

CHAPTER 11

The geographic, socioeconomic, and cultural determinants of violence

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Introduction to the Geographic, Socioeconomic and Cultural Determinants of Violence

Violence is defined by the World Health Organization as the intentional use of physical force or power, threatened or actual, against a person, or against a group or community that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment, or deprivation (WHO 2002). In this chapter, the focus is on places where violence (the criminal act against a person, ranging from assault to lethal violence) is high, both in absolute and relative terms. In the United States, cities such as New Orleans and Detroit have in recent times experienced homicides rates above 50 per 100,000, but none of these cities reached rates found in some Latin American cities, such as Juarez, in Mexico (148 per 100,000 inhabitants), or Maceió, in Brazil (135 per 100,000 inhabitants). In South Africa, although the murder rate has decreased significantly from 68 per 100,000 people in 1995–1996, it is still high at 31 per 100,000 inhabitants (2011/2012) compared to the global homicide rate of eight per 100,000.

The interesting question that arises from this disparate group of high violence neighbourhoods across the world, Detroit, United States, Rio de Janeiro, Brazil or Cape Town, South Africa, is do they have anything in common? And they do appear to share some characteristics. In addition to institutional neglect and environmental injustice, these areas are populated by individuals who suffer from long-term deprivation and poor health often related to bad environmental conditions. However, degrees of poverty and variations in levels of institutional neglect are considered insufficient to explain why these areas are more violent than others. Although environmental criminology has since the early twentieth century made attempts to interpret the links between violence and socioeconomic conditions, it is still an empirical question as to whether social processes operate in a similar way across different places and countries.

The objective of this chapter is to make a contribution to this knowledge base by reviewing explanations for violence (levels and patterns), drawing from principles of criminological theories that are supported by evidence from Northern American and European cities as well as from cities of the Global South.

Explaining Violence

Violence is often caused by a combination of determinants or ‘triggers’. A number of these ‘triggers’ are discussed in this chapter, paying attention to the ecological characteristics that determine the contexts where violence takes place (e.g. geographic, socioeconomic, cultural, and life style). These explanations for violence should be considered as complementary rather than competing with each other.

Demography and Socioeconomic Conditions

Demographic composition, particularly gender and age, is known to be good predictor of the level of violence, especially in deprived areas. The highest homicide rates, both in terms of victimization but also perpetration relate to young males (Fox and Piquero 2003; Salla et al. 2012). Social factors are also important. Social disorganization theory links many forms of delinquency and crime with the presence of weak, informal social controls (Shaw and McKay 1942; Kornhauser 1978; Bursik Grasmick 1993) triggered by housing mobility, weak social ties, and poor normative social structures. High homicide rates are a sign of severe social disorder (Wilson and Kelling 1982). But even in less chaotic communities young men growing up in areas with high violence rates tend to have less access to jobs and less exposure to conventional role models. In addition there are fewer working-class and middle-class households to serve as buffers against the effects of uneven and poor economic conditions (Krivo and Peterson 1996). Some argue that the effect of poverty *per se* in generating violence is not as important as the impact of relative deprivation (Burton et al. 1994). The fact that a group is relatively deprived in comparison with others provides the conditions for conflict and violence.

Changes in institutions also directly affect the supply and demand for jobs, schools, and health care across the country. Rapid change may weaken social control and it can generate *anomic conditions* (e.g. Merton 1938; Agnew 1992) that are characterized by a breakdown or absence of social norms and values, and create favourable conditions for crime. Inequality in the distribution of resources can motivate individuals towards crime. Some of these motivated individuals would overcome blocked opportunities through theft/robbery, or express frustration about



their incapacity to reach these resources, through violence. An unanswered question is whether violence in anomic conditions is a result of a search for improvement of material conditions only. The distinctive features of high-crime cities perhaps provide some clues. In British cities, Hancock (2001) describes such areas as having a neglected built environment that is characterized by; poorly designed and poorly maintained housing, a lack of natural surveillance, an abundance of empty properties, a lack of public facilities, and the presence of environmental hazards. There may be visible signs of gang activity, drug dealing, truancy, and young people hanging around the streets with little in the way of purposeful activity. Some of these features are also found in high-crime areas of cities of the Global South, such as Rio de Janeiro or São Paulo, but they tend to be magnified by social inequality, organized crime, and poor governance (see e.g. Caldeira 2000; Ceccato et al. 2007). In São Paulo the geography of homicides coincides with that of the infant mortality. Figure 11.1 exemplifies the fact that one may survive poor living conditions as a child but may not free oneself from the clutches of criminogenic conditions that lead to early death.

Ceccato et al. (2007) suggest that the geographical variation in homicide has been shown to be related to areas of poverty, but also to central areas where people concentrate for leisure and entertainment, including pockets of drug-related activity where illegal firearms are easily available. These underlying conditions in cities such as São Paulo are indicative of institutional neglect,

which means that basic public services and infrastructure fail to attend citizens equally; even if they exist, they are not accountable. In such circumstances, violence becomes a means of imposing social control by dominant members of the group (Black 1984). Moreover, in social contexts like this, where there is little or no access to dispute-resolution structures (for example, small claims courts,) or to agents of dispute mediation (e.g. lawyers or legitimized community representatives), violence may be seen as the only possible means by which to solve a problem. Kubrin and Weitzer (2003) suggest that police practices may also play an important role as generators of violence (Zaluar 2012). As in any other large city, disadvantaged areas in São Paulo or Stockholm have criminogenic conditions that make conflicts and violence part of everyday life. These are long lasting and triggered by disputes over scarce resources or repression by the Police (Chevigny 1999), or simply by the presence of weapons on the streets or other crimes, such as drug-related offences (Ceccato et al. 2007).

European and American criminology research has revealed strong associations between structural and cultural factors and violent crime at the intra-urban level (for a review, see Heitmeyer and Hagan 2003). Sampson and Wilson (1995) assess structural and cultural factors in explaining violence, arguing that low residential quality creates social isolation and a concentration of the disadvantaged. This leads to cultural adaptations that undermine the social control that is fundamental to deter crime.

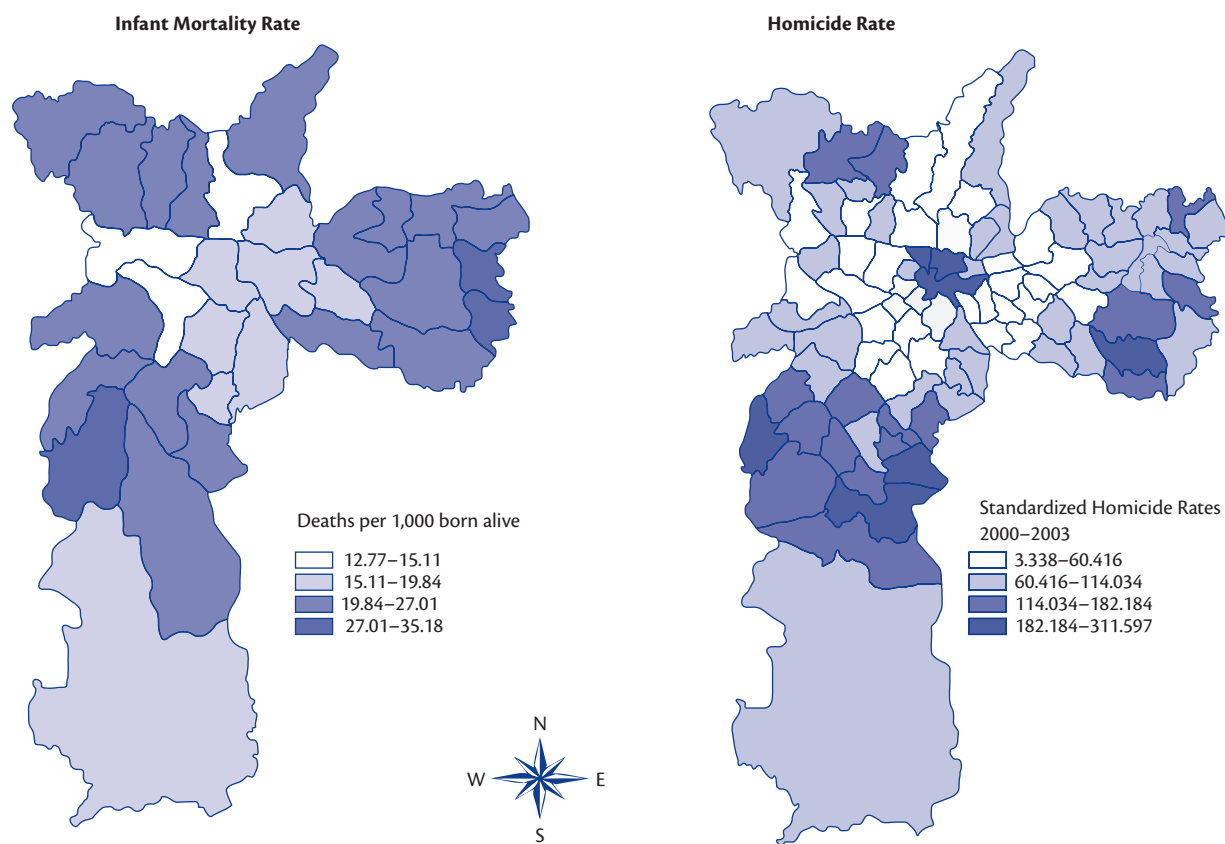


Fig. 11.1 Almost perfect fit? Deaths at age of 1 year and by homicide in São Paulo municipality, Brazil.

Source: data from Fundação Seade, data on infant mortality registered by public health authorities in São Paulo municipality, 1998 and Secretaria de segurança pública de São Paulo, data on homicides registered by police authorities in São Paulo municipality, 2006.



The Culture of Violence

Cultural differences in values, norms, and beliefs held by members of groups or subgroups are seen as important in explaining variations in rates of violence, particularly in the United States (Messner and Rosenfeld 1999). The core idea is that some subcultures provide greater normative support for violence than others in upholding values such as honour (for an extensive review of cultural and sub-cultural theories of homicides, see Corzine et al. 1999). In the United States, the evidence for this subculture of violence is the concentration of high rates of murder that have characterized the south from its earliest settlement through to the beginning of the twenty-first century. The existence of profound differences in levels of violence between ethnic groups is however a controversial field (Farrington et al. 2003) but has been suggested to be part of the explanation for large regional differences in homicide rates elsewhere. In contemporary Estonia, for instance, Russians make up a significant part of the population who are both victims and perpetrators in cases of homicide. Salla et al. (2012) suggest, however, that culture alone does not explain high homicide rates among Russians in Estonia. They suggest that deadly violence in Estonia is related to mechanisms linking long-term socioeconomic deprivation to social exclusion, combined with hazardous drinking patterns. The groups of perpetrators and victims of homicide largely coincide geographically in Estonia: they are males, middle-aged, Russian-speaking, unemployed and poorly educated, either from Tallinn or from economically deprived areas of north-east Estonia, such as Ida-Viru County. Figure 11.2 shows that despite the fact that overall homicide rates in Estonia are falling, the rates in Ida-Viru County remain almost as high as national rates from the early years of Estonia's post-independence period.

One of the criticisms of studies that explore ethnic or cultural explanations of violence is the fact that it is not always possible to untangle structural factors from cultural ones (Parker 1989; Kilsztajn et al. 2003). Structural conditions such as poverty and/or inequalities are sources of regional disparity, and it is argued that

accounting for these features would alone explain the regional variations in the prevalence of violence. At an intra-urban level, in Rio de Janeiro for instance, high-crime areas are characterized by open violence among young males, daily sounds of gun shots and extensive connections between everyday crime, drug dealing and ready access to illegal weapons (Chevigny 1999; Zaluvar 2012)—in other words a culture of violence that goes beyond poverty.

In a culture of violence, the importance of shared values is perhaps important to legitimize violence between groups (e.g. between members of opposing gangs) but also perhaps to free them from other more positive societal constraints, for example family, religious, or community networks. And, indeed, Bursik and Grasmick (1993) argue for the importance of such networks in preventing and reducing violence.

From Social Cohesion to Collective Efficacy

Evidence shows how social cohesion at the neighbourhood level (in other words, high levels of social trust and co-operation between citizens for mutual benefit) can lead to fewer criminogenic conditions (Rosenfeld et al. 2001). Whilst social cohesion and civil engagement have less often been analysed in North American and Western European cities, it is argued here that in developing countries their positive role cannot be taken for granted. Zaluvar (2012), for example, shows how entangled forms of power take over existing community and religious organizations in shanty towns, called 'favelas' in Rio, Brazil. The development of new forms of illegal business has infiltrated slum areas and makes them into gateways for criminal organizations. Trafficking gangs dominate some 'favelas' whilst drug lords restrict dweller and government agent movements in others. This development has come together with armed mobs and militias. In these war-like conditions, young males are the most common victims of homicides.

Such communities could be argued to be highly cohesive, albeit in a dysfunctional and fear-driven manner. And so it is perhaps not social cohesion alone that leads to civic engagement and reduced

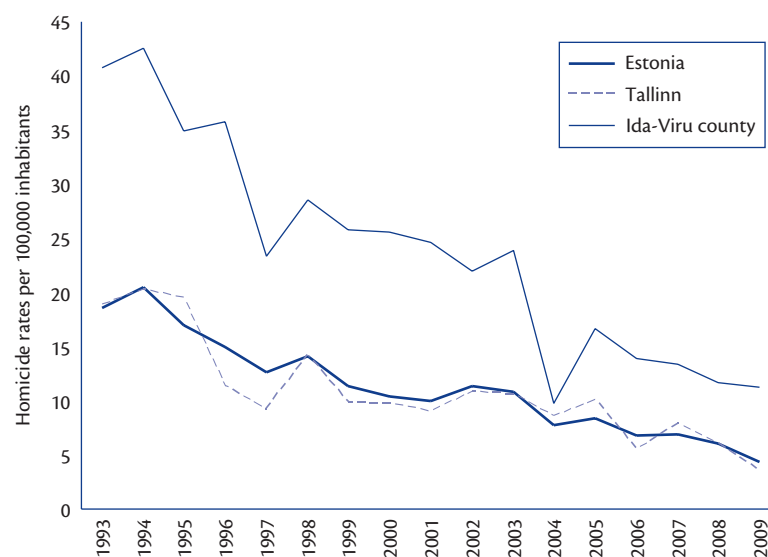


Fig. 11.2 Homicide rates in Estonia, Tallinn and Ida-Viru county, 1993–2009.

Source: data from *Statistics Estonia*, Tallinn, Estonia, Copyright © Statistics Estonia 2014, available from http://pub.stat.ee/px-web.2001/1_Databas/Social_Life/07Justice_and_security/03Crime/03Crime.asp and data from the National Police Board, Estonia.

violence. Another school of thought devotes more attention to individual agency rather than the need for sharing common values, as a prerequisite for social cohesion. Collective efficacy is the group-level term used by Sampson et al. (1997) to refer to the situation where there are shared expectations within the group and a willingness to engage in processes of social control for the common good. Sampson et al. (1997) suggest that action to restrict crime does not necessarily require strong local social ties or associations. Collective action may take place where personal ties and social networks are weak. What is important is a willingness to intervene on behalf of the common good, for instance, by engaging in activities that improve overall safety of the neighbourhood (e.g. actions combating drug and alcohol addictions that may lead to violence).

The Addiction–Violence Link

Goldstein (1985) provides insight into the dynamics of the drug homicide linkage. This author suggests three ways in which drug consumption and drug trafficking may causally be related to violence. The first kind of violence is psycho-pharmacological caused by the properties of the drug itself. The second is economic–compulsive violence motivated by the need or desire to obtain drugs, and the third is systemic violence, which is associated with traditionally aggressive patterns of interaction within the system of drug distribution and use. Baumer et al. (1998) confirm that areas in the United States with higher levels of crack cocaine use have higher homicide rates as well as higher levels of other offences. The presence of alcohol and the availability of weapons (Felson and Messner 1996) and drugs increase the likelihood that certain types of confrontational interaction escalate into a killing. More recently, Lipton et al. (2013) found that the presence of alcohol outlets, drug possession, and trafficking arrests were predictive of violent crime. In cities with strong links between drug trafficking and violence, such as in São Paulo, ‘revenge’ is the most common reason behind multiple murders (*chacinas*). It is believed that drug trafficking employs more than 20,000 couriers (*aviõesinhos*), the majority of whom are adolescents between 10 and 16 years of age, often coming from poor families. The chance of being arrested is small and traffickers have no difficulty in recruiting them to deliver drugs—a task that often leads to violence and death (Ceccato et al. 2007). These authors suggest that unlike in Rio de Janeiro, where drug-selling points are concentrated in the hills and managed by a few ‘drug barons’, in São Paulo the selling points seem to be widely scattered over the city and are managed by hundreds of small traffickers, not only in poor neighbourhoods but also in central areas where many drug-selling points are concentrated.

Mobility and The Role of the Environment on Violence

Most theories of urban criminology have so far concentrated either on the neighbourhood conditions of crime location or on where offenders live, missing a great deal of information on people’s whereabouts over time in the city. This missing information is vital for understanding why an individual decides to commit a crime, for instance violence. In Wikström et al. (2010), the interaction between individuals’ crime propensity and their exposure to criminogenic environments was empirically tested using a group of young people. Although not limited to violence alone, findings showed that those who spend more time in criminogenic environments (e.g. being unsupervised with peers in neighbourhoods

with a poor collective efficacy) tend to be more frequently involved in acts of crime. Wikström et al. (2010, p. 81) note, however, that:

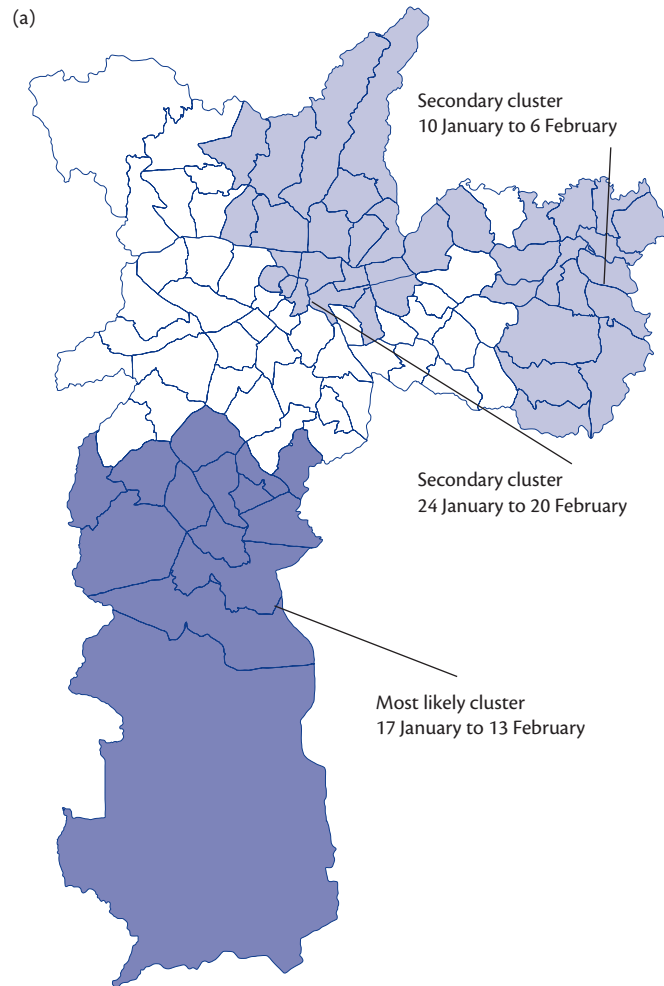
this relationship depends on the young person’s crime propensity. Having a crime-averse morality and strong ability to exercise self-control appears to make young people situationally immune to influences from criminogenic settings, while having a crime-prone morality and poor ability to exercise self-control appears to make young people situationally vulnerable to influences from criminogenic settings.

The importance of situational conditions for violence has long been pointed out in international literature. Land use shapes the flows of human routine activities and affects the number of interactions that are criminologically relevant and which could lead to offences (Cohen and Felson 1979). In São Paulo, most homicides may happen close to the victim’s home but outdoors (Ceccato 2005), particularly in city centres. City centres tend to be violent places regardless of the time of the year because they concentrate land uses that attract activities that may lead to crime and violence, with bars, restaurants, entertainment, and cultural and sport activities. Another, perhaps complementary explanation for temporal variations in violence is suggested by theories that link ambient conditions to aggression. This assumption, as will be discussed, is based on the idea that changes in the weather, or extremes of weather, function as ‘stressors’ leading to violent behaviour.

The Weather–Aggression Explanation

The general aggression model (Anderson et al. 2000) suggests that weather, and particularly temperature, heightens physiological arousal and leads to aggressive thoughts and, in certain cases, violence. Individuals who are highly sensitive to changes in the weather might exhibit behavioural or mood changes, leading to violence. Although poorly studied, this assumption is not new. Quételet (1842) in his nineteenth-century study suggested that the greatest number of crimes against a person is committed during summer and the fewest during winter. Since then, researchers have found new empirical evidence on how crime levels vary over time and space. Some relate these temporal differences to the direct impact of weather on behaviour whilst others associate them indirectly, via variations and changes in people’s routine activity over time but also may interact with individual’s socio-economic conditions. A recent study from St Louis, United States, shows that neighbourhoods with higher levels of social disadvantage are likely to experience higher levels of violence as a result of anomalously warm temperatures resulting from climate change. Mares (2013) indicates that 20 per cent of the most disadvantaged neighbourhoods are predicted to experience over half of the climate change-related increases in cases of violence.

Most of the literature from the Northern hemisphere indicates that more violent crimes occur on hot days (e.g. Hakko 2000; Rotton and Frey 1985). An exception is the study by Ceccato (2005), which shows that for São Paulo, temperature has an influence on violence rates, but it is not the only factor. Findings show stronger evidence that changes in people’s routine activity during the summer has more effect on violence than weather variables alone. Homicides take place when most people have time off, particularly during vacations (hot months of the year), evenings and weekends, which indicates the importance of changes in routine activity, from structured (e.g. home–work–home) to unstructured ones. Figure 11.3 shows seasonal differences in clusters of violence by season both in Stockholm, Sweden, and São Paulo, Brazil.



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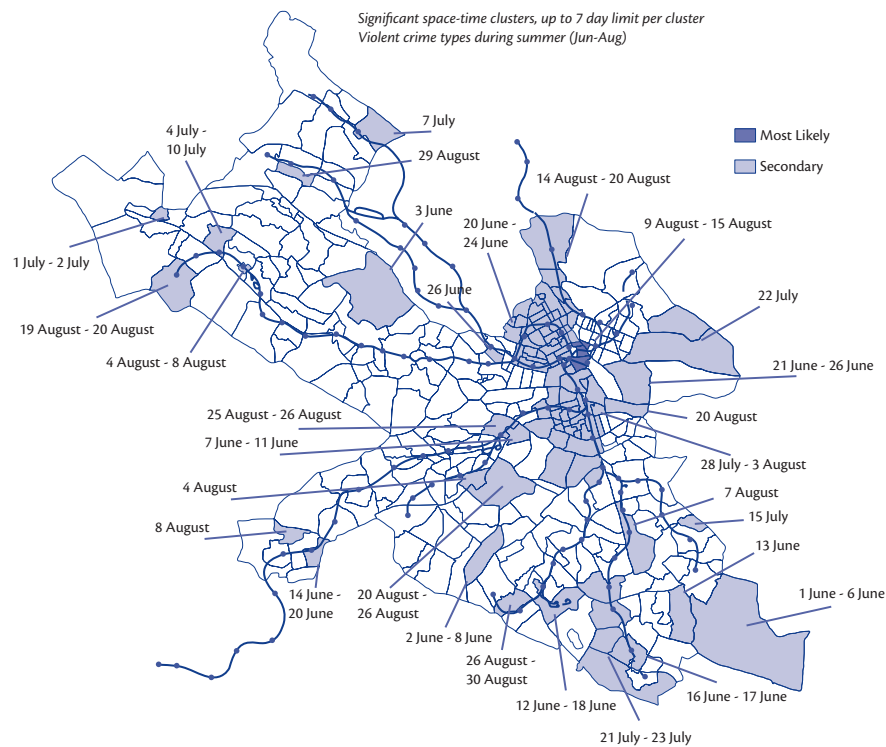
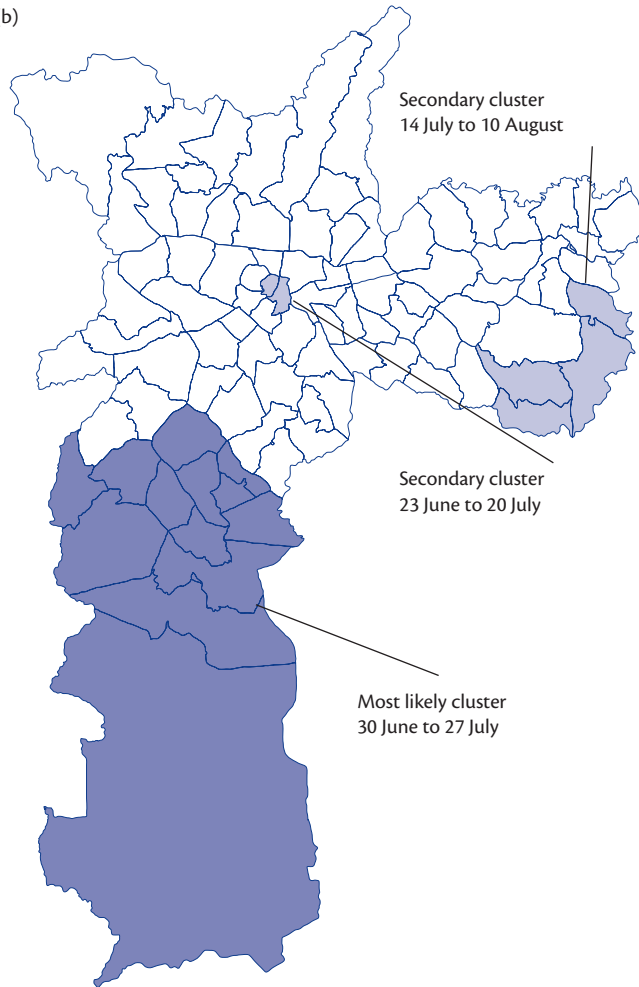


Fig. 11.3 Clusters of homicides in a tropical city, São Paulo, Brazil, 2000–2002, and clusters of violence in a Scandinavian city, Stockholm, Sweden, 2006–2008; (a) summer and (b) winter.

Reprinted from Uittenbogaard, A., and Ceccato, V., Space-time clusters of crime in Stockholm, Sweden, *Review of European Studies*, Volume 4, pp. 148–56, Copyright © 2012 Canadian Center of Science and Education, licenced under the Creative Commons Licence 3.0 and *Journal of Environmental Psychology*, Volume 25, Issue 3, Ceccato, V., Homicide in São Paulo, Brazil: assessing spatial-temporal and weather variations, pp. 249–360, Copyright © 2005, with permission from Elsevier, www.sciencedirect.com/science/journal/02724944.



(b)



Significant space-time clusters, up to 7 day limit per cluster
Violent crime types during winter (Dec-Feb)

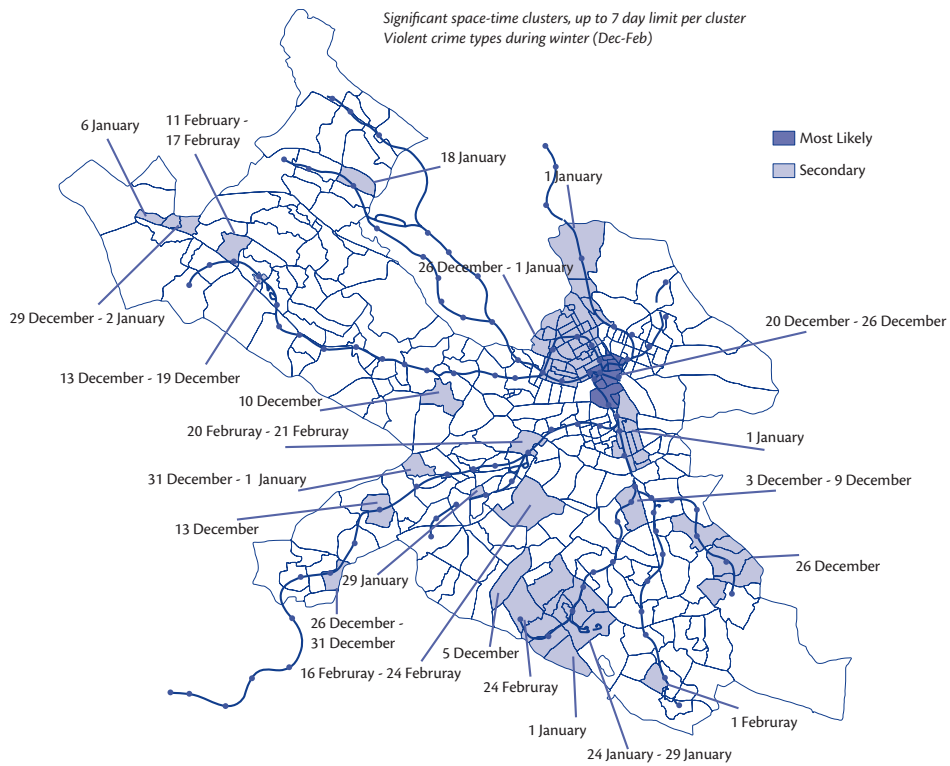


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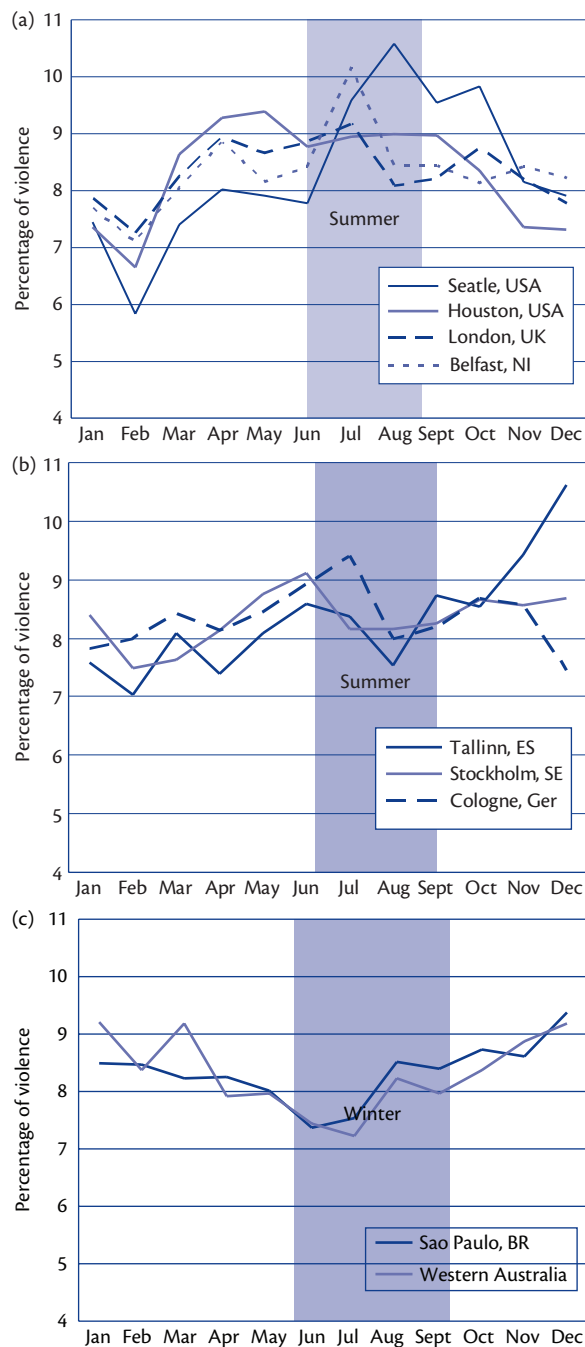


Fig. 11.4 (a–c) Violence in selected cities of Northern and Southern Hemispheres, by months of the year, 2011.

Source: data from Cologne Police Department, *Cases of violence: Police Dispatch Data, 2010 and 2011*, Copyright © 2012. The data includes cases of homicide, assault and aggravated assault, excluding cases of rape and robbery. For Cologne, the data excludes homicides but they are relatively few in relation to the total violence.

Figure 11.3 shows that although the location of primary clusters is similar and stable between summer and winter (dark blue), the concentration of violence increases in size during vacation time (summer) and shrinks afterwards (winter) for secondary clusters (light blue), when people get back to structured activities. SaTScan produces types of clusters in this mode: primary clusters (the most likely ones), that is clusters that are least likely to be due to chance

and secondary clusters (the weak ones according to their likelihood ratio test statistic). Secondary clusters means that while it is possible to pinpoint the general location of a cluster, its exact boundaries must remain uncertain (Kulldorff 2013). In the case of Stockholm, secondary clusters shrink in the winter but not in the city centre, where an expansion of the primary clusters is noticed, particularly around Christmas time (20–26 December). These two examples indicate that poor and/or central neighbourhoods are more likely to have high levels of homicide, regardless of the time of the year, while in other areas violence varies based on changes in weather and/or routine activity

Figure 11.4 shows levels of violence in selected cities in 2011 from both Northern and Southern hemispheres. Violence is greater in the summer months than in the winter, but at higher latitudes, such as Tallinn and Stockholm, the pattern seems to be fairly stable over the year, that is it does not show the same variation as cities in the Southern hemisphere, in the United States, or the United Kingdom. Regardless of latitude, changes in people's routine activity (for instance, from structured activities, such as going to work or school, to unstructured activities, such as leisure, travelling, participating in festivals, drinking) constitute a reasonable explanation, but not perhaps the only one, for changes in violence levels over the year. Although the data used here are limited to a 1-year dataset, it is indicative of the importance of geographical and temporal differences in causation of violence. This evidence does not take other factors (such as alcohol consumption) into account that, together with seasonal variations of human activities, are expected to affect violence levels over time. The potential relationship between violence, changes in routine activity, and alcohol consumption still remains an empirical question. And that relationship may, for example, explain the apparent pre-Christmas upturn in violence in Tallinn.

Gaps in the Evidence

The difference in nature and magnitude of violence faced by cities in developing countries demands particular consideration as to whether the research and theories discussed in this article are adequate for interpreting situations where violence is particularly high, such as in cities like Rio or Cape Town. They may not be adequate, but they have been used for decades in theoretical benchmarking to tackle problems in cities of the Global South. In cities like Rio, the source of violence is not only imposed by external organized crime, but in some cases, it is local rulers and service providers that determine the tone for crime and violence, simply because the State is not present. In other cases, police are repressive and corrupt. What is social control in such areas? Or is it better to say, for whom is social control? In these areas, 'safety' is built on the basis of fear of mafia-like social networks; so are social disorganization principles of any use in these settings? The importance of considering the context of violence is fundamental also for finding ways of tackling it. This calls for the need for comparative and policy oriented research that looks for specific causes of violence, which are so far missing in the international literature. Policy and actions may maximize their chances of successfully combating violence if they rely on knowledge that stems from the contexts to which they actually apply. Temporal and geographical patterns of violence across countries and latitudes



reflect weather and routine activity changes over time—a fact that should not be neglected in future research or when defining policy interventions.

Conclusions

This chapter seeks to show that violent areas share a number of commonalities, such as having populations that suffer from long-term deprivation, institutional neglect, and poor health conditions. However these factors alone cannot explain why certain areas are more violent than others. The international literature has long suggested a number of possible explanations for high levels of violence other than those discussed, ranging from the role of social networks, individuals' life styles and cultures, as well as the importance of the environment in affecting

individual routine activity over time and space. Despite these developments, future research should devote time to assess why violence tends to be concentrated at particular areas and times. The interaction between environmental, demographic, and socioeconomic factors in the causation of violence needs further investigation.

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