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The heavy police presence at football matches in England has reduced hooliganism in the stadium – but at what cost in terms of both policing budgets and under-protected places elsewhere in the neighbourhood? **Olivier Marie** examines the multiple effects of football matches on crime.

Football matches: the effects on crime



During home matches, opportunistic offenders in under-protected local areas commit more property crimes

In the 1980s, football in England became infamous for the aggressive behaviour of some of its fans, when hooliganism tainted the 'beautiful game'. To combat this affliction, security at stadiums was greatly enhanced and the policing of matches drastically increased. As a result, crowd violence had significantly subsided by the 1990s and the hooligan stigma has all but disappeared from English football today.

Still, the occasional scuffle is inevitable. While the police are now mostly able to prevent these from degenerating, the physical proximity of opposing fans has the potential to result in violent crimes during home games. This possibility – which I call the 'concentration effect' – is the first channel through which football matches can have an effect on crime.

In recent years, a different public safety debate has emerged, which is concerned with the very high costs of policing matches. These costs are only partially covered by the football clubs themselves. In 2009, during a discussion of the costs of policing football by the House of Commons Home Affairs Committee, David Winnick MP noted additional potential costs:

'If I were involved in criminality of a more sophisticated kind... would I not work on the assumption that the police will be fully occupied in a particular city – it will not be difficult to find out when these premier games are being played – and I could go about my unlawful business?'

This question suggests the second channel through which matches can affect

crime – the 'displacement effect'. There may be increases in violent crime and property crime away from stadiums because of the displacement of police personnel assigned to match security during a home game.

A third possible effect of football on crime may stem from the 'self-incapacitation' of some potential offenders. This supposes that among the thousands of fans attending or following a game, a not insignificant number of them would have been criminally active if they had not been at the match. Self-incapacitation could therefore lead to decreases in violent crime and property crimes during both home and away games, especially in neighbourhoods where a high proportion of the population supports the local team.

Football matches may thus affect local crime rates through concentration, displacement and self-incapacitation – the directions of the three potential effects are described in Figure 1. For researchers, the difficulty is to disentangle the impact of each of these effects as they occur simultaneously. One solution is to consider how they influence property crime and violent crime separately during home and away games.

For example, to identify the self-incapacitation effect, we simply need to consider changes in local crime rates in a football team's neighbourhood during away games. The displacement effect can then be measured as the difference in crime rates during home and away games for property offences. The concentration

effect only affects violent crime during home games but will be hard to measure precisely. We would still be able to attribute increases in violent offences during home games as stemming from a mix of the displacement and concentration effects.

To obtain measures of these effects, we use the Metropolitan Crime Statistics System, high frequency local area crime data available for London for 1994-97. The system contains information on the time, location and type of offence for all crimes recorded by the police in the capital during this period. The data are aggregated at the level of the 32 boroughs in London into four six-hour windows for property and violent crimes.

This is matched to detailed game information for nine major football teams with grounds in seven different London boroughs (in parenthesis): Arsenal (Islington), Charlton Athletic (Greenwich),

Figure 1:
Concentration, displacement and incapacitation effects on property crime and violent crime during home and away games

	Property crime		Violent crime	
	Home	Away	Home	Away
Concentration	▶	▶	△	▶
Displacement	△	▶	△	▶
Self-incapacitation	▽	▽	▽	▽

Note: Upward and downward pointing arrows represent positive and negative effects through each of the three channels – concentration, displacement and self-incapacitation – through which home or away sporting events may affect local property crime and violent crime. Flat arrows suggest no expected effect.

Chelsea (Hammersmith and Fulham), Crystal Palace (Croydon), Millwall (Lewisham), QPR (Hammersmith and Fulham), Tottenham Hotspur (Haringey), West Ham United (Newham) and Wimbledon (Croydon).

For each match, we know the kick-off time, the attendance, the type of game (league or cup), the result including goal difference, the number of red and yellow cards issued and whether it is a local derby (that is, when London teams play each other). There are 571 home and 576 away matches in the period for which the crime data are available.

To identify a match effect on local criminal activity, we exploit the variation in location and timing of both home and away games. We focus on the impact of large variations in attendance, controlling for weather conditions and whether the game is played on a holiday. We also net out the possible influence of other matches taking place at the same time, the distance of each borough to the stadium hosting a home game and the distance of each away match.

Our results suggest that the level of property crime falls by roughly 3% for every extra 10,000 supporters attending an away game. In accordance with our conceptual framework (Figure 1), we interpret the fall in property offences during away matches as a pure self-incapacitation effect.

But during a home game, property crime rises by 4% for every extra 10,000 supporters. This suggests that there is an important police displacement effect as opportunistic offenders in the under-protected areas of a borough take advantage of the smaller probability of detection to commit property crimes.

We find no measurable impact on violent crime in the local community except during a local derby. This suggests some effect of concentration during matches that are reputedly the ones with the highest levels of animosity between rival fans.

The overall conclusion from our research is that the displacement of police forces during football matches increases property crime by almost 7% for every extra 10,000 fans attending a game. This is in line with a growing body of evidence showing that police presence has an important effect on reducing crime, including CEP research on the impact

on crime of extra policing following the 7/7 terror attacks in London (Draca et al, 2008).

The research also contributes to the debate about the impact of policing of private sporting events and the cost in terms of the local community's wellbeing. This is especially relevant after August's riots and looting in London, which raised questions about the ability of an already stretched police force to maintain law and order when the capital hosts the Olympic Games next year.

This article summarises 'Police and Thieves in the Stadium: Measuring the (Multiple) Effects of Football Matches on Crime' by Olivier Marie, CEP Discussion Paper No. 1012 (<http://cep.lse.ac.uk/pubs/download/dp1012.pdf>).

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Further reading

Mirko Draca, Stephen Machin and Robert Witt (2008) 'Panic on the Streets of London: Police, Crime and the July 2005 Terror Attacks', CEP Discussion Paper No. 852 (<http://cep.lse.ac.uk/pubs/download/dp0852.pdf>).

Violent crime in the local community does not increase on match days except during a local derby

