

Penal Populism and the Public Thermostat: Crime, Public Punitiveness, and Public Policy

WILL JENNINGS,* STEPHEN FARRALL,** EMILY GRAY,** and COLIN HAY***

This article makes the case that feedback processes in democratic politics—between crime rates, public opinion, and public policy—can account for the growth of penal populism in Britain. It argues that the public recognize and respond to rising (and falling) levels of crime, and that in turn public support for being tough on crime is translated into patterns of imprisonment. This contributes to debates over the crime–opinion–policy connection, unpacking the dynamic processes by which these relationships unfold at the aggregate level. This uses the most extensive data set ever assembled on aggregate opinion on crime in Britain to construct a new over-time measure of punitive attitudes. The analysis first tests the thermostatic responsiveness of punitive attitudes to changes in recorded crime rates as well as self-reported victimization, and then examines the degree to which changes in mass opinion impact on criminal justice policy.

Getting Tough on Crime: Policy Feedback, Penal Populism, and Punitive Sentiment

Between 1980 and 2010, the prison population of England and Wales doubled, from around 40,000 to more than 80,000 people. A rising tide of “penal populism” was first identified during the 1990s (see Bottoms 1995; Garland 2001), encapsulated in harsher sentencing, the increased use of imprisonment, more restrictive community orders, and other innovative and experimental forms of crime control (e.g., antisocial behavior orders). In the aftermath of widespread urban riots across Britain in 2011, the punitive response of the criminal justice system was showcased in the higher rate of custodial sentences for rioters compared to similar offenses in the previous year (House of Commons Library 2011), increasing the prison population to record levels. This marked the latest apex of the “punitive turn” in criminal justice policy in Britain, mirroring similar growth of punitiveness and the carceral state in the United States (e.g., see Enns 2014, 2016; Gottschalk 2006).¹ In Britain, the grip of this penal punitiveness on mass opinion and electoral politics is now perceived to be such that it is “a stance that no serious politician can safely disavow” (Sparks 2003, 170). Throughout the 1980s and 1990s, politicians from both main political parties had increasingly presented themselves as “tough on crime” (Newburn 2007). In this regard, penal populism is seen as an inevitable product of the intersection of democratic politics and crime, as political elites seek to satisfy the demand (or perceived demand) of citizens for punitive policy.

Despite the widespread consensus over the rise of penal populism, as Enns (2014, 858) notes, there is debate over the nature and role of mass opinion in these dynamics. Some suggest that the public have a residual preference for punishment that is

*Department of Politics & International Relations, University of Southampton

**Centre for Criminological Research, University of Sheffield

***Sciences Po, Paris

The copyright line for this article was changed on 17 August 2018 after original online publication.

Governance: An International Journal of Policy, Administration, and Institutions, Vol. 30, No. 3, July 2017 (pp. 463–481).

© 2016 The Authors. *Governance* Published by Wiley Periodicals, Inc.

This is an open access article under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

doi:10.1111/gove.12214

weakly related to actual rates of crime (e.g., Beckett 1997; Gottschalk 2008; Zimring and Johnson 2006). Others, however, more strongly argue that crime rates shape both public attitudes and political responses to crime (Miller 2013, 2016; Weaver 2007). In the case of Britain, this debate is reflected in the disconnect between rising fear of crime (and broader concern about social disorder) and actual falls in crime rates. What evidence is there, then, that the public has become increasingly punitive? And to what extent have changes in mass opinion impacted on the expansion of the criminal justice state and, specifically, the use of imprisonment as a means of punishment?

This article sets out theoretical expectations of how feedback between crime rates, public opinion, and public policy might account for this rising tide of penal populism in Britain. Specifically, it argues that the public recognize and respond to rising (and falling) levels of crime, and that in turn public support for being tough on crime is translated into patterns of imprisonment. If there has been a punitive shift in mass opinion, this should have reflected rising trends in crime rates and, in turn, have been reversed in response to the crime drop observed since the 1990s. This study uses the most extensive data set ever assembled on aggregate opinion on crime and law and order in Britain (consisting of more than 2,000 survey items collated from 1938 to 2013) to construct a new over-time measure of punitive attitudes, contrasting the trend in favor of tougher sentencing with more liberal attitudes on the death penalty. It tests the thermostatic response of punitive attitudes to changes in crime rates, measured using official statistics at annual intervals over the long term (1970–2013) and self-reported victimization data at monthly intervals in the shorter term (2001–2013). It then considers the degree to which changes in mass opinion have impacted on criminal justice policy, specifically in relation to the incarceration rate.

As such, the article tests the “democracy-at-work” thesis, as criticized by Beckett (1997) but upheld by Enns (2014, 2016), Miller (2013, 2016), and to some extent Baumgartner, De Boef, and Boydston (2008). What sets this apart from past studies is its use of both recorded crime statistics and self-reported victimization data, which enable insights into both long- and short-term dynamics of the crime–opinion–policy link at the macro-level. Our findings suggest that the public’s punitiveness is a direct function of the crime rate. Further, we show that changes in the incarceration rate are associated with changes in punitive opinion, offering evidence of the opinion–policy link for criminal justice, as has been shown in the United States (Enns 2014, 2016). More broadly, this study is of consequence for understanding growth of the carceral state in other advanced democracies during this period.

But before introducing our data and the time series analysis, we first reflect on how theories of feedback in and between public policy and public opinion inform our expectations about the rising tide of penal populism and its impact on the criminal justice state.

Punitive Attitudes and the Public Thermostat

Implicit in the concept of penal populism is that the public has a preference for generally punitive policies in the field of criminal justice. Some theorize mass opinion as having an underlying retributive streak that is weakly related to actual rates of crime (e.g. Beckett 1997; Gottschalk 2008; Zimring and Johnson 2006). The public’s appetite for punishment is thus viewed as stable and enduring, and not easily sated by policymakers. The implication of this view of public opinion is that it is almost unavoidable that politicians will end up pandering to publics expressing support for ever harsher punishment. But this perspective would not imply a very dynamic inter-relationship between crime, punitive attitudes, and public policy: Public punitiveness

will be relatively impervious to changes in actual rates of victimization (or the risk of victimization) and policymakers will be under constant pressure to pursue harsh measures—leading to a ratchet pattern of policy responses, or punctuations (such as in Baumgartner and Jones 1993).

An alternative perspective suggests that public attitudes on punishment are responsive to actual rates of crime and victimization (e.g., Miller 2013, 2016; Weaver 2007). Indeed, in a recent study Enns (2016) shows how media coverage and crime rates tend to lead support of the U.S. public for being tough on crime. This public responsiveness might be due to rising crime rates directly exposing people to physical and psychological harms or financial losses, or because citizens derive their preferences indirectly from perceptions of the wider social milieu. In line with this, we draw on Wlezien's (1995) "thermostatic" theory of public opinion to argue that the public's preferences for punitive policies to deal with crime should recognize and adjust in response to changes in policy. Even if most people would agree that crime is not desirable (a "valence issue" where there is broad consensus over policy ends; Stokes 1963) some might want the government to be doing more on the issue, some less. The public will have *relative* preferences for policy on crime. That is, they will prefer government to be doing more or less (e.g., on violent crime, vandalism, or antisocial behavior) relative to the status quo. According to Wlezien, relative preferences can be theorized as the difference between some underlying ideal point of the public's preference for policy and actual policy. This can be expressed:

$$R = p^* - p, \quad (1)$$

where R is relative preferences, p^* is some ideal level of policy, and p is the current level of policy. Relative preferences therefore may change either as a result of change in the underlying ideal point or when policy differs. A substantial line of research demonstrates that this is the case across a wide range of policy domains (e.g., Soroka and Wlezien 2010; Wlezien 1995). It is important to note that changes in policy conditions are not the same as changes in policy, and this may have implications for both public responsiveness and representation in policy (see Jennings and Wlezien 2015).

In the case of crime we might expect that the relative punitiveness of the public, that is, the degree to which people think government should be more or less tough on offenders, will be a function of the level of crime in society at large. Specifically, the prevalence of crime (and its impact on citizens) should influence the unobserved ideal preference, against which relative preferences for policy (R) are formed. If the crime level is low, the ideal point of public demand for punitive policies (p^*) will be lower than when the crime level is high, with the actual level of policy (p) remaining unchanged. This relationship should be relatively stable. If this is the case, we would also expect rises (or falls) in the crime rate to lead to thermostatic changes in preferences for more (or less) punitive criminal justice policy. So while Wlezien (1995) tests thermostatic preferences against changes in p (as measured with changes in public expenditure), here our assumption is that relative preferences for being tough on crime will respond to p^* , as captured by the crime rate. (Of course, there may be other broader social values influencing the distribution of ideal preferences for penal policy as well, but we would expect at least some correspondence between punitive preferences and the crime rate.)

Of course, the relative preference for punitive policy might respond not to crime rates in the aggregate but rather to specific subsets of crime (Zimring and Hawkins 1997). Miller (2013, 2016) argues that public concern is most likely to be influenced by *violent* crime, specifically, homicide. In societies with low murder rates—and lower

rates of violence more generally—public opinion on punishment might, however, instead be focused on headline crime rates as indicating the level of lawlessness, disorder, and lack of safety. Further, in countries with lower incidence of murder, any meaningful “signal” about the personal risk of victimization will be more difficult to distinguish from random fluctuations on a year-on-year basis. Different social groups might be more or less exposed to victimization, but the evolution of preferences among “parallel publics” (Page and Shapiro 1992) implies that opinion tends to move together over time—despite differences in the absolute level of preferences. This would suggest that macro-level dynamics capture the underlying processes of the crime–opinion link.

Another possibility is that the public’s preference for punitive measures is also influenced by the *fear of crime*, which is not necessarily related to actual rates of victimization (e.g., Farrall, Jackson, and Gray 2009; Hough and Mayhew 1983). This would imply that thermostatic responsiveness of public opinion might be weaker on criminal justice than in other policy domains. Lastly, it may be that popular support for punishment is more ambiguous than often characterized, and that considering public preferences on a single dimension of more or less punitiveness overlooks important aspects of this link.² There are reasons to at least be cautious, then, regarding whether public demand for being tough on crime is responsive to changes in social conditions. We argue, however, the public’s punitiveness in Britain would tend to be responsive to the national crime rate. This is empirically testable, of course.

Punitive Mass Opinion and Dynamic Representation

If public opinion is responsive to changes in the rate of crime, there is reason to expect that this will impact on public policy. Political actors have strategic incentives to reflect changes in punitive attitudes of citizens in their policy decisions. Studies of dynamic representation posit a feedback processes between public preferences and policy (e.g., Erikson, MacKuen, and Stimson 2002; Soroka and Wlezien 2010; Stimson, MacKuen, and Erikson 1995; Wlezien 1995). If the public adjust their preference for more or less policy in a particular domain, and government responds, this is dynamic representation (Stimson, MacKuen, and Erikson 1995, 543). This is consistent with the ideas behind penal populism and accounts of the role of democratic politics in criminal justice (e.g., Enns 2014; Miller 2013). Office-seeking officials will tend to adjust their policy stance and performance on crime in view of retaining or gaining support at elections in the future. Given these theoretical expectations, what might be expected of criminal justice policy given the (claimed) punitive shift in public opinion?

Clearly the patterns of responsiveness are going to vary according to the political and legal system (see Enns 2014 for discussion of the United States and Miller 2016 for a more comparative view). Past quantitative studies have revealed the influence of public opinion over aspects of criminal justice in the United States (e.g., Baumgartner, De Boef, and Boydston 2008). Peter Enns (2016) specifically shows how public punitiveness influences change in the incarceration rate in America—with quite profound effects for the size of its prison population. While many of the street-level bureaucrats in the British criminal justice system are largely impervious to direct public or political pressure, there are reasons to believe that aspects of crime control policies may be responsive to shifts in opinion (Miller 2016). Not least, the example of the punitive response to the August 2011 riots reveals a willingness of the system to act in such a way as to “send a message.” In Britain, government has direct legislative influence over the content of criminal law, governing offenses and sentencing. It also has direct control over spending on the police and prison system, as well as their management,

and over the introduction of specific crime-stopping initiatives. Elected government thus has multiple means of pulling the levers of the penal regime to respond to shifts in the public's demand for policies that are tough on crime. The recent introduction of Police and Crime Commissioners, in late 2012, has provided another institutional channel for the influence of democratic politics (though does not affect the period covered by our study).

As we noted above, preferences for punitive policies and confidence in the criminal justice system tend to vary across social groups, an argument made by Miller (2013, 292). This, in turn, is a source of differentiated pressures on policymakers in terms of the sorts of measures favored among different communities. Studies in the United States have shown how race shapes debates about crime and punishment and patterns of political mobilization (Alexander 2010; Forman 2012; Gotteschalk 2008; Wacquant 2008). In other countries ethnicity may be less strongly related to these processes, or ethnic-racial differences may be reflected more in *levels* of victimization and preferences for more or less punitive policies, rather than in the degree of responsiveness. For example, while ethnicity and criminal justice patterns in Britain may resemble those in the United States (e.g., black people are statistically more likely to be victimized, criminalized, and imprisoned—which is also the case for Indian and Pakistani groups) public concern about crime among different ethnic groups has tended to move in parallel over the past decade or so. Consequently, *level* differences between whites and blacks in Britain in support for more or less punitive policies do not discount the possibility of policy responsiveness to public opinion—where there is a different equilibrium, or gap, between policy and preferences, but the interaction unfolds in the same way.

Institutions, Policy Entrepreneurs, and the Carceral State in Britain

Aggregate-level patterns of responsiveness are also a function of the *political opportunity structures* that arise from the interaction of institutions and political actors. These structured the feedback processes between public opinion and public policy in growth of the criminal justice state in Britain. Prior to the 1970s, crime had generally received little attention as a political issue, either from policymakers or the wider public. The institutional agenda of the Home Office, the central government department responsible for policing and criminal justice, was to seek to reduce the reliance on prison due to its cost and questions over its effectiveness at rehabilitating offenders, compared to probation (Faulkner 2014). The liberal-progressive consensus on criminal justice was broadly supported by all mainstream political parties (Downes and Morgan 1997). This consensus started to break down in the run-up to the 1979 election, as opposition leader Margaret Thatcher started to highlight crime as an issue (Farrall, Jackson, and Gray 2009).

In this context, increasing social anxieties relating to crime (and rising crime rates) were a potential opportunity for vote-seeking politicians. In office, however, the Thatcher governments did not follow through on this tough rhetoric in focusing on crime or the criminal justice system, with other more immediate priorities taking precedence. As a consequence, criminal justice policy did not undergo the sort of radical shift that occurred in other policy domains (Hay and Farrall 2011). Instead, it was the Major government that presided over a critical juncture in the growth of the criminal justice state, from 1990 onward. With crime rates increasing sharply, and a number of prominent “signal crimes” (Innes 2004) such as the murder of toddler James Bulger fueling public concern, policymakers became increasingly attentive to matters relating to crime and criminal justice. The Home Secretary Michael Howard and his Labour

counterpart Tony Blair (who became leader of the Labour Party in 1994) each sought to talk up the punitive credentials of their policies to reflect perceived popular demand. The period from the 1980s through the mid-1990s, thus, is a critical moment in the escalation of punitive policies, where it might be expected that public attitudes became harsher and where policymakers responded in turn with measures that were tough on crime. These are the theoretical expectations, and the political-institutional context. How can they be tested?

Data and Analysis

Constructing a Measure of Punitive Opinion for Britain

The first survey of public attitudes on criminal justice was fielded by the British Institute of Public Opinion (which would later become Gallup U.K.) in January 1938, concerning whether flogging should be abolished as a punishment for offenders (see Gallup 1976). Early on, polls on crime and law and order were relatively rare and tended to focus on whether or not the death penalty should be kept or abolished (the death penalty was eventually abolished in 1965). It is possible to discern some long-term trends in punitive opinion from major election and social surveys like the British Election Study (BES) and the British Social Attitudes Survey (BSAS). Since 1982, the British Crime Survey (now known as the Crime Survey for England and Wales [CSEW]), primarily a survey about self-reported victimization, has also asked the public about their attitudes on aspects of the criminal justice system such as sentencing and confidence in the police, courts, and prisons. However, most survey questions relating to crime/punishment have been infrequent and irregular. Additionally, the initial focus on attitudes toward the death penalty means that data on punitiveness more generally, for less serious crimes, are far thinner. The sparseness of the data makes it hard to discern long-term shifts in public attitudes, which may be further obscured due to sampling error. We, therefore, have a large amount of information about public attitudes on crime and punishment, observed at different points in time, but no single continuous measure of opinion.

Following Enns (2014), we use Stimson's (1991) "dyad ratios algorithm" to extract the latent underlying dimension of public attitudes toward criminal justice. This captures the degree to which public opinion is liberal or punitive in its view on how crime should be dealt with. Stimson's method is attractive because it offers a potential solution to the irregular and infrequent availability of nevertheless informative poll data at different points in time. The principle behind the algorithm is intuitive; the ratio of aggregate-level survey responses to the same question at different points in time provides meaningful information about the relative state of public opinion—telling us whether, on average, public attitudes have become more or less punitive (see Stimson 1991, Appendix 1, and Bartle, Avellaneda, and Stimson 2011 for an extended technical discussion of the method).³ This extracts the underlying tendency of all survey items relating to crime and punishment, analogous to a principal components approach.

We use data from the BES (via Bartle, Avellaneda, and Stimson 2011), British Crime Survey and BSAS (see Jennings et al. 2015), and sources of poll data from Gallup (see Gallup 1976) and Ipsos-MORI. This identified all opinion questions relating to the sentencing and punishment of criminals, capital punishment, confidence in the police or criminal justice system, and how to deal with "antisocial behavior" (a term that became a buzzword during the 1990s for juvenile misdemeanors and other low-level crime). Survey items are scored as the percentage of respondents expressing a punitive

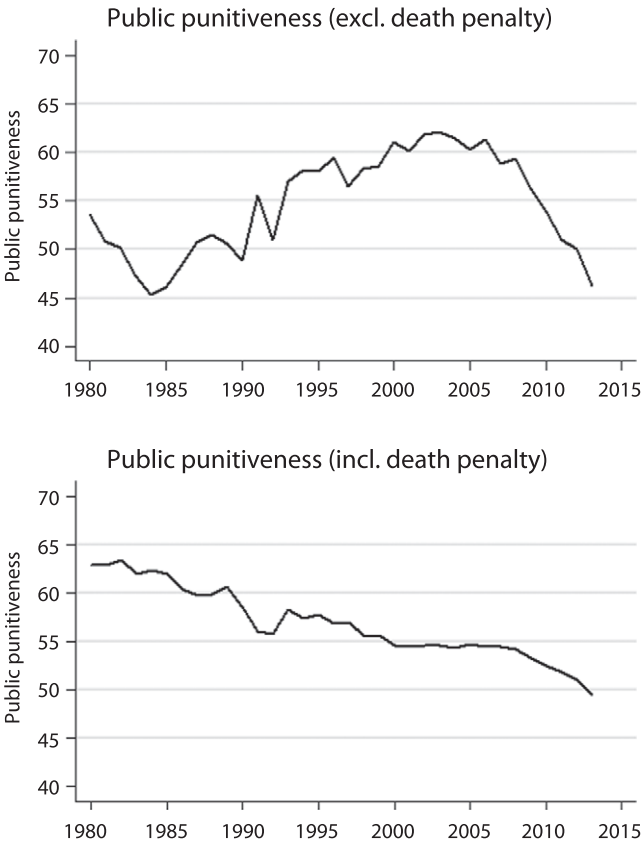
TABLE 1
Factor Loadings of Selected Question Series and the Measure of Punitive Opinion

	Punitive Opinion (Incl. Death Penalty)		Punitive Opinion (Excl. Death Penalty)	
	N	Correlation	N	Correlation
Survey item				
CSEW: Are sentences too tough, about right or too lenient?	16	0.868	16	0.867
CSEW: Are young offenders dealt with too leniently?	15	0.928	15	0.915
CSEW: Would you say the police in this area do a good job or a poor job?	11	-0.963	11	0.854
CSEW: How good a job do you think judges are doing?	11	-0.269	11	0.713
CSEW: How good a job do you think magistrates are doing?	11	-0.769	11	0.941
CSEW: How good a job do you think the prison service is doing?	11	-0.805	11	0.311
BSAS: The law should always be obeyed, even if a particular law is wrong.	22	0.444	22	-0.724
BSAS: For some crimes, the death penalty is the most appropriate sentence.	24	0.914	24	-
BSAS: People who break the law should be given stiffer sentences.	24	-0.360	24	0.358
BSAS: In favour of the death penalty for murder in the course of a terrorist act	8	0.847	-	-
BSAS: In favour of the death penalty for murder of a policeman	8	0.873	-	-
First dimension				
Proportion of variance explained		58.1		63.8
N of time series		72		46
N of survey items		2,007		1,850

attitude or preference, for example, 75% agreeing or agreeing strongly with the statement "People who break the law should be given stiffer sentences" (BSAS: 1986–2012) or 65% indicating that nonviolent prison sentences should be shorter is a "bad idea" (CSEW: 1983, 1987). Again following Enns (2014), we include questions that relate to trust and confidence in the criminal justice system (e.g., courts, police, magistrates).⁴ The argument here is that lower levels of confidence in policing and criminal justice will be associated with support for more punitive action on crime. In total our data set consists of 2,007 survey items observed over the period from 1938 to 2013. Because the vast preponderance of survey items fall within the period between 1980 and 2013, our analysis focuses upon this period.

For reasons that will become clear in a moment, we estimate a measure of punitive opinion including and excluding survey questions relating to the death penalty. In Table 1, we report factor loadings of selected survey items, as well as the proportion of variance explained by the underlying factor. Here, we see a substantial proportion of variance loads onto a single underlying dimension, indicating the central tendency in the public's punitive attitudes. This accounts for 58.1% of all variance in survey questions on crime and criminal justice, and 63.8% when survey items relating to the death penalty are omitted. It is also evident in Table 1 that the correlation (i.e., factor loading) of a number of items is reversed when attitudes on capital punishment are

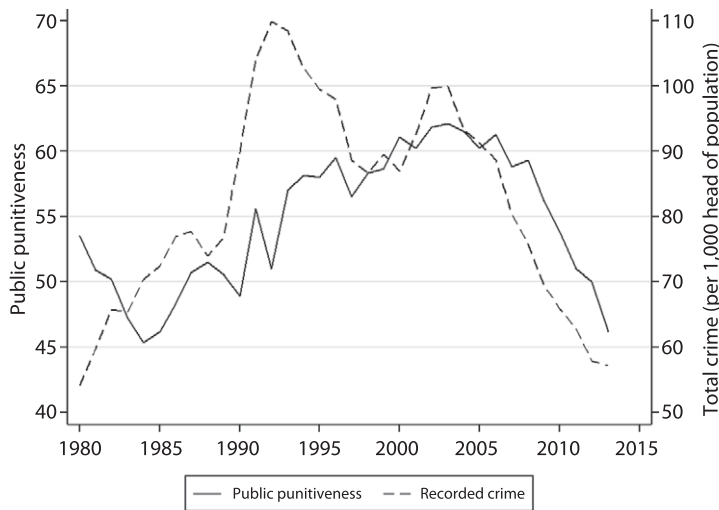
FIGURE 1
Public Opinion on Crime and Punishment, 1980–2013



excluded. This suggests that punitive opinion on the death penalty differs in a systematic and meaningful way from attitudes on other aspects of punishment and confidence in the criminal justice system.

This indeed is what we observe in Figure 1, where we plot the respective measures. Retaining survey questions relating to the death penalty sees an increasingly liberal trend in public opinion on criminal justice, with punitiveness declining steadily from the 1980s. This trend can be discerned from the underlying survey data that reveal falling support for the death penalty. In the BSAS, this falls from 74% support in 1986 to 55% in 2012. In contrast, over the same period support for stiffer sentences *rises* from 73% to 79%. This is reflected in the alternative measure of punitive attitudes, excluding public opinion on the death penalty. This reveals a more cyclical trend in public attitudes, with a fall in punitiveness from the early- to mid-1980s, and then rising punitive sentiment that peaks around 2005. While this is consistent with claims about the increasing punitive tide of public opinion, the sudden reversal of this trend from around 2007/8 onward suggests that the irreversibility of penal populism may have been overstated. The trends revealed in our measure suggest that public opinion on crime exhibits important and meaningful over-time variation. Punitive attitudes are not immutable, and indeed there may be parallel liberal and punitive tides of opinion in relation to different aspects of criminal justice policy.

FIGURE 2

Punitive Opinion (Excluding The Death Penalty) and Recorded Crime in England and Wales, 1980–2013**Explaining the Rise (and Fall) of Punitive Opinion in Britain**

The next step is to test the “thermostatic” response of punitive attitudes to changes in crime rates. In Britain, the recorded crime rate increased substantially between 1980 and the early 1990s—peaking at around 110 crimes per 1,000 head of population in 1992—and remained at historically high levels until around the early 2000s, before it started to fall.⁵ As is shown in Figure 2, the upward trend in support for being tough on crime moved largely in parallel with the recorded crime rate. Indeed, the correlation of the series over this period is equal to a substantial 0.61 ($N = 34$, $p = 0.000$). Notably, the onset of the “crime drop,” from around 2001/2, appears to have directly preceded a decline in public support for more punitive action on crime. Recall, we are interested in the degree to which punitive opinion reacts to changes in the actual crime rate, as well as perceptions of crime.

We, therefore, test the lagged effect of the crime rate using a time series regression model in first differences, where change in punitive opinion at t is estimated as a function of change in the crime rate in the previous year, $t-1$. We also test for the effect of change in fear of crime on public opinion (using the CSEW survey item about whether people “feel safe walking around in the dark at night” interpolated for missing years, measured on a four-point scale from “very safe,” “safe,” “unsafe,” to “very unsafe,” so higher values indicate feelings of less personal security). An augmented Dickey–Fuller test of the punitive opinion measure does not reject the null of the presence of unit root, and we thus model the variables in first differences.⁶ The variables are standardized (i.e., the difference from the mean is divided by the standard deviation) so that relative effects can be compared.

$$\Delta \text{PUNITIVE}_t = \alpha_0 + \beta_1 \Delta \text{CRIME}_{t-1} + \beta_2 \Delta \text{FEAR}_{t-1} + \mu_t.$$

The model is fitted with the Prais–Winsten method to control for serial autocorrelation of the residuals (μ_t), estimated as the first-order autoregressive process: $\mu_t = \mu_{t-1} + \varepsilon_t$.

TABLE 2
Recorded Crime, Fear of Crime, and Punitive Opinion, 1981–2012

	$\Delta \text{PUNITIVE}_t$ (1)	$\Delta \text{PUNITIVE}_t$ (2)
$\Delta \text{CRIME}_{t-1}$	0.447 (0.171)*	0.296 (0.167)†
ΔFEAR_{t-1}		0.401 (0.181)*
Intercept	-0.011 (0.057)	0.027 (0.052)
N	31	31
R-squared	0.19	0.34
Adjusted R-squared	0.16	0.29
RMSE	0.43	0.41
Durbin–Watson statistic	1.716	1.714
Rho	-0.386	-0.507
Start	1981	1981
End	2012	2012

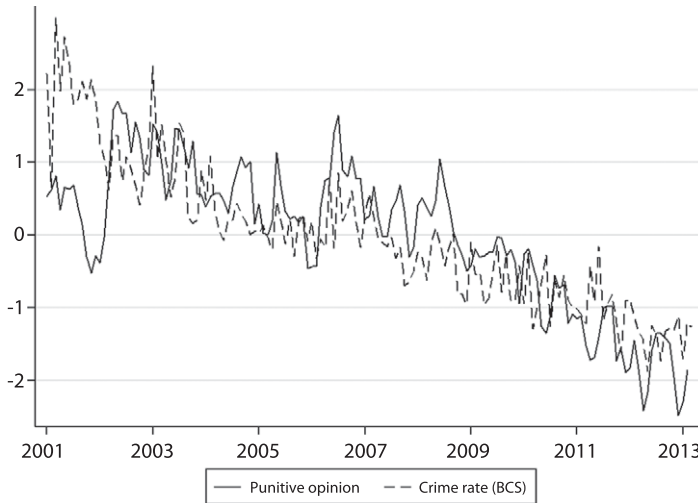
† $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

The results of the regression models are reported in Table 2. Here we see that the recorded crime rate has a positive and significant effect on support for punitive action on crime; a one standard deviation in the rate of crime leads to a 0.4 standard deviation in punitive opinion. This indicates a substantial substantive effect.⁷ When fear of crime is also controlled for, this effect becomes weakly significant (at the 90% confidence level), and the size of effect is slightly reduced (to 0.3). This nevertheless suggests that the public’s preference for punitive action on crime is thermostatic: As crime rises, demand for getting tough on crime also increases; as crime falls so too does support for punitive measures.

To further test our theoretical expectations about the reaction of punitive opinion to changes in the crime rate we focus in on a time period where we have more fine-grained data on crime rates and public attitudes (noting our $N = 31$ in the above analysis). In Figure 3, we plot the correspondence of our index of punitive opinion, estimated instead for monthly intervals between January 2001 and February 2013 (consisting of a total of 1,741 survey items) against the crime rate, measured with self-reported victimization in the CSEW.⁸ The results here are striking: Support for punitive measures on crime and lack of confidence in the criminal justice system track closely the crime rate over this 12-year period. Note that even if we plot the same relationship between the crime rate and the CSEW survey question regarding whether “sentences are too tough, about right or too lenient,” there is a similar degree of correspondence (if slightly weaker). This offers some reassurance that the relationship observed above in Figure 2, and modeled in Table 2, are not artifacts of spurious relationships in the aggregate data due to a (relatively) small N . The downward trend in support for being tough on crime in Figure 3 is notable in light of claims of a punitive turn in popular opinion.

We again model the relationship between change in the crime rate and change in punitive opinion. This time, using a single-equation error-correction framework, we estimate the contemporaneous effect of change in the crime rate (ΔCRIME_t), as well that lagged effect of change in the crime rate (CRIME_{t-1}), controlling for lagged values of punitive opinion (PUNITIVE_{t-1}). The latter captures the rate of re-equilibration in response to a shock (i.e., the error-correction mechanism).⁹ The variables are again standardized so that relative effects can be compared.

FIGURE 3

Punitive Opinion and Self-Reported Crime in England and Wales, 2001–2013

$$\Delta \text{PUNITIVE}_t = \alpha_0 + \beta_1 \text{PUNITIVE}_{t-1} + \beta_2 \Delta \text{CRIME}_t + \beta_3 \text{CRIME}_{t-1} + \varepsilon_t.$$

The results, reported in Table 3, again provide support for the theoretical expectation that punitive opinion will be responsive to the crime rate. A one standard deviation change in the self-reported rate of victimization leads to a 0.1 standard deviation increase in punitive attitudes on crime. Similarly, a one standard deviation increase in the lagged value of the self-reported crime rate leads to a 0.1 standard deviation increase in opinion. Additionally, the error-correction parameter (-0.121 , $p < 0.01$) indicates that 90% of a one-unit shock to punitive opinion remains after one month, 81% after the second month (0.9×0.9), 0.73% after the third month ($0.9 \times 0.9 \times 0.9$), and so on. It is clear, then, that public support for being tough on crime is responsive over time to the rate of crime—at least for the period in question.

Does Public Opinion Influence Criminal Justice Policy?

If public opinion becomes more or less punitive in direct response to changes in crime rates, it might be expected that vote-maximizing politicians would, in turn, look to adjust criminal justice policies to offer reassurance to citizens wanting them to get tough on crime. There are many ways that elected representatives might look to respond to public support for tougher policies on crime, and these are contingent on the particular configuration of the political system and arrangement of policing and criminal justice. They might increase spending (if in a position to), hold hearings into the issue or announce crime control initiatives, engage in rhetoric about “getting tough on crime,” or make changes to the law relating to evidence or sentencing. As in the case in the United States (Enns 2014, 862), incarceration rates provide a good measure of the punitiveness of criminal justice policy since policymakers have substantial power over the creation of offenses, sentencing, and general rules around prisoners on parole and license. They also to a much lesser extent indicate the effectiveness of the criminal justice system as a whole in detecting and prosecuting offenders. While

TABLE 3
Self-Reported Crime and Punitive Opinion

	Δ PUNITIVE _t
PUNITIVE _{t-1}	-0.121 (0.041)**
Δ CRIME _t	0.136 (0.060)*
CRIME _{t-1}	0.100 (0.043)*
Intercept	-0.013 (0.029)
N	145
R-squared	0.074
Adjusted R-squared	0.054
RMSE	0.348
Durbin-Watson statistic	1.753
Start	2001 M1
End	2013 M3

$\dagger p < 0.01$; $*p < 0.05$; $**p < 0.01$; $***p < 0.001$.

political means of influence over incarceration policy in Britain are quite direct, the absence of political appointees in police,¹⁰ prosecutors, or judiciary might be expected to insulate it somewhat from pressures of public opinion, as observed in the United States (Green 2015; Miller 2004).

For initial analysis of dynamic representation, we use change in the incarceration rate (per 1,000 head of population) as our dependent variable. Change in the number of new admittances to the prison population is preferable to measuring the current prison population level, which is a stock measure reflecting the accumulation of all decisions taken up to that time point. As Enns (2014, 862–863) puts it: “... if ... the incarceration rate reflects shifts in the public’s support for being tough on crime ... an increase (decrease) in the public’s punitiveness should correspond with more (fewer) new admittances.” We plot our measure of public punitiveness against change in the incarceration rate in Figure 4.

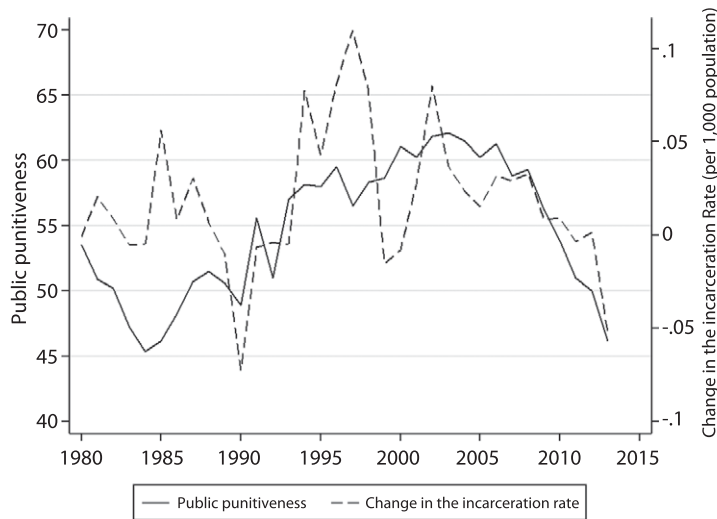
While the incarceration rate dances around a little more than the measure of punitive public opinion (understandably as the dyad ratios algorithm smooths the series to control for sampling error), this reveals a fair degree of covariation between the series. Indeed, the correlation between the series is equal to 0.47 ($p < 0.01$).

To model the relationship between public punitiveness and the incarceration rate we use an error-correction model (ECM). Drawing on the approach used by Enns (2014), this enables us to test the short-run and long-run effects of our predictors of interest. Specifically, we model change in the incarceration rate as a function of change in and lagged values of public punitiveness and the crime rate, with lagged values of the incarceration rate included to control for the rate of error correction (INCARCERATION_{t-1}). The model takes the form:

$$\Delta\text{INCARCERATION}_t = \alpha_0 + \beta_1 \text{INCARCERATION}_{t-1} + \beta_2 \Delta\text{PUNITIVE}_t + \beta_3 \text{PUNITIVE}_{t-1} + \beta_4 \Delta\text{CRIME}_t + \beta_5 \text{CRIME}_{t-1} + \mu_t.$$

The model is again fitted with the Prais–Winsten method to control for serial autocorrelation of the residuals (μ_t), estimated as the first-order autoregressive process:

FIGURE 4
Punitive Opinion and Change in the Incarceration Rate in England and Wales, 1980–2013



$\mu_t = \mu_{t-1} + \varepsilon_t$. The variables are standardized so that relative effect sizes can be compared. The results of a base model of change in the incarceration rate, presented in the first column of Table 4, suggest that public punitiveness is associated with increases in punishment. This finding is largely confirmed by the ECMs presented in the second and third columns, which reveal positive and weakly significant ($p < 0.1$) short-run effects of punitive attitudes and positive and strongly significant ($p < 0.05$) long-run effects. Interestingly, and in contrast to findings for the United States (Enns 2014, 866) the short-run effect of the crime rate on change in incarceration is negative and significant. That is, an increase in the crime rate in a given period is associated with a fall in the prison population (per head of general population). This is surprising, as it would not be expected that rising crime would be associated with falling rates of incarceration—and merits further investigation.

As previously for our test of the thermostatic public, it is possible to focus our analysis on a period where we have more fine-grained data on public attitudes and incarceration rates. This uses data on the total prison population from the monthly bulletins of the Ministry of Justice (and previously the Home Office) as well as data on crime rates from the CSEW.¹¹ In Figure 5, we plot the detrended measures as the prison population and punitive opinion series exhibit underlying persistence that may otherwise conceal the relationship of interest. The figure reveals a degree of commonality between the series, although public opinion is far more volatile, with the correlation equal to 0.61 ($p < 0.001$).

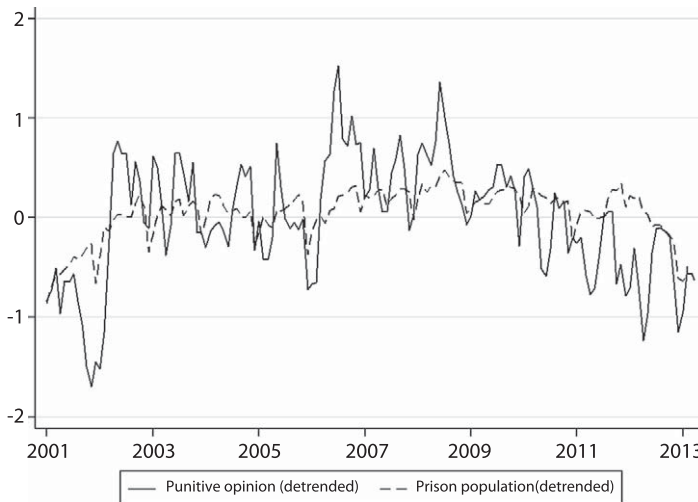
For our final test of responsiveness of the incarceration rate to the public's preferences for punitive policy, we estimate another ECM including the short- and long-run effects of punitive attitudes, also including a control for time to capture the underlying trend in the prison population over the period between 2001 and 2013. We also estimate a model, reported in the second column of Table 5, using a specific survey question that is asked monthly in the CSEW: "Are sentences too tough, about right or

TABLE 4
Punitive Opinion and Changes in the Incarceration Rate, 1980–2013

	$\Delta \text{INCARCERATION}_t$ (1)	$\Delta \text{INCARCERATION}_t$ (2)	$\Delta \text{INCARCERATION}_t$ (3)	$\Delta \text{INCARCERATION}_t$ (4)
PUNITIVE _t	0.015 (0.006)*			
INCARCERATION _{t-1}		-0.066 (0.037)†	-0.095 (0.037)*	-0.072 (0.076)
ΔPUNITIVE _t		0.072 (0.040)†	0.094 (0.048)†	0.083 (0.055)
PUNITIVE _{t-1}		0.107 (0.037)**	0.113 (0.047)*	0.101 (0.058)†
ΔCRIME _t			-0.184 (0.075)*	-0.178 (0.083)*
CRIME _{t-1}			-0.037 (0.043)	-0.013 (0.068)
ΔINEQUALITY _t				-0.111 (0.149)
INEQUALITY _{t-1}				-0.032 (0.074)
Intercept	-0.733 (0.321)*	0.068 (0.034)†	0.070 (0.026)*	0.080 (0.032)*
N	33	33	33	31
R-squared	0.17	0.25	0.41	0.36
Adjusted R-squared	0.14	0.18	0.30	0.17
RMSE	0.12	0.12	0.11	0.12
Durbin–Watson statistic	1.816	1.830	1.800	1.807
Rho	0.414	0.406	0.253	0.231
Start	1981	1981	1981	1981
End	2013	2013	2013	2013

† $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

FIGURE 5

Punitive Opinion and the Prison Population in England and Wales (Detrended Series), 2001–2013

too lenient?” This provides further confirmation that our index of punitive opinion has indicator validity as a measure of public preferences. In terms of the results presented in Table 5, we see that punitive opinion has positive and significant short- and long-run effects on the incarceration rate. Further, the error-correction parameter (-0.316 , $p < 0.001$) indicates that shocks to the prison population are quickly absorbed. The control for time indicates that there is a significant positive trend in the size of the prison population.

TABLE 5
Punitive Opinion and Change in the Incarceration Rate, 2001–2013

	$\Delta \text{INCARCERATION}_t$ (1)	$\Delta \text{INCARCERATION}_t$ (2)
$\text{INCARCERATION}_{t-1}$	-0.316 (0.057)***	-0.242 (0.049)***
$\Delta \text{PUNITIVE}_t$	0.109 (0.029)***	0.040 (0.014)**
PUNITIVE_{t-1}	0.105 (0.023)***	0.050 (0.014)***
TIME_t	0.009 (0.002)***	0.005 (0.001)***
Intercept	-5.051 (0.938)***	-3.097 (0.685)***
N	145	146
R -squared	0.253	0.184
Adjusted R -squared	0.232	0.161
RMSE	0.118	0.123
Durbin–Watson statistic	2.000	2.039
Start	2001 M1	2001 M1
End	2013 M3	2013 M3

† $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Together, these results provide considerable support for the theoretical expectation that public opinion exerts an influence over the functioning of the criminal justice system. We observe positive and significant effects of our measure of punitive attitudes on the incarceration rate over both the longer and shorter terms using alternative measures of public preferences for policy.

Conclusion

As crime rose steadily throughout the 1980s and much of the 1990s in Britain, public anxiety and demand for penal policies that were tough on crime grew, leading to increased attentiveness of government to crime and criminal justice. During the same time period, the rate of imprisonment doubled, putting substantial strain on Britain's prison system and, in particular, its overcrowded and antiquated Victorian prisons. As we have shown here, the rising tide of punitive opinion was an important factor in the increased use of incarceration as a policy response. Increased use of prison and harsher sentencing therefore reflected popular support for government being tough on crime. While many accounts of penal populism emphasize the politicization of the issue of crime by parties and politicians (Pratt 2007), evidence we have presented here suggests that the shifting public mood on crime *preceded* increases in the incarceration rate. Public opinion was already moving in a punitive direction well before the prison population reached its peak. This is a significant finding, in revealing that the public recognized the crime problem prior to the policy response under the Major and Blair governments. At the same time, we have shown that the tide of punitive opinion has turned since the mid-2000s, applying a brake to (if not leading to a complete reversal of) the size of the prison population. Importantly, this finding relates to the newly sentenced population (as shown in Figure 4), whereas the size of the total prison population in Britain continues to rise, for a number of reasons, including longer sentence lengths, greater numbers of convictions for sexual offenses, and increasing numbers of prisoner recalls.

Our analysis is based on new data set on public attitudes on crime and punishment in Britain that is unprecedented in its scope, consisting of more than 2,000 observations of aggregate-level survey items. This enabled us to determine whether there has been a punitive shift in opinion, and we provide some support for this claim. We also found, however, that public support for being tough on crime has declined over the past decade, in parallel with falling crime rates. In sum, the findings offer substantial support for the thermostat theory of public opinion, applied to the policy domain of criminal justice in the case of Britain (between 1980 and 2013). Alongside this, the results reveal that public punitiveness does influence the incarceration rate. This is consistent with the findings of Enns (2014, 2016), which reveal that the rise of mass incarceration in the United States was a response to an increasingly punitive public. Importantly, it is change in the incarceration rate that responds to public opinion, highlighting a constraint of responsiveness in this policy domain. Cross-national similarities here point to the prospective value of future comparative investigation. Of course, the trajectory of penal populism may be very different in other settings.

The methodological approach adopted for our analysis leaves a few questions unanswered. One is whether some policy feedback processes might start "downstream" in other domains. For instance it is well established that economic conditions are a contributing factor to crime rates (e.g., Jennings, Farrall, and Bevan 2012), and it therefore might follow that decisions in relation to management of the economy may impact on policy in other domains, for example, crime, leading to public demand for policies that are tougher on crime. The idea of "policy as its own

cause" of course is not new (Wildavsky 1979). Another question relates to whether media, politicians, or organized interests might still lead public attitudes on crime, and the public responsiveness that we observe is driven by omitted variables reflecting elite mobilization of mass opinion (Farrall, Jackson, and Gray 2009, chap 2 argues that might well have been the case for Britain in the 1980s with regard to crime, for example; see also Lee 2001). As Enns (2016) shows, media coverage of rising crime was a factor in the long term punitive shift in U.S. public opinion. While we cannot be sure, the similar findings observed over the longer term (from 1980 to 2013) and the shorter term (from January 2001 to March 2013), where the time series are a function of different data-generating processes (recorded crime rates compared with self-reported victimization rates), should provide confidence that the rise and fall of public punitiveness fits with the theoretical expectations of thermostatic opinion. This also underpins a possible argument that penal populism was simply a strategic response of policymakers to the rising punitive tide of mass opinion, but that as crime rates have fallen (some might argue due to the increasingly tough policies on crime) this 30-year trend has started, albeit it slowly, to reverse, and increasingly liberal public attitudes on crime have contributed to stabilization of the prison population (even if this stabilization is at historically high levels). How long this apparently liberal turn in public opinion lasts may have significant impacts in the long term on the culture of control and potentially the rolling back of the criminal justice state in Britain.

Notes

1. Not all countries have experienced the sort of penal populism encountered in the United States (its most extreme case) or the United Kingdom. For example, Green's (2007) *When Children Kill* shows how media and political responses to high-profile juvenile crimes differed substantially between Norway and the United Kingdom.
2. Beckett (2007) develops this argument using the longstanding survey question about the "most important problem" (MIP) facing the nation, a measure itself that has been subject to some debate (Jennings and Wlezien 2011; Wlezien 2005). While the MIP provides a good indicator of the issues that are atop people's minds at a given moment in time, it is less reliable as a measure of preferences for analysis of representation (Jennings and Wlezien 2015).
3. Each survey item can be expressed as the ratio of attitudes on crime or punishment at two points in time: a "dyad." This ratio provides an estimate of the relative punitive opinion, for a given question, in years $t+i$ and $t+j$.

$$P_{ij} = \frac{X_{t+i}}{X_{t+j}}$$

This enables recursive estimation of the index of punitive opinion for each survey item for each time period based on all data available. Because there are multiple estimates of punitive opinion (i.e. there are multiple survey items) and they are not all equivalent indicators of the latent construct, the dyad ratios algorithm estimates the squared correlation of each series with the underlying dimension and uses this to weight the series (Bartle, Avellaneda, and Stimson 2011, 269). This correlation is interpretable as a factor loading, and is reported for selected survey items.

4. It might be argued *confidence* in the criminal justice system is not a direct measure of expressed preferences for punitive policy. For example, someone might have a strong preference for liberal, rehabilitation-focused policy but still be confident in the court system and the police. We estimated our measure of punitive opinion including and excluding survey items that relate to trust/confidence and find that the correlation between the two series is more than 0.8.
5. There is a high degree of correlation between the overall recorded crime rate (the largest proportion of which is forms of property crime) and the rate of homicide and violent crime: around 0.8 or above ($p = 0.000$).
6. We also tested alternative model specifications consistent with the time serial properties of the data and our theoretical expectations; for example, we estimated a single-equation error-correction model including both first differences and lags of the crime

rate and fear of crime and the lag of punitive opinion, which also revealed a significant and positive lagged effect of the crime rate (though no effect was observed for fear of crime).

7. Note that when we estimate the model with the homicide rate or violent crime rate as the independent variable instead, we observe similar but weaker results (i.e., public punitiveness appears to respond to these measures of victimization, but the proportion of variance explained by the models is lower, suggesting that the headline crime rate is a better predictor of changes in public opinion).
8. This is calculated as the average number of reported incidents per respondent in the CSEW.
9. When contemporaneous and lagged values of fear of crime are also included in the model, their effects are not significant at the 95% confidence level. A fully specified model including the interaction of fear of crime and the (self-reported) crime rate provides further support for positive and significant short- and long-run effects of the crime rate, and a slightly superior model fit (the interaction of the lag of the crime rate and fear of crime is negative and significant, indicating that the effect of the crime rate on punitive opinion is lower when fear of crime is higher). We opt to present a more parsimonious model here, but the general inferences remain the same.
10. Note that our analysis relates to the period prior to introduction of elected Police and Crime Commissioners in England and Wales in November 2012.
11. We use the total prison population (including those on remand) instead of the per capita measure used for the analysis of annual data above because monthly estimates of the U.K. population are not published by the Office for National Statistics. This likely is a contributing factor in the upward trend in the prison population during the period.

References

- Alexander, Michelle. 2010. *The New Jim Crow: Mass Incarceration in the Age of Colourblindness*. New York: The New Press.
- Bartle, John, Sebastian Dellepiane-Avellaneda, and James A. Stimson. 2011. "The Moving Centre: Preferences for Government Activity in Britain, 1950-2005." *British Journal of Political Science* 41 (2): 259-285.
- Baumgartner, Frank R., Suzanna L. De Boef, and Amber E. Boydstun. 2008. *The Decline of the Death Penalty and the Discovery of Innocence*. Cambridge, UK: Cambridge University Press.
- Beckett, Katherine. 1997. *Making Crime Pay: Law and Order in Contemporary American Politics*. Oxford: Oxford University Press.
- Bottoms, Anthony. 1995. "The Politics of Sentencing Reform." In *The Philosophy and Politics of Punishment and Sentencing*, ed. Chris Clarkson and Rod Morgan. Oxford: Oxford University Press.
- Downes, David, and Rod Morgan. 1997. "Dumping the 'Hostages to Fortune'?" In *The Oxford Handbook of Criminology*, ed. Mike Maguire, Rod Morgan, and Robert Reiner. Oxford: Clarendon Press.
- Enns, Peter. 2014. "The Public's Increasing Punitiveness and Its Influence on Mass Incarceration in the United States." *American Journal of Political Science* 55 (4): 857-872.
- . 2016. *Incarceration Nation: How the United States Became the Most Punitive Democracy in the World*. Cambridge, UK: Cambridge University Press.
- Erikson, Robert S., Michael B. MacKuen, and James A. Stimson. 2002. *The Macro Polity*. Cambridge, UK: Cambridge University Press.
- Farrall, Stephen, Jonathan Jackson, and Emily Gray. 2009. *Social Order and the Fear of Crime in Contemporary Times*. Oxford: Oxford University Press.
- Forman, James. 2012. "Racial Critiques of Mass Incarceration: Beyond the New Jim Crow." *New York University Law Review* 87: 101-146.
- Fortner, Michael Javen. 2015. *Black Silent Majority: The Rockefeller Drug Laws and the Politics of Punishment*. Cambridge, MA: Harvard University Press.
- Gallup, George H., ed. 1976. *The Gallup International Public Opinion Polls, Great Britain: 1937-1975*. New York: Random House.
- Garland, David. 2001. *The Culture of Control*. Oxford: Oxford University Press.
- Gottschalk, Marie. 2006. *The Prison and the Gallows: The Politics of Mass Incarceration in America*. Cambridge, UK: Cambridge University Press.

- . 2008. "Hiding in Plain Sight: American Politics and the Carceral State." *Annual Review of Political Science* 11: 235–260.
- Green, David. 2015. "US Penal-Reform Catalysts, Drivers, and Prospects." *Punishment and Society*, 17 (3): 271–298.
- Hay, Colin, and Stephen Farrall. 2011. "Establishing the Ontological Status of Thatcherism by Gauging Its 'Periodisability': Towards a 'Cascade Theory' of Public Policy Radicalism." *British Journal of Politics and International Relations* 13 (4): 439–458.
- Hough, Michael, and Patricia Mayhew. 1983. *The British Crime Survey: First Report, Home Office Research Study No. 76*. London: Home Office.
- House of Commons Library. 2011. *The August 2011 Riots: A Statistical Summary*. London: House of Commons Library.
- Innes, Martin. 2004. "Signal Crimes and Signal Disorders." *British Journal of Sociology* 55 (3): 335–355.
- Jennings, Will, Stephen Farrall, and Shaun Bevan. 2012. "The Economy, Crime and Time: An Analysis of Recorded Property Crime in England & Wales 1961–2006." *International Journal of Law, Crime and Justice* 40 (3): 192–210.
- Jennings, Will, Emily Gray, Colin Hay, and Stephen Farrall. 2015. "Collating Longitudinal Data on Crime, Victimization and Social Attitudes in England and Wales: A New Resource for Exploring Long-Term Trends in Crime." *British Journal of Criminology* 55 (5): 1005–1015.
- Jennings, Will, and Christopher Wlezien. 2011. "Distinguishing between Most Important Problems and Issues?" *Public Opinion Quarterly* 75 (3): 545–555.
- . 2015. "Problems, Preferences and Representation." *Political Science Research and Methods* 3 (3): 659–681.
- Lee, Murray. 2001. "The Genesis of Fear of Crime." *Theoretical Criminology* 5 (4): 467–485.
- Miller, Lisa. 2004. "Re-thinking Bureaucrats in the Policy Process: Criminal Justice Agents and the National Crime Agenda." *Policy Studies Journal* 32 (4): 569–588.
- . 2013. "Power to the People: Violent Victimization, Inequality and Democratic Politics." *Theoretical Criminology* 17 (3): 283–313.
- . 2016. *The Myth of Mob Rule: Violent Crime and Democratic Politics*. Oxford: Oxford University Press.
- Newburn, Tim. 2007. "Tough on Crime: Penal Policy in England and Wales." *Crime and Justice* 36: 425–470.
- Pratt, John. 2007. *Penal Populism*. London: Routledge.
- Soroka, Stuart, and Christopher Wlezien. 2010. *Degrees of Democracy: Politics, Public Opinion, and Policy*. Cambridge, UK: Cambridge University Press.
- Sparks, Richard. 2003. "State of Insecurity: Punishment, Populism and Contemporary Political Culture." In *The Use of Punishment*, ed. Sean McConville. London: Routledge, pp. 149–174.
- Stimson, James A. 1991. *Public Opinion in America: Moods, Cycles, and Swings*. Boulder, CO: Westview.
- Stimson, James A., Michael B. MacKuen, and Robert S. Erikson. 1995. "Dynamic Representation." *American Political Science Review* 89 (3): 543–565.
- Stokes, Donald E. 1963. "Spatial Models of Party Competition." *American Political Science Review* 57 (2): 368–377.
- Wacquant, Loic. 2008. *Urban Outcasts: A Comparative Sociology of Advanced Marginality*. Cambridge, UK: Polity Press.
- Weaver, Vesla M. 2007. "Frontlash: Race and the Development of Punitive Crime Policy." *Studies in American Political Development* 21 (2): 230–265.
- Wildavsky, Aaron. 1979. "Policy as Its Own Cause." In *Speaking Truth to Power*, ed. Aaron Wildavsky. Boston: Little, Brown.
- Wlezien, Christopher. 1995. "The Public as Thermostat: Dynamics of Preferences for Spending." *American Journal of Political Science* 39 (4): 981–1000.
- . 2005. "On the Salience of Political Issues: The Problem with 'Most Important Problem.'" *Electoral Studies* 24 (4): 555–579.
- Zimring, Franklin E., and David T. Johnson. 2006. "Public Opinion and the Governance of Punishment in Democratic Political Systems." *Annals of the American Academy of Political and Social Science* 605: 266–280.