



Violent and Antisocial Behaviour at Football Events

Review of interventions

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Preface

This report presents the findings of a study on approaches that have been taken to prevent and respond to antisocial and violent behaviours among populations watching and attending football events, and the extent to which these approaches proved effective.

The report has been prepared for Qatar University, to inform that country's preparations towards hosting the 2022 FIFA World Cup, but is intended to be of interest and relevance to practitioners, policy-makers, academics and people interested in the field of sport spectator safety in general.

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Summary

Disorder and violence at football matches are well-recognised issues that have attracted considerable attention in the media as well as among policymakers and practitioners. In an effort to prevent and respond to the phenomenon, numerous strategies and interventions have been implemented by relevant stakeholder groups, including police and other security professionals, football clubs and associations, fan organisations and local and national governments. However, despite the wide range of tools available in the fight against antisocial and violent behaviour at football matches, there are gaps in the understanding of the current state of practice and its effectiveness.

This rapid evidence review responded to this gap through a focused, structured literature search and aimed to provide a critical assessment of previous research into these issues. It addressed the following research questions:

1. What approaches have been taken to prevent and respond to antisocial and violent behaviours among populations watching and attending major sporting events, in particular international football matches?
2. To what extent have these approaches proved effective, insofar as those planning major international football tournaments can draw on a body of good practice?

To answer these questions, the research team undertook a rapid review of available evidence. This took the form of a literature review built on rigorous and systematic methodological approaches, the parameters of which were tightly defined to allow for the examination of available evidence within existing time constraints.

The review observed a multitude of strategies that can be and have been implemented to counter antisocial behaviour at football matches. They can broadly be grouped into four categories: 1) organisation of the venue (e.g. equipping stadiums with cameras, seating-only arrangements), 2) organisation of the events (e.g. arranging transport for away fans; setting up early kick-off times); 3) approaches to policing (e.g. dialogue-based policing, police liaison teams); and 4) laws, policies and partnerships (e.g. higher penalties for hooliganism, cooperation with fan associations).

With respect to the effectiveness of these interventions, the review found that the existing evidence base (at least as captured by the parameters of the review) is underdeveloped. The review found evidence pertaining only to a subset of interventions. Of the studies offering an effectiveness assessment, the majority faced notable methodological limitations. Only four studies identified in the review offered evidence based on a comparatively robust methodological design.

Among interventions for which there is positive evidence, the utilisation of security cameras and mandatory transport arrangements for visiting fans were found by methodologically robust studies to be effective in reducing disorder, although each intervention was discussed by only one study. Similarly, early kick-off times were found by two studies to result in reductions in antisocial behaviour. A large number of studies also found evidence of effectiveness for a variety of policing approaches aimed at establishing dialogue and lines of communication with fans in an effort to improve intergroup relations. However, while pointing uniformly in the same direction, this evidence is largely based on observations and qualitative interviews, typically building on a limited number of matches and consultations.

Mixed evidence is available for the effectiveness of banning orders, i.e.

prohibitions on entry and match day travel by high-risk supporters. Evidence from stakeholder interviews (primarily with police officers) shows they are seen as very effective in reducing disorder, although quantitative analyses of existing data have not established a firm link. Similarly, one study on the use of mounted police provided tentative evidence based on stakeholder testimonies and quantitative analyses, but stressed the results need to be interpreted with caution.

Among interventions that do not appear to be effective, two methodologically robust studies failed to find any positive effect for fan registration schemes as a precondition for a ticket purchase. Similarly, none of the three studies examining the effect of alcohol bans found any positive results. These included bans within stadiums, city-wide bans and bans on consumption while in transit to the stadium.

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Abbreviations

| | |
|-------|-----------------------------------------------------------------------------------------------|
| CIV | Dutch Hooliganism Registration Institute (<i>Centraal Informatiepunt Voetbalvandalisme</i>) |
| ESIM | Elaborated Social Identity Model |
| FBOs | Football Banning Orders |
| FIOs | Football Intelligence Officers |
| MWG | Mounted Working Group |
| PLOs | Police Liaison Officers |
| PLTs | Police Liaison Teams |
| PSUs | Police Support Units |
| SLOs | Supporter Liaison Officers |
| SPT | Special Police Tactic |
| SWP | South Wales Police |
| UKFPU | UK Football Policing Unit |

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The views presented in this report are the authors' and remaining errors are also our own.

1 Introduction

Hooliganism, spectator violence and antisocial behaviour at football matches are well-recognised issues (see, e.g. Spaaij 2005). Public authorities, clubs and fan associations have implemented strategies and interventions intended to prevent and respond to instances of antisocial behaviour and violence connected to large sporting events, and football matches in particular, with the aim of ensuring the safety and security of spectators, players and members of staff.

This report sets out findings of an evidence review into approaches and strategies employed to counter hooliganism and problematic spectator violence at football matches, with a particular emphasis on international football. It addresses two research questions:

1. What approaches have been taken to prevent and respond to antisocial and violent behaviours among populations watching and attending major sporting events, in particular international football matches?
2. To what extent have these approaches proved effective, insofar as those planning major international football tournaments can draw on a body of good practice?

1.1. The phenomenon of spectator violence in football

In spite of its prominence as a societal challenge (see, e.g. Council of the EU 2006),

the issue of hooliganism and football-related disorder continues to raise questions regarding its causes and exacerbating and mitigating factors. These factors may include a wide variety of variables, ranging from socioeconomic factors and alcohol use to weather to local cultural context and rivalries. The focus on this question is not surprising – understanding what influences spectator violence could help further inform strategies to counter the phenomenon. To that end, a rapid evidence review conducted in parallel with the present review set out to take stock of existing evidence on factors associated with football-related disorder. The results of this review are available in a parallel report prepared by RAND Europe, *Violent and antisocial behaviour at football events and factors associated with these behaviours* (forthcoming.)

1.2. Preventing and responding to antisocial and violent behaviour

The following chapters of this report describe a multitude of strategies and interventions implemented with the objective to counter antisocial and violent behaviour at and around football matches. We capture both preventative (e.g. banning spectators with a record of violence, designing stadiums) and reactive measures (e.g. arrests made by the police on the day of the match); measures which are coercive and prohibitive

(e.g. removing disruptive spectators or banning alcohol); and measures which aim to encourage and reward peaceful behaviour (such as marketing and information provision). The approaches examined include those which try to control how crowds move geographically and spatially through features of stadium design, and those which aim to effect rational decision making by individuals.

The actors involved in these interventions often, but by no means always, include the police. Police and other security professionals attend almost all football matches (national and international) to deter and respond to antisocial and violent behaviour. Other stakeholders that are important in helping ensure an orderly conduct of football matches include football clubs, football associations and supporters' clubs; supporters themselves and their self-policing efforts also play a key role.

1.3. How the evidence review was conducted

Annex A provides a detailed account of the methodology employed for this review. The approach taken was a 'rapid evidence assessment' – an approach to identifying and critically assessing a body of research that is methodological, rigorous and repeatable but compromises on some of the breadth of a full systematic review.

The research team conducted a search of several academic (Web of Science, Scopus, PsycInfo and Social Sciences Abstracts) and grey literature (OpenGrey, IssueLab, OAISTER and Advanced Google search) databases and snowball searches in order to find as many relevant studies as possible in the time available. The initial inclusion criteria were any articles reporting primary research published in English after 2005 reporting on the implementation of strategies to counter antisocial and violent behaviour at football matches. Commentaries,

editorials and features, as well as research focusing exclusively on sports other than football, were excluded.

The quality of identified evidence was assessed utilising an adjusted version of the Maryland Scientific Methods Scale (Madaleno and Waights 2014). The scale ranks studies from 1 (least robust) to 5 (most robust) and assigns two scores to each study: one based on the robustness of the study design and one based on how the design was implemented. The purpose of the scale is to quickly summarise the adequacy of research for answering questions about effectiveness. These scores are presented in the evidence summary tables presented at the beginning of each chapter on detailed findings.

An important limitation of this review's methodology is that, while systematic, its parameters and inclusion/exclusion criteria necessarily constrained its scope. It is possible that further applicable lessons might be identified in literature that did not meet the criteria for inclusion in this review.

1.4. Transferability and how to use the information in this report

The findings presented in this report are predominantly based on studies authored in Europe, which raises the question of their transferability to other contexts. This is particularly the case for papers discussing strategies to manage crowd behaviour during domestic football leagues, which may be responding to context-specific challenges and issues. Nevertheless, while the context of each football match and league may differ, the findings in this report provide a relatively consistent cross-national overview of what type of interventions and strategies have been considered and utilised in the context of football matches. The evidence on the effectiveness of these strategies tentatively

demonstrates which interventions may be more likely than not to be successful in achieving their desired outcomes. In addition, a valuable contribution of some of the more qualitative and ethnographic studies included in this review lies in the fact that they offer lessons on the practical implementation and functioning of interventions that extend beyond an analysis of their impacts. Lastly, information in this report also discusses the data and data sources utilised in existing studies to examine the effectiveness of the interventions employed. This may represent a useful resource for others wishing to undertake similar effectiveness assessments.

1.5. Structure of this report

The remainder of this report is structured as follows. Chapter 2 provides an overview of the key findings from the review and sets out the main messages for policymakers and planners involved in all aspects of planning a football tournament. Chapters 3–6 provide more detail on what we found in relation to four types of interventions, describing the previous studies that were included in our review and our critical assessment of them. Chapter 7 provides a summary and draws out broader lessons and ideas for building the evidence base.

2 Key findings on the quality of the identified evidence and the evidence base

2.1. The quality and quantity of identified evidence

2.1.1. Twenty-six studies were selected for inclusion in this review

A total of 26 studies were included following the application of the screening and inclusion criteria:

- 980 (non-unique) sources identified
- 141 retained after applying inclusion criteria and removing duplicates
- 63 retained after title and abstract search
- 26 included after full-text review.

There were several principal reasons for attrition in the sample of identified literature, all of which were linked to the inclusion criteria. For the most part, studies that were excluded from the review fell into one or more of the following categories: 1) studies were not published in English; 2) studies focused on a sport other than football; and/or 3) studies focused on amateur/youth football. Studies were further excluded from the discussion of effectiveness if they 4) did not examine effects of interventions on antisocial and violent behaviour and related outcomes; and/or 5) did not include any empirical data.

2.1.2. The studies cover a breadth of strategies and interventions to counter antisocial and violent behaviour

Table 6 in Annex B presents an overview of all interventions mentioned in reviewed studies: their aims, who employs the strategy, where and when it is employed and who it targets. The table overleaf summarises the key interventions.

2.1.3. There are some potentially promising practices but little systematic evidence on the effectiveness of approaches used to minimise crowd violence associated with football matches

While a number of interventions to tackle antisocial and violent behaviour at football matches have been described in the literature, assessments of their effectiveness are comparatively rare. This does not necessarily mean that the tactics identified are not effective; it may be rather that there is relatively little robust evidence demonstrating effectiveness, at least within the parameters of our review. The studies reviewed cover approaches to preventing, reducing or managing violence at football matches. Few studies, however, rigorously tested interventions in a way that allow firm conclusions to be drawn about effectiveness in such a way that we were able to extract clear advice and guidance for those planning

Table 1. Overview of strategies and interventions to counter antisocial and violent behaviour

|  Venue organisation |  Event organisation |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>CCTV cameras</p> <p>Segregation of home and away fans</p> <p>Strategic placement of stages, sound equipment and screens</p> <p>All-seater stadiums</p> <p>Establishment of processing and holding areas for spectators who are arrested or refuse to leave the premises</p> <p>In-stadium alcohol restrictions</p> <p>Posting signs to convey safety information to spectators</p> <p>Changing venues for 'high-risk' events</p> <p>Physical security features (e.g. Plexiglas barriers)</p> | <p>Matchday alcohol restrictions in host town</p> <p>Identity card/fan registration schemes</p> <p>Refusing entrance to inebriated spectators</p> <p>Earlier/daylight kick-off times</p> <p>Mandatory transport to stadium</p> <p>Restriction/banning orders</p> <p>Removal of disruptive spectators</p> <p>Screening of items brought into the stadium</p> <p>Reducing situational instigators of violence (e.g. offensive T-shirts, banners)</p> <p>Control of the dispersal process</p> <p>Ticket policies, ban on touting</p> |
|  Policing and other staff |  Laws, policies, partnerships |
| <p>Intelligence-led policing</p> <p>Community/low-intensity/dialogue-based policing/police liaison teams</p> <p>Use of riot gear</p> <p>Establishment of an effective command post</p> <p>Use of different security 'levels'</p> <p>Increased visibility of security/police; show of force</p> <p>Relying on reactive tactics</p> <p>Standby officers; relief officers</p> <p>Deployment of mounted police</p> <p>Use of hand-held cameras</p> | <p>Coordinating platforms for relevant stakeholders</p> <p>Zero-tolerance of hooliganism policies from football clubs; information campaigns</p> <p>Fan projects (e.g. liaison between clubs and fan associations)</p> <p>Support to anti-hooliganism opposition from football fans</p> <p>Certification and permits to host events</p> <p>Adopting/advertising legislation and penalties for violent and/or hate behaviour</p> <p>Encouragement of marketing to gender- and age-diverse crowds</p> |

international football events. For example, most studies did not incorporate any rigorous analysis of the intervention in contrast with a comparison condition (e.g. matches where a given intervention was not in place or matches played before the introduction of the intervention in question). Of those that did make a comparison between the intervention and another type of circumstance, none were randomised controlled trials (which are regarded as providing higher-quality evidence). The few quasi-experimental designs varied in both design and quality; there were only four studies that were assessed as at least 3 on the adjusted Maryland Scientific Methods Scale and provide credible evidence of effectiveness (Di Domizio and Caruso, 2015; Giacomantonio et al. 2015; Priks 2014; Schaap et al. 2015).

Much of the research reviewed was small-scale, interview-based or observational in nature, typically conducted with one group, during a single match or over a short time frame. Although such studies can generate evidence and knowledge that can inform policy development, they typically do not include a comparison condition and do not allow for meaningful assessments of whether reductions in violence (or antisocial behaviour) were due to the tactics discussed or observed. This is because we cannot reliably assert 'what would have happened otherwise'.

In addition, the review also identified a number of descriptive papers that mention the existence or implementation of interventions without providing an assessment of their effectiveness. Some of these papers claim that the interventions are effective but do not provide any supporting evidence. These studies are also listed in Table 6 in Annex B. Frequently, these descriptive papers focused on the topics of crowd behaviour and police tactics. What the review also discovered was that some commonly used police practices (such as intelligence-led policing) whose

effectiveness is evidence-supported have not been extensively evaluated for policing football crowds. This is in spite of the fact that such approaches are routinely used to police football matches, in particular international football matches (Spaaij 2005).

Further complicating the attribution of any effect to a given intervention is the fact that interventions are rarely implemented in isolation from other strategies but rather as part of a broader approach, rendering the assessment of individual components very difficult. More broadly, any observed decreases in disorder and hooliganism may be at least partly the result of wider socio-economic factors not connected with any concrete anti-hooliganism strategies. For instance, Veuthey and Freeburn (2015) noted that factors such as general long-term decline in crime may have contributed to the recorded decrease in hooliganism in England, although they added that international data do not necessarily support a strong relationship between overall crime levels and football-related disorder.

2.2. The evidence base

2.2.1. There is some evidence that football banning orders can be effective in reducing antisocial and violent behaviour

Four reviewed studies included an examination of the impact of football banning orders (FBOs) in the UK and offered some tentative evidence of their effectiveness (see section 3.2). Banning orders are police-initiated (and judge-issued) restrictions on match attendance and matchday travel imposed on individuals considered high-risk. Stakeholders (both police and fans) tended to view the orders as effective in changing fan behaviour; however, authors who examined official police data were unable to conclude that observed decreases

in indicators of interest (such as arrests) were attributable to using banning orders.

2.2.2. Dialogue-based or low-intensity tactics are shown to be promising, if not proven

Fifteen studies examined policing approaches, which predominantly incorporated some form of dialogue-based or low-intensity tactics aimed at improving communication and relations between the police and fans (see section 6.2). Under this approach, police officers focus on establishing communication and positive relations with fans, with the objective to improve intergroup relations and marginalise antisocial behaviour. The studies spanned international tournaments and three European national football leagues. While all of the studies in this group drew on observational data and qualitative testimonies and covered only a small number of matches, the evidence they provided pointed uniformly in the direction of positive results. Dialogue-based policing appeared to have the potential to lead to positive outcomes such as improved intergroup relations, enhanced legitimacy of the police and greater self-policing by fan crowds, all of which can contribute to greater likelihood of preventing disorder and deescalating conflict situations. One study on the use of mounted police utilised a relatively robust design and offered preliminary evidence that the deployment of horses could yield positive results, although it stressed the need for further research (see section 6.4).

2.2.3. Fan registration programmes have not been shown to achieve their hypothesised results

Two methodologically robust studies assessed the impact of fan registration schemes in the UK and Italy as a prerequisite for a domestic league ticket purchase (see section 3.3). The idea behind such a scheme is that fans wishing

to purchase a ticket need to be registered with the football club and provide some information about themselves. The conditions for registration may vary across schemes and may include differential conditions for different types of matches (e.g. more information needs to be provided for away-match tickets). Neither study found the programme in question effective in achieving the intended results.

2.2.4. Starting matches earlier in the day might displace antisocial and violent behaviour

Two studies assessed a series of interventions related to the logistical organisation of domestic and some international matches (see section 4.2). Both found that early kick-off times led to positive outcomes at the time of the match but diverged in their assessment of risks outside stadiums. A quantitative study from the Netherlands observed a reduction in the number of incidents outside stadiums while an ethnographic study from the UK suggested early starting times may lead to increased risks post-match. The Dutch study also observed that daylight kick-off times led to increased risks inside stadiums.

2.2.5. Cameras and mandatory transport arrangements for fans both appear to lead to positive outcomes

One quasi-experimental study from Sweden observed that the use of cameras led to reductions in disorder inside stadiums during domestic league matches without any associated spill over effect to adjacent areas (see section 5.3). A Dutch study also examined the effect of mandatory transport requirements, i.e. a system whereby supporters of visiting teams were required to use designated modes of transport to reach the stadium. The study found that this system had positive results both inside and outside stadiums (see section 4.3).

2.2.6. Prohibiting alcohol has not been shown to reduce violence and antisocial behaviour overall

None of the three studies (primarily focused on domestic matches in Brazil, the Netherlands and the UK) examining the effect of alcohol bans inside stadiums found any effect on violence during matches (see section 5.2),

although one of these studies found evidence of increases in the number of incidents outside the match venue. One of the studies also assessed the effects of city-wide alcohol bans (see section 4.4) and bans on alcohol consumption on match day transport (see section 4.5) but did not find either intervention effective.

3 Detailed findings: interventions regarding rules of attendance

3.1. Evidence summary

Six reviewed sources commented on the effectiveness of two strategies related to conditions under which individuals can or cannot attend football matches: FBOs and mandatory supporter registration. These studies are summarised in Table 2 below,

grouped together by individual interventions. For each study, the table presents the country in focus, its scores on the adjusted Maryland Scientific Methods Scale (one for study design and one for execution) and a brief summary of its results. Studies that are based on the same data and analysis are listed in the same row.

Table 2. Studies assessing the effectiveness of interventions related to rules of attendance

| Study | Country | Study quality | Results |
|-----------------------------------------------------------------|-------------------------------------|---------------|------------------------------------------------------------------------------------------------------|
| <i>Football banning orders</i> | | | |
| Hopkins and Hamilton-Smith (2014) | England (domestic) | 1,1 | Decrease in arrests but unclear if linked to FBOs; some evidence of behaviour modification |
| Hopkins (2014) | England (domestic) | 1,1 | Decline in arrests not linked to FBOs; FBOs seen as effective by police |
| Hamilton-Smith et al. (2011); Hamilton-Smith and Hopkins (2013) | England, Wales, Scotland (domestic) | 1,1 | Some evidence of positive effect on severity of future reoffending; FBOs seen as effective by police |
| Stead and Rookwood (2007) | UK (domestic) | 1,1 | FBOs seen as effective by police and fans |
| <i>Mandatory supporter registration</i> | | | |
| Di Domizio and Caruso (2015) | Italy (domestic) | 3,3 | Failure to increase the share of casual fans in attendance |
| Schaap et al. (2014) | Netherlands (domestic) | 3,3 | Not effective in reducing violence |



3.2. Football banning orders

3.2.1. What is the intervention and where has it been used?

Most studies in this group focused on the use of FBOs in the UK. Under an FBO, a court can restrict the ability of individuals to travel to certain areas (stadiums and their vicinity) for specific periods of time in relation to football matches with the objective of reducing the likelihood of football-related disorder. FBOs can apply both domestically and internationally. In the latter example, individuals under an FBO can be asked to surrender their passport prior to a match that is scheduled to take place abroad. An application for an FBO can be made by a chief police officer on the basis of police intelligence if there is 'reasonable grounds to believe that making a banning order would help to prevent violence or disorder' (Hopkins and Hamilton-Smith 2014, 282). Orders can be applied for a period of three to ten years and have been implemented in their current form in England and Wales since 2000 and in Scotland since 2006.

3.2.2. What have studies found?

Hopkins and Hamilton-Smith (2014) reviewed the available evidence of FBOs' effectiveness. They drew on Home Office reports and data on arrests resulting from disorder involving England supporters at six international tournaments preceding the introduction of the FBOs, and from five tournaments held after their introduction. The authors noted that the Home Office considered that the FBOs resulted in the transformation of the behaviour of risk supporters, with the vast majority (92 per cent) of individuals subjected to an FBO no longer

considered a threat by the police at the time of the order's expiration (Home Office 2013, referenced in Hopkins and Hamilton-Smith 2014). However, the authors noted that the Home Office claims were not supported by any evidence and therefore, in the absence of a rigorous impact evaluation, it was difficult to draw any firm conclusions regarding the orders' effectiveness.¹

Arrest data presented in the study also demonstrated that instances of disorder and resulting high numbers of arrests of England supporters were more common prior to the introduction of the FBOs. Tournaments held after 2000 with large numbers of FBOs in place took place largely without major disturbance, although the authors noted that a number of arrests had been made at the 2006 World Cup in Germany. However, the authors urged caution in interpreting the data and noted that the results of several studies suggesting high numbers of arrests prior to 2001 may have been attributable to policing tactics in the host countries (see, e.g. Frosdick and Marsh 2005, referenced in Hopkins and Hamilton-Marsh 2014).

The authors also conducted an online survey of football supporters to examine whether FBOs influenced domestic behaviour of risk supporters. The survey received 199 responses, including 63 from individuals who had previously been subject to an order. The majority (59 per cent) of respondents believed that hooligans had become more selective in deciding when to turn out in order to avoid undesired police attention. By contrast, nearly a third of respondents (29 per cent) felt that banning orders had made little or no difference to hooligans' behaviour. Still, 12 per cent of respondents opined that banning orders had effectively ended hooligan

¹ Similarly, banning orders were considered very successful in an earlier Home Office report (2005), which did not offer any supporting evidence beyond statistics on their use.

organisations in their clubs. Specifically with respect to individuals previously subjected to FBOs, their reactions were split in three roughly equal groups. The largest group, 37 per cent, admitted to having changed their behaviour as a result of having been subjected to an FBO. These respondents continued their involvement in hooliganism but were more selective in deciding when and where to engage in such activities. The next group, 33 per cent, indicated that banning orders had made no difference in their behaviour. The remainder, 30 per cent, reported having desisted from hooliganism. This group either stopped going to football matches altogether or refrained from any hooligan activities while attending football. The results of the survey need to be interpreted with caution as they cover a small, non-representative group of fans.

A study by Hopkins (2014) aimed to shed light on the effectiveness of FBOs. This paper examined the number of arrests at domestic football matches in England and Wales since the 1992–1993 season to investigate whether there was any change following the introduction of the banning orders. The author found that the number of football-related arrests had been falling steadily in the decade before banning orders were introduced and continued to fall at a similar pace after their introduction. This led the author to conclude that the reduction in football-related arrests post-2001 appears to be a part of a long-term trend rather than a result of the implementation of the banning orders.

In addition to the analysis of arrest data, Hopkins also conducted 27 semi-structured interviews with three types of police officers: 1) Match Commanders (officers responsible for policing management), 2) Football Intelligence Officers (FIOs; officers responsible for collecting intelligence) and 3) Force Banning Officers (officers responsible for submitting order applications to court). The interviewed

officers were generally positive about the impact of the banning orders and claimed they had observed modifications in the behaviour of football hooligans. According to the interviewees, these modifications manifested themselves in two principal ways. First, in line with the survey findings by Hopkins and Hamilton-Smith (2014), some risk supporters were seen as more selective in choosing which matches to attend in an attempt to reduce the possibility of the police constructing a profile on them. In other words, the possibility that an FBO would be imposed on them rendered attending football matches regularly too risky for this group of supporters. Second, interviewees felt that the most determined supporters under FBOs would attempt to work around the temporal and spatial restrictions imposed on them so that they could continue their involvement in hooliganism to the extent possible. One suggested way supporters could do this was by congregating in a pub just outside the exclusion zone specified by the FBO. A notable limitation of this interview-based evidence is the relatively small number of officers involved. In addition, some of the interviewees were responsible for submitting applications for FBOs, which may have made them more positively predisposed towards the use of the instrument.

Similar observations were made in an earlier report by Hamilton-Smith et al. (2011) and a follow-up paper by Hamilton-Smith and Hopkins (2013) evaluating the implementation of FBOs in Scotland. The evaluation drew on administrative data on convictions and case files and on focus groups and interviews (involving over 50 individuals) with operational and strategic stakeholders. These stakeholders included police officers, procurators, football-club security managers and football association representatives. With respect to the situation in Scotland, the evaluation concluded that while banning orders did not

eliminate football-related offending, there was tentative evidence that they contributed to a reduction in the severity of future reoffending by individuals who had previously received an order. The study also consulted with stakeholders in England and Wales to benchmark the Scottish application of FBOs to that in England and Wales. Interviewees in England and Wales offered testimonies similar to those reported in Hopkins (2014). According to the stakeholders, in England and Wales FBOs were seen as very effective with respect both to the individuals subjected to them and those supporters who wished to avoid receiving one. Similarly, FBOs were credited with playing a key role in reducing hooliganism in the UK by all three FIOs and all three fans interviewed in a paper by Stead and Rookwood (2007), discussed in greater detail here in the chapter on policing interventions (Chapter 6).

Echoing the above-mentioned lack of clarity regarding the effectiveness of FBOs, an earlier paper by Stott and Pearson (2006) also noted that the impact of the instrument was not clear. According to the authors, one contributing factor was that FBOs were often deployed in conjunction with other strategies, such as low-intensity policing, which may be more instrumental in bringing about desired outcomes. In addition, in support of other studies (see, e.g. Pearson 2005), the authors pointed out potential problems with the use of FBOs related to civil rights and the instrument's proportionality (or lack thereof).

3.2.3. Main strengths and limitations of the evidence

The evidence on the effectiveness of banning orders comes primarily from the testimonies of police officers and some fan representatives (all studies scored 1,1). The strength of qualitative evidence contrasts with inconclusiveness of findings based on quantitative analyses.

3.2.4. Key messages

Banning orders are considered by police officers and some other stakeholders as a key intervention that has helped reduce or prevent violence at UK stadiums. Other sources of evidence offer a less clear picture on their effectiveness.



3.3. Mandatory spectator registration

3.3.1. What is the intervention and where has it been used?

Another type of strategy evaluated in the reviewed literature is the requiring of various forms of spectator registration in order to gain admittance to a football match. An example of such a scheme is the so-called fidelity card, implemented in the Italian Serie A in May 2008 (Ferrari 2012). The fidelity card is essentially a fan identification card, and since the 2010–2011 season, possession of one has been required for holders of season tickets and away supporters to gain admittance to stadiums. The objective of the fidelity card was to keep violent supporters away from matches and encourage the attendance of casual fans. Its introduction followed the adoption of a package of counter-violence measures adopted in Italy in 2008 that included the following elements: 1) closed-door matches where necessary, 2) a ban on cumulative sales of away tickets, 3) increased punishment for football-related hooliganism and 4) sanctions for football clubs supporting fan clubs involved in violent events (Ferrari 2012).

Similarly, in the Netherlands, clubs may restrict ticket sales to only individuals who have previously registered with the club and are in possession of corresponding documentation (e.g. a season card or a club card). The requirements for obtaining the away-match card necessary to buy away-match tickets may

be even stricter and may include the furnishing of additional information or photographs. The cards can also be scanned during entry to the stadium, verifying the identity of the ticket holder again at the time of the match (Schaap et al. 2014).

3.3.2. What have studies found?

Di Domizio and Caruso (2015) assessed the impact of the above-mentioned counter-hooliganism policies, with a particular focus on the fidelity card initiative. Reductions in various indicators of interest were recorded in Italy in the aftermath of the introduction of the counter-hooliganism policies. Between the 2006–2007 and 2011–2012 seasons, there was a decrease in the number of matches with injuries (from 101 to 60), injured civilians (from 134 to 83), injured policemen (from 316 to 37), people arrested (from 246 to 75) and people charged with violent behaviour (from 848 to 504).

Specifically with respect to the fidelity card, the authors analysed its impact on ticket sales on casual fans, testing whether its introduction might induce the attendance of more supporters unaffiliated formally with either club. To that end, they examined effects on ticket sales for matches with entry restrictions in place for away fans (those matches were designated as high-risk) and for matches where fidelity card owners were eligible for an exemption from these restrictions. The analysis drew on match-level data covering five seasons (2007–2008 to 2011–2012) and utilised a series of regression models. The results of the models showed that entry restrictions applicable to away fans resulted in a reduction of casual attendance by about 2,200 people per match, suggesting that some occasional spectators were turned off by matches designated as risky. This effect was compensated in instances where holders of fidelity cards were afforded an exemption to the entry restrictions. Such matches attracted

approximately 1,300 more casual fans, reducing the overall effect on casual attendance to 900 fewer spectators. Building on these results, the authors concluded that the hypothesised substitution effect between committed and uncommitted fans produced by the fidelity card failed to materialise. While this paper had one of the most robust methodological designs among those identified, it focused on an outcome that is only indirectly presumed to be linked with football-related disorder.

An evaluation of strategies to combat hooliganism in the Netherlands (Schaap et al. 2015) also covered mandatory registration of spectators among the interventions it reviewed. The analysis utilised data provided by the Dutch Hooliganism Registration Institute (*Centraal Informatiepunt Voetbalvandalisme* [CIV]) on professional football matches in the Netherlands over five seasons (2006–2007 to 2010–2011). The data indicated whether and which specific anti-hooliganism measures were in place for a given match and whether specific types of hooliganism-related incidents occurred either inside or outside the stadium. A limitation of this measure was its binary character – it indicated whether a given type of incident occurred or not but did not provide information about its extent or severity. The method employed by the authors was a multi-level logistic regression. The results of the model showed that the registration requirement in the form of a home-match card or an away-match card was not significantly related to the risk of incidents. This observation was true for incidents both inside and outside the stadium. As such, the authors concluded that the mandatory cards did not appear to be effective in combating hooliganism. As a possible explanation, the authors hypothesised that potential hooligans may still have been able to obtain tickets despite the card requirements. While this study design was among the most robust in the reviewed group of papers, the

authors noted it was not possible to rule out alternative explanations for the observed results.

In addition to the studies discussed above, banning orders and supporter cards are also discussed, along with other interventions adopted in Italy,² in a paper by Ferrari (2012). The author does not discuss the effectiveness of individual interventions but, similarly to Di Domizio and Caruso (2015), notes that the adoption of a package of anti-hooliganism strategies was followed by a notable reduction in several relevant indicators. Between the seasons 2005–2006 and 2010–2011, the number of riots fell by 56 per cent, injuries among supporters by 58 per cent, injuries among police officers by 81 per cent, arrests by 48 per cent and number of police force deployed by 35 per cent.

3.3.3. Main strengths and limitations of the evidence

Both Di Domizio and Caruso's (2015) and Schaap et al.'s (2015) studies discussed in this section are among the most robust included in this review (scored 3,3). A limitation of Di Domizio and Caruso's (2015) study of the Italian context is that it did not directly examine changes in violence or disorder but rather size and composition of match spectator crowds.

3.3.4. Key messages

Two comparatively robust studies failed to identify any positive effect of mandatory registration schemes.

2 These include 1) stadium safety requirements, requiring each stadium with a capacity of at least 10,000 seats to have an operational security group consisting of key stakeholders such as local police, state police, fire rescue and venue safety management; 2) establishment of a National Centre for the Monitoring of Sports Events with the authority to declare selected matches as high-risk; 3) increased punishments for violent crimes committed inside or in the vicinity of stadiums or linked to sporting events.

4 Detailed findings: logistical organisation of matches

4.1. Evidence summary

Two studies assessed the effectiveness of five strategies related to the logistical organisation of football matches: 1) early starting times, 2) daily kick-off times, 3) mandatory transport arrangements for visiting fans, 4) city-wide bans on alcohol and 5) bans on alcohol consumption on match day transport. These

studies are summarised in Table 3 below, organised by individual interventions so each study is listed more than once. As in the previous section, for each study, the table presents the country in focus, its scores on the adjusted Maryland Scientific Methods Scale (one for study design and one for execution) and a brief summary of its results.

Table 3. Studies assessing the effectiveness of interventions related to logistical organisation of matches

| Study | Country | Study quality | Results |
|---------------------------------------------------------|--------------------------------------|---------------|-------------------------------------------------------------------------|
| <i>Early starting times</i> | | | |
| Schaap et al. (2014) | Netherlands (domestic) | 3,3 | Reduction in incidents both inside and outside stadiums |
| Pearson and Sale (2014) | England (domestic and international) | 1,1 | Reduction in risk during matches, potential increase in post-match risk |
| <i>Daylight kick-off times</i> | | | |
| Schaap et al. (2014) | Netherlands (domestic) | 3,3 | Increase in incidents inside stadiums, no change outside |
| <i>Mandatory transport arrangements</i> | | | |
| Schaap et al. (2014) | Netherlands (domestic) | 3,3 | Reduction in incidents both inside and outside stadiums |
| <i>City-wide bans on alcohol</i> | | | |
| Pearson and Sale (2014) | England (domestic and international) | 1,1 | Not effective in preventing consumption |
| <i>Ban on alcohol consumption on matchday transport</i> | | | |
| Pearson and Sale (2014) | England (domestic and international) | 1,1 | Not very effective in preventing consumption |



4.2. Earlier starting times and daylight kick-off times

4.2.1. What is the intervention and where has it been used?

Two studies (one from the Netherlands and one from the UK) examined two strategies related to the scheduling of football matches and their possible impact on antisocial and violent incidents. These strategies were: 1) scheduling matches earlier in the day, thereby limiting opportunities for the consumption of alcohol or drugs in the run-up to a match; 2) scheduling matches so that they take place during daylight hours, thereby avoiding darkness around the stadium.

4.2.2. What have studies found?

The first study was conducted by Schaap et al. (2015). As explained in Chapter 3, the analysis took the form of a multilevel logistic regression model utilising data provided by the CIV. Regarding the time of the match, the results of the model confirmed the authors' hypothesis: matches played later in the day were found to be more likely to experience incidents both inside and outside the stadium. However, contrary to expectations, playing at night-time, i.e. during hours of darkness, was found to be related to an increased likelihood of incidents occurring inside the stadium but *not* outside. The authors also found that the impact of the starting time of match was not affected by whether or not the match is played in darkness (i.e. a 7 p.m. starting time in the Netherlands in January would be mean the match would be played in darkness, whereas the same starting time in May would mean the match would be played in daylight).

Earlier kick-off times were also among the strategies examined in an ethnographic paper by Pearson and Sale (2011) focused on alcohol

and football spectators. The paper drew on a series of ethnographic studies covering fans of three English teams (Blackpool, Manchester United and the England national team) during the period 1995–2009. Over the course of the data collection, the researchers observed in excess of 200 matches (including matches held outside of England) with more than 2,000 hours of observations (including travel time to foreign matches). The paper also incorporated data from direct observations of police operations during English Premier League match days in the 2008–2009 season and from an unspecified number of interviews with British and Italian senior police officers.

Assessing the impact of early kick-off times, the authors concluded that this strategy was effective in reducing the amount of alcohol drunk by supporters before matches, in particular at weekends. By extension, assuming a link between alcohol consumption and risk of violence, early kick-off times were seen as effective in decreasing the potential for violent incidents *during the match*. At the same time, according to the authors, matches with early kick-off times could be followed by prolonged periods of drinking and increased risk of violence after the match, particularly if supporters of the away team do not leave the match area immediately (as is the case with derbies between teams from the same city). This was confirmed by authors' observations of a number of Manchester United vs. Manchester City fixtures with early kick-off times, which were not found to have reduced the overall amount of alcohol consumed and instead led to increases in alcohol consumption among some supporters. Therefore, the authors concluded that while early kick-off times may be effective in reducing football-related disorder *at the time of the match*, they may potentially lead to an increased likelihood of issues later in the day. Nevertheless, based on interview testimonies, the authors suggested that early kick-off times

for high-risk matches may still be preferable as they help avoid holding matches during the hours of darkness, which may have a strong effect on the probability of incidents occurring.

4.2.3. Main strengths and limitations of the evidence

One study in this section employed a comparatively robust design (scored 3,3). The other study is based only on a series of observations, albeit covering a relatively large number of matches (scored 1,1).

4.2.4. Key messages

Both studies that examined the effect of early starting times found positive results, although one study suggested the possibility of increased risk post-match. Moving kick-off times to daylight hours was found to have a counterintuitively negative effect on disorder inside stadiums.



4.3. Mandatory transport for away fans

4.3.1. What is the intervention and where has it been used?

The Dutch study by Schaap et al. (2015) also examined the effectiveness of mandatory transport arrangements for away fans deployed at some domestic matches in the Dutch league. Under these arrangements, fans of the visiting team had to utilise a predetermined trajectory to arrive at the stadium on the day of the match and were not allowed to deviate from the route. The idea behind this intervention was to minimise contact with home-team supporters.

4.3.2. What have studies found?

According to the authors, mandatory transport arrangements for away-team fans were found to be effective in reducing the likelihood

of incidents both outside and, to a lesser degree, inside the stadium. However, the authors noted that the mandatory transport strategy was seen as intrusive and costly, was unpopular with supporters and was likely to be discontinued (Ferwerda et al. 2011; Van der Aa 2011, referenced in Schaap et al. 2015).

4.3.3. Main strengths and limitations of the evidence

The evidence for this type of intervention is based on only one study from only one country, albeit with a relatively robust research design (scored 3,3).

4.3.4. Key messages

Mandatory transport arrangements were found to be effective in reducing disorder both inside and outside stadiums.



4.4. City-wide bans on alcohol

4.4.1. What is the intervention and where has it been used?

Pearson and Sale (2011) also examined the impact on alcohol consumption by football supporters of city-wide bans on alcohol sales. The authors observed the application of city-wide bans during six trips to different Italian venues that hosted matches involving an English team. The bans typically took the form of a prohibition on the sale of alcohol by restaurants, bars and supermarkets and on public drinking during the 24 hours surrounding a given match.

4.4.2. What have studies found?

The authors concluded that the introduction of city-wide bans was not effective in preventing alcohol consumption. According to the study's findings, there were three

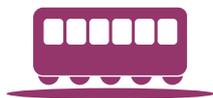
principal ways through which fans were able to procure alcohol in contravention of the ban. First, some local upscale restaurants would continue to serve alcohol, sometimes at the request of locals who did not wish to be deprived of a drink to accompany their meals. Second, local youth would purchase alcohol from supermarkets a day in advance and resell to English fans on the day of the match. Third, fans continued to be served by some bars located in less central streets and thus less visible to the police. As a conclusion, the authors suggested that bans on alcohol consumption may even have had undesired consequences by engendering an 'us vs. them' mentality vis-à-vis the police among football supporters and by encouraging fans to congregate away from the police, who were thus in a worse position to monitor the situation (e.g. in the instance of a confrontation with home-team supporters).

4.4.3. Main strengths and limitations of the evidence

The evidence underpinning this intervention comes from an ethnographic study employing a very limited number of observations (scored 1,1).

4.4.4. Key messages

City-wide bans on alcohol were not found to be effective in preventing consumption of alcohol on match days.



4.5. Prohibiting alcohol on transport

4.5.1. What is the intervention and where has it been used?

Pearson and Sale (2011) also assessed situations in the UK in which the prohibition of alcohol consumption was applied to supporters' transport to and from the stadium

using modes of transit that had been officially designated to carry football supporters (typically buses or trains).

4.5.2. What have studies found?

Based on the authors' observations, this strategy was not effective in reducing the risk of alcohol-related violence for two principal reasons. First, some supporters ignored the prohibition and found a way to continue consuming alcohol while in transit; second, some supporters were already drunk before they began their formal transit to the stadium.

4.5.3. Main strengths and limitations of the evidence

The evidence underpinning this intervention comes from an ethnographic study based only on match day observations (scored 1,1).

4.5.4. Key messages

Transport-related alcohol bans were not found to be effective in preventing consumption of alcohol on match days.

5 Detailed findings: in-stadium equipment, features, services

5.1. Evidence summary

Four studies assessed the effectiveness of two strategies deployed inside stadiums related to security features and (limitations on) the provision of alcohol: alcohol bans inside stadiums and the utilisation of security cameras.

These studies are summarised in Table 4 below, organised by individual interventions. As in the previous sections, for each study, the table presents the country in focus, its scores on the adjusted Maryland Scientific Methods Scale (one for study design and one for execution) and a brief summary of its results.

Table 4. Studies assessing the effectiveness of in-stadium interventions

| Study | Country | Study quality | Results |
|------------------------------------|--------------------------------------|---------------|-----------------------------------------------------------|
| <i>Alcohol ban inside stadiums</i> | | | |
| Pearson and Sale (2014) | England (domestic and international) | 1,1 | No changes in alcohol-related violence |
| Nepomuceno et al. (2017) | Brazil (domestic) | 2,1 | Little effect on violent behaviour |
| Schaap et al. (2014) | Netherlands (domestic) | 3,3 | No change in incidents inside stadiums, increase outside |
| <i>Security cameras</i> | | | |
| Priks (2014) | Sweden (domestic) | 4,2 | Reduction in incidents inside stadiums, no change outside |



5.2. Alcohol ban inside stadiums

5.2.1. What is the intervention and where has it been used?

Three studies (covering primarily domestic matches in the UK, Brazil and the Netherlands)

examined the impact of bans on alcohol inside the stadium.

5.2.2. What have studies found?

Looking at national and international matches involving English teams, the ethnographic study by Pearson and Sale (2011) did not observe any changes in alcohol-related violence that could

be connected to the use of bans on alcohol inside the stadium. The authors did observe, however, several unintended consequences of such bans. Most fundamentally, supporters rushed to consume as much alcohol as possible before entering the stadium, which worked against the ban's objective to reduce the level of fans' drunkenness at the time of the match. Efforts to maximise consumption before the start of the matches also led to last-minute rushes at turnstiles immediately before kick-off times, particularly at away matches. Where some consumption was allowed in restricted areas (e.g. in UK stadiums not within sight of the pitch),³ these locations tended to become crowded, with potential for jostling, beer spillage and subsequent tensions. The lack of alcohol provision inside stadiums also increased the possibility that fans would end up drinking alongside supporters of the opposing team in pubs and near off-licences outside the stadium in an unsegregated and uncontrolled fashion. Lastly, a small group of supporters ignored the ban and managed to bring alcohol inside the stadium.

A quantitative study by Nepomuceno et al. (2017) assessed the impact of a ban on alcohol sales inside stadiums that was in place in the Brazilian state of Pernambuco between 2009 and 2015. The authors analysed a dataset covering matches of the states' three biggest football clubs, which included criminal justice information on any hooliganism incidents that may have occurred during the matches (the total number of matches in the sample was 375, incidents occurring at 309 of these). The dataset covered the period 2005–2015 and therefore included four years not covered by the alcohol ban. The authors ran a pre/post comparison of the number of hooliganism incidents that took place before and after the introduction

of the ban, utilising a non-parametric model. The results of the analysis showed that the alcohol ban had little effect on hooligans and their violent behaviour. In the period preceding the introduction of the ban, there were 139 matches with at least one incident occurring (608 incidents in total). After the introduction of the ban, there were 170 matches with at least one incident occurring (755 incidents in total). An explicit limitation of the study acknowledged by the authors is the fact that the underlying dataset captured only officially recorded hooliganism incidents, which left out a potentially large number of instances of violent behaviour where perpetrators were not caught by the police. In addition, while the paper does not clarify this, it appears that the model used did not include a dummy variable to capture the existence or absence of the new policy.

The evaluation of Dutch anti-hooliganism strategies by Schaap et al. (2015) also examined the effects of a ban on alcohol sales inside the stadium. The results indicated that such bans were not associated with the likelihood of incidents occurring inside the stadium (after accounting for heterogeneity between matches). Alcohol bans appeared to increase the likelihood of incidents occurring outside the stadium, thereby having the opposite of their intended effect. However, the authors urged caution in interpreting the model's results, since the underlying dataset included a large number of missing values with respect to whether alcohol was sold during the match – this information was not available for 37 per cent of matches included in the dataset.

5.2.3. Main strengths and limitations of the evidence

The evidence underpinning this intervention comes from three studies with different

research designs (one of which was relatively robust – the studies were scored 3,3, 2,1 and 1,1 respectively) and from three different countries, spanning multiple contexts.

5.2.4. Key messages

All three studies conclude that bans on alcohol inside stadiums had little to no effect on disruptive and violent behaviour inside stadiums. Two studies suggested such bans may lead to negative outcomes outside stadiums.



5.3. Security cameras

5.3.1. What is the intervention and where has it been used?

A study by Priks (2014) evaluated the effect of surveillance cameras installed in Swedish football stadiums on unruly behaviour. The author took advantage of a decision in 2000 by the Swedish Football Association that all stadiums hosting matches in Allsvenskan (the highest Swedish league) needed to be equipped with cameras within two years. The actual date of the camera installation varied across individual teams due to differences in the time it took to obtain necessary permits and procure the equipment.

5.3.2. What have studies found?

The study examined referee reports which recorded the number of incidents during matches held in the period 1999–2005 to examine any changes in the volume of unruly behaviour in the aftermath of the introduction of the surveillance cameras. The data covered 1,273 matches, of which 211 were played in stadiums without cameras. To check for any possible displacement effect of hooliganism from inside the stadium to its vicinity, the study also examined Swedish police data on incidents outside football stadiums. Matches

held at three stadiums which had installed cameras before they became mandatory served as a control group.

Results from the study's ordinary least squares regression models indicated that matches played under surveillance cameras saw a 64 per cent reduction in incidents from an initial average of 0.26 incidents per match. The significance of these results was confirmed in a series of robustness checks, including the addition of month-fixed effects and stadium-specific linear trends. They also remained valid after controlling for other possible explanations such as size of attendance or number of officers present at the match (derived from data from the Swedish National Police Force). Therefore, the study concluded that the observed reduction in disorderly behaviour could be linked to the use of surveillance cameras and was not attributable to any endogenous factors or parallel policing interventions. Furthermore, the author found no significant differences between matches with and without cameras in the number of incidents occurring outside of stadiums, suggesting there was no displacement effect of unruly behaviour. The study demonstrated that findings remain valid under various model specifications. While the study did not discuss explicitly its assumptions behind the chosen independent variables, this does not appear to be a constraint as the timing of the intervention (installation of security cameras) was exogenous to prior disruptive behaviour at football matches.

5.3.3. Main strengths and limitations of the evidence

The evidence underpinning this intervention is based on only one study, albeit with a robust methodological design (scored 4,2).

5.3.4. Key messages

The introduction of cameras was found to lead to a reduction in incidents inside stadiums, without any spill over effects to adjacent areas.

6 Detailed findings: policing interventions

6.1. Evidence summary

The review identified 17 studies that examined the effectiveness of various policing interventions. Of these, 15 studies examined a dialogue-based approach to policing (although the used terminology differed across studies), one study focused on covert and intelligence policing and one study assessed the utilisation of mounted police. These studies

are summarised in Table 5 below, organised by individual interventions. As in the previous sections, for each study, the table presents the country in focus, its scores on the adjusted Maryland Scientific Methods Scale (one for study design and one for execution) and a brief summary of its results. Studies that are based on the same data and analysis are listed in the same row.

Table 5. Studies assessing the effectiveness of policing interventions

| Study | Country | Study quality | Results |
|----------------------------------------------------------------------|--------------------------|---------------|-----------------------------------------------------------------------------------------------------------------------|
| <i>Dialogue-based policing – international football competitions</i> | | | |
| Hylander et al. (2010); Rosander and Guva (2012) | Germany (World Cup 2006) | 1,1 | No major incidents; tactics seen as successful |
| Schreiber and Adang (2010a, b) | Germany (World Cup 2006) | 2,1 | Tactics seen as successful in comparison with high-profile policing |
| Schreiber and Stott (2012) | Portugal (Euro 2004) | 1,1 | Tactics seen as successful in improving police–fan relations |
| Stott et al. (2007) | Portugal (Euro 2004) | 1,1 | Tactics seen as successful in comparison with high-profile policing |
| Stott et al. (2008a) | Portugal (Euro 2004) | 2,1 | Lower visible police presence and number of arrests, improved intergroup relations and identification with the police |

| Study | Country | Study quality | Results |
|---------------------------------------------------------------------------------------|--------------------------------------|---------------|----------------------------------------------------------------------------|
| Dialogue-based policing – domestic football leagues (UK) | | | |
| College of Policing (2015) | UK (domestic and some international) | 1,1 | Tactics seen as successful in improving police–fan relations |
| Stott et al. (2008b) | UK (domestic) | 1,1 | Tactics seen as successful in improving police–fan relations |
| Stott et al. (2012); Stott (2014) | UK (domestic) | 1,1 | Tactics seen as successful in improving police–fan relations |
| Stott et al. (2016a) | UK (domestic) | 1,1 | Tactics seen as successful in improving police–fan relations |
| Dialogue-based policing – domestic football leagues (other European countries) | | | |
| Beedholm Laursen (2017) | Denmark (domestic) | 1,1 | Tactics seen as successful in improving police–fan relations |
| Havelund et al. (2016) | Denmark (domestic) | 1,1 | Tactics seen as successful in improving police–fan relations |
| Stott et al. (2016b) | Sweden (domestic) | 1,1 | Tactics seen as successful in improving police–fan relations |
| Covert and intelligence-based policing | | | |
| Stead and Rookwood (2007) | UK (domestic) | 1,1 | Intelligence-based policing seen as more effective than more overt tactics |
| Deployment of mounted police | | | |
| Giacomantonio et al. (2015) | UK (domestic and some international) | 3,2 | Mixed results; horses seen as effective by police officers |



6.2. Dialogue-based policing

6.2.1. What is the intervention and where has it been used?

Most of the studies reviewed (15 of 17) examined some form of dialogue-based approach to policing football events, aimed at fostering communication and intergroup relations between the police, other authorities and fans. While the terminology used to

describe the policing approach differed (e.g. low-key policing, low-intensity policing, event policing) the basic tenets and objectives of the assessed approaches were very similar. Five of these papers explicitly focused on international football tournaments while the rest focused on domestic leagues (UK, Denmark and Sweden).

6.2.2. What have studies found?

International tournaments

A paper by Hylander and Granström (2010) conducted a case study of policing and

organising strategies employed during a match between Germany and Poland at the 2006 World Cup held in Dortmund, Germany. In the run-up to the match, the police utilised several strategies to prevent and reduce violence (described in detail by Hau 2008) with the overall objective to be friendly and communicative, avoid any action that might have been seen as provocative and respond professionally to any conflict situations. To illustrate, supporters (predominantly Polish fans) were welcomed at the train station by a human avenue of police officers to help fans navigate their way from the station to other destinations, such as the locations of large spectator screens and the stadium. The police were unarmed, dressed in uniforms but with no helmets or visors, and were available to answer questions. Fans of the opposing teams were not separated during the day.

The authors collected data via two methods. The first was a participant observation undertaken by three pairs of senior researchers. The observations took the form of semi-structured, multipoint observations and lasted ten hours. In the second, the research team conducted 38 interviews with supporters of both nationalities, police officers, match organisers and other service agents as well as a follow-up interview with a police commissioner. The field interviews were conducted in the streets and at the locations of the large screens before and after the match and during half-time.

Based on the collected data, the authors concluded that overall the match day was peaceful and without major issues. The approach of the police was seen by interviewed fans as welcoming and not at all provocative. In addition to policing tactics, the authors noted that other organisational features likely played a substantial role in keeping the event largely incident-free. These included good accessibility of facilities for visiting spectators

(such as food and drink vendors, public restrooms) and physical infrastructure (e.g. carpet on the ground signposting directions to most important venues, spatial organisation of places where supporters congregate). As the study concluded, 'the covert police strategy was to behave in a friendly way and to treat the fans as festival participants rather than rival supporter groups.... The most successful disarming, however, seemed to be all the [event] arrangements' (p.20). A subsequent paper by Rosander and Guva (2012), analysing the behaviour of police at the same match based on the same observational data, reiterated the conclusion that the 'friendly but firm' approach (p.67) was successful in keeping the match day in the city peaceful.

In another paper examining policing tactics at the 2006 World Cup (and comparing it to earlier tournaments), Schreiber and Adang (2010a) conducted structured observations of ten matches and associated activities held in three host cities in North Rhine-Westphalia. On three occasions, the researchers also conducted observations either the day before or the day after the match. During the observations, focused on crowded areas, the researchers took samples every 15 minutes on the number of people and the interactions between fans as well as between fans and the police. Any incidents and associated interventions were also recorded. The team of observers consisted of 23 graduate course participants (comprising postgraduate students and police officers) trained in advance by the authors of the paper. In total, the observers recorded 1,020 samples. The methodology for structured observations was in line with that used by a paper on policing tactics during the 2004 UEFA European Championship (Euro) (Stott et al. 2008a, discussed below), enabling a direct comparison between the two tournaments. In addition, the research team conducted a series of interviews with the

following groups: 184 interviews with fans; nine with employees of security companies; 40 with police officers, of which 31 took place during the tournament and nine in its aftermath; and two with FIFA volunteers. The data was further complemented by an analysis of media data from newspapers, TV and online sources.

The comparison of the observational data from the 2004 Euro and the 2006 World Cup offered mixed results. The number of incidents recorded in observational data from Germany was higher than that recorded in Portugal (incidents recorded in four per cent and one per cent of the respective samples.). At the same time, the frequency of recorded positive police–fan and fan–fan interactions was higher in Germany than in Portugal. The authors also noted that the concept of low-intensity policing had not been applied uniformly during the World Cup. The police appeared to implement some of its features but did not implement a full ‘friendly but firm’ approach. For instance, in contrast with the tactics in Portugal, the majority of policing was done by units in riot gear, making it more difficult to provide a differentiated response to any arising conflict situations. Where implemented, the authors observed positive outcomes resulting from the low-intensity approach. These included improved facilitation of fan and legitimate intergroup relations as well as conflict de-escalation and greater marginalisation of disorderly behaviour. These findings led the authors to conclude that where the German police was able to offer a targeted and context-dependent form of policing, positive outcomes ensued. By contrast, issues occurred where this was not the case.

Drawing on the same data as used in Schreiber and Adang (2010a), Schreiber and Adang (2010b) examined in greater depth the policing tactics surrounding the match between Germany and Poland at the 2006 World Cup, the same match as that analysed by Hylander and Granström (2010). The

findings of the Schreiber and Adang (2010b) paper were similar to observations made in their wider study (2010a), i.e. that low-intensity and welcoming policing was conducive to positive intergroup relations. However, while acknowledging that the match day was free of large-scale hooligan confrontations, the authors noted an increased number of incidents and arrests. In contrast with Hylander and Granström (2010), the authors observed a worsening in the situation towards the end of the day and suggested that the police may have abandoned somewhat their original low-intensity concept. This may have contributed to what the authors termed a ‘self-fulfilling prophecy around violent behaviour and fan disorder’ (p.486).

This review also identified a series of papers produced as part of a larger research project examining the use of low-intensity policing in the context of the 2004 Euro held in Portugal. A paper by Schreiber and Stott (2012) examined the utilisation of low-intensity policing techniques during the tournament and their effect on the security situation surrounding group-stage matches involving Germany. The study’s focus on German fans reflects the fact that, in the run-up to the tournament, German fans were identified as a high-risk group. Under the low-intensity policing approach, the Portuguese police decided to offer multiple levels of response. In standard situations, the police would deploy in small teams or pairs with the objective of conveying a sentiment of security. Their portfolio would include proactive communication, provision of advice to fans to help their enjoyment of the tournament, and monitoring and addressing small-scale incidents. Situations that escalated would be resolved by specialised intervention units, which would not be visible until necessary.

The study collected data in two principal ways. First, the authors conducted semi-structured observations over the course of

the tournament covering events involving German fans. Second, the research team also conducted ad hoc interviews with 173 German and 12 Dutch fans (the Netherlands was one of Germany's opponents at the group stage). In addition, the team undertook unstructured interviews with other stakeholders, including members of the German, Dutch and Czech fan embassies⁴ (the Czech team was also in the same group) and members of the NGO FARE (Football Against Racism in Europe). Lastly, the research team also conducted a series of semi-structured consultations with several police commanders. Based on the collected data, the authors concluded that the low-intensity approach to policing helped foster non-violence and good relations between fans from different nations. Interviewees largely credited the low-intensity policing tactics with having contributed to a calm and positive atmosphere, particularly in comparison with their experiences from other contexts. In addition, according to the authors' observations, the low-intensity approach was successful in deescalating situations of emerging conflict. As such, the authors argued that the results of the study lent support to the Elaborated Social Identity Model (ESIM), developed in previous literature (Drury and Reicher 2000; Reicher 1996, 2001; Stott and Reicher 1998), as an account of processes determining crowds' collective action.

As part of the same research project, a paper by Stott et al. (2007) also examined policing employed by the Portuguese police during the 2004 Euro. In contrast with the previous paper, this study focused on the fans of the England team and their behaviour during the tournament. In this regard, important focal points of the study were two riots involving England fans in the southern Portuguese town

of Albufeira, while the rest of the tournament and all other match locations saw no collective violence involving England fans. All major cities in Portugal (and therefore all match venues) were policed by the national police (*Policia de Segurança Pública* [PSP]), which adopted the low-intensity approach described in the previously discussed paper. By contrast, rural areas were served by the Portuguese National Guard (*Guarda Nacional Republicana* [GNR]), which adopted a more reactive, high-profile approach. The authors set out to examine the relationship between public policing strategies, social identity and social disorder.

As with the previous paper, this study utilised two principal data collection methods. First, the research team conducted semi-structured field observations at match venues on all matchdays involving the England team and during the second night of riots in the town of Albufeira. Second, the research team consulted with England fans. The researchers conducted interviews with 'approximately 74' (p.80) England fans during the tournament. In addition, the study team ran a web-based survey of England fans before and after the tournament (recruited via articles and advertisements, fan organisations' distribution lists and flyers distributed during the tournament). The online questionnaire elicited 102 responses, 39 of them received before the tournament and 63 after the tournament. Lastly, the research team reached out for testimonies to 20 fans engaged in previous research and heard back from 14 individuals.

Based on the data collected, the research team noted differences in the policing strategies employed in Albufeira and elsewhere. In particular, incidents observed in Lisbon were deescalated while the situation in Albufeira

4 Fan embassies are stationary services offered in host cities for visiting team fans. They may provide guide materials, goodwill events and other forms of support and advice.

failed to be contained. Based on fans' testimonies, the low-intensity approach to policing was seen as enhancing the legitimacy of the police while the opposite was true for high-profile policing. The authors concluded that low-intensity policing contributed to a cultural change on the part of England fans. As part of this change, hooliganism seemed to have become more marginalised and isolated. These findings, however, need to be interpreted with caution given the limitations of the data. As the authors noted, greater certainty could have been achieved if they had had more quantifiable data on any changes in the perception of intergroup relations and if they had been able to follow the same fans throughout the tournament (thereby allowing a within-subject study design).

Stott et al. (2008a) also examine low-intensity policing tactics at the 2004 Euro in Portugal and build on the previous paper by Stott et al. (2007). This study was a quantitative attempt to identify reasons for the successful maintenance of public order in host cities during the tournament. The data used for the analysis also drew on a combination of observations and consultations with fans. Unlike in the study by Stott et al. (2007), observations informing this paper were structured and covered 14 matches at the tournament covering all matches played by the following teams: Portugal, the Netherlands, Germany and England. The method of these observations was identical to that employed by a previous study (Adang and Cuvelier 2001) focusing on the 2000 Euro, enabling a direct comparison between the two tournaments. The observations were undertaken by English-speaking Portuguese observers, split equally between university students and police academy cadets. Observations covered the night before the match and the afternoon and night of the match day. Observers recorded in regular intervals data on the

number of fans and police present in their areas, their interactions and the occurrence of any incidents and corresponding police interventions. In total, the observers took 1,896 samples, which were divided roughly equally between seven increased-risk matches and seven standard-risk matches (899 and 977 samples, respectively). In addition to the observations, the study drew on responses to an online questionnaire distributed to fans of the England team, the same as the one used to inform the paper by Stott et al. (2007).

Quantitative observation data revealed that visible police presence was observed in approximately half (56 per cent) of the samples. This was significantly less than during the 2000 Euro ($p < .001$). Positive contacts with the police were observed in five per cent of all observational samples, a significantly lower share than during the 2000 Euro ($p < .001$). The observational data was also consistent with arrest records in that it indicated a significantly lower number of disorder incidents during the 2004 Euro in comparison with the previous tournament ($p < .001$). According to the authors, this confirms the low profile of the deployment of the Portuguese police and the ensuing low levels of disruption and disorder. Data on fans' perceptions further corroborated positive impacts of this form of policing. Post-tournament measures of intergroup relations were significantly more positive than the recorded pre-tournament values for all comparison groups (local population, opposition fans and Portuguese police), suggesting fans viewed their actual intergroup relations more positively than expected before the tournament. Furthermore, intergroup relations measures and in-group identification measures were both significantly and positively correlated with perceived similarity to the Portuguese police. This suggests that once fans viewed as legitimate the policing

approach they experienced, this changed the relationship between perceived similarity to the police and in-group identification. While before the tournament, identifying strongly as an England fan was linked to perceived dissimilarity to police, the opposite was true following the tournament.

Domestic football leagues – United Kingdom

A study by Stott et al. (2008b) examined policing operations (including aspects of dialogue-based or community policing) in the context of domestic matches in the English Premier League and its impact on crowd dynamics and disorder. The study relied on 19 semi-structured observations conducted during the 2004–2005 season, primarily in the form of shadowing commanders, spotters and Police Support Units (PSUs). In some instances, the research team also attended briefings, pre-event planning meetings and training events. The team also interviewed stakeholders (number of interviews not specified), including police, club representatives and supporters.

Specifically with respect to dialogue-based policing, the study suggested that proactive communication and engagement on the part of the PSUs had beneficial results in terms of building positive relations between the police and fans, providing accurate risk assessments and using resources efficiently. Interactions with fans were also found to be effective in making indiscriminate tactics, such as containment exercises, more acceptable to them. The authors noted a potential tension between intelligence- and community-based policing models but suggested that by adopting a more community-based policing approach, intelligence objectives might also be satisfied through increases in perceptions of legitimacy.

The ESIM model was also the basis for a study by Stott et al. (2012), which examined the policing of matches involving Cardiff City

Football Club, a team in the English Football League (promoted to the second tier of English professional football, in 2002–2003). Following two high-profile incidents involving Cardiff City fans in 2001 and 2002, the South Wales Police (SWP – the agency with local jurisdiction), the club, its supporters and the local authority put in place initiatives designed to tackle hooliganism. A key component of this process was the development and adoption of dialogue-based policing on the part of the SWP, moving away from a previous concept based on deterrence.

The authors collected data on the implementation of the new policing approach via a series of semi-structured observations at 23 Cardiff City matches, with researchers either interspersed among fans or in the company of the club's safety and security team. During the observations, the researchers recorded the chronology of events and their impression of aspects such as fan and police behaviour and their interactions. While attending the matches, researchers also conducted semi-structured interviews (number not specified) with fans, police officers and club officials. For several matches, interviews were also conducted before and after the match and the team attended pre-match planning meetings. In addition, the authors were in regular consultation with the SWP, who discussed their strategy and tactics and provided documentation for review to the research team. Lastly, the research team also held a series of meetings and other consultations with fan representatives, including people known to the police as having engaged in hooliganism.

An analysis of the data revealed findings similar to those in previous papers on policing strategies. Collected evidence indicated that fans' relationships with the police and other authorities were marked by a higher degree of perceived legitimacy. In addition, supporters seemed to have exercised a notable

degree of self-regulation in situations that could potentially lead to intergroup conflict, with hooligan components of the fan base increasingly marginalised. Furthermore, the adoption of the dialogue-based approach enabled the SWP to gather better intelligence. All these factors combined allowed the police to withdraw a substantial portion of resources dedicated previously to football policing. By contrast, in away matches involving Cardiff City fans, sporadic incidents of major collective conflict occurred. According to the authors, this was the case in situations where the host police appeared to rely more on a deterrence-based approach and seemed less ready or able to engage in a dialogue.

Arrest data cited by the authors also confirmed the observation of a decrease in intergroup conflict. Between the 2002–2003 and 2004–2005 seasons, the number of arrests of Cardiff fans (at both home and away matches) fell from 194 to 90 and the number of ‘significant incidents’ (as categorised by the SWP) fell from 14 to five, all of which happened at away matches. The authors noted that this period also coincided with the implementation of FBOs, of which Cardiff City had the highest number of all English and Welsh clubs in 2002. However, the authors contended that FBOs by themselves were an insufficient explanation for the observed decrease, pointing at the continued (albeit less frequent) violence at Cardiff’s away matches.

These conclusions based on data from Cardiff were also reiterated in a book chapter by Stott (2014), which stressed that heavy-handed tactics could generate or escalate conflict situations while strategies based on facilitation and dialogue could help reduce tensions.

More recently, Stott et al. (2016a) conducted a case study of a dialogue-based policing tactic deployed by the West Yorkshire Police at a match between Oldham Athletic and Bradford City in League One (the third tier of professional

football in England) in 2014. To police the match, the West Yorkshire Police utilised Police Liaison Teams (PLTs) consisting of Police Liaison Officers (PLOs). The role of PLOs is to serve as a link between event attendees, organisers and public order commanders. They use negotiation and communication skills to defuse situations and resolve minor problems. Their objective is to build relationships and trust between authorities and crowd members and also to prevent disproportionate responses from the police. According to the authors, this case study represented the first examination of the use of PLTs in the context of football policing, as their use had hitherto been limited almost exclusively to policing political demonstrations.

The study followed principles of Participant Action Research (PAR), in which practitioners engage with research – one of the authors was directly involved in the match as a public order commander. Data for the case study was collected through a combination of researchers’ observations, opportunistic interviews with police officers and fans and analysis of official documentation, including transcripts of the police radio log, arrest reports, etc. In addition, after the match the research team held two debrief sessions with PLOs and force spotters tasked with the identification of problem fans.

Based on collected data, the authors concluded that the PLT was successful in opening a line of dialogue with fans, which in turn promoted self-regulation among supporters. This appears to have led to greater perception of police legitimacy and helped avoid conflict situations. The PLT was also seen as a source of timely and rich information on risks during the day, providing a more nuanced assessment than would have been available from FIOs and police spotters. The PLOs did encounter, however, some resistance from their police colleagues (including senior staff), some of whom felt that PLTs were not an appropriate tool for

football policing. According to the authors, this pushback was similar to what PLTs had encountered in other contexts, e.g. the policing of political protests.

The use of PLTs was also reviewed in a report by the UK College of Policing (2015), although the review focused on the practice of their deployment at large events in general, rather than solely in the context of football matches. The report drew on 26 interviews with the following groups of stakeholders: police commanders who had deployed PLTs (ten interviewees), PLT members (nine interviewees), protestors and event participants who had liaised with PLTs (five interviewees) and staff of local businesses who had liaised with PLTs (two interviewees). Overall, there was a general agreement among interviewed stakeholders that the use of PLTs had the potential to contribute to reductions in conflicts and disorder. They were thought to be able to achieve this outcome through greater facilitation of communication and engagement as well as through relationship building. Specifically with respect to football, while one interviewed commander did not feel the need to use PLTs at every football match, this interviewee, like others, offered examples of their value. For instance, according to the offered testimonies, PLTs were seen as valuable before European fixtures since away fans may arrive and gather early before these matches, opening an opportunity for PLTs to engage with them. Along similar lines, PLTs could facilitate engagement with organisers of fan-based fora well in advance of a match. As such, the report concluded that the utilisation of PLTs in the run-up to and during specific football fixtures should be considered.

Domestic football leagues – other European countries

Havelund et al. (2016) examined the perceived effectiveness of a dialogue-based approach

to policing football matches employed by the Danish police. Under this approach, specially trained police officers reach out to those supporters of the visiting team amenable to a dialogue with the police in order to help ensure all fans' behaviour remains legitimate. Such an approach is typically implemented before the match and can continue during it. In Denmark, the approach was introduced in Aarhus in 2010 and, following a positive evaluation by the Danish national police (Diderichsen 2011, referenced in Havelund et al. 2016) was subsequently expanded nationwide. Based on an analysis of official police data on arrests, the authors observed that there was a notable decrease in the number of arrests related to matches in the Danish Superliga (the highest league) following the introduction of dialogue-based policing – from 714 arrests in the season 2008–2009 to 99 in the season 2014–2015. According to the authors, the Danish police viewed the implementation of the concept of dialogue policing as one of the main reasons behind this decrease.

The study by Havelund et al. (2016) aimed to add the perspective of football supporters to these observations. They ran an online survey of members of Brøndby Support, a club of supporters of Brøndby (a Danish football club) with approximately 3,600 members, to ask them about their perceptions of the dialogue-based approach to policing. The survey received 623 responses, which were analysed and used to construct cross-tabulations and frequency tables. The vast majority of respondents (82 per cent) felt that that dialogue-based policing was conducive to a more peaceful atmosphere at and surrounding football matches. A slightly smaller group (74 per cent) also indicated that the policing approach had contributed to the strengthening of dialogue between supporters and the police. Furthermore, approximately two-fifths of respondents (43 per cent) reported that

dialogue with the police had helped them better understand the work police do in connection with football matches. These results led the authors to conclude that dialogue-based policing can have positive impacts on the overarching police objectives of preventing and resolving conflict situations at football matches and preserving a calm atmosphere. However, this conclusion is based on a relatively small survey limited to organised supporters of one club in the Danish Superliga.

Beedholm Laursen (2017) also examined football policing tactics in Denmark in connection with Brøndby. The author conducted participant observation on 25 match days during the 2012–2013 and 2013–2014 seasons. As part of these observations, the author conducted a series of ethnographic interviews (number not specified) with members of Fraktion64, a small group of Brøndby ultras consisting of 10–20 members. Similarly to Havelund et al. (2016), Beedholm Laursen concluded that dialogue-based policing can lead to positive outcomes. In particular, it may incentivise supporters to exercise a greater degree of self-policing if the way the crowd is being policed is perceived as fair and legitimate. Failure to achieve this may result in crowd members sympathising with small groups of confrontational fans. However, the author also noted that the use of targeted coercive force remained important for providing a flexible and differentiated response, stressing that successful event policing requires implementing dialogue and coercive policing approaches in a complementary way based on an informed differentiation of fan behaviour.

Policing interventions were also assessed in a report by Stott et al. (2016b), developed as part of a research project aimed at identifying and developing good practices in the context of crowd management at matches in the highest Swedish football league. The report examined the implementation and effectiveness of

the Special Police Tactic (SPT), a national approach to crowd policing adopted in Sweden (not limited to football). The SPT utilises small, highly mobile squads of officers (called DELTA units) trained to use high-level force and equipped accordingly with the objective to achieve tactical flexibility. Complementing the DELTA units are units of Dialogue Police, designed to build confidence and trust among crowd members and resolve issues through communication and negotiation. Specifically in the context of football, the operationalisation of the Dialogue Police differs slightly between Swedish regions. The Stockholm region introduced a football-specific unit of the Dialogue Police, divided into two subunits. The first, deployed in civilian clothes but with clear yellow identification tabards, focuses on building trust and does not make arrests or use coercion (where possible). The second subunit, deployed in civilian clothes without any markings, undertakes intelligence tasks, similarly to UK spotters. In other regions, there is no distinction between liaison and intelligence, and units focusing on supporter engagement (called Supporter Police) wear police uniforms and tabards. Furthermore, in one of the regions outside Stockholm, the police deployed an experimental police unit (called EVENT police) configured in the same way as the DELTA units (albeit with a different uniform) and tasked with proactive communication with fans, focusing on dialogue and facilitation as opposed to the use of force. At the time of writing of the report, the EVENT police concept was being trialled in other locations as well. The approach is modelled on the Danish concept of dialogue-based policing discussed above in Havelund et al. (2016) (and described in detail in Havelund et al. 2013). Important counterparts in the dialogue with police are Supporter Liaison Officers (SLOs), appointed by football clubs to facilitate constructive communication with their fans.

The authors collected data via observations of 12 fixtures in the highest Swedish league. The observations followed the principles of participatory research and involved researchers as well as practitioners (UK police officers, SLOs from Sweden, Denmark and the UK, stadium safety and security managers from Sweden, Denmark and the UK) as members of the observation team. Each observation was followed by a workshop during which the research team discussed collected data.

Reflecting on the collected data, the authors noted that the variation observed between approaches adopted in various localities can be confusing and contrasts with the notion of a unified national approach. They observed that officers in uniforms faced greater difficulties opening lines of dialogue with fans, which limited their contribution to risk management. The Stockholm model appeared to be effective in building trust and confidence between fans and the police and improved mutual communication. By contrast, in areas where the roles of spotting and liaison were not formally separated, the authors noted comparably worse information flows, risk assessment and relationships between police and fans. With respect to EVENT units, the authors found these can add to overall police ability to offer a graded tactical response and work with crowds in a fashion that is perceived as legitimate. Their impact, however, had been limited due to their early stage of development and the lack of a clear organisational framework.

6.2.3. Main strengths and limitations of the evidence

All studies in this group share the same methodological limitations. They are all based on either participant observations or stakeholder testimonies (obtained via interviews or surveys), or a combination thereof and, with the exception of one study, offer no statistical test of their findings. For

that reason, they are all invariably assessed as 1,1 on the study quality scale. Furthermore, they generally cover either single or a limited number of matches, raising questions about the generalisability of their findings.

6.2.4. Key messages

While provided by studies with methodological limitations, the evidence on the effectiveness of dialogue-based policing points uniformly in the same direction. The intervention is seen as effective in engendering better intergroup relations, particularly in comparison with high-profile tactics.



6.3. Covert and intelligence-based policing

6.3.1. What is the intervention and where has it been used?

Intelligence-led, or intelligence-based, policing refers to a policing approach based on the collection of intelligence data which can be used to assess risks to public order. Stead and Rookwood (2007) examined intelligence-led policing as part of their paper on policing tactics in the UK. Intelligence-based policing can also be understood as informing other strategies discussed earlier in this report. For instance, the imposition of FBOs relies heavily on football intelligence data.

6.3.2. What have studies found?

Stead and Rookwood (2007) conducted three interviews with fans of three Premier League clubs and with three UK FIOs. Testimonies by fans and police officers suggested that, in comparison with approaches in continental Europe, policing in the UK is seen as more covert and intelligence-led, and more effective. Relatedly, while interviewed FIOs felt that the use of protective clothing or riot gear increased

the chances of preventing disorder, interviewed fans tended to express the opposite sentiment. Reflecting on another aspect of UK football policing, interviewed FIOs stressed the utility of using intelligence data in policing matches and fans generally expressed understanding of its merits (and the necessity of underlying data collection).

6.3.3. Main strengths and limitations of the evidence

The one study included in this section has major methodological limitations (scored 1,1). Furthermore, in assessing the effectiveness of intelligence-led policing, it may be impossible to isolate a specific tactic from others which build on football intelligence data, such as banning orders.

6.3.4. Key messages

Similarly to banning orders, intelligence-led policing is seen as very effective by the police, although this finding is based on very limited evidence.



6.4. Use of mounted police

6.4.1. What is the intervention and where has it been used?

This intervention takes the form of deploying police with horses at or in the vicinity of football stadiums. Its use by some police forces in the UK was the subject of a study by Giacomantonio et al. (2015), which assessed the value of mounted police units in the UK and specifically examined the deployment of police with horses in the context of football matches in England.

6.4.2. What have studies found?

Giacomantonio et al. (2015) undertook a statistical analysis of quantitative data

provided by the UK Football Policing Unit (UKFPU), primarily based on reports by FIOs and data provided by the Mounted Working Group (MWG) of the UK Association of Chief Police Officers, a now-defunct body replaced by the National Police Chiefs' Council. The UKFPU dataset covered 2,804 fixtures that took place at stadiums of Premier League and Championship teams (i.e. in the two highest tiers of English football) in the 2010–2011, 2011–2012 and 2012–2013 seasons in the English domestic league or European club competitions, or as friendly matches. This dataset yielded information on attendance, match category, number of ejections and number of arrests as well as a binary indication of whether an incident report had been filed by an FIO. The MWG data indicated the number of horses (if any) deployed at each match.

Assessing the bivariate relationship between the two datasets, the authors noted that the presence of police horses at matches was associated with higher numbers of arrests and ejections and an increased probability of disorder. However, these results are largely a reflection of the fact that the higher risk a match was considered to be, the more likely police horses were to be deployed. To account for possible confounding factors such as crowd size or match risk, the research team also conducted a series of multivariate analyses. These revealed that the deployment of mounted officers was not significantly associated with ejections or whether reports of disorder were filed. They were, however, positively associated with the number of arrests. Based on a review of police reports, the authors suggested that the presence of officers on horseback may facilitate arrests, for instance by providing greater visibility of ticket touting in a large crowd. Examining only matches where horses were present, the multivariate models suggested that the number of horses deployed was weakly (at

the ten per cent level) associated with the number of arrests and had a significant (at the five per cent level) negative association with the likelihood of an incident report being filed. Again, a review of police reports offered suggestions of possible mechanisms through which these associations manifest themselves. In one instance, mounted officers were able to position horses to form a cordon separating home and away fans and prevent any confrontation.

The researchers also ran a survey of police officers deployed to football matches during the 2013–2014 season, asking respondents to rate the quality of policing and other related variables. Data obtained through the survey was complemented with a review of operational orders, documents establishing policing plans for the match and detailing the number of police deployed. In total, 128 valid responses were obtained covering 49 unique matches. Approximately two-thirds of responses came from match commanders and FIOs, with the rest coming from officers in other roles such as PSU commanders or tactical advisers. Most of the matches covered by the responses took place in the Premiership, the Championship and League One (the three top tiers of English football). According to the survey results, the presence of horses was negatively associated with levels of disorder reported at individual matches (significant at the ten per cent level). In addition, survey responses indicated that the presence (as well as the number) of horses at matches was positively linked to how officers perceived the overall level of positive interactions with members of the public (significant at the ten per cent level). Overall, however, the research team stressed that it was impossible to draw causal conclusions regarding the associations described above, primarily because mounted police were more likely to be present at matches with higher overall levels of policing

and because police leadership may decide to send horses predominantly to matches where more disorder is anticipated.

The authors also conducted two focus groups with football fans (19 participants in total) to complement the analysis presented above with an account of the public's perception. All participants were involved with fan organisations and were serious and lifelong football fans; at least two participants had been previously subjected to a banning order. Overall, focus group participants held a negative view of football policing but tended to regard mounted police separately from other police forces. The presence or absence of mounted police did not seem to play a role in how fans viewed football policing, with other factors (such as use of force) playing a much more important role. In interpreting the results of the focus groups, it is necessary to keep in mind that these represent the views of a very small number of fans and not including any casual football supporters.

6.4.3. Main strengths and limitations of the evidence

The evidence on the effectiveness of mounted police is provided by only one study, albeit of a relatively robust design (scored 3,2). As the study noted, the results should be understood as preliminary and further work is needed to determine the chain of causality.

6.4.4. Key messages

The presence of horses was found to be associated with a higher number of arrests, and the number of horses was negatively associated with the likelihood of an incident report being filed. One possible explanation is that horses may make arrests easier and allow for more effective prevention of disorder. Positive outcomes associated with the presence of horses were also reported by police officers deployed at football matches.

7 Discussion

The results of this review indicate that while a range of interventions and strategies to combat football-related antisocial and violent behaviour have been described in the literature, a much smaller number have been subjected to an assessment of their effectiveness. The evidence provided by studies included in this review offers a mixed picture. For some interventions, such as early kick-off times or the utilisation of security cameras, results from a small number of methodologically robust studies suggest they can achieve positive outcomes. A larger number of less robust studies also uniformly appear to support the implementation of dialogue-based approaches to policing football events. By contrast, no evidence of effectiveness was found for other interventions, such as various forms of bans on alcohol.

Overall, the findings of the review demonstrate that the evidence base underpinning interventions and tactics to tackle football-related disorder is underdeveloped. Further research, particularly in the form of rigorous evaluation studies, will be necessary to develop

our understanding of what works. Notable persisting challenges in this regard are the isolation of the effect of individual interventions adopted as part of a whole package of measures and the transferability of evidence across contexts.

Nevertheless, the evidence presented in this report offers useful insights for the organisation of football matches as well as future efforts to assess the effectiveness of different organisational approaches. First and foremost, in a few areas, the reviewed evidence tentatively points in the direction of positive outcomes associated with clearly defined types of interventions. Further, the literature included in the review also provides examples of how different interventions have been put into practice and considerations surrounding their implementation. Lastly, the discussion of existing assessments and what the reviewed studies found suggests possible data sources and methodological approaches for those wishing to replicate these assessments in their respective contexts.

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Annex A. Methodology

To address the research questions discussed in Chapter 1, a rapid evidence assessment was carried out to identify and review the literature. Unlike a full systematic review, which aims to search the entire evidence base comprehensively, the scope and coverage of the rapid evidence assessment was restricted through search and screening criteria selected to focus on the most relevant literature. This Annex sets out the methods employed in the review.

Methods

We used several different ways of searching for relevant evidence. These included the following:

1. Three interviews with experts on crowd behaviour and safety from European law enforcement agencies, to help define the scope of the review and discuss relevant literature and key themes emerging from research in this field.
2. A preliminary search in Google Scholar, Web of Science and JSTOR informed by these early discussions, using a number of iterations of the following search terms: (football OR soccer) AND (crowd OR spectator OR fan) AND (behav* OR violen* OR antisocial OR alcohol* OR hooligan*) AND (strateg* OR prevent* OR respon* OR measure* OR effect* OR polic* OR reduc*).

The purpose of these searches was to identify search terms producing the most relevant results for this review.

3. Identification of three pieces of literature of relevance to this review. Final search strings were then tested by checking that these papers would be captured in the results.
4. A systematic search using a targeted search of criminal justice and behavioural science databases. We liaised with research experts from RAND's Knowledge Services team, composed of professional librarians and information specialists, to focus on the most comprehensive databases. For academic literature, the following databases were searched in the final review: **Web of Science, Scopus, PsycInfo and Social Sciences Abstracts**. In addition, grey literature was also searched using the following databases: **OpenGrey, IssueLab, OAISTER and Advanced Google search**. These databases were searched simultaneously by RAND Knowledge Services, who collated the results from these databases before transmitting them to the research team.
5. 'Snowball' searching. All papers captured by the search were then analysed by the research team. Bibliographies and references cited in the literature that met the inclusion criteria were followed up on

and identified for inclusion in this review. Through this snowballing approach, seven pieces of literature were added to the review.

All search results were screened by members of the research team against the inclusion criteria. Screeners consulted with each other during the early stages of the review to ensure consistency in the process. For the papers which were included in the review, the evidence was analysed and synthesised and the findings interpreted and presented in this report (see below).

Inclusion criteria

The **inclusion criteria** were as follows:

| Included in the rapid evidence assessment |
|-----------------------------------------------|
| Articles in English |
| Articles reporting primary research |
| Grey literature |
| Articles published after 2005 |
| Research from or about any country |
| Systematic reviews/rapid evidence assessments |

The **exclusion criteria** were as follows:

| Excluded from the rapid evidence assessment |
|-------------------------------------------------|
| Commentaries, editorials and features |
| Research relating to sports other than football |
| Narrative reviews |

Database searches

Search terms

Search terms and synonyms were as follows:

(football OR soccer)
AND
(crowd* OR spectator* OR fan OR fans)
AND
(behaviour* OR behavior* OR violen* OR antisocial OR anti-social OR "anti social" OR alcohol* OR hooligan*)
AND
(strateg* OR prevent* OR respon* OR measure* OR effect* OR polic* OR reduc* OR assess* OR evaluat*)

Databases searched and numbers of studies found

The research team liaised with research experts from RAND's Knowledge Services team to focus on the most comprehensive and relevant databases. Initially, we proposed searching **Web of Science, Scopus, PsycInfo, Social Sciences Abstracts, JSTOR and Google Scholar** for peer-reviewed research. It was subsequently decided to exclude JSTOR from the searches, as the database produced thousands of irrelevant results. Furthermore, Knowledge Services advised excluding Google Scholar, as the search engine cannot support sophisticated search strings, does not allow the exportation of more than one citation at a time into EndNote and returns results of which most, if not all, would be found in the other academic databases. In addition, grey literature was also searched for using **OpenGrey, IssueLab, OAISTER and an Advanced Google search**.

Search results were imported into a single EndNote file and combined with the literature identified in the previous review. After removal of duplicate studies, the titles and abstracts

were screened by two researchers (LS and JP). Full papers of potentially relevant studies were retrieved and a final judgement on eligibility was made by three researchers (SD, LSF, JT).

Data from relevant studies was extracted by three researchers (SD, LSF, JT) into a standardised template (see Annex 3).

Search results (academic and grey databases)

| Database | Search terms | Number of results |
|-------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| Web of Science Indexes=SCI-EXPANDED, SSCI, A&HCI | TOPIC: (football OR soccer) AND TOPIC: (crowd* OR spectator* OR fan OR fans) AND TOPIC: (behaviour* OR behavior* OR violen* OR antisocial OR anti-social OR "anti social" OR alcohol* OR hooligan*) AND Strateg* OR prevent* OR respon* OR measure* OR effect* OR polic* OR reduc* OR assess* OR evaluat* | 209 (citations about American football) = 191 – duplicates with R1 = 26 |
| Scopus Article, Review, Article in Press | TITLE-ABS-KEY ((football OR soccer)) AND TITLE-ABS-KEY ((crowd* OR spectator* OR fan OR fans)) AND TITLE-ABS-KEY ((behaviour* OR behavior* OR violen* OR antisocial OR anti-social OR "anti social" OR alcohol* OR hooligan*)) AND TITLE-ABS-KEY (strateg* OR prevent* OR respon* OR measure* OR effect* OR polic* OR reduc* OR assess* OR evaluat*) | 273 – American football and duplicates = 35 |
| PsycInfo Academic Journals and Reviews | football OR soccer AND crowd* OR spectator* OR fan OR fans AND behaviour* OR behavior* OR violen* OR antisocial OR anti-social OR "anti social" OR alcohol* OR hooligan* AND strateg* OR prevent* OR respon* OR measure* OR effect* OR polic* OR reduc* OR assess* OR evaluat* | 170 – duplicates and American football = 9 |
| Social Sciences Abstracts Academic Journals and Reviews | football OR soccer AND crowd* OR spectator* OR fan OR fans AND behaviour* OR behavior* OR violen* OR antisocial OR anti-social OR "anti social" OR alcohol* OR hooligan* AND strateg* OR prevent* OR respon* OR measure* OR effect* OR polic* OR reduc* OR assess* OR evaluat* | 38 – duplicates and American football = 1 |

| Database | Search terms | Number of results |
|--------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| OpenGrey, IssueLab, OAISTER, Advanced Google search PDF files only | football crowd* OR spectator* OR fan OR fans "behaviour " site:.org.uk football hooligan* "behav*" site:.org.uk football "behav*" spectator site:.gov.uk filetype:pdf soccer behav* crowd site:.gov.uk football anti-social OR antisocial OR alcohol OR hooligan* "spectator*" site:.org soccer anti-social OR antisocial OR alcohol OR hooligan* "spectator*" site:.org anti social behavior football spectators europe | 24 |

Summary results

- Total number of results from academic databases: 70
- Total number of results from grey literature search: 24
- Total number of studies retained after title and abstract search: 39
- Total number of studies included in the review: 19.

Snowball search

The bibliographies of studies identified via the search of academic and grey literature databases retained for full-text review were also searched for potentially relevant sources. The research team compiled the list of all potentially relevant sources and undertook the same steps as those for the results of the database search, i.e. removal of duplicates,

application of inclusion and exclusion criteria, title and abstract screen, full-text review and data extraction. This process resulted in the following:

- 266 (non-unique) sources identified
- 47 retained after applying inclusion criteria and removing duplicates
- 24 retained after title and abstract search
- 7 included in the review.

Combined count

In total, we identified 141 publications across the searches after removing duplicates and applying inclusion/exclusion criteria. Following a review of titles and abstracts, 63 studies were retained and, following a full-text review, 26 studies were identified as relevant for inclusion. In addition, 26 articles informed the review indirectly and are cited within this report.

Appendix B. Overview of implemented strategies

In addition to the basic characteristics of individual interventions, the table below summarises which reviewed papers discuss the intervention in question and the last column indicates whether the review identified an assessment of its effectiveness. In multiple instances, interventions were presented in the reviewed literature as effective or best

practice without any discussion of supporting evidence. As the last column demonstrates, this literature review identified studies that offered evidence of effectiveness (albeit of a varying degree of strength) for only a small subset of interventions listed in Table 6. This evidence is discussed in detail in the subsequent section.

Table 6. Overview of interventions to counter antisocial and violent behaviour

| Intervention | Undertaken by whom? | Undertaken when and where? | Intervention target | Relevant literature | Empirical assessment of effectiveness identified? |
|-----------------------------------|---------------------|-----------------------------|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| <i>Venue organisation</i> | | | | | |
| CCTV cameras | Football club | Inside stadium before match | All fans | Council of the EU (2006); Home Office (2005); Mojet (2005); Priks (2014); Spaaij (2005); Veuthey and Freeburn (2015) | Yes |
| Segregation of home and away fans | Football club | Inside stadium during match | All fans | Council of the EU (2006); Di Domizio and Caruso (2015); Ferrari (2012); Home Office (2005); Madensen and Eck (2008); Mojet (2005); Raspaud and da Cunha Bastos (2013); Spaaij (2005); Stead and Rookwood (2007); Veuthey and Freeburn (2015); Warren and Hay, (2009); | No |

| Intervention | Undertaken by whom? | Undertaken when and where? | Intervention target | Relevant literature | Empirical assessment of effectiveness identified? |
|---------------------------------------------------------------------------------------------------------------|-------------------------------------------|-----------------------------|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| Strategic placement of stages, sound equipment, and screens | Football club | Inside stadium before match | All fans | Madensen and Eck (2008); Mojet (2005) | No |
| All-seater stadiums | Football club | Inside stadium before match | All fans | Home Office (2005); Mojet (2005); Spaaij (2005); Madensen and Eck (2008); Veuthey and Freeburn (2015) | No |
| Establishment of processing and holding areas for spectators who are arrested or refuse to leave the premises | Football club | Inside stadium before match | All fans | Madensen and Eck (2008) | No |
| In-stadium alcohol restrictions | Football club (could be legally mandated) | Inside stadium during match | All fans | Connors (2007); Madensen and Eck (2008); Mojet (2005); Nepomuceno et al. (2017); Pearson and Sale (2014); Schaap et al. (2014); Council of the EU (2006); Veuthey and Freeburn (2015); | Yes |
| Posting signs to convey safety information to spectators | Football club | Inside stadium before match | All fans | Council of the EU (2006); Madensen and Eck (2008) | No |
| Changing venues for 'high-risk' events | Football association | N/A | All fans | Madensen and Eck (2008) | No |

| Intervention | Undertaken by whom? | Undertaken when and where? | Intervention target | Relevant literature | Empirical assessment of effectiveness identified? |
|------------------------------------------------------|----------------------|------------------------------|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| Physical security features (e.g. Plexiglas barriers) | Football club | Inside stadium before match | All fans | Council of the EU (2006); Ferrari (2012); Madensen and Eck (2008); Mojet (2005); Raspaud and da Cunha Bastos (2013); Veuthey and Freeburn (2015); | No |
| Event organisation | | | | | |
| Matchday alcohol restrictions in host town | Local government | Inside stadium | All fans | Pearson and Sale (2014); Veuthey and Freeburn (2015); | Yes |
| Identity card/fan registration schemes | Football club | Outside stadium before match | All fans | Di Domizio and Caruso (2015); Ferrari (2012); Home Office (2005); Schaap et al. (2014); Spaaij (2005); Veuthey and Freeburn (2015) | Yes |
| Refusing entrance to inebriated spectators | Football club | Outside stadium before match | Drunk fans | Council of the EU (2006); Madensen and Eck (2008); Veuthey and Freeburn (2015) | No |
| Earlier/ daylight kick-off times | Football association | Outside stadium before match | All fans | Pearson and Sale (2014); Schaap et al. (2014) | Yes |
| Mandatory transport to stadium | Football club | Outside stadium before match | Away team fans | Schaap et al. (2014) | Yes |

| Intervention | Undertaken by whom? | Undertaken when and where? | Intervention target | Relevant literature | Empirical assessment of effectiveness identified? |
|---------------------------------------------------------------------------------|-------------------------------------|----------------------------------------------------|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| Restriction/banning orders | Courts/ football club | Outside stadium before match | High-risk fans | Council of the EU (2006); Di Domizio and Caruso (2015); Ferrari (2012); Hopkins and Hamilton-Smith (2014); Hamilton et al. (2013); Hamilton-Smith et al. (2011); Home Office (2005); Hopkins (2014); Pearson (2006); Mojet (2005); Stead and Rookwood (2007); Tsoukala (2013); Watson (2013); Veuthey and Freeburn (2015) | Yes |
| Removal of disruptive spectators | Police, security staff, event staff | Inside stadium during match | Disruptive fans | Connors (2007); Madensen and Eck (2008) | No |
| Screening of items brought into the stadium | Security staff, event staff | Outside stadium before match | All fans | Council of the EU (2006); Madensen and Eck (2008); Mojet (2005); Veuthey and Freeburn (2015); Warren and Hay (2009) | No |
| Reducing situational instigators of violence (e.g. offensive T-shirts, banners) | Police, security staff, event staff | Inside and outside stadium before and during match | All fans | Council of the EU (2006); Ferrari (2012); Madensen and Eck (2008); Warren and Hay (2009) | No |
| Control of the dispersal process | Police, security staff, event staff | Inside and outside stadium after match | All fans | Council of the EU (2006); Madensen and Eck (2008) | No |
| Ticket policies, ban on touting | Football clubs | Outside the stadium before the match | All fans | Council of the EU (2006); Mojet (2005); Veuthey and Freeburn (2015) | No |

| Intervention | Undertaken by whom? | Undertaken when and where? | Intervention target | Relevant literature | Empirical assessment of effectiveness identified? |
|----------------------------------------------------------------------|---------------------|----------------------------------------------------|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| <i>Policing and other staff</i> | | | | | |
| Intelligence-led policing | Police | Primarily outside stadium before match | All fans | Council of the EU (2006); Council of the EU (2010); Connors (2007); Havelund et al. (2013); Hylander et al. (2010); Raspaud and da Cunha Bastos (2013); Rosander and Guva (2012); Spaaij (2005); Stead and Rookwood (2007) | Very little on its own but intelligence policing feeds into other assessed interventions |
| Community/low-intensity/dialogue-based policing/police liaison teams | Police | Primarily outside stadium before match | All fans | Council of the EU (2010); Hau (2008); Schreiber and Adang (2010a, b); Schreiber and Stott (2012); Stott et al. (2007); Stott et al. (2008a,b); Stott et al. (2012); Stott (2014); Stott et al. (2016a,b); Watson (2013); Warren and Hay (2009); Veuthey et al. (2015) | Yes |
| Use of riot gear | Police | Primarily outside stadium before match | All fans | Schreiber and Adang (2010a, b); Stead and Rookwood (2007) | Not on its own but as part of assessments surrounding low-intensity policing |
| Establishment of an effective command post | Police | Inside and outside stadium before and during match | All fans | Council of the EU (2006); Madensen and Eck (2008) | No |
| Use of different security 'levels' | Police | Inside and outside stadium before and during match | All fans | Madensen and Eck (2008) | No |

| Intervention | Undertaken by whom? | Undertaken when and where? | Intervention target | Relevant literature | Empirical assessment of effectiveness identified? |
|--------------------------------------------------------|-------------------------------------------------|----------------------------------------------------|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| Increased visibility of security/police; show of force | Police | Inside and outside stadium before and during match | All fans | Connors (2007); Madensen and Eck (2008); Mojet (2005); Stead and Rookwood (2007) | Not on its own but assessed in contrast with low-intensity policing |
| Relying on reactive tactics | Police | Inside and outside stadium before and during match | All fans | Connors (2007); Madensen and Eck (2008) | Not on its own but assessed in contrast with low-intensity policing |
| Standby officers; relief officers | Police | Inside and outside stadium before and during match | All fans | Connors (2007); Giacomantonio et al. (2015) | No |
| Deployment of mounted police | Police | Inside and outside stadium before and during match | All fans | Giacomantonio et al. (2015) | Yes |
| Use of hand-held cameras | Police | Primarily outside stadium before and during match | All fans | Stead and Rookwood (2007) | Not on its own but as part of intelligence-led policing |
| Laws, policies, partnerships | | | | | |
| Coordinating platforms for relevant stakeholders | Football clubs, police, local government, media | Ongoing intervention | All fans | Connors (2007); Council of the EU (2006); Council of the EU (2010); Di Domizio and Caruso (2015); Ferrari (2012); Mojet (2005); Warren and Hay (2009); | No |

| Intervention | Undertaken by whom? | Undertaken when and where? | Intervention target | Relevant literature | Empirical assessment of effectiveness identified? |
|-----------------------------------------------------------------------------------|----------------------------|----------------------------|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Zero-tolerance of hooliganism policies from football clubs; information campaigns | Football clubs | Ongoing intervention | Fan associations | Mojet (2005); Spaaij (2005); Veuthey and Freeburn (2015) | No |
| Fan projects (e.g. liaison between clubs and fan associations) | Football clubs | Ongoing intervention | All fans | Home Office (2005); Spaaij (2005); Veuthey and Freeburn (2015) | No |
| Support to anti-hooliganism opposition from football fans | Football fans | Ongoing intervention | All fans | Home Office (2005); Spaaij (2005) | No, although fans' self-policing is discussed in studies on low-intensity policing |
| Certification and permits to host events | Local and state government | Ongoing intervention | Football clubs | Madensen and Eck (2008); Veuthey and Freeburn (2015) | No |
| Adopting/ advertising legislation and penalties for violent and/or hate behaviour | Local and state government | Ongoing intervention | All fans | Di Domizio and Caruso (2015); Ferrari (2012); Home Office (2005); Madensen and Eck (2008); Mojet (2005); Raspaud and da Cunha Bastos (2013); Tsoukala (2013); Watson (2013); Warren and Hay (2009); Veuthey and Freeburn (2015) | No |
| Encouragement of marketing to gender- and age-diverse crowds | Football club | Ongoing intervention | All fans | Madensen and Eck (2008) | No |

Annex C. Data extraction template

Table 7. Data extraction template – Part 1

| | | |
|----------------|------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Coder | |
| General | Full reference | |
| | First author | |
| | Year | |
| | Brief summary | |
| | Include? | Yes/no/yes + reason for studies that would otherwise be excluded |
| | Format of document | Review/synthesis, empirical study, letter to editor... |
| | Type of data used | Quantitative – primary data collection through surveys Quantitative – using secondary data Qualitative – interviews/focus groups Mixed methods Other |
| | Type of sporting event | (World Cup, Euro, domestic...) |
| | Year of event | |
| | Country of event | |
| | Country of origin of perpetrators | |
| | Specific groups of perpetrators | |
| | Country origin of victims | |

Table 8. Data extraction template – Part 2

| | | |
|----------------------|-------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| Interventions | Name/Title | |
| | Objective(s) | What it aimed to achieve |
| | Actors undertaking the measures | Who was implementing it? Who was otherwise engaged and how? E.g. police, private sector, supporters' groups |
| | Target of measure | Who it was targeted at (fans, others)' individual vs. group level, or a specific place |
| | Timeframe | When it was implemented |
| | Where were the measures undertaken | |
| | Inputs | What were the costs? Any information on resources involved? |
| | Activities/Measures | What was planned or actually delivered? |
| | Outputs and outcomes | Expected or evidence on actual outputs and outcomes |
| | Impacts | Expected or evidence on actual impacts |

Table 9. Data extraction template – Part 3

| | | |
|-------------------------------------|-----------------------------------------------|-----------------------------------------------------------------------------------|
| Assessments | Comparison condition | Was there a comparison condition (does not have to be a comparison group)? |
| | Type of evaluation | E.g. control/comparison groups, pre/post, etc.; describe statistical methods used |
| | Sample size (initial) | |
| | Sample size (analysis) | |
| Limitations | Explicitly reported | |
| | Any other coder comments | |
| Quality assessment | Topic relevance | |
| | Quality of study design and conduct | |
| | Quality of analysis and interpretation | |
| Any other comments | | |
| Further literature to review | | |