The proximity of sexual violence to schools: Evidence from a township in South Africa

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Abstract

Schools are unique places that greatly influence the daily lives of learners. Examining any factors that may be contributing to school absenteeism and dropout rates is vital as gaining an education is central to reducing the poverty gap as well as lowering income inequality, particularly in less developed contexts. This study examines the proximity of sexual violence to both primary and secondary/intermediate schools in the impoverished township of Khayelitsha in South Africa. The locations of schools in 2005 ($n = 55$) and sexual crime data from 2006 to 2015 ($n = 1518$) were analyzed to determine the median number of crimes within a set of buffer distances around school perimeters. A point process model (homogeneous multi-K function) examined spatial clustering. Results indicate that sexual violence clusters around both types of schools in Khayelitsha. We discuss possible reasons for the findings and potential implications for future research and practice.

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Introduction

Much recent research has focussed on the association between schools and crime. Generally speaking, researchers have found that neighbourhoods with a higher number of schools typically experience more crime (see McCord et al. 2007; Osborne et al. 2016; Hewitt et al. 2018). Recent work in the District of Columbia, United States has found that the crime-generating power of schools is greater in neighbourhoods with a higher percentage of youth and with a higher percentage of the population living in poverty (see Osborne et al. 2016) while in Vancouver, Canada, Hewitt et al. (2018) found similar effects but in neighbourhoods with a higher percentage of single residents. Studies finding more ambiguous associations between school locations and crime include Kautt and Roncek (2007); Murray and Swatt (2013); and MacDonald et al. (2018) with the latter researchers finding no evidence that new school openings increased crime in affected neighbourhoods in Philadelphia relative to neighbourhoods where schools were always open or never had schools.

A number of theoretical perspectives housed within the school of environmental criminology play a central role in understanding the nature of the relationship between schools and crime. From the routine activities and crime pattern perspectives, a school is a common and predictable node that learners routinely travel to and from leading to an increased risk for offending and/or victimization. Accordingly, schools act as crime generators in that they are easily accessible to the public and attract large numbers of people providing an increased opportunity for motivated offenders. Likewise the school environs could also attract potential offenders as an increasing number of often unsupervised youths travel to and from school reducing the effectiveness of neighbourhood informal social controls (Sampson 2012). Schools are, however, necessary and permanent neighbourhood institutions which feature prominently in the urban environment. Schools themselves, and the spaces around them should engender feelings of safety and security among learners and be conducive to positive social engagement

and interaction. Any incidence of crime in these spaces should be of great concern since crime and violence in and around schools has been shown to affect learners physical and emotional well-being (Muschert and Peguero 2010; Espelage et al. 2013), levels of academic achievement (Wang et al. 2014), and academic progression (Ncontsa and Shumba 2013). While much is known at the aggregate level about the impact that schools have on neighbourhood-level crime rates, much less research has examined the point pattern spatial distribution of crime around schools, particularly sexual crime. In fact, to our knowledge, no previous study has examined the spatial diffusion of sexual crime around schools in particular, and certainly not in a developing country context.

Our research aims to examine the spatial clustering of sexual violence around 55 schools in the township of Khayelitsha in South Africa. We use point level crime data and a novel geospatial technique to examine the diffusion of sexual violence around both primary and secondary/intermediate schools in this unique setting. This is important to study for a number of reasons. First, sexual violence is endemic to South Africa. A person is raped or indecently assaulted every minute in the country (Sigsworth 2009), with population-based studies in South Africa finding that between 28% and 37% of men have perpetrated rape (Dartnall and Jewkes 2013). These troubling national statistics mask sub-national trends which are often considerably worse in more deprived regions of the country, such as Khayelitsha. Any study that is able to provide further insight into the nature and distribution of this national scourge in the country is valuable. Second, anecdotal evidence suggests an increase in crime in and around schools in the country with school learners particularly targeted as they travel to and from school (see Lange and Schmidt-Kallert 2010; Kelto 2013; Gontsana 2016). Such occurrences, if found, are likely to result in a decrease in school attendance and a concomitant increase in school drop-outs in affected communities. South Africa currently sits last in the World Economic Forum's (2016a) list of 139 countries in terms of mathematics and science education

– below Nigeria, Mozambique, and Malawi. Only 40% of any given cohort of learners starting school in the country go on to pass matric (Grade 12, usually aged 18) – the final level of schooling in South Africa – leaving roughly 60% of youths with no qualification at all (Spaull 2015). Examining the factors that may be contributing to school dropout rates, particularly in more deprived regions of the country, is vital if South Africa is to address its poverty gap and reduce income inequality, currently the highest in the world (World Bank 2018). Finally, the study provides further insight into the role of schools as crime generators. Results of previous work strongly support the notion that the presence of schools in a neighbourhood leads to an increase in the risk of crime, although questions remain about this association in less developed contexts. Indeed, as with most criminological theories, laws and axioms, it is unknown if this relationship exists in an African context in general, and in a South African context, specifically. This is important to ascertain as it provides a measure of academic credibility and generalizability to an association generally accepted and acknowledged by most environmental criminologists.

The rest of the paper proceeds as follows. We first provide an overview of the study site as this provides greater context for the study. After that we briefly explain the data used for the study and the methods employed before discussing our results and concluding.

Study site

The site for this study is the township of Khayelitsha, located on the urban periphery of Cape Town, a city in the southwestern corner of South Africa (see Figure 1). Khayelitsha was formed in 1983, a late enforcement of the Group Areas Act of 1950. The Group Areas Act provided for the comprehensive racial segregation of South African cities and involved the forced relocation of Black African families into predominantly outlying rural areas, distant and distinct from the White urban core. Khayelitsha is one of the densest (estimated at 10120.31

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people per km² (Statistics South Africa 2011)) and most impoverished townships in the country with a population of roughly 400,000, of which almost 99% are Black African. The World Economic Forum (2016b) lists Khayelitsha as one of the world's five biggest slums with an estimated 32% to 46% of households in the township living in severe poverty. Rather predictably, crime is Khayelitsha is rampant. The township is among the most violent in the country with the homicide rate consistently over 80 per 100,000 residents, almost double the national average (Crime Hub 2018). The township has one of the highest rates of sexual violence in the world outside a conflict zone (Luthy-Kaplan 2015), with one in three children under 18 likely to be a victim of rape and sexual assault (Inter-Ministerial Committee 2017) and 41% of primary school learners having experienced sexual violence in an intimate partnership in the preceding 12 months (Morison et al. 2017). Trust in the police is low (O'Regan et al. 2014) which has resulted in a surge in 'mob justice' and violent vigilantism incidents over the past decade (Super 2016), exacerbated by a concomitant increase in gangsterism (Pinnock 2016). According to Gillespie (2013), an informal justice system exists in Khayelitsha, headed by local taxi associations and local street patrols and committees. This informal system has deep historical roots in the township and is borne out of desperation and frustration of the community who see the South African Police Service (SAPS) as corrupt and incompetent (O' Regan et al. 2014).
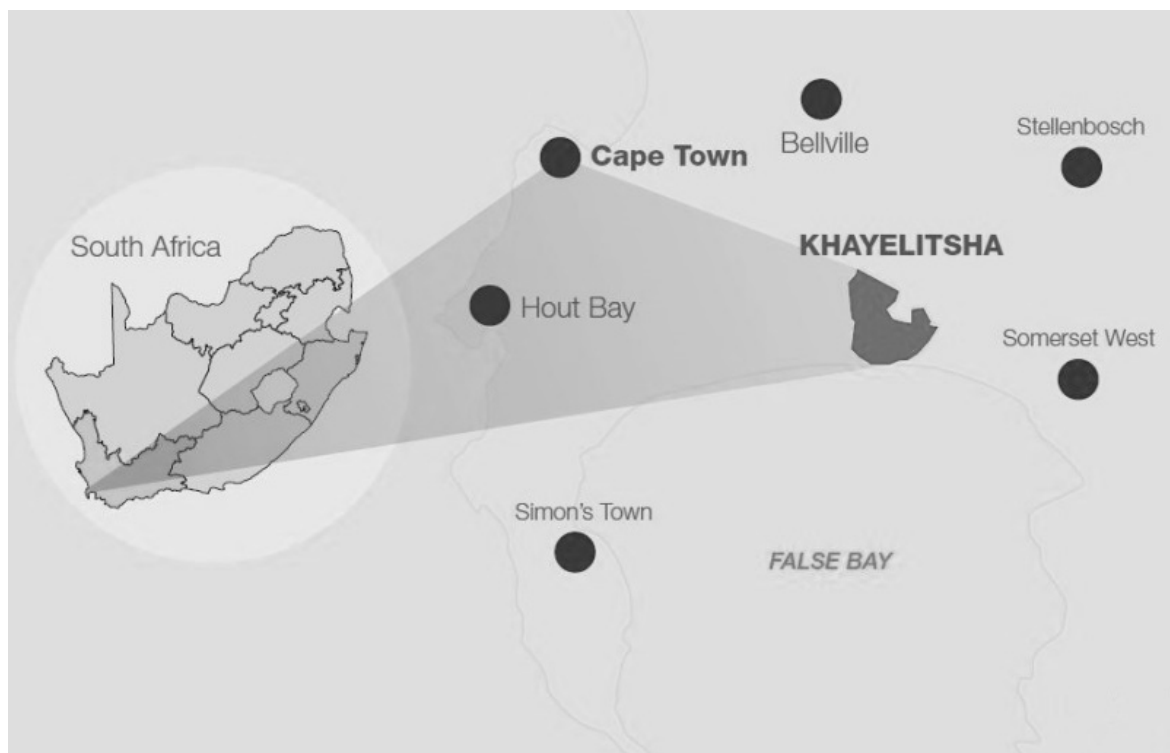
Figure 1: Location of Khayelitsha, South Africa

It is within this broader context that the present study aims to make a contribution. In particular, we aim to provide answers to the following two related questions: First, does sexual violence spatially concentrate around schools in Khayelitsha? And second, if so, do these concentrations vary based on the type of school (primary and secondary/intermediate)? Anecdotal evidence in township settings such as Khayelitsha indicates that school-going youth are vulnerable to (sexual) crimes as they travel to/from school due to their routine visibility and lack of adequate community protection and social control (including inadequate policing, investigation and prosecutorial services) (Lange and Schmidt-Kallert 2010; Kelto 2013; Gontsana 2016). This study aims, in part, to examine the veracity of these claims.

The spatial distribution of schools and crime are often embedded within a road-network-constrained urban space. The inter-connected factors that might explain this interplay of schools and crime within the unique underlying urban township structure are also discussed.

Data and methods

The City of Cape Town municipality provided the addresses of schools located in Khayelitsha. Each school was classified as either primary (Grades 1-7) (n = 31) or intermediate/secondary (Grades 8-12) (n = 24) and mapped. The locations of schools were verified by Internet sources. The schools were categorized by type as we were interested in determining whether the spatial patterns of sexual victimization differed by the type of school. It could be, for example, that younger learners are at an increased risk of victimization.

Crime data for Khayelitsha was obtained from the South African Police Service (SAPS). These data contain information pertaining to the location, date and time of occurrence of all contact crimes by category in Khayelitsha over a nine year period: 2006-2015[1]. Sexual violent crime was extracted from this dataset and included incidences of rape, attempted rape, sexual assault and indecent assault. The initial dataset comprised 4997 sexually violent crimes. From this initial dataset, we removed sexual crimes that occurred on weekends (Saturdays and Sundays), school holidays, as well as sexual crime that occurred in the evenings (after 18:00pm). This resulted in 1518 incidences of sexual violence over the ten year study period. Of course, it is well-known that crime - and especially sexual crime in South Africa - is notoriously under-reported (see Breetzke 2006), and potentially even more so in a township community which has essentially lost all confidence in the police. Indeed, a recent study found that just under four percent of women who had been raped (by either a partner or non-partner) had reported it to the SAPS (Machisa et al. 2010). While unfortunate, these problems are simply a reality in a number of less developed contexts with little possibility of recourse for researchers. The data are, however, official and the most spatially replete data available with which to conduct analysis and draw inferences. All data obtained for this research was obtained

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[1] The 'Greater Khayelitsha reporting area' consists of three police precincts: Khayelitsha, Harare, and Lingelethu West. We used crime data for all three policing precincts in this research.

following correct ethical procedures as outlined by the authors' respective academic and research institution.

Initially, the number of sexual crimes located within a 200 meter Euclidean buffer of each school perimeter was calculated. This analysis was repeated at the 400 meter and 600 meter buffer distances. Road network buffers were considered but, given the informal nature of much of the road network in the township and the fact that the vast majority of learners walk to school (National Household Travel Survey 2013), we felt it more prudent to use Euclidean buffers. The relatively small buffer distances were chosen due to the extremely high population density of the township and the fact that they broadly approximate a township 'block'. To describe the sexual crime distribution around schools, the median, minimum, and maximum number of sexual crimes and the proportion of schools with at least 40 sexual crimes incidences within 200 meter, 400 meter, and 600 meter buffer distances were calculated and differences compared using a Wilcoxon test for equality of medians. Spatial point pattern analysis using a multitype K-function was used to determine the spatial clustering of sexual crime located within 200 meter, 400 meter, and 600 meter buffer distances of each school. The multi-K function ($\lambda_j K_{ij}(r)$) counts the expected number of additional random points (λ, intensity per unit area) of a type j (sexual crime) within a given radius (r, up to 1500 meters) of a point of a type i (school). The resulting theoretical (expected) multi-K function curve is then compared with the empirical (observed) multi-K function curve. Independence (similar multi-K function curves) indicates that the location of sexual crime relative to schools is not statistically different from that of randomly assigned sexual crimes relative to schools (the null expectation), whereas deviation (divergent multi-K function curves) suggests significant spatial dependence between schools and sexual crimes (i.e., clustering of sexual crimes around schools).

Results

A kernel density map indicating the spatial distribution of sexual crime and schools is shown in Figure 2. Overall, zero percent, 29% and 75% of schools in Khayelitsha had more than 40 sexually violent crime incidents located within 200 meter, 400 meter and 600 meters, respectively (see Table 1). No schools had 40 or more sexual crimes within the 200m buffer interval. Interestingly, the percentage of schools with more than 40 sexual crimes at the 400 meter and 600 meter distance buffers was higher for primary schools at 32% and 77%, compared to secondary/intermediate schools, at 25% and 71%, respectively. The median number of sexually violent crimes within 200 meters of all schools is seven, and rises to 29 at 400 meters, and 68 at 600 meters. Similar to the above, these overall statistics mask local variability by type of school where primary schools exhibited a higher median at the 200 meter buffer distance. Worryingly, these trends continue at both the 400 meter and 600 meter buffer distances. No significant effects were found in the Wilcoxon tests for median equality between school type at the 200 meter, 400 meter, or 600 meter buffer distances.

Table 1: Median number of sexually violent crime incidences and the percentage of schools with at least 40 incidences in close proximity to schools, by school type

|	No of schools	Median number of crimes within 200m	Range (min, max)	% of schools with 40 or more crimes within 200m	Median number of crimes within 400m	Range (min, max)	% of schools with 40 or more crimes within 400m	Median number of crimes within 600m	Range (min, max)	% of schools with 40 or more crimes within 600m
Overall	55	7	(0, 31)	0	29	(1, 84)	29	68	(2,177)	75
School type										
Primary	31	8	(0, 27)	0	34	(1,80)	32	77	(2,141)	77
Secondary/intermediate	24	6	(1, 31)	0	26	(12,84)	25	56	(23,177)	71

*p <0.05, ** p <0.005, ***p <0.001
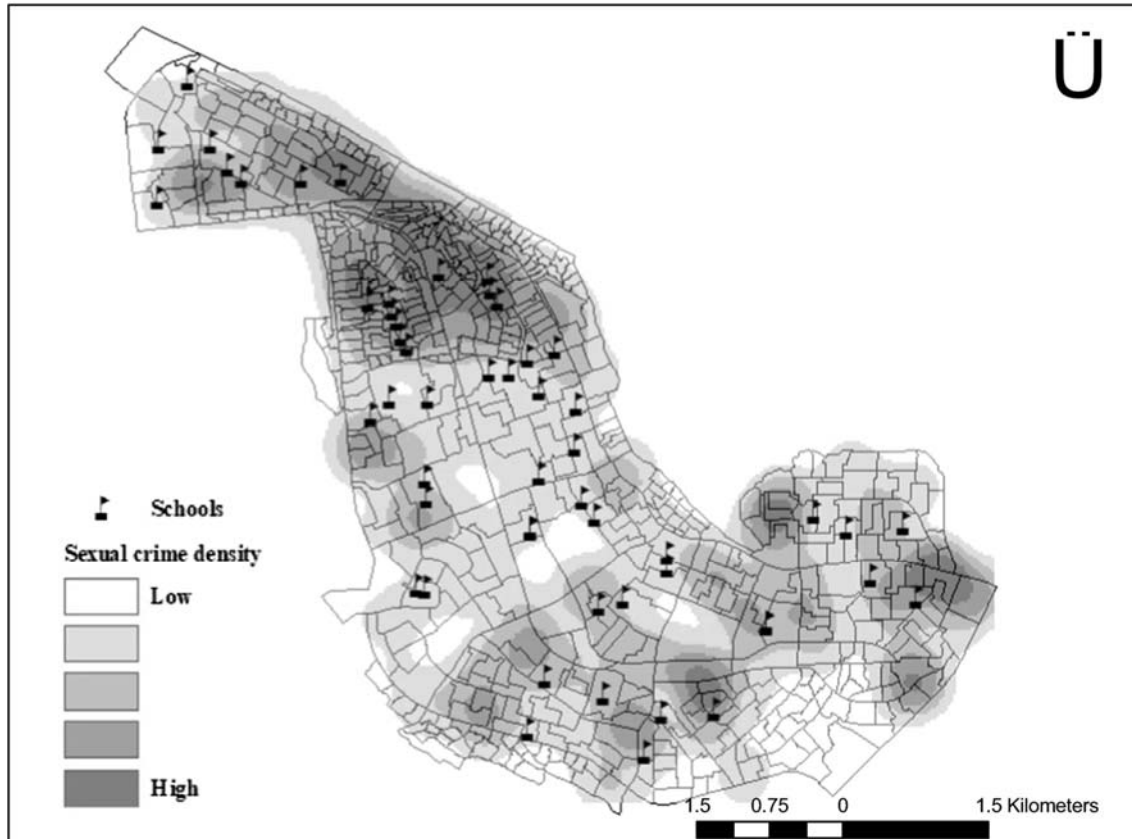
Figure 2: The spatial distribution of sexual crime and schools in Khayelitsha

Figure 3 shows the spatial clustering of sexually violent crime around all schools in Khayelitsha using the multi-K function. Rather disturbingly, sexual crime was found to spatially cluster around all schools in the township more than what would normally be expected by chance. Figures 4 and 5 shows the spatial clustering of sexually crime around primary and secondary/intermediate schools, respectively. Again, sexually violent crime significantly clusters around both primary and secondary/intermediate schools in Khayelitsha more than what would be expected by chance. Spatial clustering of sexual crime was found to be marginally higher around primary schools than secondary/intermediate schools.
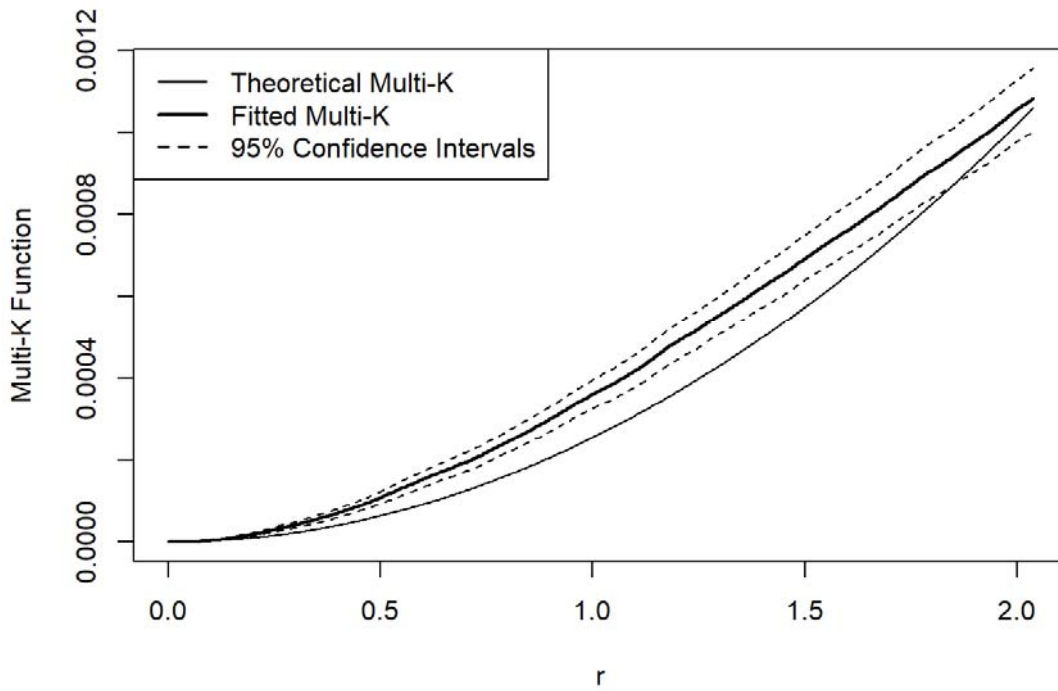
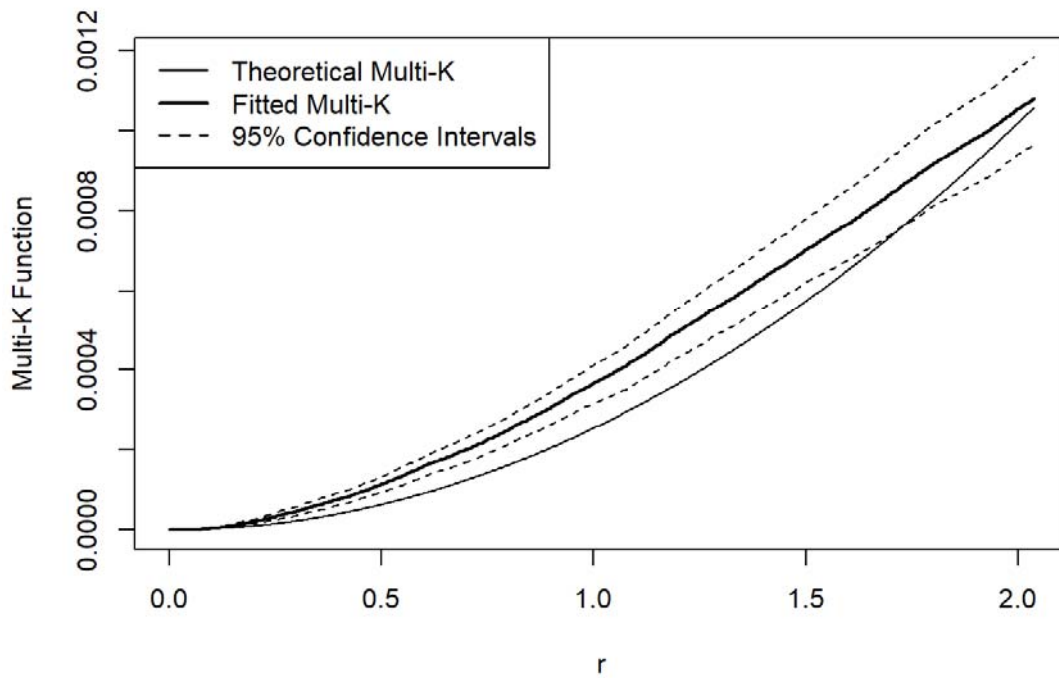**Figure 3:** Clustering around all schools in Khayelitsha, Cape Town

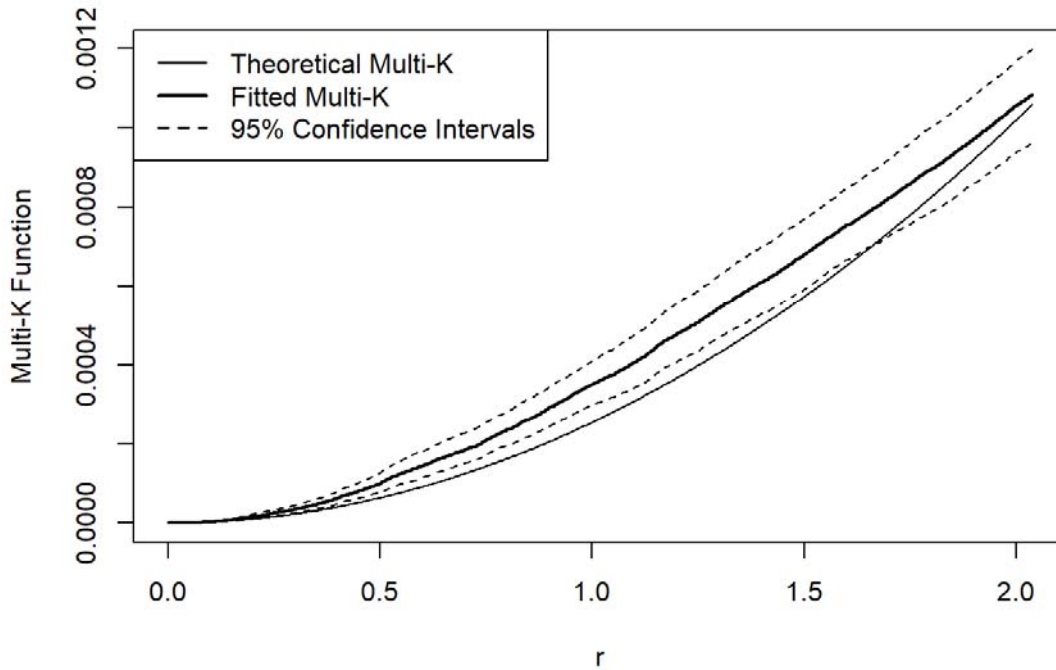**Figure 4:** Clustering around primary schools in Khayelitsha, Cape Town

Figure 5: Clustering around secondary/intermediate schools in Khayelitsha, Cape Town

Discussion

Schools are prosocial institutions that greatly influence the daily lives of learners. Indeed, the majority of waking hours of children and adolescents are spent at school. Theoretically, schools ought to be safe spaces where learners who have been victimized can be identified (i.e., by missing school), and where long-term damage resulting from victimization ameliorated (e.g., through providing educational and psychological support) (Ward et al. 2018). However, the results of this research suggest that schools and their surrounding environs may attract crime and place individuals at an increased risk of sexual victimization, at least in a South African context. In our study, we found strong evidence for the spatial clustering of sexual crime around schools in Khayelitsha. Rather disturbingly, a high degree of spatial clustering of sexual violence was found to occur around both primary and secondary/intermediate schools. Indeed,

three quarters of all schools had more than 40 incidents within a 600m buffer distance over the course of the study period. The clustering of sexual violence was found to be higher around primary schools, although the difference was marginal, and both types of schools were found to attract crime.

It is difficult to compare the results of this study with previous work given the contextual differences between South Africa and other countries. The alternate methodologies (most often aggregated studies) employed by other research of this nature also make comparisons problematic. These factors notwithstanding, the results of our work are broadly similar to those found in North American studies, which have found an association between the presence of schools in a neighbourhood and increased crime (see McCord et al. 2007; Osborne et al. 2016; Hewitt et al. 2018). Unlike other studies, however, we were able to show a significant point-based association between schools and sexual crime. Previous research has shown that various institutions and locations have been found to serve as generators of crime (see Peterson et al. 2000; Grubesic and Pridemore 2011; McCord and Tewksbury 2013; Kubrin and Hipp 2016), yet the linkage between crime, and sexually-based offences in particular, and schools at a point process level has not hitherto been evidenced, and certainly not in a developing context. To that extent, this study adds to the extant literature.

Possible reasons for the association found between sexual crime and schools in this study are speculative but could be related to the routine activities undertaken by individuals associated with the school; most notably, the routine activities of learners who commute to and from a central node (school) along a predictable pathway (route). It is important to note here that there is no public school bus program in South Africa. The majority of learners in Khayelitsha walk to school. In fact, according to the National Household Travel Survey (2013) just under 70% of learners walk to school in South Africa. In more deprived township contexts, such as Khayelitsha, that number rises to over 80%. Moreover, the walking journeys to and

from schools in townships like Khayelitsha are unlike those in more developed contexts. A substantial proportion of the township is informal with no clearly defined street network with most residents in these extremely dense areas using narrow footpaths in between dwellings and through open fields as a means of getting to and from locations. Anecdotally, the risk of being a victim of crime while walking to a school in a township setting in South Africa is high (see Lange and Schmidt-Kallert 2010; Kelto 2013; Gontsana 2016) with a recent survey noting that one in four learners in South Africa felt unsafe on their journey to school (Equal Education 2016). In fact, the risks associated with the routine walking trip to and from schools in Khayelitsha is so high that various initiatives have been developed to reduce the opportunities for crime. These include the 'Walking Bus' initiative that involves adult 'drivers' in neon safety jackets and whistles around their necks picking up learners at their respective houses, walking them to school, and bringing them home in the afternoons. Another strategy is the development of 'safe nodes', multi-purpose sub-centres which are intended to reduce the likelihood of violent behaviour along footpaths and on transport routes in the township (see Lange and Schmidt-Kallert 2010). Our finding that sexual crime spatially clusters around school areas suggests that these initiatives are vital in reducing opportunities for violence to occur and could potentially also aid in the placement of future protective facilities.

Internationally, children's safety as they travel to and from school is a growing concern with neighbourhood crime and the fear of crime when walking to and from school identified as a main cause of school absenteeism in the United States (Centers for Disease Control and Prevention 2002; Wiebe et al. 2013). The situation is, however, exacerbated in the South African context due to the nature of the macro- and micro-environment. At the macro-level Khayelitsha is one of the poorest townships in South Africa. Life is hard and the population is young. Almost 40% of Khayelitsha residents are unemployed, with more than 50% of young men (15-23 years) out of work (Statistics South Africa 2011). Data from Statistics South Africa

(2011) indicate that just under three-quarters of residents survive on less than R3,200 (~US$230) per month with approximately 60% of residents living in informal shacks. Moreover, the population is young. More than a quarter of the population are under 15 years of age and an astonishing 65% of the population are under 30 years of age (Statistics South Africa 2011). Previous international research has found that crime involving youth is most often concentrated in relatively few locations (Weisburd et al. 2009), with the presence of schools significantly influencing crime in the surrounding area (McCord et al. 2007).

At the micro-level, the areas surrounding schools in Khayelitsha are under-serviced and under-resourced. A study by Simons et al. (2018) found that the areas surrounding schools in low income communities in and around Cape Town, including Khayelitsha, had poorly defined and maintained footpaths, a lack of pedestrian crossings, and a lack of traffic-calming features near or adjacent to schools. The conditions of footpaths are even more dire in more informal areas where Super (2016) describes them as haphazard at best with no lighting and which often become waterlogged and difficult to navigate, particularly when wet. Consequently, many learners make use of unsafe pedestrian routes when travelling to and from school (Simons et al. 2018). The results of this study suggest that the risk of using these unsafe routes may present an increased opportunity for motivated offenders to target learners. Indeed, it could be that an impoverished and youthful population (at the macro/community-level) exposed to increasingly vulnerable and predictable targets undertaking routine activities within a disorganized and unstructured local school environment (at the micro-level) increases risk of sexual violence. Locally, Gonsalves et al. (2015) found that the average 210 meter round trip women undertake to go to the toilet in Khayelitsha significantly increases their risk of sexual assault. The results of this research suggest that the round trip to school and back (often, much further than 210 meters round-trip) could potentially be used to explain existing spatial patterns of sexual crime

as commuting learners are at heightened risk to predisposed offenders or potential criminal opportunities.

Of course, in a study such as this there are a number of limitations which must be considered. First, it could be that the spatial clustering of sexual crime around schools may simply reflect the broader criminogenic processes (encompassing built, social, cultural and other factors) that are playing out at the neighbourhood level and may not be related to the presence of schools. This concern has validity, however, much of the appeal of the multi-K function in crime analysis lies in its simplicity. The tool is not analytical but is a purely descriptive measure which allows users to determine more broadly where crime is spatially clustered. Regarding the underlying environmental backcloth, we did not take localized socio-economics into account due to the fact that Khayelitsha is uniformly poor. In fact, the vast majority of schools in our study are located in similarly deprived neighbourhoods. All public schools in South Africa are categorized into quintiles based on the socio-economics (i.e., level of income, unemployment rates) of the schools zoning area (see Collingridge 2013 for more details). Schools in the lowest quintiles are in school zones that are the most socio-economically deprived and are therefore classified as no-feeing paying schools according to the South African Schools Act (Act No. 84 of 1996). As a result their parents are not expected to pay school fees. In our analysis 51 of the 55 schools were non-fee-paying schools. In other words, the areas surrounding 93% (51 out of 55) of the schools examined in our study are socio-economically similar. Regarding the built environment, the legacy of apartheids' spatial geography means that there are very few community facilities in Khayelitsha. The first shopping mall in the township opened in 2005 and there are currently only five sports facilities, five community centers, two libraries and two recreational centers for a region whose population is estimated to be the sixth largest in the country (Brunn and Wilson 2013). Finally, the population size is difficult to estimate owing to illegal immigration, high mobility and the

fact that many residents live in informal settlements. Official figures state the size of the township at just under 400,000 (Statistics South Africa 2011) but figures of up to 1.2 million have been noted (Cronje 2014), making any inference based on population density problematic.

Second, due to privacy concerns, we have no information about the victim of the sexual crime as recorded by the SAPS. As a result, we do not know the demographics of the victim and cannot speculate whether the victim was possibly a learner or not. There is no remedy for this shortcoming. Whilst we are aware that a number of earlier studies have found that a large proportion of sexual crime occur within victims' or offenders' homes (see, for example, MacDonald 1971; Chappell and Singer 1977; McDermott 1979), there is also increasing evidence that the opportunities presented by certain physical characteristics of neighbourhoods increase the likelihood of these types of crime (see Ceccato 2014; Hewitt et al. 2018). Moreover, previous international research has identified an elevated risk of crime in proximity to high schools (Roncek and Faggiani 1985; Hewitt et al. 2018) and colleges (Block and Block 1999) and attributes these crimes to learners, as potentially both the victims and offenders. Indeed, previous South African research has also shown that sexual violence perpetrated by male learners and teachers towards female learners in and around township schools has become so 'normalized' that female learners do not even bother reporting such offences (see Abrahams et al. 2006; Sigsworth 2009). Given the number of schools ($n = 55$) and sexual crimes examined in the study ($n = 1518$), as well as the wealth of anecdotal evidence suggesting an increased risk of sexual victimization for learners walking to school in South Africa more generally (see Kelto 2013; Gontsana 2016;) and Khayelitsha more specifically (see Lange and Schmidt-Kallert 2010; Khayelitsha Commission Report 2014), we are reasonably confident that the associations we observed and explanations provided are plausible, if not probable.

Finally, the study is context-specific. The results presented here are applicable to the township of Khayelitsha; a partially informal, extremely dense, suburban area. It could be that

the associations we observed in this study do not hold true in other cities and/or townships in South Africa or in similar contexts, internationally. Conversely, it could also be that stronger patterns are observed in other contexts. Future research should aim to replicate this type of research in cities in other countries and/or within South Africa that are distant and distinct from Khayelitsha, taking the other limitations into account as well.

Conclusion

Crime generators are places to which strongly motivated, intending criminal offenders migrate to because of opportunities for crime (Brantingham and Brantingham 2000). Schools and their surrounding environs present opportunities. They bring together in space and time a number of individuals who have a legitimate association with the node (i.e., learners, teachers, parents, administrative workers, gardeners, security guards) but potentially also intending offenders who are knowledgeable enough to know the personal and physical landscape and for whom learners make easy targets. While schools have generally been labelled as crime generators in Western cities, it is not clear whether this is true in contexts outside the West, particularly in Africa. We believe that through this research we have provided a number of answers to the two empirical questions posed earlier. First, similar to much of the theoretical and empirical literature, this study found a significant and positive association between crime and schools. Using a set of buffer distances we were able to determine that an astonishing 75% of schools have more than 40 incidences within 600 meter radii across the nine-year study period. Uniquely, we found this association at a point-based level and through examination of sexual offences, only. Second, we found that primary schools exhibited slightly greater clustering of offences than secondary/intermediate schools, although the difference was marginal. It could be that younger learners are seen as easier targets than older ones. More research is needed to determine whether these findings are generalizable to other cities in the country and, indeed to

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other countries. From a South African perspective, future analyses could attempt to replicate this study in a more 'formal' context and as a result use the street segment and/or street block as the unit of analysis (although gaining access to geocoded crime data in the country is an ongoing challenge).

The limitations of the study notwithstanding, we believe that the results presented here, however tenable, are important not only for law enforcement agencies, non-government organizations and other relevant key stakeholders responsible for crime prevention and crime reduction in Khayelitsha, but also for the broader scientific community studying impediments to school success. There is a desperate need to gain a better spatial understanding of crime, and especially of sexually-based offences, in informal under-policed township communities. We agree that a deeper understanding of the root social and structural causes of sexual crime in township communities such as Khayelitsha is required to potentially explain the patterns we observed but are confident that the results presented here, whilst descriptive, are of sufficient rigor to merit further investigation and provide an important platform for future research (both locally and internationally) examining the association between sexual violence and schools.

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