



SENSE ABOUT SCIENCE
MAKING SENSE OF CRIME

CONTRIBUTORS

The contributors met over 2014 and 2015 to review the public debate on crime and crime policy; to identify insights from research that put this debate into context; and to edit the guide.

With thanks to everyone else who reviewed all or part of the guide, including: Geoffrey Payne, Niral Vadera, Milly Zimeta, Jonathan Breckon, David Derbyshire and Rachel Tuffin and to the Alliance for Useful Evidence for hosting a meeting of the contributors.



DR ALEX SUTHERLAND
 Research leader in communities, safety and justice, RAND Europe; research associate, Institute of Criminology, University of Cambridge



DR ALEX THOMPSON
 Research and Policy Officer, Sense About Science



PROFESSOR JONATHAN SHEPHERD
 Director, Violence Research Group and professor of oral and maxillofacial surgery, Cardiff University



PROFESSOR JON SILVERMAN
 Research professor of media and criminal justice, University of Bedfordshire; former BBC Home Affairs correspondent



PROFESSOR KEN PEASE
 Visiting professor of crime science, Department of Security and Crime Science, University College London, and University of Loughborough



DR LISA MORRISON-COULTHARD
 Lead policy advisor, British Psychological Society



NICK ROSS
 Chairman, UCL Jill Dando Institute of Security and Crime Science; former Crimewatch presenter



DR PRATEEK BUCH
 Policy director, Evidence Matters campaign, Sense About Science



PROFESSOR RICHARD WORTLEY
 Director, UCL Jill Dando Institute of Security and Crime Science



TRACEY BROWN
 Director, Sense About Science

CONTENTS

INTRODUCTION

01. HOW POLITICIANS AND THE MEDIA
SHAPE WHAT WE THINK ABOUT CRIME

02. THERE ARE MORE RELIABLE WAYS
OF MEASURING CRIME THAN POLICE STATISTICS

03. CAUSES OF CRIME THAT POLICY
CAN ADDRESS: TEMPTATION AND OPPORTUNITY

04. POLICE AND PRISON OFTEN
DON'T PROVIDE EFFECTIVE REMEDIES AGAINST CRIME

05. FINDING OUT WHAT WORKS, WHAT DOESN'T,
AND WHAT LOOKS PROMISING IN CUTTING CRIME

6. AND FINALLY ... CHANGING THE DEBATE

INTRODUCTION

Making Sense of Crime

There's always heated debate about crime in the media and a lot of political argument about how we should respond to it. But these arguments rarely provide insight into what actually causes crime, what lies behind trends over time and in different places, and how best to go about reducing it.

Values inform how a society decides to deal with crime. We may decide that rehabilitation is a better principle than punishment, and this will influence how we decide what is most effective. However, we also expect these choices to be disciplined by sound evidence, because if crime policy ignores what works and what doesn't, there are likely to be bad social consequences. And with over £10bn spent annually on tackling crime through the police, prisons, probation and courts, unless we look at evidence we can't see how effective any of it is.

Crime policy usually has twin aims – to prevent crime, and to seek justice by punishing those who commit offences. Research shows there's only a loose link, if any, between the way offenders are punished and the number of offences committed. There is no reliable evidence for example, that capital punishment reduces serious crimes as its supporters claim.¹ Yet politicians and commentators regularly claim that more punishments are a way to cut crime.

Academic, government and community organisations have all said crime policies need to be based more on evidence, but much of the evidence available at the moment is poor or unclear. Debates about crime rarely reflect how strong the evidence behind opposing policies is, and even when politicians honestly believe they're following the evidence, they tend to select evidence that supports their political views.

This guide looks at some of the key things we do know and why it has been so difficult to make sense of crime policy. An important point throughout is that policymakers sometimes have to make decisions when things are not clear-cut. They have a better chance of making effective policies if they admit to this uncertainty – and conduct robust research to find out more. In the following pages we have shared insights from experts in violent crime, policing, crime science, psychology and the media's influence on the crime debate. They don't have all the answers, but we hope they leave you better-placed to hold policymakers and commentators to account and promote a more useful discussion about crime.

¹ Nagin, DS, and Pepper, JV, *Deterrence and the Death Penalty*, National Research Council, 2012

01

**“BLAIR: IM SCARED
FOR MY CHILDREN”**

**“STREET CRIME IS SO BAD
I FEAR FOR MY CHILDREN”**

**“HANDGUN CRIME
RISES BY 40%”**

**“POLICE UNABLE TO HALT
RISE IN VIOLENT CRIME”**

HOW POLITICIANS AND THE MEDIA SHAPE WHAT WE THINK ABOUT CRIME

Surveys over the past twenty-five years consistently show that throughout this time people believed crime was rising. That’s not surprising – just look at the headlines from the late 1990s and early 2000s ...

Many criminal justice policies are a response to this fear of the dramatic crimes that have featured in the media. Survey data show this kind of coverage is a big factor in increasing worry about crime.² When a school stabbing, a death linked to a ‘legal high’ or terrorist incident captures the public imagination, government feels under pressure to respond. Ministers react by reaching for measures that give the impression that they’re ‘doing something’, missing opportunities to tackle the problem effectively, because the pressure to consider the evidence takes a back seat or might be perceived as a sign of dithering.

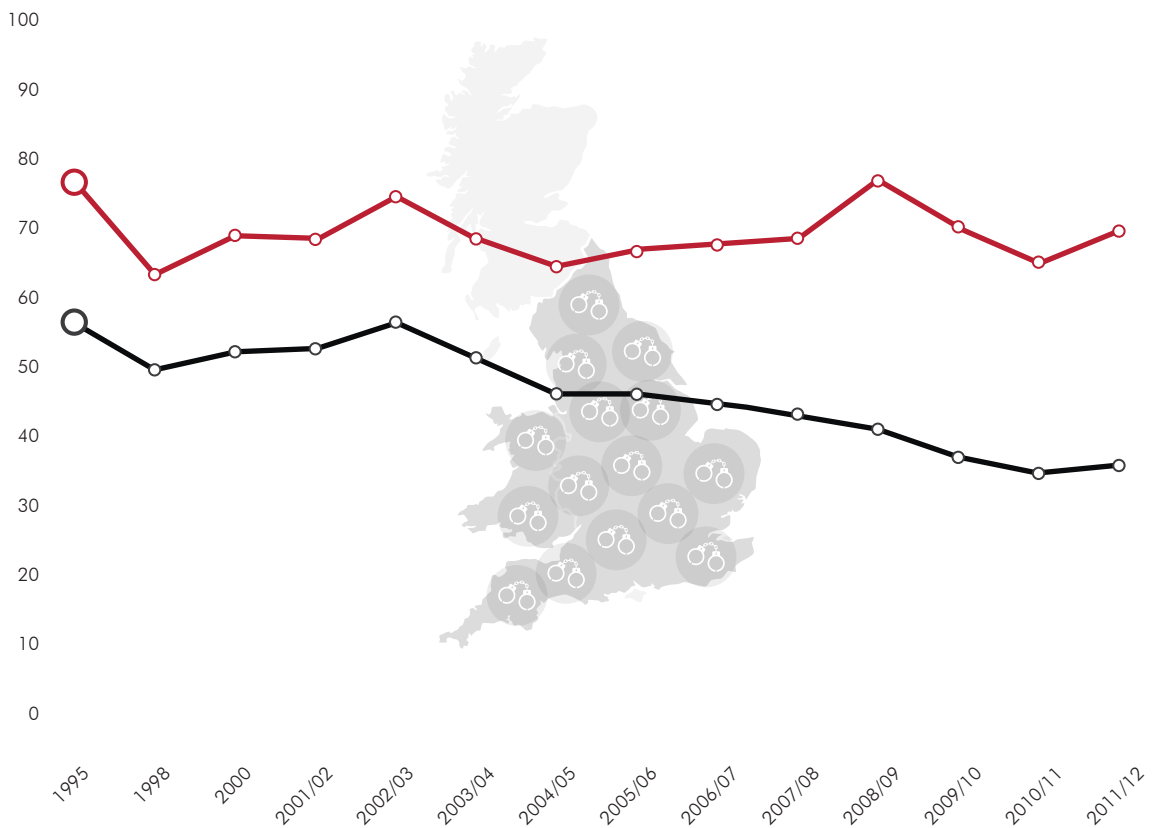
Britain’s largest crime surveys show that fear of particular crimes has fallen once people have become aware that those crimes have decreased. There remains a gap, however,

² Jansson, K, *British Crime Survey: Measuring Crime for 25 years, 2007*

between the actual risk of being a victim and people’s perception of that risk: almost one in five people surveyed in England and Wales thought it likely or very likely that they would be a victim of violent crime in 2014³, while the actual risk of being a victim was 3%⁴.

There is though a persistent belief that national crime rates are rising when they aren’t. When asked what they thought was happening to crime in the country as a whole, 61% of people said crime had risen in the previous two years, which contrasts with just 32% who thought it had risen in their local area.² This is not surprising because most people said their views on crime in the country as a whole are influenced by the news, which is more likely to feature dramatic crimes, whereas word of mouth and personal experience influence their views on local crime.

FIGURE 1: PERCENTAGE OF PEOPLE WHO THINK CRIME HAS GONE UP IN THE TWO PREVIOUS YEARS ACROSS THE COUNTRY (RED LINE) AND IN THEIR LOCAL AREA (BLACK LINE). FROM THE CRIME SURVEY OF ENGLAND AND WALES



³ Public perceptions of crime, Office for National Statistics, March 2015

⁴ Crime in England and Wales, Year Ending September 2014, Office for National Statistics, January 2015

Some journalists and politicians claim that high-profile measures are needed to cut crime, and that tackling the rate of crime is the most effective way of addressing the fear of it. But some of the most effective ways of reducing offending are simpler measures that rarely feature in the policy debate, such as targeted changes to street lighting, which have also been effective at reducing the fear of crime.⁵



Jon Silverman

“Politicians act as though there is a consistent level of fear of crime which they need to address. But reliable surveys show that concern about crime is subject to fluctuations, with a relatively small number of people frequently ‘fearful’. It’s important to ask the right questions to understand public attitudes on crime.”

MOST TYPES OF CRIME ARE FALLING

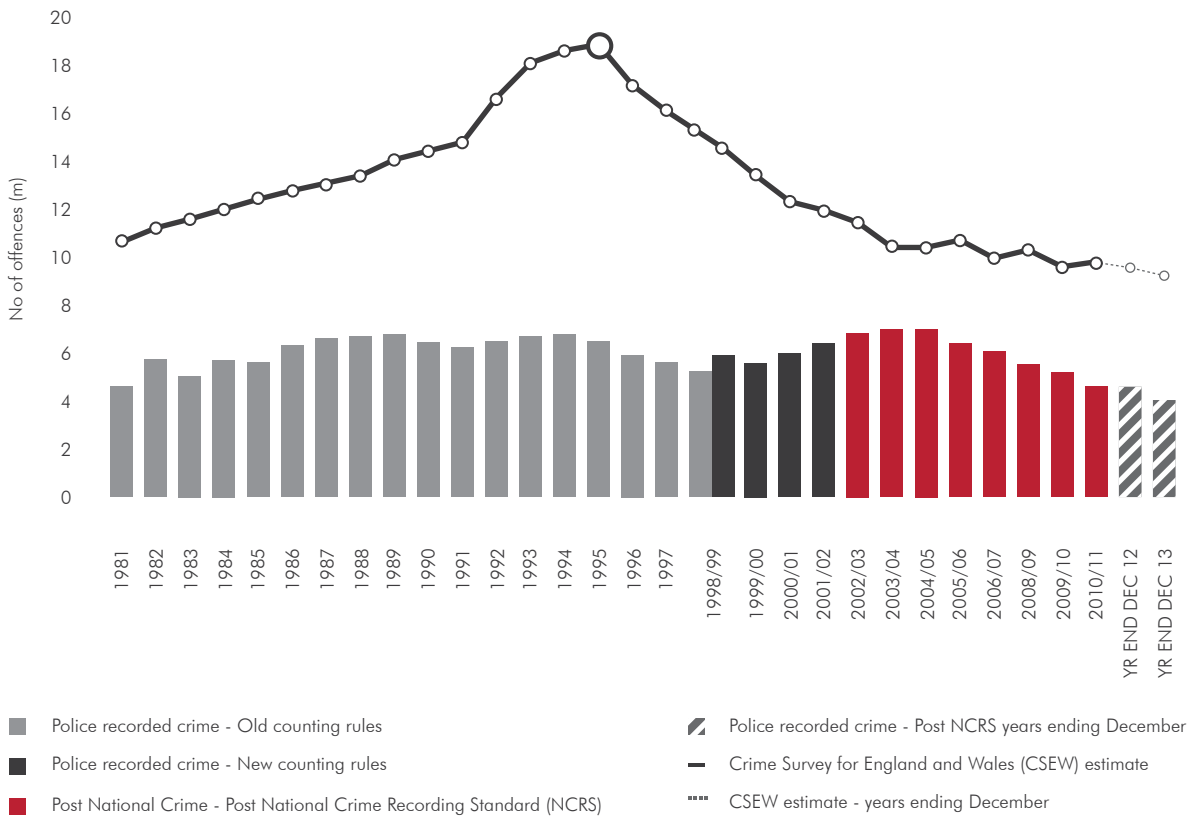
The introduction of victim surveys and other methods set out in the next section has made it possible to collect more reliable evidence on crime rates. So what does the most reliable evidence tell us about how much crime has been happening in recent decades? And do the political debate and news coverage reflect this evidence?

Crime rose significantly between the early 1980s and mid-1990s. This was loudly trumpeted by the media and lamented by politicians, who blamed things ranging from falling moral standards to unemployment and video games, and promised to be tough on crime – largely ignoring the evidence on the causes of crime and the most effective remedies, as we discuss further on. **Then crime levelled out and fell – rapidly.**

⁵ Welsh, DP, and Farrington, BC, *Effects of Improved Street Lighting on Crime*, Campbell Collaboration, 2008

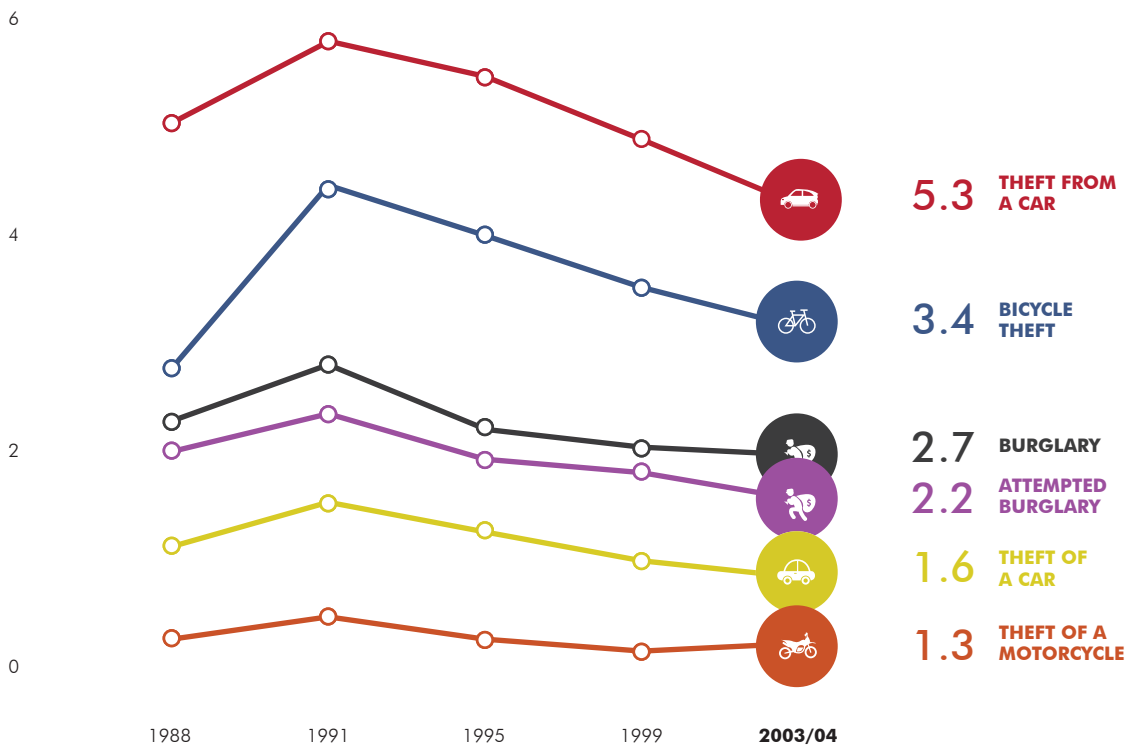
FIGURE 2: TRENDS IN CRIME, ADAPTED FROM THE CRIME SURVEY FOR ENGLAND AND WALES AND FROM POLICE-RECORDED CRIME STATISTICS. ONS 2014

Police recorded crime data are not designated as National Statistics



Crime began to go down in the UK (under the Conservatives) in 1995, and continued to fall, fairly consistently, under subsequent Conservative, Labour and Conservative/Liberal Democrat Coalition governments. In fact crime has not just been falling in the UK. It fell first in the US, where crime has been going down for around 25 years, then throughout the industrialised world, something no UK politician can claim credit for.

FIGURE 3: AVERAGE OF ONE YEAR PREVALENCE RATES FOR 5 PROPERTY CRIMES IN 15 COUNTRIES THAT PARTICIPATED FOUR TIMES OR MORE IN THE INTERNATIONAL CRIME VICTIMS SURVEY (1989-2005) AND THE EUROPEAN CRIME SAFETY SURVEY (2005).



Adapted from analysis of the International Crime Victims Survey ⁶

⁶ van Dijk, J et al., *Criminal Victimization in International Perspective*, Tilburg University, 2007

So long-term trends and international data show that ministers are not right when they date good news on crime from when they came into office, as they often seem to do:

Yvette Cooper (Labour): “Our party worked so hard to help cut crime by 40 per cent when we were in Government.⁷”

Theresa May (Conservative): “Under this Government, crime is down by more than ten per cent.⁸”

Nick Clegg (LibDem): “The continuing fall in crime is one of the biggest success stories of this coalition.⁹”

In recent years the media and politicians have started to catch up with evidence that crime has been falling for nearly two decades. But this good news is underplayed and even now headlines seek to persuade us otherwise – by turning attention to other kinds of ‘bad news’ on crime. For years ‘white collar crimes’ such as fraud, cybercrime and many types of tax offences rarely featured in the media, but are now reported as being on the increase.

“HALF OF ATTACKS ‘ALCOHOL-RELATED’”

“SCOTLAND FULL OF EASTERN EUROPEAN CRIMINALS!”

“50% OF CRIMES ARE UNSOLVED”

“CRIME RISES FOR FIRST TIME IN MORE THAN A DECADE”

Stories about crime rarely point out that it is not a single number going up or down for all offences or in all areas, and that some regions, age groups and some types of targets are affected more than others. Many conspicuous crimes such as bank raids, horse stealing and safe-breaking are virtually extinct because there are fewer opportunities to commit them or the targets are harder to steal. Other offences, such as online bank fraud, might be rising because of a new opportunity to commit them. (These are especially hard to count as they don’t feature in victim surveys and are rarely reported to the police so might not be noticed for years, if at all).

This incomplete public debate allows politicians and news media to get away with picking and choosing statistics to suit their point. This will continue unless citizens challenge politicians and commentators about how thoroughly they’ve considered any evidence that doesn’t support their claims.

⁷ Speech given to Labour Party Annual Conference, 3rd October 2012

⁸ Speech given to Conservative Party Conference, 9th March 2013

⁹ Guardian, 7th May 2014

02

THERE ARE MORE RELIABLE WAYS OF MEASURING CRIME THAN POLICE STATISTICS

In the 19th Century crime was measured by the number of court convictions. This had the obvious flaw that not all crimes are detected or finish up in court or in a conviction. For most of the 20th Century we relied on police statistics, which had similar defects. But that doesn't mean we can't estimate crime quite accurately and, starting in the 1960s, there have been more reliable ways to do so which we explore below.

WHAT IS CRIME?

We can think of crime as defined by rules of behaviour codified in law¹⁰, and as laws can move with the times, definitions of crime differ from one jurisdiction to the next and from one era to the next. Slavery, which was legal, has become a major offence; homosexuality, which was illegal, is now protected by law. Ideas of what is criminal also differ, with attitudes to fiddling taxes or expenses, illegal downloads, fake DVDs or many traffic offences varying from person to person.

¹⁰ Wikström, P-O H, *Individuals, settings and acts of crime: situational mechanisms and the explanation of crime*. In Wikström, P-O H and Sampson, RJ (Eds.), *The Explanation of Crime: Context, Mechanisms and Development*. Cambridge: Cambridge University Press, 2006

WHY WE SHOULDN'T RELY ON POLICE STATISTICS

Police officers hardly ever come across crime when it is taking place – they usually only know about crime when we tell them about it. We don't always do that. Although the reporting rate varies for different types of crime¹¹, only between 40% and 60% of the crimes that appear in victim surveys are recorded by the police.¹² Britain's leading specialist on injuries from violent crime is Professor Jonathan Shepherd, a maxillofacial surgeon from the University of Cardiff who was the first to measure hospital attendance caused by violent crime. He is emphatic:



Jonathan Shepherd

“Police figures are not a reliable measure of violent crime. They don't reflect many violent offences, such as those resulting in hospital treatment which the police do not know about. Information collected in accident and emergency has helped Cardiff police and city council to reduce injury caused in violence by 40% relative to cities where this information has not been used.”

What's more, reporting rates for the same offence can vary a lot over time – such as when sex crime appeared to rocket after ChildLine was launched and again following publicity about the Jimmy Savile case.¹³

When crime figures rise, you might think it's because the police are failing. But paradoxically, good policing can make police crime figures rise. For example, initiatives to raise awareness of sexual abuse or crackdown on knife crime can lead to more offences being reported and recorded.

Police records of offences are also vulnerable to different interpretations of the same event. Does a boy smashing three windows count as one offence or three? And they are vulnerable to manipulation. Police forces have sometimes fiddled the figures, because of pressure to meet targets or to reduce their workload. Such concerns about manipulated statistics were raised recently in Her Majesty's Inspectorate of Constabulary's report into the Kent Police force¹⁴ and by former Police Constable James Patrick in relation to the Metropolitan Police. But the Home Office has acknowledged the unreliability of police statistics since the early 1980s. In 2014, MPs finally recognised the scale of the problems in a report explaining, “Why we can't rely on police recorded crime statistics.”¹⁵

“HOW VIOLENT CRIMES ARE MADE TO VANISH LIKE A PUFF OF SMOKE”

To underline the scepticism with which police data are viewed, police crime figures are no longer rated as official national statistics. Yet even now many commentators and policymakers remain unaware of how misleading they can be and continue to report them uncritically.

¹¹ Annual trend and demographic tables, Crime in England and Wales, Office for National Statistics, July 2014

¹² Analysis of variation in crime trends, Office for National Statistics, January 2013

¹³ Sexual offences in England and Wales year ending June 2013, Office for National Statistics, October 2013

¹⁴ Crime Recording in Kent: A report commissioned by the Police and Crime Commissioner for Kent 2013

¹⁵ House of Commons Public Administration Select Committee, 2014

BUT CAN ANY CRIME STATISTICS CAN BE TRUSTED?

Some people despair and say that because police-recorded statistics are unreliable, "All we can really say we know about the crime rate is that we don't know very much at all."¹⁶ "

"ARE THE STREETS REALLY THE SAFEST THEY'VE BEEN FOR 30 YEARS?"

Some crimes can be measured more reliably than others. In the case of murder, for example, it is hard to hide bodies, and nowadays it's very hard to fool the pathologists who examine them.

Other crimes, such as violent attacks and some types of property crime, are far more difficult to gauge. In reality they can only be estimated. But there are many clues: victim surveys, business surveys, attendances at accident and emergency departments, insurance claims and even counting broken window glass in public car parks to assess how many cars have been broken into.

WHAT DO VICTIM SURVEYS SHOW?

Victim surveys are used around the world for measuring crimes committed against individuals. In England & Wales for example, 40-50,000 households are surveyed every year in the Crime Survey for England and Wales (formerly the British Crime Survey). That's 40 times more than most opinion polls, and the sample is selected to be representative of the country as a whole, so it's considered a fairly reliable measure of individual victimisation and perceptions of crime. Above all it's consistent, because if people lie or misremember they are unlikely to do so differently from one year to the next. Surveys have the advantage over police statistics that they take into account unreported crimes or crimes deemed unimportant by the police, giving a more accurate view of overall crime levels – they always show that there's more crime happening than the police record. But they also record an untested perception of what offence was committed, and they don't cover everything. The most reliable crime surveys look at households and crimes against individual people, so crimes such as shoplifting and fraud remain very difficult to estimate.

While it is generally accepted that victim surveys are the most reliable way of finding out about personal crime, we only get a rounded picture of crime by looking at all of the data together.

¹⁶ Philips, M, *The Times*, April 2014

¹⁷ Lynn, P and Elliot, D, *NatCen Social Research*, 2000

03

**“FOR EVERY CRIME THERE IS A CRIMINAL.
IN MY BOOK, BEING TOUGH ON CRIME
MEANS BEING TOUGH ON CRIMINALS.”¹⁸”**

John Major

**“[THERE IS A CONFLICT BETWEEN]
TRADITIONAL PROTECTIONS FOR
THE SUSPECT AND THE RIGHTS
OF THE LAW-ABIDING MAJORITY ...
IT IS TIME TO REBALANCE
THE DECISION IN FAVOUR OF THE DECENT,
LAW-ABIDING MAJORITY WHO PLAY
BY THE RULES AND
THINK OTHERS SHOULD TOO.”¹⁹”**

Prime Minister Tony Blair, June 2006

CAUSES OF CRIME THAT POLICY CAN ADDRESS: TEMPTATION AND OPPORTUNITY

This view of people as angels or devils ignores the evidence, which is that those who commit crime aren't a separate group of people distinct from a law-abiding majority. In fact, a third of British males born in the 1950s had acquired a criminal conviction by the time they were middle-aged²⁰ and several follow-up studies have shown similar results.²¹ It's likely that most people know somebody who has downloaded entertainment illegally, or paid tradesmen in cash to avoid tax. The idea of 'the law-abiding majority' appears to be a myth.

¹⁸ John Major's speech to the Conservative Political Centre, 29th January 1996

¹⁹ Quote from speech reported in the *Guardian*, 23rd June 2006

²⁰ Karstedt & Farrall (2007) *Centre for Crime and Justice Studies*, King's College London

²¹ Farrington, D and Wikström, PO, 'Criminal careers in London and Stockholm: A cross-national comparative study', in Weitekamp, EGM and Kerner H-J (eds), *Cross-national longitudinal research on human development and criminal behaviour*, Kluwer Academic Publishers, Dordrecht, 1994



Nick Ross

“Even prolific offenders spend most of their lives on the right side of the law, and most of the rest of us occasionally stray onto the wrong side of the law. Most of the biggest answers to crime lie in changing circumstances not people, but again and again there is a gravitational pull back to blaming individuals rather than finding solutions.”

Scandals such as the rigging of inter-bank lending rates in 2012, and others involving banks, insurance companies and other parts of the financial sector, have shown that where there is temptation and opportunity there is widespread wrongdoing by those not normally considered as criminals. Even our elected officials are not exempt from this: MPs from all parties were caught up in the parliamentary expenses scandal of 2009, but significantly those who represented ‘safe seats’ with huge majorities, for whom the temptation to fiddle expenses was perhaps stronger and the cost less immediate, were reported to be more likely to be guilty.²²

“MPS’ EXPENSES: MINISTERS HAVE PRESIDED OVER ‘SCANDALS OF SHAMELESSNESS’”

CIRCUMSTANCES AND CRIME

For a particular crime to occur, a person predisposed to committing that crime needs to come into contact with a suitable target or victim, in the absence of things to protect that potential target.²³ So lots of factors play a role, whether that’s an impulsive reaction to feed a

drug or alcohol addiction, a car being left unlocked or inadequate street lighting. When people talk about the causes of crime, they usually emphasise one of two questions:

- What causes some people to commit crime and others not?
- What situations cause patterns – increases or decreases, locations, times, degrees of seriousness, and so on – in particular crimes?

The distinction is important because the first question emphasizes morality or motive and the second one external circumstances. Morality or personal motives are much harder to address through policy. Moreover, they are a poor predictor of patterns of crime. There is evidence that a small minority of people have a higher predisposition to committing crime, for a variety of reasons that include psychological disorders and personality factors such as impulsiveness.²⁴ And that certain crimes are committed more by particular groups, e.g. young men. But there are clearly lots of people in those groups who don’t commit crime and lots of people outside of them who do.

The availability of suitable targets and the absence of security measures, which we can usefully think of as temptations and opportunities to commit crime, are the most suitable things for crime-reduction policy to focus on. Many of the advances in effective policing and crime reduction since the 1990s have emerged from changing circumstances rather than people. But policymakers tend to heavily underrate the importance of circumstance as a factor, while overrating the personal choices that ‘criminals’ make.

²² Analysis by Mark Thompson, May 2009. No published studies analysing the link were available at the time of writing

²³ Marsh, P, et al., Football Violence and Hooliganism in Europe, The Amsterdam Group, 2006

²⁴ Homicide, Harvard Injury Control Research Centre, accessed April 2015

HOW CIRCUMSTANCES CAN TURN ORDINARY PEOPLE TO VIOLENT CRIME

There are vivid examples from everyday life where circumstances have led to apparently decent people doing terrible things. Recognising the anonymity of crowds and mob mentality played a role in the rise and taming of football hooliganism.²⁵ Alcohol consumption and the availability of weapons are both key predictors of violent crime, which is why many pubs now use plastic glasses to reduce the severity of injury caused in bar fights. The higher murder rate in Scotland, compared to England or Wales, is almost entirely explained by a combination of alcohol and knives, while the high US murder rate owes much to the availability of handguns²⁶ – although research is yet to show a definitive causative link between the ease of owning a gun and gun violence.²⁷



Nick Ross

“It has long been known that in wartime decent people can behave in ways that would have seemed inconceivable in peacetime. The men involved in death squads or who looted and raped during wartime, were typically law-abiding people before and after the conflict”.

SO WHAT DO POLITICIANS AND COMMENTATORS THINK CAUSES CRIME?

Some politicians and commentators have said with great certainty that drug addiction¹⁵, broken families²⁸, lack of morality²⁹ or violent video games³⁰ are a leading cause of crime, while with equal force others blame poverty³¹, inequality³², and government cuts³³. If you know someone’s politics you can usually predict his or her opinion on crime: “We know [insert pet cause here] causes crime, so we must reduce [insert pet cause here].” When we look a little more closely at these pet causes, it turns out that some are just not correlated with crime rates:

²⁵ Marsh, P, et al., *Football Violence and Hooliganism in Europe*, The Amsterdam Group, 2006

²⁶ *Homicide*, Harvard Injury Control Research Centre, accessed April 2015

²⁷ *Violent Crimes and Handgun Ownership*, FactCheck.org, March 2008

²⁸ *Being tough on the causes of crime: tackling family breakdown to prevent youth crime*. Centre for Social Justice, 2007

²⁹ Palmer, A, *Crime: the antidote is morality*, Daily Telegraph, May 2012

³⁰ Stuart, K, *Keith Vaz urges tighter controls on violent video games*, Guardian, May 2012

³¹ Mills, J, *Poverty, not lack of morals, was to blame for the riots*, New Statesman, October 2011

³² *Speech to the Labour Party Annual Conference*, October 2012

³³ Leppard, D and Flynn, C, *Austerity crimewave hits Britain*, Sunday Times, December 2011

FIGURE 4: HOUSEHOLDS WITH A SINGLE MOTHER AREN'T CORRELATED WITH THE AMOUNT OF CRIME (IN THE USA). ADAPTED FROM U.S DEPARTMENT OF JUSTICE

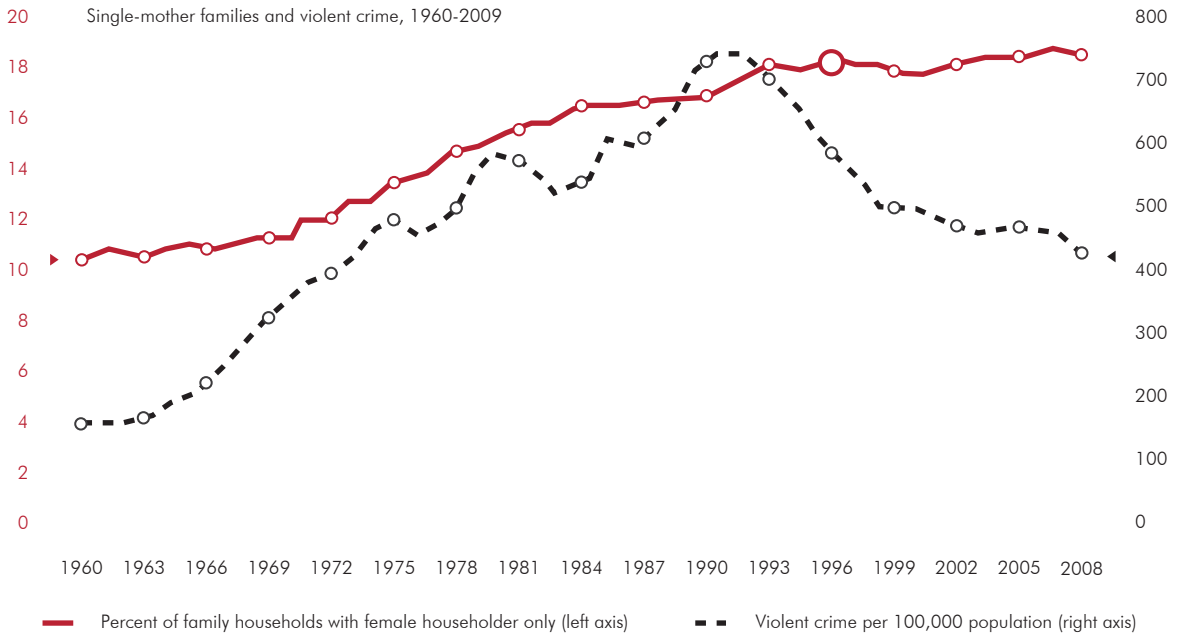
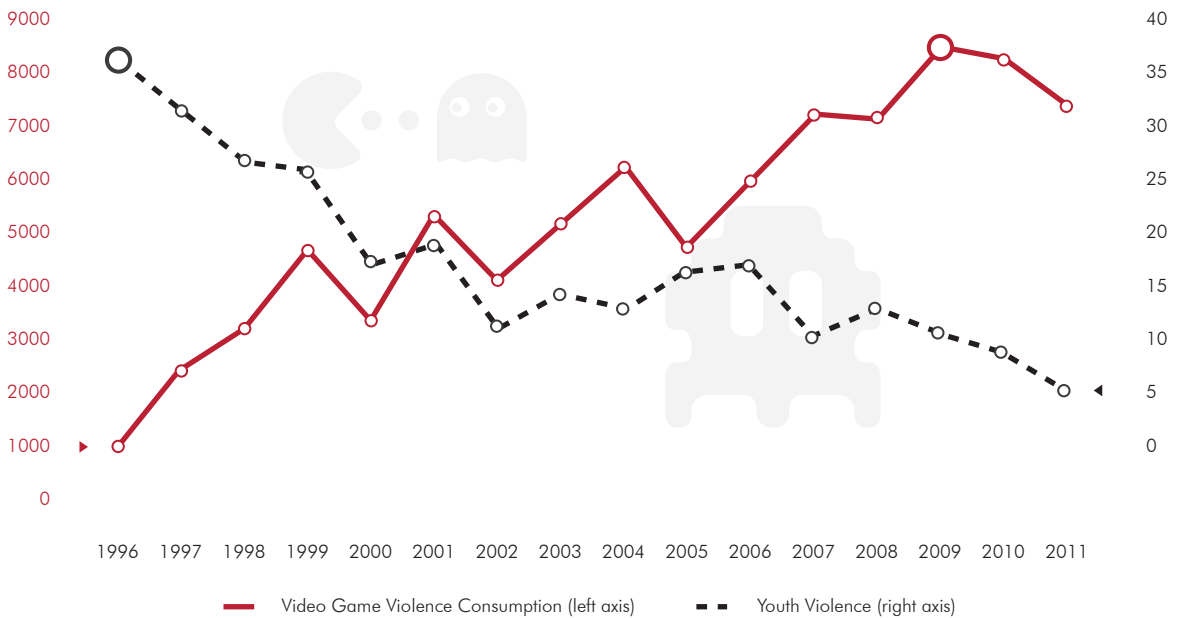


FIGURE 5: THE USE OF VIOLENT VIDEO GAMES ISN'T LINKED WITH A RISE IN VIOLENT CRIME (IN THE USA). IF ANYTHING THERE'S A STRONG CORRELATION THE OTHER WAY. ADAPTED FROM FERGUSON 2014 Societal videogame violence consumption and societal youth violence, 1996-2011



³⁴ Uniform Crime Reporting Statistics

³⁵ Ferguson, CJ, Does Media Violence Predict Societal Violence? It Depends on What You Look at and When, Journal of Communication, 2014

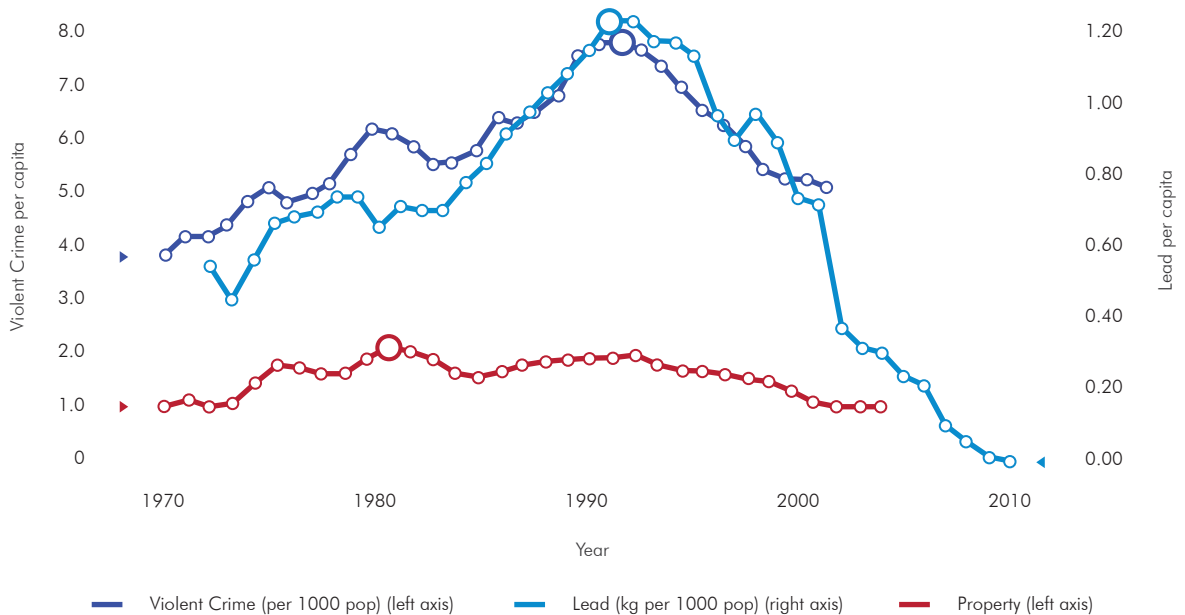
For others there's little if any evidence that a link suggests a direct cause; for example, poverty appears to have no effect on the likelihood of a person committing crimes when family and peer groups are taken into account. For some factors there is stronger evidence of a link with crime: a reduction in the number of heroin and crack cocaine users is strongly correlated with a drop in acquisitive crime such as theft (although there might be a third factor that caused the decline of both).

NEW THEORIES ATTEMPTING TO EXPLAIN THE RECENT DROP IN CRIME

Amongst the newer theories of crime that have emerged in recent years is the idea that removing lead from petrol since the 1970s caused a drop in crime years later. This is plausible because lead is known to be toxic to the brain and can alter behaviour. However, the evidence of a causative link between lead in petrol and crime is mixed. So-called

ecological studies show a strong correlation between levels of atmospheric lead and violent crimes committed 23 years later. But economic analysis shows a weaker link with property crime (figure 7), raising the question of why exposure to lead would make people more likely to commit some crimes but not others.

FIGURE 6: LEAD IN THE AIR CORRELATES WITH VIOLENT CRIME 22 YEARS LATER (IN THE USA). ADAPTED FROM REYES, 2007⁴⁰

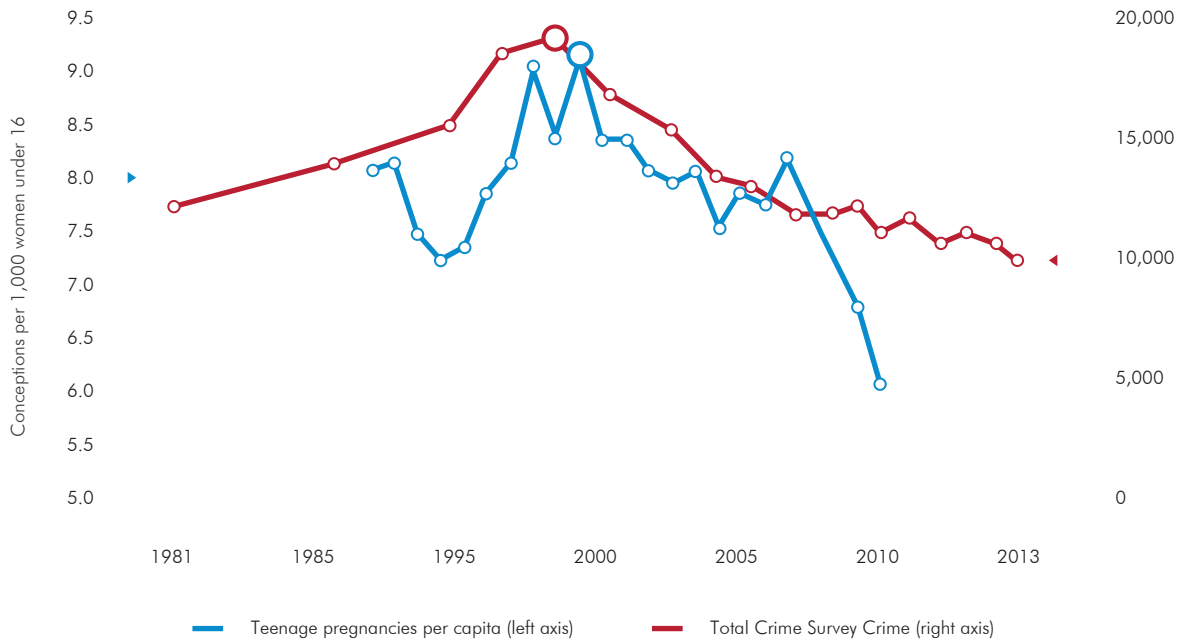


³⁶ Sarisalan, A, et al., *Childhood family income, adolescent violent criminality and substance misuse: quasi- experimental total population study*, *British Journal of Psychiatry*, 2014
³⁷ Morgan, N, Home Office, 2014
³⁸ Reviewed in Landrigan, P.J, *The worldwide problem of lead in petrol*, World Health Organisation, 1997
³⁹ Nevin, R, *How lead exposure relates to temporal changes in IQ, violent crime, and unwed pregnancy*. *Environmental Research*, 2000
⁴⁰ Reyes, JW, *Environmental policy as social policy? The impact of childhood lead exposure on crime*, NBER, 2007

The evidence is far from certain on whether these correlations show a causal link between lead and crime.⁴¹ It is clear, however, that the evidence doesn't support claims by some proponents of the theory, that lead in the atmosphere explains 90% of the fall and rise in crime rates in the 20th Century.

Another theory is that legalising abortion also reduced crime by reducing the number of unwanted children. This was popularised by the book *Freakonomics*⁴², but it fails to explain why crime began to fall in the USA (around 1990/1) years before it fell in the UK (around 1995/6), whereas abortion was legalised in Britain (1967) before the USA (1973). Also, more recent economic analysis suggests there's little evidence that a change in abortion laws in either the UK or US affected crime rates.⁴³ And teenage pregnancy rates have been decreasing since the mid-1990's, as have crime rates (Figure 8), but that does not mean that there's a causal link.

FIGURE 7: TEENAGE PREGNANCY RATES APPEAR TO CORRELATE WITH CRIME RATES IN THE UK, BUT THERE IS NO EVIDENCE OF A CAUSAL LINK. ADAPTED FROM OFFICE FOR NATIONAL STATISTICS^{44, 45}



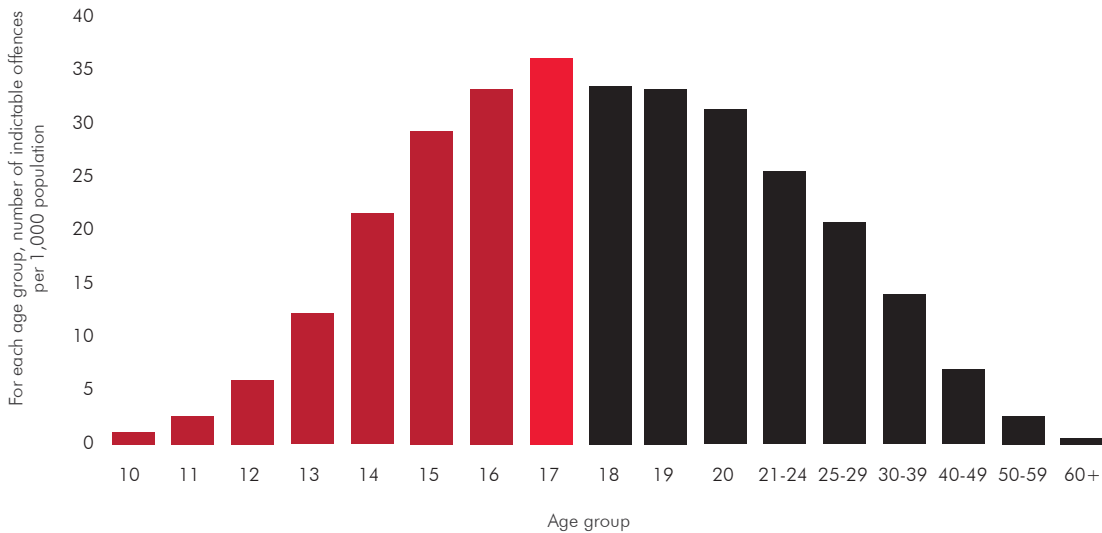
⁴¹ Reviewed in Stretesky, PB, and Lynch, MJ, *The relationship between lead and crime*, *Journal of Health and Social Behaviour* 2004

⁴² Levitt, SD, & Dubner, SJ, Chapter 4. *Where have all the criminals gone?* In: *Freakonomics: A rogue economist explores the hidden side to everything*, Spierling & Kupfer, 2005

⁴³ Joyce, TJ, *Abortion and crime: a review*, NBER, 2009

One factor that is very clearly linked with crime is rarely mentioned by policymakers, perhaps because they can have little influence over it: growing up. There's strong evidence that age influences the likelihood of a person committing a crime, with people in their late teens most likely to offend.

FIGURE 8: THE PEAK RATE FOR OFFENDING IS AT THE AGE 17. ADAPTED FROM ANALYSIS BY THE POVERTY SITE USING MINISTRY OF JUSTICE DATA⁴⁶



So when we hear about crime reduction policies, it's important to ask whether they aim to reform people, reduce temptations or remove opportunities. And how are effective are they in achieving these aims?

⁴⁴ Conception statistics 2011, Office for National Statistics, February 2013

⁴⁵ Crime in England and Wales, year ending December 2013, Office for National Statistics, April 2014

⁴⁶ The Poverty Site, December 2010. Note that the age of offender is grouped differently from age 20 onwards

04

POLICE AND PRISON OFTEN DON'T PROVIDE EFFECTIVE REMEDIES AGAINST CRIME

“MORE BOBBIES ON THE BEAT: FORGIVE ME FOR BEING SILLY BUT ISN'T THAT BLINDLY OBVIOUS TO EVERYONE EXCEPT OUR POLITICIANS?”

“LABOUR WILL BRING BACK BOBBIES ON THE BEAT IF IT WINS NEXT ELECTION”

According to our analysis, the majority of political leaflets and manifestos in the 2015 UK General Election claimed that putting more police on the beat will reduce crime, and yet the evidence for this is weak or even contradictory.^{47, 48}

That is not to say that targeted policing isn't effective – there is robust evidence that deploying more officers in a targeted way can cut crime. However, this means more than just targeting known crime hotspots with a police presence: it means using statistical analysis to predict where crime is likely to occur in the future, and who the likely victims might be.⁵⁰

⁴⁷ Analysis by Mark Easton, BBC, 2010

⁴⁸ The impact of police numbers on crime rates. The College of Policing, What Works Crime Reduction Centre, 2012

⁴⁹ Sherman, LW, The rise of evidence-based policing: targeting, testing and tracking. University of Cambridge, 2013

⁵⁰ Bowers, KJ, Johnson SD and Pease, K, Prospective Hot-Spotting: the future of crime mapping?, British Journal of Criminology, 2004. For a review of predictive policing techniques, see Perry et al, Predictive policing, RAND Corporation, 2013

DO TOUGHER SENTENCES CUT CRIME?

Those on the political right insist that tough-sounding policies on prisons, such as longer sentences or mandatory jail terms for knife crime, 'work.' It might seem intuitive, but there is not reliable evidence to show that this actually reduces crime, and the studies that have suggested it might, show only modest effects at best.⁵¹

Liberal campaigners, on the other hand, claim that prison doesn't work. The evidence bears this out in a general sense, but it doesn't mean that it never works, and how true it is depends on what is meant by 'work'.



Alex Sutherland

"We can signal disapproval at particular types of crime by increasing punishments, but politicians often claim that measures such as heavier mandatory sentences will reduce the number of these offences (or reoffences) through a deterrent effect. It's hard to find evidence to support this."

Several studies have shown that prison can cut reoffending when carefully targeted at small groups of specific high-risk offenders, not because it deters or reforms them – the evidence on either is very mixed – but because, quite simply, they cannot reoffend in the community while they are incarcerated.⁵² Equally, comparisons of community sentences and prison terms rarely compare like with like. They tend to ignore the fact that jail is reserved for those who commit serious offences, and that heavy sentences for major crimes, which are rare, don't necessarily deter people from committing minor offences that are more common.

DO SHORT, SHARP SHOCKS WORK TO LOWER CRIME?

Paradoxically, research on US boot camps⁵³ and 'scared straight'⁵⁴ programmes shows they lead to higher reoffending rate than any other intervention.

Crime has fallen at similar rates across jurisdictions with sharply different policies on prisons and sentencing, which undermines any simplistic view of the link between prison and crime rates. One reason for this is that prison is irrelevant to most crimes. Remember, Home Office and Ministry of Justice data show that only about half of offences are reported to police (and this includes violence),⁵⁵ of which only a small proportion finally get to court and only about 3% result in a custodial sentence.⁵⁶

⁵¹ Nagin, DS, *Deterrence: a review of the evidence by criminologists and economists*, *Annual Review of Economics* 2013

⁵² For instance, Blumstein, A, et al., *The Crime Drop in America*, *Cambridge Studies in Criminology*, 2005

⁵³ *Juvenile Boot Camps*, reviewed on www.crimesolutions.gov, accessed April 2015

⁵⁴ *Juvenile Awareness Programms*, reviewed on www.crimesolutions.gov, accessed April 2015

⁵⁵ *Annual Trend and Demographic Tables - Crime in England and Wales, year ending March 2014*, Office for National Statistics, July 2014

⁵⁶ *Criminal Justice Statistics Quarterly Update to June 2014*, Ministry of Justice, November 2014,

05

FINDING OUT WHAT WORKS, WHAT DOESN'T, AND WHAT LOOKS PROMISING IN CUTTING CRIME

Politicians, civil servants and crime commissioners increasingly claim that they're doing 'what works' to cut crime, but many strategies seem to be based on hunches or political needs – they haven't been tested to the same degree as we might expect in other areas where our wellbeing is paramount, such as food safety, medicines or civil aviation.



Nick Ross

"It is not good enough to fill any void of ignorance with political ideology - but that is what tends to happen. A lot of crime policy research is weak, and the Jill Dando Institute at University College London has been selected to lead a multi-centre study to find good evidence of effectiveness. In the meantime the honest answer should often be, 'we just don't know'."

We have discovered that a lot of the evidence that crime researchers and policymakers refer to comes from small-scale studies and pilots, which are not enough to show that something works. They rarely have good controls against bias or chance. More robust methods, such as randomised controlled trials (RCTs), are becoming more common in research into policing and the probation system. The College of Policing's What Works Centre for Crime Reduction has recently been established. Working with a consortium of academics led by the UCL Jill Dando Institute, they have started to systematically review the existing research into crime reduction and have established an easily used toolkit for police forces to evaluate the impact, costs and implementation of crime reduction efforts ranging from the use of CCTV to 'scared straight' programmes.⁵⁷ To add to this, the Campbell Collaboration and other academic research groups are trying to compile a body of reliable evidence on strategies to cut crime.

footnotes ≠ evidence. A report by Conservatives in London claimed that playing classical music on the underground would cut attacks on staff. Their evidence? Footnotes in their report pointed to a newspaper article and a lifestyle blog – not the most appropriate sources of evidence!⁵⁸

IN THE MEANTIME, THERE ARE ALREADY PLACES WHERE EVIDENCE CLEARLY POINTS TO THE EFFECTIVENESS OR NOT OF DIFFERENT CRIME-CUTTING MEASURES.

Psychological research has resulted in improvements to how witnesses and victims are asked to identify suspects. Evidence suggests that people remember whole faces rather than separate features, and do so better when thinking about a person in context. A new system of suspect identification based on this research, called Evo-FIT, has been used by police and has led to the identification of suspects in 60% of occasions, with a conviction being secured for 30% of cases – a substantial improvement on rates under previous photo-identification systems that focussed on recalling individual features of a face.⁵⁹

Just as importantly, good research can identify programmes that aren't working. In a review of evidence on drug prevention, the UK Drug Policy Commission concluded: "There is little evidence that drug-specific education makes a difference to the prevalence of drug taking" and "overall the evidence for cost effectiveness of drug-specific education is weak." With drug-taking amongst young people declining for over a decade,⁶⁰ we need to look elsewhere for explanations.

In looking for effective ways to cut crime, there are parallels to be drawn with how road deaths in the UK went down from a peak of over 7,000 per year in the 1970s, to well below 2,000 today. Rather than trying to change drivers' behaviour by directly targeting them, policy switched to changing the environment around them, with safer roads and vehicles, automatic restraints and different policing tactics, for example on motorcycle helmets or drink-driving.

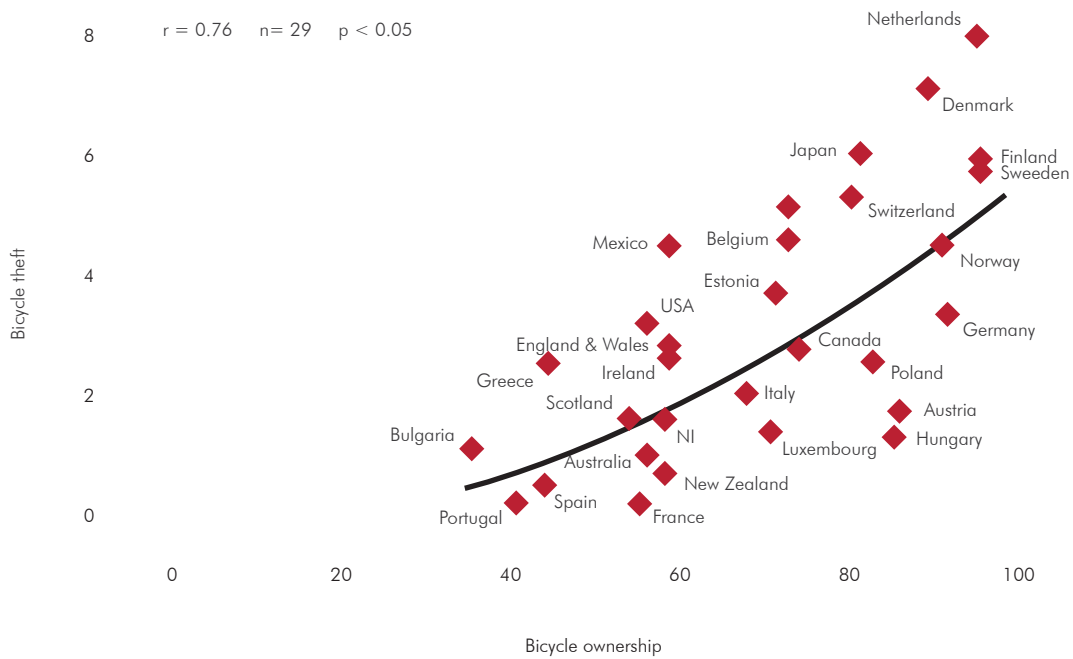
⁵⁷ *Crime Reduction Toolkit. College of Policing, What Works Centre for Crime Reduction*

⁵⁸ *Research by Evidence Matters, 2014*

⁵⁹ *EvoFIT: applying our understanding of face perception to the identification of criminals. British Psychological Society*

⁶⁰ *Fuller, E, Survey of Smoking, Drinking and Drug Use among Young People in England, NatCen Social Research, 2013*

FIGURE 9: BICYCLE THEFT RISES AS BICYCLE OWNERSHIP INCREASES. ADAPTED FROM ANALYSIS OF THE INTERNATIONAL CRIME VICTIMS SURVEY⁶¹



⁶¹ Van Dijk, *Criminal Victimization in International Perspective*, Tilburg University, 2007



Richard Wortley

“Bicycle theft is a crime that is almost fully explained by presence of bicycles, so should we cut bicycle ownership? Better to design bike stands and locks in a way that makes it harder to steal bikes, as research from the UCL Jill Dando Institute and Central Saint Martins has shown.⁶²”

Evidence shows that reducing opportunities and removing temptations to commit crime are two low-hanging fruit that are very effective. A large body of reliable evidence shows that making cars harder to steal, and installing strong security measures in homes can substantially reduce crime rates for example.

This observation has also led to experimental approaches with changing the environment. For example, many police forces, particularly in the USA, adopt a zero-tolerance towards broken windows, graffiti and litter in an attempt to deter more serious crime, although the evidence on whether this works remains contested.⁶³ Seeking evidence does not mean avoiding experimentation or new approaches. It just means that they should be explored with good monitoring and the results should be tested as objectively as possible to find out what their impact was.

DESIGNING OUT CRIME

If councils want to make people feel safer and reduce crime in inner-city areas, they could try a simple intervention like alleygating: giving residents gates in estate alleyways, once used as a warren for burglars and troublemakers.^{64, 65} Crime-fighting measures such as secure locks on doors and windows are now built into new homes, which together with home improvements on old homes, is the most likely reason why domestic burglary has fallen by almost two-thirds from 15 million offences in 1995 to 6 million in 2014.⁶⁶ Evidence suggests that these measures are not simply displacing crime from one area to another, as was feared. On the contrary, design against crime in places like Manchester’s Moss Side and Wythenshawe reduced crime in manipulated areas and also resulted in a ‘halo effect’ of lower crime in the areas surrounding them.⁶⁷

Better design can bring car crime down too. When tough anti-theft devices such as alarms and immobilisers were introduced by car manufacturers, backed by tough standards overseen by the likes of Thatcham Research since the mid-1990s, car theft went down – dramatically, from 600,000 in 1993 to 70,000 in 2014.⁶⁸

⁶² Ekblom, P, *Bike off 2: catalysing anti theft bike, bike parking and information design for the 21st century*, University of the Arts London, 2008

⁶³ Summarised in Harcourt, BE and Ludwig, J, *Broken windows: new evidence from New York City and a five-city social experiment*. University of Chicago, 2005

⁶⁴ Armitage, R, & Smithson, H, *Alley-gating revisited: the sustainability of resident’s satisfaction?* *Internet Journal of Criminology*, 2007

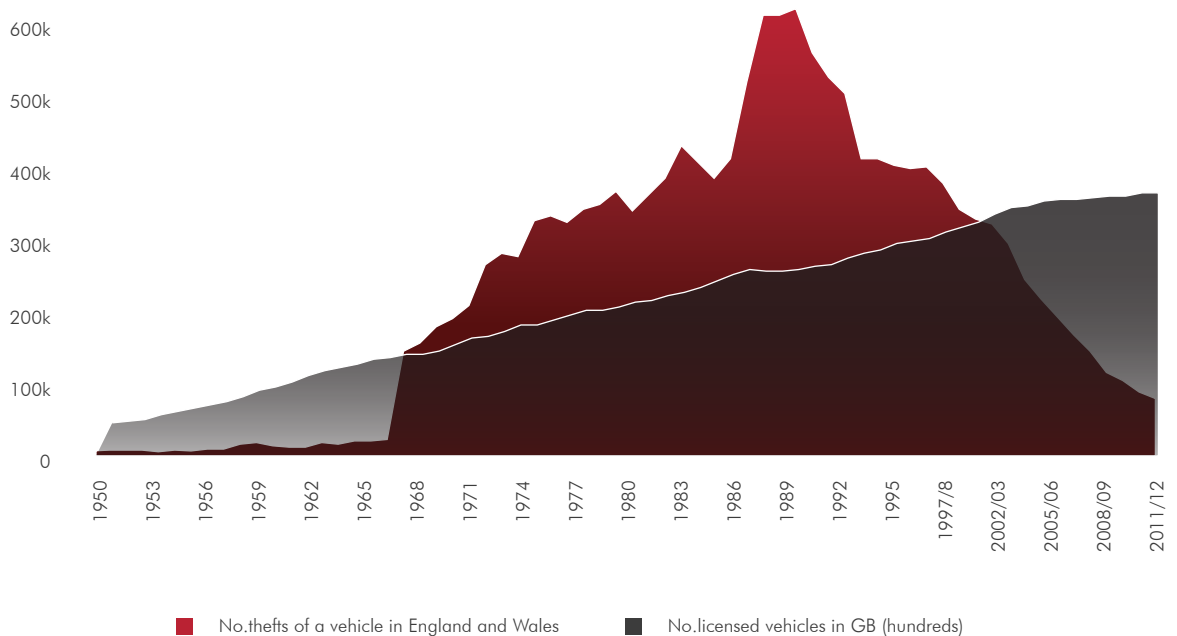
⁶⁵ Johnson, S, & Loxley, C, *Installing alley-gates: practical lessons from burglary prevention projects*, Home Office, 2001

⁶⁶ *Trends in CSEW property crime*, Office for National Statistics, November 2014

⁶⁷ Pidd, H, *How Manchester is designing out crime in Moss Side and Wythenshawe estates*, *Guardian*, June 2014

⁶⁸ Reviewed in Farrell, G et al, *The Crime Drop and the Security Hypothesis*, *Journal of Research in Crime and Delinquency*, 2011

FIGURE 10: THEFTS OF VEHICLES AND THE NUMBER OF REGISTERED CARS. ANALYSIS BY SENSE ABOUT SCIENCE, 2014 FROM OFFICE FOR NATIONAL STATISTICS DATA ⁷⁰



And smartphones... Save Our Smartphones, an international initiative started in New York state, lobbied companies such as Apple and Samsung to introduce 'kill switches' in phone software, giving owners the ability to completely disable their phone if it is stolen. Apple introduced a kill switch first and thefts of iPhones dropped by 17%, while thefts of Samsung phones, which didn't include a kill switch until later, went up by 51% over the

same period.⁷¹ Unsurprisingly, Samsung and other manufacturers have now developed ways of disabling stolen phones.

These are hardly the headline-grabbing initiatives that get pulses racing at Prime Minister's Questions, but they're distinguished from most eye-catching measures in an important way – they reduce crime.

⁶⁹ Transport Statistics Great Britain, ONS, July 2012

⁷⁰ Historical crime data, ONS, July 2013,

⁷¹ Secure Our Smartphone Initiative: One Year Later, New York State Attorney, 2014

06 AND FINALLY ... CHANGING THE DEBATE

Why do politicians and commentators continue to claim that their policies are effective when the evidence shows the opposite? They selectively quote statistics – often still using unreliable figures from police rather than hospital figures, victim surveys and other sources of data on crime. They make gestures and ignore the significance of our environment in making crime less likely.

Of course politicians and commentators reach for popular-sounding measures, headline-grabbing fixes and blame. They are under public pressure. Which is why it is down to us to change the nature of that pressure, and hold authorities to account for the evidence behind crime policies that they advocate or introduce.

We all need to remind politicians that they're wrong to take credit for crime going down when it's been falling across wealthy

countries for years, and to ask questions such as:

- **What is the source of the statistics you're using?**
- **What kind of research supports your policies on crime?**
- **What kind of research contradicts them?**
- **How will your proposals to cut crime be evaluated?**

The answers might reveal that there's still little reliable evidence behind many crime policies, or that strong beliefs are wrong, or that emotions have led us to pointless remedies. But if we want sound, accountable policy and we want to reduce crime and injustice, none of us should be afraid of asking what really works.

07

DELVING DEEPER

THE UCL JILL DANDO INSTITUTE OF SECURITY AND CRIME SCIENCE

is the first Institute in the world devoted to Crime Science. Research is concentrated on new ways to cut crime and increase security.
<https://www.ucl.ac.uk/jdi>

THE BRITISH PSYCHOLOGICAL SOCIETY

is the Learned Society and Professional Body for psychologists in the UK. The Society and its members develop, promote and apply psychology for the public good.
www.bps.org.uk/impact

THE UNIVERSITY OF BEDFORDSHIRE

has a vibrant, multicultural learning community, enabling people to transform their lives by participating in excellent, innovative education, scholarship and research.
<http://www.beds.ac.uk>

CRIME (2013)

is a book by Nick Ross, on how to solve crime and why so much of what we're told is wrong.
www.thecrimebook.com

DESIGN AGAINST CRIME

is a research centre hosted at the University of the Arts London, bringing together over a dozen partner organisations to research design-led solutions to crimes such as thefts of bicycles and handbags.
<http://www.designagainstcrime.com/>

THE CARDIFF MODEL FOR REDUCING VIOLENT CRIME

sets out how sharing data between hospitals and police forces helped reduce crime
<http://bit.ly/CardiffModel>

CRIME, POLICY AND THE MEDIA: THE SHAPING OF CRIMINAL JUSTICE, 1989-2010 (2011)

is Jon Silverman's study looking at the relationship between a rapidly changing media and how criminal justice policy is made.

SENSE ABOUT SCIENCE is a UK charity that helps people make sense of evidence in public debate. We are a source of information, we counter misinformation and we champion research and high quality evidence. We work with over 6,000 researchers and hundreds of organisations across science and civil society in the UK and internationally to respond to public questions.

OTHER PUBLICATIONS BY SENSE ABOUT SCIENCE

All are available as free downloads from www.senseaboutscience.org



EVIDENCE-BASED MEDICINE MATTERS:
Case studies of 15 of the game changers in evidence based medicine.



MAKING SENSE OF STATISTICS:
Sense About Science and Straight Statistics.



MAKING SENSE OF UNCERTAINTY:
why uncertainty is part of science.



MAKING SENSE OF SCREENING:
a guide to weighing up the benefits and harms of health screening programmes.



MAKING SENSE OF DRUG SAFETY SCIENCE
investigating the science of side effects.



I DON'T KNOW WHAT TO BELIEVE:
a short guide to peer review.



IF YOU ARE...

...a commentator, medical charity, journalist, employer, educator, national body, information service, local authority, parliamentarian, health care provider, professional association, community group, NGO, lifestyle writer

...or any other civic group in need of help or comment on a difficult or controversial area of science call Sense About Science on **020 7490 9590**.


For more copies or further information, contact Sense About Science on **enquiries@senseaboutscience.org** or **020 7490 9590**.

PUBLISHED IN 2015 BY



Sense About Science
Registered Charity No. 1146170
Company No. 6771027
14a Clerkenwell Green
London EC1R 0DP
Registered in England and Wales.
www.senseaboutscience.org

This document is prepared by Sense About Science, which has final responsibility for the content.

It is licensed under Creative commons Attribution-Noncommercial-No Derivative Works 2.0 UK: England & Wales Licence. 

Produced with support from UCL Jill Dando Institute of Security and Crime Science, the British Psychological Society and the University of Bedfordshire

UCL Jill Dando Institute of
Security and Crime Science 

 University of
Bedfordshire

 The British
Psychological Society