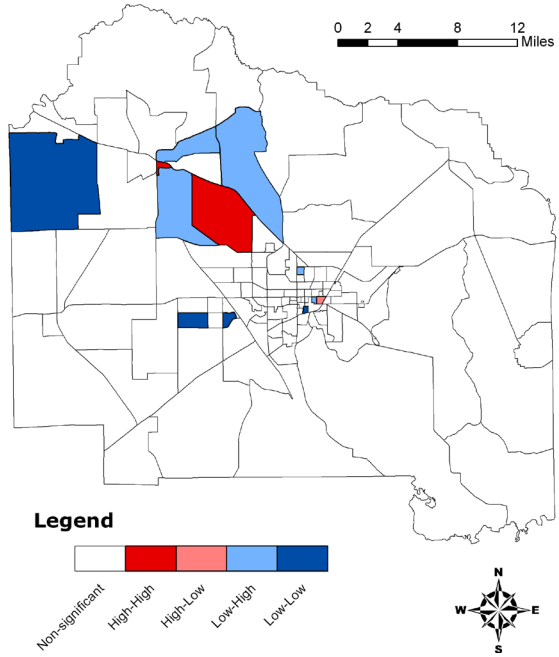


Figure 2b. Spatial concentration of proportion of sex offenders to total population in 2007.

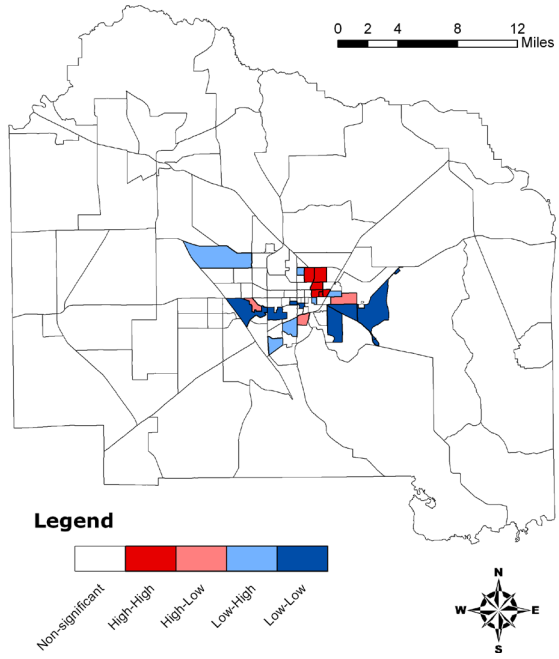


Figure 3a. Intra-county registered sex offender relocations between 2003 and 2007 (N = 40).

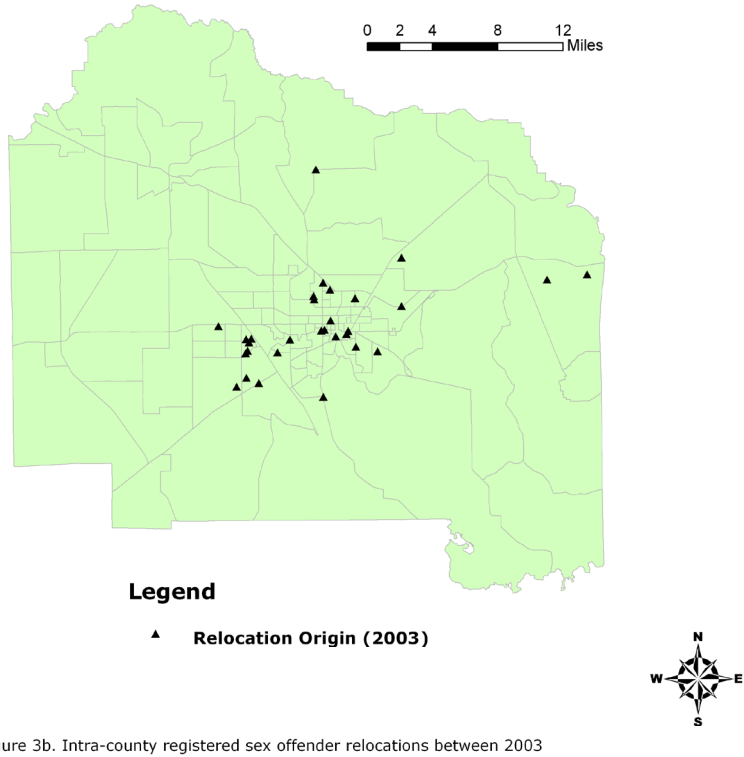
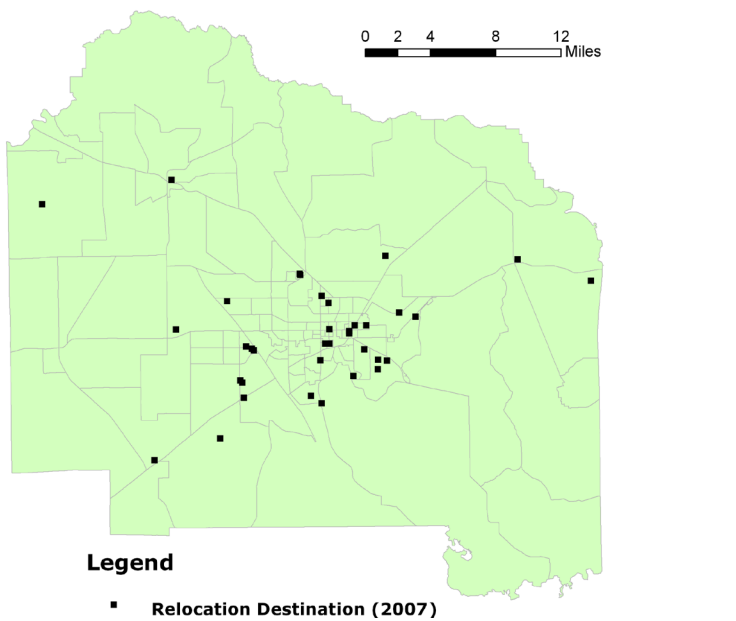


Figure 3b. Intra-county registered sex offender relocations between 2003 and 2007 (N = 40).



mean interpoint distance between offenders in 2003 of 13793.72 feet (standard deviation = 6671.21) and a mean interpoint distance in 2007 of 51110.48 feet (standard deviation = 19174.23) indicated that offenders were further apart in 2007 than in 2003. To determine if the mean interpoint distances were significant, a t-test was performed. Levene's test was significant, indicating that equality of variance for the two time periods could not be assumed. Results showed that the mean interpoint distances in 2003 (N = 178) and 2007 (N = 197) were significantly different from one another (t = -25.625, df = 247.12, p<.001), suggesting that offenders were more dispersed throughout the county as opposed to clustered closer together.

RELATIONSHIP TO POPULATION DEMOGRAPHICS

Exploratory spatial data analysis of the social variables from the U.S. census showed the percentage of minors and median family income were highly concentrated in space. Because the unit of analysis here was block groups rather than individual points, we utilized a standard indicator of spatial autocorrelation, global Moran's I, to determine the degree to which these social variables were concentrated in space. Importantly, the use of global Moran's I provided a means of identifying spatial autocorrelation across all block groups in the county. This conceptualization was appropriate because the analysis was limited to only block groups within a single county, and the analysis itself concerned the spatial distribution of registered offenders within the county as a function of increasingly punitive residency restrictions. Calculation of Moran's I for median family income showed highly significant spatial autocorrelation ($I = 0.4806$, $p < 0.0001$). Thus, Alachua County residents were highly concentrated in terms of socioeconomic status, both at the low and the high ends of the range. Results are displayed in Figure 4a. Further, Moran's I values also indicated highly significant spatial autocorrelation for the concentration of children under 18 years of age ($I = 0.7240$, $p < 0.0001$) within the county. These concentrations are depicted in Figure 4b. Figure 5 displays the restricted areas created by residency restrictions and suggest the restricted areas are equally distributed among areas of high income and low income. Because of this finding, it was not expected that sex offenders would cluster in areas of low income as opposed to areas that are more affluent as a direct result of residency restrictions.

To verify this hypothesis, block groups were separated into three categories (high income, medium income, and low income) of 40 block groups each based upon the mean family income per block group (see Table 1). An ANOVA compared the proportion of sexual offenders in each block group by income groups for 2003 and 2007. Results of the ANOVA were not significant.[8]

Table 1: Descriptive statistics for census (2000) block groups in Alachua County, Florida.

	N	Min	Max	Mean	Std. Dev.
Mean Income					
Group 1: Low Income	40	$4,821	$31,750	$22,193.50	$6,933.74
Group 2: Med. Income	40	$33,036	$48,576	$39,817.55	$4,519.34
Group 3: High Income	40	$48,750	$98,959	$66,078.87	$14,705.11
Children Under 18					
Group 1: Low Population	41	0	180	99.76	55.04
Group 2: Med. Population	40	191	386	275.77	57.261
Group 3: High Population	40	390	1915	716.03	366.676

The geospatial analyses at both time periods showed that the residency restrictions did not cover large areas highly populated with children younger than 18 years of age. Still, while sex offenders were shown to live in close proximity to these areas of high concentration of minors, they did not seem to congregate or cluster there in a systematic or intentional fashion (see Figures 4a and 4b). Block groups were divided into three groups by the mean number of children younger than 18 years of age

8 Tables displaying the ANOVA results were omitted due to non-significance, but they are available upon request from the authors.

Figure 4a. Spatial concentration of SES in Alachua County, Florida (2000 Census).

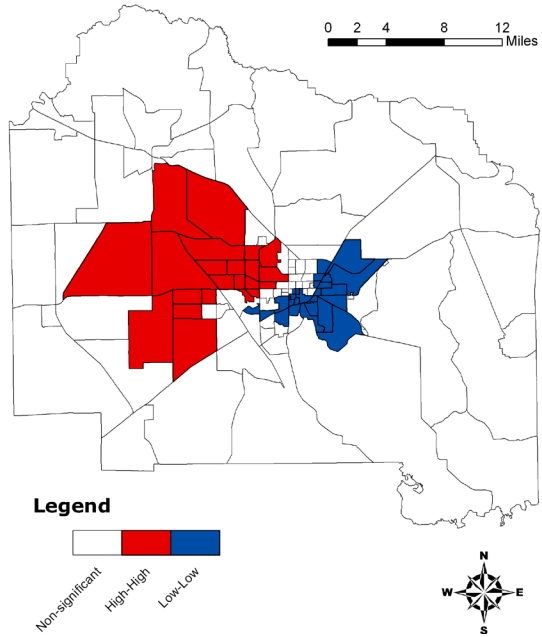


Figure 4b. Spatial concentration of children under age 18 in Alachua County, Florida (2000 Census).

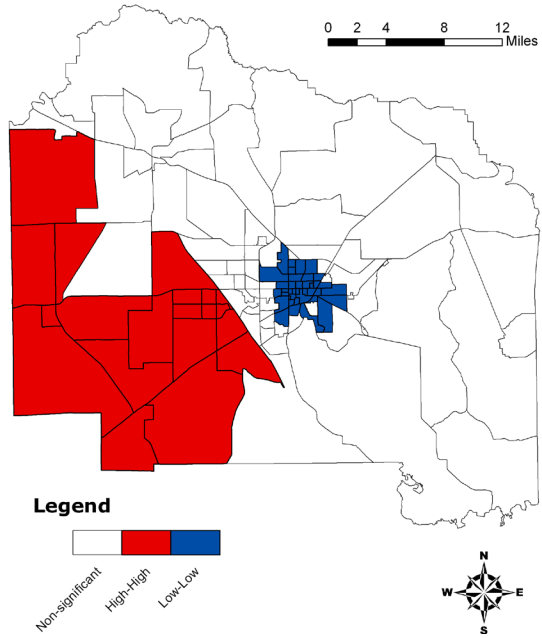
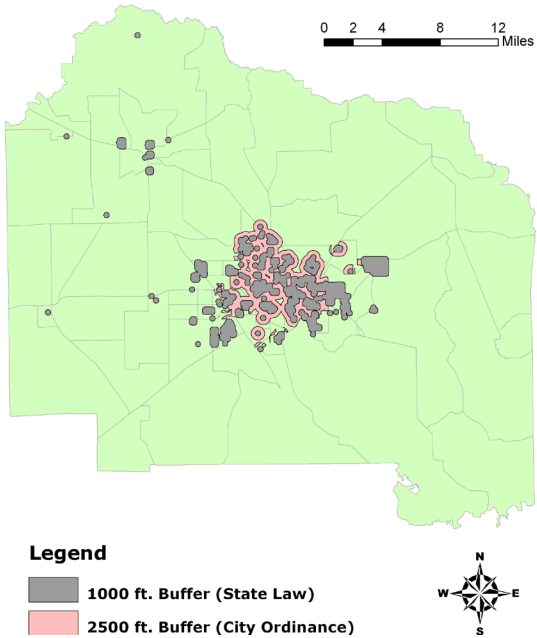


Figure 5. Residency restriction buffers.



(see Table 1). To determine if the proportion of sex offenders to the population differed significantly for the three groups, ANOVA tests were performed for each time period. Again, the ANOVA tests for 2003 and 2007 were not significant. Given these tests, we conclude that sex offenders were not more concentrated in areas of low socioeconomic status or areas densely populated with children under age 18. In contrast, the proportion of offenders was equally dispersed throughout the county, both before and after the implementation of the harsher residency restriction policy.

Additionally, the observed counts of sex offenders residing within each of the geographic buffer zones (within 1,000 feet of a restricted location, between 1,000 and 2,500 feet of a restricted location, within 2,500 feet of a restricted location, and outside 2,500 feet of a restricted location) were tabulated for each time period (see Table 2). Although the more punitive 2,500 foot restriction ordinance was not in effect in 2003, identifying the number of offenders who would have been subject to its enforcement provides a useful contrast. The differences in counts between Time 1 and Time 2 illustrate that the number of offenders in each restricted zone decreased substantially, although the overall number of offenders in Alachua County remained relatively constant from 2003 to 2007. This demonstrates that offenders reside increasingly outside of the buffered areas, and it also suggests that the spatial distribution of offender residences in 2007 became increasingly scattered rather than concentrated in the densely populated urban center.

Table 2: Tabulation of sex offender locations by geographic proximity to residency restriction zones in Alachua County, Florida, 2003 and 2007.

	2003	2007	Difference (T_2 - T_1)
Within 1,000 feet (state law)	106	80	-26
Between 1,000 feet and 2,500 feet	39	27	-12
Within 2,500 feet (city ordinance)	116	73	-43
Outside 2,500 feet	126	176	50
Total	242	249	7

RESIDENTIAL MOBILITY OVER TIME

A more interesting trend was illustrated when the sex offender residential movement points were overlaid with the 2,500 ft. buffers specified in county ordinances. In this case, results show that many offenders relocated into "off limit" areas under the more punitive residency restrictions. The analysis indicated that 27 of the 40 sexual offenders with minor victims (72.5%) who moved between 2003 and 2007, moved into a 2,500 ft. restricted buffer area. Because actual move dates were not provided in the available data, it is possible that all 40 offenders could have moved before the more stringent 2,500 foot residency restrictions were put in place. As such, the movement of offenders was also analyzed using 1,000 foot buffer zones. This analysis indicated that 40% (N = 16) of offenders moved into restricted areas. The nature and circumstances of these movements was beyond the scope of the present analysis, but it appeared that in some cases, more punitive ordinances were not effective in preventing registered offenders from relocating into restricted areas. Results are shown in Figure 6. It should be noted that at the 2007 time period, 108 sexual offenders with minor victims were living within the 2,500 foot buffer zones. This is not unexpected, however, because residency restrictions in this area were not retroactive, and therefore offenders who maintained a residence within a restricted area before the restrictions were put in place were not required to move.

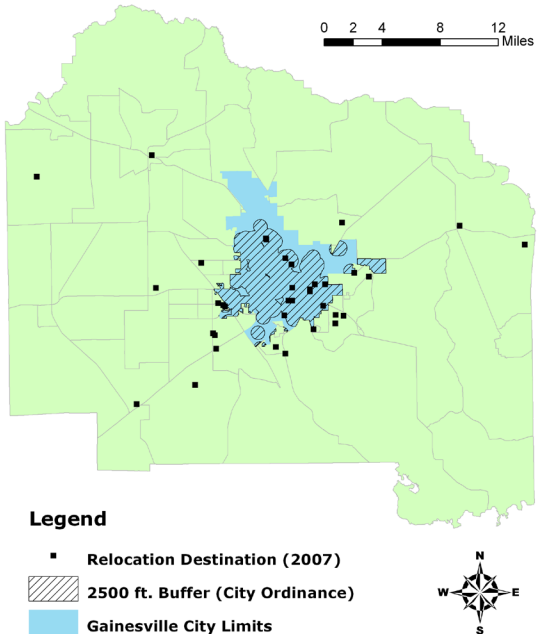
DISCUSSION

This study's primary objective is to examine the effects of sex offender residency restrictions on the spatial distribution of registered sex offenders over time. In regards to the question raised by prior researchers that residency restrictions may lead to clustering (Levenson & Cotter, 2005), data from both time points show concentrations of sexual offenders with minor victims in several block groups throughout the county. However, when using mean interpoint distances to examine the influence of increasing the residency restrictions from 1,000 feet to 2,500 feet, results show that offenders became more dispersed throughout the county, as the mean distance increased from 13793.72 feet in 2003 to 51110.48 feet in 2007. The discrepancy between the apparent clustering found in the LISA maps and the dispersion effect found through interpoint distances may be explained by the small number of offenders with minor victims in the county. There were 121 Census block groups in the analysis and between 178 and 194 offenders with minor victims in 2003 and 2007 respectively. Because of this, each offender moving into or out of a block group can have a significant influence on the spatial autocorrelation of sexual offenders. While clustering increased in a few block groups between the two time periods, the general trend indicated by the interpoint distances reveals that offenders are being more widely distributed throughout the county. As we find clustering in both time periods, it is unclear if the clustering is solely caused by residency restrictions. It is possible that the residential clustering is due to the increased hardships placed on sex offenders resulting from the combination of policies enacted against them, including registration and notification, which may contribute to decreased financial stability (Levenson, 2008; Levenson & Cotter, 2005; Levenson & Hern, 2007; Tewksbury, 2005). This relationship needs to be fully explicated through future research.

One potential concern casting doubt on this finding is that offender clustering may be driven largely by the shape and orientation of the incorporated city limits, which in this study represent the jurisdictional limits of the harsher 2,500 foot restrictions. The conventional logic behind this supposition is that as buffered restriction zones grow, the number of available domiciles for registered sex offenders decreases. Our perspective is that the opposite finding, namely those more punitive restrictions may result in greater dispersion, is equally plausible. This supposition is partially supported by our analyses, which indicate that the number of sex offenders residing outside of the 2,500 foot buffered areas (representing most of the Gainesville city limits) increased dramatically from 2003 to 2007 despite relative stability in the overall number of offenders in Alachua County (see Table 2).

The third research question for this study investigated how residency restrictions related to areas that might be at heightened risk for victimization, such as areas of low mean family income, or areas

Figure 6. Intra-county registered sex offender relocations with residency restriction buffers in 2007 (N = 40).



densely populated with children under age 18. Statistical tests showed no significant differences between the proportions of sexual offenders in areas of low, medium, or high income, as well as no significant differences between the proportion of sexual offenders in areas of low, medium, and high populations of children under age 18. While it was anticipated that the proportion of offenders would not differ based on mean family income because it was shown that the residency restrictions in Alachua County were evenly dispersed between areas of high income and areas of low income, it was noteworthy that offenders were not more concentrated in areas densely populated with children under age 18, even though maps indicated that the majority of these areas were not restricted by residency restrictions. This finding adds to extant research which found that sex offenders do not live significantly closer to areas where children congregate than members of the general population (Zgoba et al., 2008), further discrediting the assumption at the heart of residency restrictions that offenders place themselves near potential victims in a systematic way.

Finally, this study looked at the number of offenders moving into areas restricted by residency restrictions. By mapping the locations of the 40 offenders who moved between 2003 and 2007, it was shown that 72.5% (N = 27) moved into a 2,500 foot restricted buffer area. In the event that all 40 offenders who moved did so before the 2,500 foot restriction was implemented in 2005, the locations were reanalyzed using the original 1,000 foot buffer zones. The results of this reanalysis showed that 40% (N =16) moved into restricted areas.

While this study offers a valuable addition to what is known about the effects of residency restrictions, the analyses are not without limitations. First, these results are based on a single county. This concerns both the study's sample size, which is relatively small, as well as the overall generalizability of the findings. We believe that the present analysis could provide a model for further extension of this line of inquiry, and fully support replication in different regions with larger datasets, including those featuring yearly observations. Our view is that further replication is a necessary

and an inevitable step needed to forward this growing sub-field. Also, while we have no reason to believe that the results of this study are widely or perfectly generalizable, we contend that Alachua County represents an interesting test case that offers certain environmental advantages such as highly pronounced class-based segregation. More importantly, the phenomenon of increasingly punitive residency restrictions observed in Alachua County is being repeated and modeled all over the country. Second, our data do not permit fully robust conclusions about some trends that we identify. For example, although it seems unlikely, it is possible that all offenders in the sample who relocated between 2003 and 2007 could have done so prior to 2005, when the 2,500 ft. restriction ordinance went into effect. Thus, some offenders who were observed as relocating into the larger "no access" buffer zones may have been in compliance with state law at the time of their move. It should be noted, though, that a large portion of the offenders who relocated between 2003 and 2007 (40%, N=16) would have still fallen within the previous 1,000 foot buffer zones under state law. Unfortunately, retrospective offender location data was unavailable for additional years within the study timeframe for use in our analysis, as the official data source maintained by Florida Department of Law Enforcement is continually updated, and old files are not stored for researchers to access. We hope that future studies involving replication with larger datasets can help to understand the trends in offender movement over time.

Finding that a large number of sex offenders were in violation of the residency restriction points to an additional limitation of the study. While the purpose of this study was to assess the overall effects of residency restrictions on the spatial distribution of sex offenders, this study cannot give an accurate depiction of those effects because it is apparent that the restrictions were not working as intended. It is possible that in an area were there is 100% compliance with residency restrictions, residential clustering, dispersion, or relationships between offenders and areas of low mean income or high populations of children may be different. Still, the results offered by this study are valuable as they provide a look into the effects of these restrictions as they are being implemented by counties. There is no reason to suspect that the implementation of residency restrictions in Alachua County, Florida is different from other jurisdictions with residency restrictions, as the rate of non-compliance in this study was comparative to previous studies looking at residency restrictions (Tewksbury & Mustaine, 2006). Another limitation of the study is the use of static figures for area characteristics. While this study utilized data from the 2000 Census at the block group level, variables such as population, mean family income, and number of children under age 18 remained constant at both time periods. Unfortunately, data on these variables was not available on a year to year basis, forcing this analysis to use these static figures. Finally, while we illustrate trends in spatial concentration for two time periods surrounding the more punitive residency restriction intervention, we cannot reliably make inferences about potential effects before residency restrictions of any type were made effective. Doing so would require, at minimum, a third time point with residency data for sex offenders before any residency restrictions were put in place in order to compare all three levels of restriction. Unfortunately, we were unable to locate this data for our analysis, as Florida instituted residency restrictions for sexual offenders in 1997, but the state does not retain residency records for sexual offenders at different time periods. The registry in Florida is updated from a master list, thus the FDLE was unable to trace back to 1997 to determine where sex offenders were living at that time. With the appropriate data, we regard this additional analysis as a valuable future research direction.

Exploratory spatial data analysis shows limited residential clustering of registered sex offenders in Alachua County. This may be viewed as supportive of the currently underdeveloped literature on criminological theories that might potentially explain sexual offending as a function of geography and social structure (e.g., social learning, routine activities, etc.), because those theoretical orientations might predict spatial concentration of offenders. Our analysis is not intended to assess any theoretical suppositions about the etiology of the behavior, but this study and others like it may be instrumental in constructing theoretical models that could better account for this class of offenders. These results

may differ in other areas, however, if residency restrictions are not equally distributed in space between areas of high socioeconomic status and areas of low socioeconomic status.

When considering potential theoretical relationships between the variables under study, many questions remain largely unresolved. For example, although geographic proximity is supposed to relate to sexual offender recidivism and/or the risk of victimization for children under age 18, thus, residency restrictions are widely popular, the nature of that relationship is tenuous. One line of reasoning suggests that smaller geographic areas present more risk than larger areas when holding the number of potential victims constant; however, it is at least conceivable that the opposite could be true, and that victims could be sought out when they were less numerous for any number of logistical and practical reasons (victims' social isolation, restricted patterns of movement, greater predictability, etc.). Ultimately, this is an empirical question that we cannot address in this analysis because we lack victimization data. Notably, developing this line of reasoning and empirical inquiry would also have implications for methodology, as future studies could use geographic area to adjust proportions as a function of the hypothesized relationship between area and risk in this population.

Examining the spatial clustering of offenders has implications for policy as well. From a policing perspective, information pertaining to the spatial distribution of registered sex offenders may aid in routine patrols, preventive techniques such as neighborhood watch programs, pursuing technical parole/probation violations through regular address verification, and a variety of other concerns. However, results from this study suggest that the workload and administrative responsibilities for police may actually be increased by harsher residency restrictions, because offenders are dispersed more widely, making coordination of prevention and monitoring programs more difficult and labor-intensive. This is to say nothing, of course, about the increasingly demanding workload resulting from "net-widening" and broader classification schemes in Florida as well as many other states.

Our analysis also identified two demographic properties potentially relevant to policies affecting sex offender residency restrictions. First, it appears that socioeconomic status is highly spatially autocorrelated in Alachua County. If residency restrictions were differentially affecting offenders based in some way on their income level, these trends should have been apparent in the maps showing the spatial distribution of offender residences. Examples of this type of potential effect include class bias or a differential effect whereby offenders are relegated to lower-socioeconomic status areas due to fewer opportunities to relocate into middle-class or upper-class neighborhoods. However, it appears that the spatial distribution of registered sex offenders both before and after the more punitive 2,500 ft. residency restrictions is relatively unrelated to income.

Second, our analysis suggests that residency restrictions in Alachua County may not be protecting the children under age 18. Many of the 2000 Census block groups identified as having a high-high concentration of residents under age 18 had few or no residency restriction buffers whatsoever. This occurs because schools in Alachua County are centrally located, for the most part, but aggressive expansion and annexation of the city of Gainesville has meant a great deal of growth in the northwest and southwest quadrants of the urban area. Gainesville's schools remain fixed in the urban core, while many residents who have young families relocate to the unincorporated fringes where new, primarily middle-class neighborhoods are being developed. Construction of new schools, parks, and daycare facilities has not kept pace with housing, rendering residential restrictions essentially meaningless in certain areas characterized by a high density of families with young children.

With respect to the residential mobility trends over time, our analysis suggests questions about the efficacy of residency restrictions. For example, many offenders relocated into "off limit" areas within Alachua County between 2003 and 2007. Some ordinances restricting residency also feature exemptions usually enacted by judges to alleviate hardship in cases where a registered offender has searched unsuccessfully for a suitable place of residence outside the restricted areas (Levenson & Cotter, 2005). It is unclear how many cases in Alachua County were accompanied by such exemptions, or the precise nature of the requests. These questions should be addressed in future

research investigating court decisions involving sexual offenders. It is possible that offenders are unable to locate suitable residences due to their own socioeconomic background or income potential, but a trend of this nature should have resulted in a clustering effect in the highly polarized low-socioeconomic status areas of Alachua County. No trend is evident.

One of the most alarming findings from this study is that residency restrictions are not covering areas highly populated with children less than 18 years of age. This finding gives reason to criticize the locations selected for residency restrictions that appear arbitrary (schools, parks and day care facilities). While offenders may not be able to live near a school where children congregate under constant supervision, convicted sexual offenders may live next door to a family with small children who play unsupervised outside their home. Also, as results show at both time periods, many sexual offenders with minor victims live within restricted areas because they secured that residence before restrictions were implemented. These nuances may give provide a false sense of security that could possibly contribute to future victimization if parents are less diligent in monitoring their children because they believe they are living in an area "off limits" to sexual offenders. Even if research showed evidence that residency restrictions could be effective, a finding unsupported in the literature to date, these laws would not be a panacea for parents.

CONCLUSION

Addressing policy issues pertaining to sexual offenders is a delicate matter at best. Many policymakers are well-intentioned when championing sex offender policies, such as residency restrictions, that are presumed to be clearly and definitively in the best interests of the public. However, evolving research on these measures suggests that they may have no effect at all; even worse, that they may aggravate the problem. This study shows limited clustering of the residential locations of sex offenders with minor victims. Furthermore, increasingly harsh residency restrictions resulted in the dispersion of offenders throughout the county. In addition, offenders did not appear to be moving disproportionately into areas of low socioeconomic status, or areas densely populated with children younger than age 18. Finally, results suggest that residency restrictions are not functioning as intended as indicated by the number of offenders moving into restricted areas. Unfortunately, the politics of sex offender policy, which can scarcely be separated from logical or legal rationale, makes comprehensive reform in the near term unlikely. One of the greatest challenges moving forward will be to remember that the best intentions must be tempered with objective, systematic analysis in order to guide future policy.

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