From the UK

DOES STOP AND SEARCH REDUCE CRIME?

by Ben Bradford and Matteo Tiratelli

Summary

Despite recent declines in its use, stop and search continues to be one of the most controversial powers vested in police in England and Wales. Yet until recently there has been surprisingly little research assessing its effectiveness in reducing crime. In this briefing we attempt to redress this imbalance. Starting with an overview of recent trends in the use of stop and search, we then draw on our own research, as well as a number of other recently published studies, to suggest that its overall effect on crime is likely to be at best marginal. Existing research evidence seems to converge on this conclusion. This, we suggest, means that questions of the effectiveness of stop and search cannot be considered independently of the wider issues that surround the power: social and cultural understandings of what police are for; and a clear-eyed view of the impact policing has for those individuals and communities subject to it.

Introduction

After nearly 50 years of debate stop and search continues to be one of the most controversial police powers in England and Wales. Part of the reason for this longevity is that the power seems to function as a signifier for the practice of policing as a whole. Discussions of stop and search very often, and very rapidly, branch out in one of two contrasting directions: into discussion of the impositions of policing on individuals and communities; or into consideration of the need for, ability of, and means available to police to 'fight' crime - and, of course, their effectiveness in doing so. It can in short be difficult to talk about stop and search without also talking about a much wider range of policing issues.

The reason for the first of these turns, and much of the continued political, social and cultural salience of stop and search, is clear. Stop and search in England and Wales, and cognate practices such as stop and frisk in the US,

has consistently been shown to be disproportionately directed towards people from visible ethnic minorities. The reasons for this disproportionality are likely to be complex, ranging from stereotyping, implicit and institutional bias to the political, social and economic positions of different groups in society. But there is little doubt that it is real. People from certain minority groups have been shown time and again to be more likely than others to stopped, with often very significant implications for themselves and those around them (Bradford, 2017; Shiner et al., 2018). Under such conditions it is hardly surprising that stop and search serves as a litmus test for the distribution and effects of police activity.

While the evidence of disproportionality is overwhelming, data concerning the effectiveness of stop and search has until recently been much less forthcoming. Very little research has considered whether this is an effective investigatory or preventative power. Despite this, there is a widespread belief among policymakers and practitioners that stop and search 'must' work. In October 2018, for example, Home Secretary Sajid Javid claimed precisely this, and pledged to look at ways to 'reduce bureaucracy and increase efficiency in the use of this power' (Bentham, 2018). At the other end of the political spectrum, London Mayor Sadiq Khan argued in January 2018 that 'when based on real intelligence, geographically focused and performed professionally, [stop and search] is a vital tool for the police to keep our communities safe. It will let the police target and arrest offenders, take the weapons they carry off our streets and stop these attacks from happening' (Dearden, 2018). What, and how, stop and search can contribute to achieving these ends only is rarely considered, however, making the frequently drawn link with effective police work something of a puzzle. By focusing on the issue of effectiveness in this briefing, we attempt to redress what seems to us to be an imbalance in the debates that rage around the power.

Trends in stop and search

Police in England and Wales have a variety of powers to stop and search. Broadly speaking, these can be categorised into one of two groups. On the one hand there are those that require officers to have 'reasonable suspicion' before conducting a search, the most well-known and widely used being: section 1 of the Police and Criminal Evidence Act 1984 (PACE), which enables searches for stolen goods and a range of prohibited items (such as offensive weapons); section 23 of the Misuse of Drugs Act 1971 (s23); and section 47 of Firearms Act 1968 (s47) (these latter powers are also governed under PACE).

On the other hand, there are powers that do not require such suspicion, most notably section 60 of the Criminal Justice and Public Order Act 1994 (s60), intended to prevent acts of serious violence; and section 44 of the Terrorism Act 2000 (s44, since repealed) intended to prevent acts of terror. Use of these powers has fluctuated widely over time. Use of stop and search steadily grew from the turn of the century to reach a peak in 2010/2011, when over 1.2 million were conducted. Since then use has fallen significantly, to less than 300,000 in 2017/2018. This decline mirrors, although far exceeds in magnitude, a decline in police numbers, which fell from a peak of 144,000 in 2010 to 122,000 in 2018. The reduction in the use of stop and search also occurred during a period of increased political scrutiny, including then Home Secretary Theresa May's critical comments on its impact on minority communities and a series of investigations by the Equality and Human Rights Commission.

Use of the non-suspicion based powers, although always used far less than the powers under PACE, increased rapidly to a peak around 2009/2010, before subsequently declining equally as fast. This was again a result of political pressure, primarily concerning extreme ethnic disproportionality in the application of these powers, as well as legal action concerning the extent to which s44, in particular, breached human rights legislation. The s44 stop powers were ruled illegal by the European Court of Human Rights in 2010.

Despite the current political focus on the utility of the power in addressing violent crime, drugs dominate the grounds provided by police for stop/searches. Over the period July 2016 to July 2018, for example, over 60 per cent of stops were for drugs, and less than 20 per cent for weapons. Many UK forces have explicitly said they do not 'prioritise' low-level drugs possession (HMIC, 2013), yet this is what most searches uncover (Shiner et al., 2018), which raises questions about the targeting of the power and ends to which police think it is being directed (a point we return to below).

As well as temporal variation in the use of stop and search there is also geographic variation. The Metropolitan Police Service (MPS) were the heaviest users, at over 1,500 stops per 100,000 population. By contrast Greater Manchester Police, a force similar in many ways to the MPS, used the power 15 times less, with a stop rate of less than 100 per 100,000 population. Other distinctions, although not as extreme, are still marked. Merseyside, for example, used stop and search at 5 times the rate of South Yorkshire (over 700 per 100,000 compared with less than 150).

Does stop and search reduce crime?

The suspicion-based powers to stop and search – i.e. those that comprise the vast majority of stops – are framed in law as investigatory rather than preventative in nature. In this sense it does not particularly matter whether stop and search has any preventative or deterrent effect on crime, since justification of the use of the power lies in its ability to detect crimes that have already been committed. Despite this, however, policy and wider debates do frequently refer to its potential to deter crime – for example, the recent decline in use of the power is frequently cited as one reason for the upswing in violent crime. As Merseyside Police Chief Constable Andy Cooke said in September 2018, 'because there are less police officers, and because they know they're more reluctant to engage in stop-search, criminals feel safe carrying knives and guns around' (Dearden, 2018).

Any effect of stop and search on crime seems most likely to operate via specific, rather than general, deterrence. It is doubtful that additional police activity, or changes in tactics, are noticed by the general population in such a way that might cause them to alter their crime-related behaviours as a result of updated perceptions of the risk involved. However, people actually targeted by stop and search may update their risk perceptions as a result of being apprehended while committing a crime. Symmetrically, those engaged in criminal acts may update their risk perceptions as a result of 'getting away with it', i.e., not being apprehended while breaking the law. It is also possible that stop and search has a disruptive or situational effect, which does not operate through people's intentions or motivations to offend but simply puts barriers in their way (for example if they feel compelled to 'stash' knives rather than carry them). In sum, it is by no means implausible to suggest stop and search has a crime-reducing effect.

What then does the evidence say? An important feature of this field of research is the lack of experimental studies that have specifically considered stop and search (we consider 'hotspot' policing below). The foundational and much critiqued San Diego study (Boydstun, 1975) was quasi-experimental in nature, with the type of policing delivered to neighbourhoods systematically varied to examine what effect 'field interrogations' might have on crime. But in the UK it seems police leaders have been extremely reluctant to consider experimental evaluations of stop and search, very possibly because these would necessarily entail cessation of, or at least a marked reduction in, stop activity in some areas included in any study. Such a reduction carries significant risk

for police if a high profile crime, that could conceivably have been prevented by stop and search, were to occur during the study period. There is also the distinct possibility that senior officers do not see such research as necessary because, again, they 'know' stop and search has an effect.

Two recent quasi-experimental studies have however been reported. McCandless and colleagues (2016) explored the effect of Operation BLUNT 2, a knife crime initiative involving a large increase in s60 searches in some Metropolitan Police boroughs. Change in crime rates in the boroughs where Operation BLUNT 2 was in place were compared with change in the boroughs where it was not, with the conclusion being that the police operation – i.e. a large increase in weapons searches – had no effect on police recorded crime; indeed, ambulance calls related to violence fell faster in those boroughs where there were smaller increases in searches.

MacDonald et al. (2016) used a similar design, this time based around Operation Impact in New York. This involved increasing the number of officers, Stop, Question and Frisks (SQFs) and arrests in hotspots ('impact zones'). Analysis suggested that different types of SQF had different effects. While an increase in SQFs based on reasonable suspicion had no consistent association with crime, the increase in SQFs based on probable cause (which in the US is a higher legal threshold linked to specific criminal behaviour) was associated with relative reductions in total reported crimes, assaults, burglaries, drug violations, misdemeanour crimes, felony property crimes, robberies, and felony violent crimes in the impact zones. These effects were described, however, as having 'little practical importance' (MacDonald et al., 2016) because of the small size of the reductions and the fact that probable cause SQFs made up a tiny proportion of the stops conducted.

Beyond such quasi-experiments, a range of other studies have used time series and related techniques to consider the potential effect of stop and search (and related powers) on crime. Smith et al. (2012) used weekly city- and precinct-level data from New York to explore the effects of SQF on nine types of recorded crime. They concluded that SQF was negatively associated with four crime types (vehicle crime, robbery, assault and rape) but not with the others. But the effects, even when statistically significant, were very small. For example, this analysis suggested that if SQF was 10 per cent higher in week one, robbery would have been 0.09 per cent lower at the precinct level, and 0.03 per cent lower at the city level, in week 2 (2012). Rosenfeld and

Fornango (2014) also used precinct data from New York, although this time aggregated at an annual level, and concluded that SQF had no significant effect on burglary or robbery once relevant confounds were taken into account.

Fagan (2016), again using New York data, explored whether probable cause and reasonable suspicion SQFs had different effects on six crime types (at the precinct level). He found that both SQF types had significant negative two-monthly lagged effects on violent felonies, property felonies, drug crimes, weapon offences, other felonies and misdemeanours. But the effects were consistently larger when examining just probable cause SQFs. Moreover, the sharpest decreases in crime were associated with the highest concentrations of probable cause SQFs. Fagan concluded that even the targeted use of searches based on reasonable suspicion was largely unproductive, and made little contribution to reducing crime, but searches based on a higher standard of evidence did seem to have some effect.

The hotspots literature stands in some contrast to the general thrust of the research outlined above. It is well-established that targeting police activity at small, high crime areas does have an effect on crime – and stop and search activity is often part of the policing 'mix' applied in hotspots interventions (Weisburd et al., 2014). There are two important provisos here, however. First, almost all hotspots interventions have included multiple police activities in the target zones, including stop and search but also problemsolving and/or wider 'order maintenance' work (Braga et al., 2014). Second, it is moreover usually impossible to separate out the effect of the mere presence of the police in an area from whatever it is they are doing there. In other words, it is unclear what element or elements of hotspots interventions have genuine crime reduction effects, and how stop and search features in this equation.

That said, Weisburd et al. (2015), again using New York data, have explored the potential contribution of SQF to a hotspots policing strategy. Looking at lagged weekly effects across the city, they found that SQF had a significant, albeit small, negative association with crime at the street segment (i.e. at very local) level. In other words, highly targeted stop and search activity may have an effect on crime.

Recent research in London

Against this backdrop of evidence, we recently published results from analysis of ten years' worth of London-wide data. The MPS provided daily counts of recorded searches and particular categories of crime that might be susceptible

to detection by stop and search for every borough in London from April 2004 to November 2014. Susceptible crimes were defined as drugs offences, non-domestic violent crime, burglary, robbery and theft, vehicle crime and criminal damage, which we aggregated into an overall count of total susceptible crime. To explore the specific relationship between stop/search and violence further, we also obtained counts of weapon-enabled non-domestic violent crime from the MPS and of ambulance incidents related to 'stab/shot/weapon wounds' from the London Ambulance Service. In theory, the former should have been the sub-category of violence most susceptible to stop/search, while the latter should have overcome some of the problems of violence not being reported to the police and not being included in the counts of recorded crime.

Using regression models we explored the lagged effect of stop and search on crime, at the borough level and at weekly and monthly levels of aggregation. We examined, that is, whether an increase in stop and search at week or month one was associated with a reduction in crime at week or month two, compared with what crime would otherwise have been expected to be, while controlling for levels of crime at week/month one and stop and search at week/month two. We also estimated different models examining the effect of stop and search under different powers, and on different crime types.

Starting with the effect of stops under all powers on total susceptible crime, results suggested that a 10 per cent increase in stops was associated with a drop in susceptible crime of 0.3 per cent (monthly) or 0.1 per cent (weekly). Although statistically significant, this effect was extremely small. In addition, most of the effect that searches had on total crime seemed to come from the specific impact of searches on drug offences. When we excluded drug offences from the total crime rate and s23 searches from the stop/search rate, the size of the effects halved in both the weekly and monthly models, while still retaining significance.

Turning to the effect on specific crime types, the clearest results were for drug offences: a 10 per cent increase in rates of total stop/search per month decreased recorded drug offences by 1.9 per cent. Again, this was stronger than the weekly effect of 0.64 per cent. We also estimated the net effect of s23 searches, controlling for all other searches at time 1 and time 2. This suggested that most of the effect at the monthly level came from s23 searches, although note we did not find corroborating evidence at the weekly level.

We found little evidence of an effect of stop and search on violent crime. The only statistically significant result was the net effect of s1 and s47 weapon searches at the weekly level, and the effect here was very small indeed: a 10 per cent increase in stop/search led to 0.01 per cent decrease in non-domestic violent crime. Similarly, we found very little effect of stop and search on weaponenabled non-domestic violence, and no effect whatsoever when it came to ambulance incident data for calls related to 'stab/shot/weapon wounds'.

The results for burglary were similarly inconsistent. At the weekly level, a 10 per cent increase in total searches seemed to reduce burglary by about 0.17 per cent. However, the effect was non-significant at the monthly level. By contrast, the net effect of s1 searches was only significant at the monthly level (the effect of a 10 per cent rise in stops would be a 0.47 per cent decrease). These effects were again very small and inconsistently significant and so must be treated with caution.

There was no evidence of an effect of stop and search on robbery and theft (separately and together), vehicle crime or criminal damage.

Finally, we were able to take advantage of the sudden increase in the use of s60 searches by the MPS during our data period to conduct a quasiexperiment comparing the periods before and after s60 searches became commonplace We examined whether the trend in nondomestic violent crime during the period when s60 powers were being used was significantly different to the trend in the preceding period, when they were used much less often. Since nondomestic violence was generally declining over the study period, if s60 powers were effective in reducing violence then we would have expected the rate of decline to have increased after the introduction of widespread use of s60.

In fact, there was no statistically significant change in the trend in non-domestic violent crime from the 'pre' period, when the s60 powers were used less, to the 'post' period when they were used more. This result was robust to the inclusion of population data and officer numbers, and to reasonable changes in the timing of the 'interruption'. In fact, the rate of decline of nondomestic violent crime seemed, if anything, to have slowed (i.e. the coefficient for change to trend was positive and became significant once controls for population are added). There is little evidence stop and search has an effect on crime

Overall, our analysis of ten years' worth of London-wide data suggests that although stop and search had a weak association with some forms of crime, this effect was at the outer margins of statistical and social significance. We found no evidence for effects on robbery and theft, vehicle crime or criminal damage, and inconsistent evidence of very small effects on burglary, non-domestic violent crime and total crime. When we looked separately at s60 searches, it did not appear that a sudden surge in use had any effect on the underlying trend in nondomestic violent crime.

The only really strong evidence we found relates to drug offences. Perhaps stop and search does have a deterrent effect on this form of crime? There are several other plausible mechanisms that might explain the relationship we observed, however. Rather than deterring drug related offending – stopping it happening by increasing the perceived risk of sanction – it may be instead that higher rates of stop and search prompt people to change their behaviour to make it harder for officers to uncover drugs. Recreational users may take them before going out for the evening, or become better at concealing them; those addicted to drugs seem unlikely of course to stop taking them just because police activity is more evident.

The evidence from London chimes with that from the other studies outlined above. Large, and often very large, numbers of extra stops seem to be needed to generate even modest reductions in crime. Consider the following 'worked example' from our data. The London borough of Southwark recorded 1,282 searches in October 2014, and 2,295 susceptible crimes in November 2014. If crime was to be 3 per cent lower in November – the equivalent of 69 fewer crimes – we estimate that an additional 1,180 searches would have been required in October (taking the total to 2,462). Assuming it takes an average of 15 minutes to carry out a search, the extra searches that month would take 295 officer hours (or two extra officers). There were a total of 337 searches in week 45 of 2014 and 542 crimes in week 46. If there were to be 16 fewer crimes in week 46 (3 per cent lower), it was estimated that an additional 722 searches would have been required in week 45 (1,059 in total). Again, assuming 15 minutes per search, the additional searches required that week would have taken 181 officer hours (or four extra officers). And remember that most of the crimes 'deterred' would be drugs offences, and in all likelihood minor drugs offences at that (Shiner et al., 2018).

It is striking how similar these numbers are to other studies. Weisburd and colleague's (2016) analysis of New York data, for example, suggested that across New York, during the peak years of the use of SQF an extra 700,000 SQF would reduce crime by 2 per cent. This would involve more than doubling the use of the power (the 'peak' year was 2011, when just under 700,000 SQFs were conducted). While Weisburd and colleagues conclude that SQF had a significant, if small, effect on crime when targeted intensively in high crime locations, others might argue that the sheer number of extra stops needed to achieve modest reductions in crime would not make this a viable policy.

One intriguing question is whether it is valid to assume, as we have done so far, that all the effect of stop and search on crime is negative – that if stop and search goes up crime will only go down (or simply stay the same). Procedural justice theory suggests that to the extent stop and search is considered unfair (and we know this is often the case – Bradford, 2017) it may actually cause crime. Since police activity experienced as unfair undermines public trust and police legitimacy, and weakens people's social bonds to the law and legal institutions, stop and search may have a positive effect on crime, increasing levels of offending among those subject to it (Tyler, 2006). While it seems unlikely that any such process would function over the relatively short timescales considered in our London study, in a general sense the increasingly well evidenced association between procedural injustice and offending (Tyler, 2017) cautions against assuming a unidirectional association between stop/search and crime.

Conclusion

The evidence described above suggests that there is no hydraulic relationship between stop and search and crime. It seems unlikely that crime can be reduced simply by increasing use of the power; and suggestions that conducting more searches provides a simple, easy and/or 'obvious' way to reduce crime are very likely mistaken. Coupled with the lack of evidence for effectiveness in dealing with crime, the extent of the geographic variation in the use of the power and the fact that most stop/searches are for possession of drugs also raises questions. Put bluntly, if some forces can 'manage' by conducting far fewer per capita searches, and across the board the grounds for searches are often not addressing force priorities, why do some forces (still) use the power so much more than others? Answers to this question are largely outside our remit here. But they likely involve local police cultures and the link between police activity and deprivation (Bradford, 2017; Shiner

et al., 2018). They open up inevitable discussions about the extent to which stop and search is not really 'about' crime, but rather relates to wider processes of social control directed particularly at deprived and marginal populations. The evidence we have presented above supports this argument by underlining the only marginal association between stop and search and, in particular, violent and indeed 'volume' crime.

We would, however, place caveats around any conclusion that stop and have some effect when it is part of a wider 'suite' of police interventions targeted at high crime locations – the robust literature on hotspots supports this view. While the extent of the contribution made by stop and search to such outcomes is often unclear, it would at this stage be foolish to suggest it has none.

Second, and perhaps most importantly, we return to the point that the legal justification for the most widely used powers of stop and search is investigation, not prevention. What this means in practice is that as long as each and every stop conducted under s1 PACE and associated powers is justified, the extent to which the aggregate use of the power has a crime reducing effect is in a sense moot. To this one might also add acknowledgement that when considered individually stop/searches do detect crimes. While the extent to which many of these crimes are minor drug offences is troubling, since this represents significant numbers of people being drawn into the criminal justice system for no particular good reason, in other cases more serious crimes are uncovered and, when seizures of weapons are made, possibly prevented too. To put it another way, stop and search can form an important part of criminal investigations, and thus can be judged effective on a case-by-case basis.

Set against these 'positive' effects of stop and search is of course not only the lack of evidence for any meaningful overall relationship with crime but also the damage to police/community relations use of the power so often causes. Here we would focus in particular on the effect of stop and search on the individuals most affected by it, and refer the reader to the voluminous literature on procedural justice that describes what these effects can be – not only a loss of trust and legitimacy, but marginalisation, exclusion and an increased propensity to commit crime, too (Bradford, 2015; Jackson et al., 2012; Tyler, 2006; Tyler et al., 2015).

Why is it, then, that stop and search continues to play such an iconic role in debates about crime prevention and reduction? In an era of 'evidencebased

policing', why does a policing tool for which there is so little evidence continue to be proffered as an important solution to, for example, problems of serious violent crime? There are we suggest at least three answers for this apparent puzzle. First, from the perspective of individual police officers stop and search does produce results. As noted above, officers who conduct stop/searches do regularly uncover drugs, and less often, weapons. Part of the problem here may therefore be inappropriate extrapolation from individual experience to policy proposal. Second, and connectedly, it seems that local police cultures can be important factors shaping the extent to which stop and search is used. This seems to be a much more important way of 'doing' policing in some forces than in others. The third answer is that stop and search represents a style of policing that can often appear well suited to addressing significant and challenging problems. At the present time, as serious violence seems to be increasing and police resources become more and more stretched, proactive, assertive policing, particularly when coupled with the legitimating 'stamp' of intelligence-led or evidence-based targeting, holds an allure to policy makers and practitioners pressured from many angles to 'do something' about rising crime. This position is of course premised on an unstated but sometimes deeply held belief that there is a police answer to these problems, which may partly explain why it can be hard to talk about stop and search without the discussion also branching into wider consideration of the need for policing, the ability of police to control crime, and its effectiveness in doing so.

Ben Bradford is Professor of Global City Policing, UCL Jill Dando Institute of Security and Crime Science, and Matteo Tiratelli is Teaching Fellow in Sociology, University College London.