Representative Bureaucracy, Gender, and Policing: The Case of Domestic Violence Arrests in England

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Drawing on theories of representative bureaucracy, we examine whether increased representation of women in police forces in England leads to a higher rate of domestic violence arrests. To do so, we use panel regression techniques to analyze the links between gender representation and variations in the arrest of domestic abuse perpetrators when controlling for a range of other relevant variables, including the relative prosperity of the local population and the size of the police force. Our statistical results suggest that the rate of domestic violence arrests varies in terms of the authority and discretion accorded to women police officers. We find that the presence of a female police chief constable is positively associated with the domestic violence arrest rate, but that increased representation of female police officers makes a difference only when they are accorded greater opportunity to carry out frontline police work.

Introduction

The statistics on violence perpetrated against women in the UK remain stark. For example, in England and Wales, one in four women experience domestic violence over their lifetime; 48 per cent of women have experienced intimate partner violence since the age of 16; 89 per cent have experienced serious sexual assault by someone known to them; and 54 per cent of rapes are committed by a woman’s partner or ex-partner (see Smith et al. 2010; Walby et al. 2010). Yet, the conviction rate for violent offences against women, including domestic violence, remains relatively low in the UK (Coy et al. 2009; Walby et al. 2010). This pattern of violence against women is consistent with the rest of Europe, where one in four women experience domestic violence over their lifetime (Council of Europe 2008).

In this article we explore whether increased representation of women in police forces in England leads to a higher rate of domestic violence arrests through the lens of representative bureaucratic theory. The theory maintains that public organizations will be more responsive to the public if their personnel reflect the demographic characteristics of the public they serve (Krislov and Rosenbloom 1981; Sowa and Selden 2003). Whether by passively ensuring that those employed within public organizations have the same demographic origins (and by extension values) as the population they serve or actively implementing policies that promote the interests of constituent groups, a more representative bureaucracy will arguably make policy decisions that benefit those different social groups (Pitkin 1967; Mosher 1982).

In theory, within the parameters of political control and legal constraints, two interrelated characteristics of bureaucracies influence the prospects of active representation occurring. First, the opportunity for bureaucrats to exercise discretion when formulating policy; and second, the opportunity for bureaucrats to exercise discretion when implementing policy, especially at the street level, where supervisory oversight may be less intrusive. The first characteristic has generally been explored through scholarly research which focuses on passive representation in the upper echelons of public organizations.
and subsequent outcomes (see, for example, Rosenbloom and Kinnard 1977; Riccucci and Saidel 1997; Dolan 2001; Kelly and Newman 2001; Weldon 2002).

The second characteristic has been investigated in research with a focus on the extent to which discretionary power supplants inadequate checks and controls at the street level (e.g. Thompson 1976; Meier 1993; Wilkins and Keiser 2004; Theobald and Haider-Markel 2009). In this article, we seek to bring together these two foci of representative bureaucracy theory by examining the potential for active representation on behalf of women’s interests to occur where bureaucrats have the opportunity to influence policy formulation and implementation. More specifically, we examine whether the representation of women in the upper echelons of English police forces and at the street level is related to variations in domestic violence arrests.

For female bureaucrats to actively represent the interests of women, it is essential that they exercise discretion over an area of policy which is ‘gendered’. A policy is ‘gendered’ where: (1) the policy directly affects women as a class; (2) the gender of the bureaucrat changes the client–bureaucrat relationships; and, moreover, (3) the policy issue is defined as a ‘women’s issue’ through the political process (Keiser et al. 2002, p. 556). Domestic violence arrests are therefore an especially suitable topic for the application of representative bureaucracy theory because they occur within a policy area that is strongly gendered in each of these ways.

Women, in general, are far more likely than men to experience domestic abuse (Walby et al. 2010), and so female bureaucrats may correspondingly evince a more sympathetic attitude towards the life experiences of abuse victims than their male counterparts. In addition, as mentioned above, violence against women remains high and addressing this has become a policy goal for governments across the world (Council of Europe 2008; UN 2010). To date, however, little systematic research has examined the role that gender representation in those organizations responsible for policing domestic violence may play in prompting a higher rate of arrests of violent partners.

Although a clutch of studies in the US context suggest that active representation in gendered policy areas can occur within policing organizations (e.g. Chaney and Saltzstein 1998; Meier and Nicholson-Crotty 2006), few researchers simultaneously examine the effects of women’s representation at the senior and street level in these organizations. We explore whether the presence of female police chief constables and greater opportunity for female police officers to interact with clients at the street level will have a positive effect on active representation within the gendered policy area of domestic violence. In doing so, we therefore seek to break new ground in the field of representative bureaucracy. We also seek to advance knowledge in the field by examining these relationships in a non-US organizational setting: that of police forces in England.

In the first part of the article, we discuss the theory of representative bureaucracy, before we focus, in the second part, on active representation in policing. In the third part, the study context, data, and methods are introduced, after which our statistical findings are described and their theoretical and practical implications explored.

REPRESENTATIVE BUREAUCRACY THEORY

The theory of representative bureaucracy maintains that the staff employed in a public organization will share the values and beliefs of the demographic group from which they are drawn and that this ‘value congruence’ will prompt them to exercise discretion in favour of outcomes beneficial to the represented group (Sowa and Selden 2003). In
theory, bureaucrats in democratic political systems should share the same values as the citizenry that they serve (Mosher 1982). In practice, of course, the values held by citizens are rarely homogenous and may reflect the salience of one or more of the many ‘imagined communities’ that shape their self-identity (Taylor 1989; Phillips 2002). Thus, several theorists of representative bureaucracy have argued that the public in its various component parts would regard actions by a public agency as more legitimate if the demographic composition of the agency reflected that of the society it served (Levitan 1946; Long 1952; Van Riper 1958). This form of representativeness is described by political scientists as descriptive congruence (Mansbridge 1999; Lovenduski 2005), and by analysts of representative bureaucracy as passive representation (Mosher 1982).

Broadly speaking, passive representation ‘concerns the origin of the individuals and the extent to which, collectively, they mirror the whole society’ (Mosher 1982, p. 15). A passively representative bureaucracy is therefore one in which the social origins of bureaucrats approximate the distribution of social identities within society and, in effect, come to symbolize the democratic representativeness and legitimacy of the state (Stokes-Brown and Dolan 2010). Critically, the condition of descriptive congruence between the demographic characteristics of the bureaucracy and the general population may underpin behavioural congruence, wherein bureaucrats’ decisions are linked to the policy preferences of the sub-set of the population from which they originate (Dolan and Rosenbloom 2003; Wise 2003).

Theoretically, this movement from passive to ‘active representation’ assumes that the background attitudes and values of bureaucrats influence their behaviour (Thompson 1976). Nevertheless, for active representation to occur, it may not be sufficient that the bureaucracy is passively representative of society. Instead, it is likely that the institutional context in which bureaucrats work will shape the opportunities available for them to actively represent constituent groups (see Kelly and Newman 2001).

According to Meier and Bohte (2001), for value congruence to result in the translation of passive into active representation it is a critical requirement that bureaucrats have policy discretion over an area that is directly linked to their values. Or, put differently, a bureaucrat – in order to enact policy outcomes that reflect particular interests – must have a sphere of influence in a policy area or administrative structure in which he or she feels free to operate in a manner that reflects his or her preferred values (Sowa and Selden 2003). Public organizations’ administrative structures involve numerous formal controls and legal constraints, but both senior and street-level bureaucrats may nonetheless be able to retain a level of autonomy in the exercise of administrative duties and functions and thereby actively represent constituent groups.

At the apex of a public organization, one might anticipate prima facie that a higher proportion of women would inevitably result in advocacy on behalf of women’s interests (Duerst-Lahti and Kelly 1995). Although hierarchical structures are arguably anathema to women’s interests because they reify patriarchal social relationships (Ferguson 1984), the presence of hierarchy per se may be less important than the identity of top bureaucrats. Upper echelon theory suggests that senior managers construct organizational priorities and routines in their own image, and that this can be measured in terms of the observable sources of self-identification they evince, such as gender and ethnicity (Hambrick and Mason 1984). Thus, it seems logical to suppose that in public agencies run by female bureaucrats there will be a greater focus on the development of policies which promote the interests of women (Keiser et al. 2002). A study by Dolan (2000), for example, showed that women executives are more likely to adopt female friendly attitudes when there...
are more women within the organization’s leadership ranks and that this also results in policy outcomes favourable for women. In fact, since women in the senior executive service ‘…have already reached the pinnacle of their career service, attitudes or efforts geared towards improving women’s status in the workplace may simply be less risky for them’ (Dolan 2000, p. 525). Chappell (2002) similarly found that women in positions of authority in public bureaucracies tend to become ‘femocrats’ committed to advancing women’s interests.

At the street level, the very nature of the work that public servants undertake may offer them the opportunity to influence the implementation of policy in ways that can contribute to preferred outcomes. Lipsky’s (1980) research on street-level bureaucracy showed how public servants at the frontline of service delivery have significant autonomy in the exercise of their duties despite administrative constraints. Because they are ‘public service workers who interact directly with citizens in the course of their jobs, and who have substantial discretion in the execution of their work’ (p. 3), street-level bureaucrats can shape the actual content and outcomes of public policy. This applies especially strongly to policy areas where street-level bureaucrats may feel motivated to play an advocacy role on behalf of constituent groups.

Since these public servants tend to be the primary interface with service clientele they are afforded a certain level of autonomy in determining how clients are incorporated within the bureaucratic system – thereby permitting the active representation of those groups with which bureaucrats most identify (Wilkins and Keiser 2004). At the same time, individuals from different constituent groups may alter their behaviour depending upon the background of the bureaucrats with whom they interact. So for example, it is conceivable that a female police officer attending a domestic violence call will be more likely to be supportive of the victim and prompt them to pursue the case than a male officer, and the victim may respond more positively to this intervention.

Although few researchers investigate passive and active representation at the senior and street levels within the same study, most that do suggest that active representation may be more likely at the street level rather than in the upper echelons. Meier (1993) finds that teachers actively represent minority students more successfully than school principals, while Thielemann and Stewart (1996), in their study of the provision of services to people living with AIDS, confirm that: ‘The evidence is clear and overwhelming in this study that clientele interest in representative bureaucracy is greater at the level where the bureaucrat and the citizen interact than at the higher levels’ (p. 172). Nevertheless, little quantitative research has simultaneously explored the linkages between passive and active representation for women at the senior and street levels in more hierarchically structured public organizations in which the effects of organizational socialization on public servants may be especially strong, such as those responsible for policing and law and order (see Holdaway 1983). One of the principal objectives of this study is therefore to compare and contrast the prospects for active representation at both levels in policing organizations.

**REPRESENTATIVE BUREAUCRACY AND POLICING**

The potential for active representation to occur may not only depend upon the opportunities available to exercise discretion, but also upon the core mission of the organization in which bureaucrats work. Public organizations vary in terms of the tasks they perform, their institutional standing within the public sector, and their occupational cultures...
To date, most of the research on gender and active representation has been carried out in professional service organizations, such as schools, welfare agencies, and child support agencies. These organizations typically have a redistributive service delivery task that is undertaken by trained professionals who may enjoy a high degree of professional autonomy. As a result of this focus on professional service organizations, existing knowledge about the relative salience of senior-level versus street-level representation of women remains rather limited. Evidence on the effects of the representation of women in other types of public organization would therefore cast much valuable light on representative bureaucracy. In particular, while high-level policy-making organizations have been the subject of a growing number of studies, to date high risk/high reliability organizations, such as policing, fire, and emergency services remain under-studied.

High risk/high reliability public organizations are usually tasked with first response to public law, order, and safety incidents (Bigley and Roberts 2001). The tight-knit, almost paramilitary, occupational culture of high risk/high reliability organizations, such as those responsible for law and order and emergency response, may restrict the discretion available for organizational members to actively represent constituent groups (Schröter and von Maravic 2011). Chetkovich’s (1997) ethnography of the experiences of female and minority ethnic firefighters in the Oakland, California fire department, for example, highlights the ways in which new recruits to the department felt pressured to adopt the attitudes and behaviours of the veterans within the organization. The cultural constraints on the opportunity to advance the interests of under-represented constituent groups may be especially powerful within police forces, which, in Western countries, historically have been overwhelmingly white, male, and heterosexual (see Sklansky 2006). In fact, a ‘cult of masculinity’ is often said to be at the heart of a culture of ‘occupational deviance’ amongst police officers (Rubinstein 1973; Punch 1983; Young 1991).

The socialization of individuals within organizations inevitably legitimizes some activities as congruent with an organization’s values, while others are discounted or discouraged as not in keeping with the organization’s culture (Denhardt 1968; Schein 1968). The masculine environment of policing organizations may pose particular problems for female police officers as they seek to learn those behaviours that are regarded as congruent with policing (Doran and Chan 2003). Women typically occupy a minority position within policing organizations and often embrace attitudes towards police work that diverge sharply from those espoused by their male colleagues (Marks 2008). Moreover, due to the strength of their occupational identity, police officers are invariably more receptive to colleagues who adopt the prevailing norms within the group, especially if that involves ‘keeping your head down’ (Van Maanen 1975) or, even, turning a blind eye to petty corruption of various kinds (Rubinstein 1973).

Despite the constraints of the institutional context in which high risk/high reliability organizations operate, there are nonetheless several ways in which the potential for active representation may be realized, especially within policing organizations. Senior police officers, in particular, often exert considerable influence over the policing priorities of law enforcement agencies (Bordua and Reiss 1966). Police chiefs and associated leadership roles are important in providing strategic direction and priorities for the organization as well as influencing subordinate performance, responsiveness, commitment, and job satisfaction (Dobby et al. 2004; Campbell and Kodz 2011). Even so, frontline police officers may, where they are accorded sufficient discretion, find ways to advance the interests of favoured groups (Lipsky 1980).
Although Wilkins and Williams (2008, 2009), find that the pressures of police socialization may sometimes lead minority police officers to discriminate against minority groups, the scant available quantitative evidence on women working in policing organizations suggests that active representation is nevertheless possible. Chaney and Saltzstein (1998) find that the representation of women within US municipal police departments is associated with a higher rate of domestic violence arrests, while in their study of representative bureaucracy in the 60 largest US metropolitan law enforcement agencies, Meier and Nicholson-Crotty (2006) find that the percentage of women police officers is positively associated with report and arrest rates for rape. Still, in contrast to senior bureaucrats within policing organizations, street-level police officers’ attempts to actively represent interests may be much more contingent on processes and structures which present opportunities to exercise discretion.

Several scholars emphasize that the degree to which discretion is constrained (or not) by organizational structures and routines plays a vital role in making the translation of passive into active representation possible (Meier and Bohte 2001; Sowa and Selden 2003). And there is empirical evidence to support this insight. For example, Meier and Bohte (2001) find that fewer hierarchical organizational structures give minority teachers in Texan school districts more freedom to take concrete action to enhance the performance of minority students. Riccucci and Meyers’ (2003) study of frontline workers in US welfare agencies found that the relationship between passive and active representation is linked to structures that enhance the discretion experienced by the frontline workers – a finding replicated in Wilkins and Keiser’s (2004) study of street-level workers in US child support agencies.

Within the context of the gendered policy area of domestic violence, it seems especially likely that constraints on discretion will matter. If women police officers are accorded more opportunities to influence arrest decisions at domestic violence calls, then it seems highly probable that they will be more inclined to use those opportunities to actively represent women’s interests. It is also possible that the congruence between the values of women police officers and the victims of domestic violence will positively influence victims’ support for an arrest decision. Nonetheless, it is conceivable that the pressures of police socialization may be so strong that women officers feel they have to conform to the prevailing norms of their male colleagues (Fielding 1994; Doran and Chan 2003). In some cases, this can lead women to feel that they have to ‘prove’ themselves to be more competent than their male colleagues by taking on dominant masculine attitudes (Marks 2008).

Although it is possible that only a ‘critical mass’ of female representation will be sufficient to overcome the effects of organizational socialization (Meier 1993), it is also the case that police officers may depart from organizational cultural norms when they are dealing with minorities (Oberfield 2010). Thus, we argue that if there are more opportunities for women officers to actively influence domestic violence arrest decisions, then they, in turn, may have more opportunity for persuading male colleagues of the merits of an arrest. Davies and Thomas (2003), for example, point towards the role women police officers can play in ‘feminizing’ police culture.

On the basis of prior theory and evidence, we hypothesize that the higher the rate of passive representation of women in positions of authority and at the street level within police organizations, the higher the rate of bureaucratic responsiveness in terms of domestic violence arrests. We also anticipate that the potential for active representation
at the street level may be related to the discretion that women police officers are able to exercise over the work they conduct.

DATA AND METHODS
The study draws on data for the 38 police forces in England and covers the period from 2004 to 2007. In the UK, territorial police forces are responsible for the majority of policing in specific police jurisdictions. During the study period, each police force (except the Metropolitan Police Service in London) was governed by a police authority made up of approximately 20 representatives, some of whom were nominated by the local governments within their jurisdictions, and others of whom were drawn from the local community, including at least three local magistrates. These authorities appointed the Chief Constable, the senior police officer of each force who is held responsible for the administration of policing within the jurisdiction of the force, and is therefore able to exercise considerable discretion over the criminal justice priorities for each police force.

The majority of the funding for police forces comes from the UK Home Office, and their management and performance became subject to increasing scrutiny by Her Majesty’s Inspectorate of the Constabulary (HMIC) as part of the wider public service reform agenda pursued by the then Labour national government. During that time, the UK Home Office collected a wide variety of performance and organizational data on the forces in England to ensure that they were meeting their duty to secure continuous improvement in the exercise of functions. Thus, we are able to draw upon data that have been collected using common reporting procedures and that have been audited prior to publication.

Dependent variable
The dependent variable for our analysis of gender and active representation in policing is the average domestic violence arrest rate, measured as the percentage of domestic violence incidents resulting in an arrest (mean 27.95, S.D. = 10.6). These data were drawn from the annual Police Performance Assessments for each force published by HMIC. Although domestic violence is not perpetrated solely by men against women and children, the overwhelming majority of domestic violence arrests in England (around 90 per cent) are of male offenders whose victims are adult females. Domestic violence arrests thus meet the criteria of being a gendered policy area because: (1) domestic violence directly affects women as a class; (2) the relationship between female police officers and domestic violence victims is likely to be qualitatively different from that between male officers and victims; and, moreover, (3) domestic violence is widely acknowledged to be a ‘women’s’ issue by political activists as well as elected representatives (Keiser et al. 2002, p. 556).

Independent variables
To analyze the effects of women’s representation at the policy formulation and implementation levels, we utilize two key independent variables. First, a dichotomous variable coded 1 for the presence of a female Chief Constable and 0 for a male Chief Constable; and second, a variable gauging the percentage of female police officers within a police force. The UK police force has historically had low rates of women employed in the service (British Association for Women in Policing 2010). During the study period, seven forces were led by a female Chief Constable, while the average proportion of female police officers was 23.3 per cent; a figure with a comparatively narrow range from 18.3 to 30.8 per cent. Although the representation of women in positions of authority would be highly
visible throughout the police force and its jurisdiction, their presence at the street level is potentially less visible, since levels of passive representation are fairly consistent and female officers may be directed towards backroom tasks, with much less public visibility (Brown 1998; Brown and Heidenshohn 2000). Thus, the salience of women’s representation may be more evident at the top rather than the street level, making structures which offer greater opportunities for the exercise of discretion by female police officers an even more critical intervening variable in the passive–active representation relationship.

The opportunity for discretion in the implementation of policy to be exercised was measured at the force level as the percentage of police officer time available for frontline policing. This measure was calculated for each force on the basis of HMIC Function and Activity Analysis, taking the form of a ratio of the police officers fully committed to frontline duties, such as patrol, casework, and incident attendance, to that of the officers engaged in some combination of frontline and non-frontline duties, which include non-incident-related paperwork, call-handling, and court attendance. This measure serves as a proxy for the availability (at the force level) of more or less opportunity for officers within each force to interact directly with citizens in their work. Such a measure has been used in previous studies of police discretion (see Sobol 2010).

Control variables
Prior research on domestic violence offers very mixed evidence on its ecological determinants (Van Hasselt et al. 1988). Where ecological correlates have been identified, scholars suggest that there are several social risk factors associated with the prevalence of domestic violence, especially factors reflecting socio economic features of an area, such as income, education, unemployment, and minority ethnic population (Tauchen et al. 1991). At the same time, these findings may reflect the likelihood that such areas attract more attention from the police who may be more inclined to arrest poorer, less-educated, unemployed, and minority ethnic males, rather than more ‘respectable’ domestic violence suspects (Sherman et al. 1992). Although the causal mechanisms influencing the relationship between these risk factors and domestic violence arrests rather than incidents may be somewhat difficult to determine, we nonetheless include five key measures to account for their potential influence within our statistical models.

First, the average median income for working age adults (aged 16–65) was aggregated up from UK Labour Force Survey estimates for the areas served by each police force. Second, the percentage of working age adults with two or more A-levels (or the equivalent vocational qualification) was calculated for each force area from the same data source. These qualifications are roughly equivalent to the baccalaureates awarded in many European countries or the college readiness tests used in the USA. Third, unemployment rates for each force area were calculated using UK National Statistics data aggregated up from the local government jurisdictions served by the police forces. Fourth, the minority ethnic population within each police force was measured using Home Office annual estimates. We also include a measure of the squared differential between average male and female employment rates in the area served by each police force. This controls for the possibility that a large employment differential translates into a higher level of female economic dependence on men, which increases women’s vulnerability to domestic violence and may result in greater police deference to the economic status of men within such an area (Chaney and Saltzstein 1998).

In addition to ecological factors specific to domestic violence, a number of organizational factors are commonly thought to influence police arresting behaviours in general.
TABLE 1  Descriptive statistics

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Min</th>
<th>Max</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic violence arrest rate</td>
<td>27.95</td>
<td>6.20</td>
<td>77.90</td>
<td>10.73</td>
</tr>
<tr>
<td>Independent variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female chief constable</td>
<td>0.11</td>
<td>0.00</td>
<td>1.00</td>
<td>0.31</td>
</tr>
<tr>
<td>Percent female police officers</td>
<td>23.27</td>
<td>18.30</td>
<td>30.80</td>
<td>2.42</td>
</tr>
<tr>
<td>Percent frontline policing</td>
<td>64.45</td>
<td>53.30</td>
<td>76.00</td>
<td>3.90</td>
</tr>
<tr>
<td>Control variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median income</td>
<td>18845.64</td>
<td>14939.00</td>
<td>26506.61</td>
<td>2323.69</td>
</tr>
<tr>
<td>Education (% with two A-levels)</td>
<td>46.24</td>
<td>34.97</td>
<td>58.74</td>
<td>5.05</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>2.34</td>
<td>0.90</td>
<td>4.43</td>
<td>0.77</td>
</tr>
<tr>
<td>Minority ethnic population</td>
<td>5.68</td>
<td>0.80</td>
<td>29.00</td>
<td>5.76</td>
</tr>
<tr>
<td>Squared difference in adult male vs. female employment</td>
<td>156.36</td>
<td>39.56</td>
<td>308.00</td>
<td>51.43</td>
</tr>
<tr>
<td>Force size</td>
<td>3485.89</td>
<td>1012.00</td>
<td>31460.00</td>
<td>4850.36</td>
</tr>
<tr>
<td>Force expenditure (£s) per capita</td>
<td>181.23</td>
<td>109.90</td>
<td>398.11</td>
<td>41.27</td>
</tr>
</tbody>
</table>

N=152.

(Riksheim and Chermak 1993). To control for the possibility that organizational capacity and resources, in particular, may be related to variations in domestic violence arrest rates, measures of police force size and expenditure are also included in the statistical models. These were both measured using Home Office data. Table 1 presents descriptive statistics for all of our variables.

Model and methods
The pooled time-series used for the analysis is a complete and balanced panel dataset for the four years (2004–07). The cross-sectional dominance, shortness of the panel, and inclusion of dummy variables for each year of the analysis (minus one) minimize the threat of serial correlation (Stimpson 1985). Regression diagnostics revealed that the models suffered from heteroscedasticity. To correct for non-constant error variance, robust estimation of the standard errors clustered on each police force is carried out. This also controls for unobserved heterogeneity between the cases. The results are not distorted by multicollinearity because the correlations between the independent variables are not strong enough to bias the results (Belsley et al. 1980).

The statistical model is a fixed effect (within) panel regression evaluating the effects of the passive representation of women in police forces on active representation in terms of a higher rate of domestic violence arrests in England. The fixed effects within estimator explains the temporal variance within police forces and ignores cross-sectional variance between these organizations. This permits identification of the average impact of changes in the independent variables on changes in the dependent variable. Analysis of several alternative estimators suggested that the inclusion of the fixed effects for each police force accounted for the connection between the dependent variable and its lag. Thus, we do not include a lagged measure of domestic violence arrests as, in this instance, the fixed effects control for the inertia that is typical of public organizations (O’Toole and Meier 1999) as well as a wide range of other unobserved characteristics.

Fixed effects estimation takes account of organization-specific (unobserved fixed) effects and permits correlations between those effects and the (observed) effects of the explanatory variables, both of which can bias random effects estimates (Halaby 2004). Before applying a fixed effects model, it is important to establish its efficiency as an estimator in comparison
with the random effects estimator. To do this it is necessary to compare the covariance matrix of the regressors in a fixed effects model with those in a random effects model which does not permit correlations between unobserved and observed effects. Using the Hausman test, systematic differences were found between the coefficients for fixed and random effects models of change over time within English police forces, so the fixed effects estimator is used as it is more efficient.

FINDINGS

The first model presented in table 2 explains around 17 per cent of the variation in domestic violence arrests. Three of the control variables are statistically significant. As anticipated, income is negatively related to domestic violence arrests, while the presence of a growing minority ethnic population within the jurisdiction of a police force is positively related to such arrests. This may reflect social and economic stresses within such areas or it could be a product of racist attitudes and behaviour amongst arresting officers. It would be interesting in the future to examine this issue in greater detail and to consider, in particular, whether the representation of minority ethnic groups in police forces leads to active representation within this policy area. The table also illustrates that there is evidence of a positive relationship between the size of a police force and the domestic violence arrest rate, which would imply that larger forces are simply able to devote more police officers to the arrest of criminal offenders in general. None of the remaining control variables is related to domestic violence arrests.

The findings shown in the first model presented in table 2 provide strong support for the argument that active representation for women is more likely to occur if female bureaucrats are able to formulate policy within a public agency. The coefficient for female chief constable is positive and statistically significant. In fact, the size of the coefficient indicates that the presence of a female police chief was associated with a domestic violence arrest rate, on average, 6 per cent higher than when a force was previously led by a male chief. This may well be attributable to the higher priority accorded to the issue of domestic violence by female police chief constables. For example, on taking up her first post as Chief Constable, the current lead on domestic abuse for the UK Association of Chief Police Officers made it clear that she wanted ‘a new era’ for tackling violence in the home (http://www.bbc.co.uk/news/uk-wales-12878846). However, the statistical results in our first model indicate that representation of women throughout the police force does not appear sufficient to result in active representation within this gendered policy area.

The sign for the coefficient for the percentage female police officers variable is a negative one but it is not statistically significant. Thus, our research does not mirror the evidence on the direct effects of passive representation of women police officers in some US studies (e.g. Meier and Nicholson-Crotty 2006). It is possible that the pressures of police socialization in English police forces may be greater than those in the USA, and that this may be a product of differences in organizational structures and officers’ roles and responsibilities. Systematic comparative research on police culture in the UK and the USA is currently lacking but would certainly cast light on this important topic. It is also conceivable though that our null finding reflects the presence of a critical mass effect.

To explore the possibility that a critical mass of women officers may be required before active representation can occur, we carried out two additional statistical tests. First, we follow Meier (1993) by including the squared term of the women police officers variable
TABLE 2 Gender representation and domestic violence arrests

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th></th>
<th>Model 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Slope</td>
<td>S.E.</td>
<td>Slope</td>
<td>S.E.</td>
</tr>
<tr>
<td>Female chief constable</td>
<td>5.764*</td>
<td>2.566</td>
<td>6.427**</td>
<td>2.194</td>
</tr>
<tr>
<td>Female police officers</td>
<td>−0.675</td>
<td>1.228</td>
<td>−16.217*</td>
<td>7.909</td>
</tr>
<tr>
<td>Frontline policing</td>
<td>−0.185</td>
<td>0.395</td>
<td>−5.544*</td>
<td>2.631</td>
</tr>
<tr>
<td>Female police × frontline policing</td>
<td>0.241*</td>
<td>0.115</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Control variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td>−0.003†</td>
<td>0.0017</td>
<td>−0.003†</td>
<td>0.0017</td>
</tr>
<tr>
<td>Education (% with two A-levels)</td>
<td>−0.262</td>
<td>0.579</td>
<td>−0.327</td>
<td>0.557</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>−5.779</td>
<td>6.489</td>
<td>−7.555</td>
<td>6.715</td>
</tr>
<tr>
<td>Minority ethnic population</td>
<td>107.152**</td>
<td>32.860</td>
<td>126.112**</td>
<td>37.734</td>
</tr>
<tr>
<td>Squared difference in adult male vs. female employment</td>
<td>0.020</td>
<td>0.029</td>
<td>0.027</td>
<td>0.030</td>
</tr>
<tr>
<td>Police force size</td>
<td>0.011*</td>
<td>0.005</td>
<td>0.011*</td>
<td>0.004</td>
</tr>
<tr>
<td>Force expenditure</td>
<td>0.061</td>
<td>0.087</td>
<td>0.073</td>
<td>0.089</td>
</tr>
<tr>
<td>2005</td>
<td>−7.137</td>
<td>4.483</td>
<td>−7.634†</td>
<td>4.537</td>
</tr>
<tr>
<td>2006</td>
<td>−1.495</td>
<td>2.189</td>
<td>−1.775</td>
<td>2.354</td>
</tr>
<tr>
<td>Constant</td>
<td>−522.099*</td>
<td>259.934</td>
<td>−276.647†</td>
<td>254.262</td>
</tr>
<tr>
<td><strong>F statistic</strong></td>
<td>34.14**</td>
<td>31.34**</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>R-squared</strong></td>
<td>0.17</td>
<td>0.21</td>
<td></td>
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</tr>
</tbody>
</table>

**Notes**: Number of observations = 152. Formal hypotheses were evaluated with a one-tailed test, other hypotheses with a two-tailed test. †p ≤ 0.10; * p ≤ 0.05; ** p ≤ 0.01.

in the equation to try and identify whether there might be a ‘tipping-point’ at which the benefits of street-level representation emerge. Second, we substitute a logged version of that variable for the raw version included in the original model to test for non-linearity in the women police officer–domestic violence arrests relationship. In both cases, the tests failed to reveal the presence of a critical mass effect. Nonetheless, we hypothesized that for active representation to occur among women police officers, it may be necessary for them to have greater opportunity to exercise discretion in the implementation of policy. That is, for domestic violence arrests to increase, it will be important for women police officers to have the chance to influence frontline police activities.

To investigate this possibility in full requires the inclusion of the variable interacting passive representation and the measure of police discretion tapping the opportunity for more face-to-face street-level work within the statistical modelling. The first model in table 2 shows that our force-level measure of police discretion has no independent effect on domestic violence arrests. The coefficient is negative, but it is not statistically significant, indicating that we are unable to state with confidence that the relationship between the two variables is either positive or negative. It is possible that salience of greater discretion is contingent upon other relevant variables. Thus, we turn now to the interpretation of the interaction between women police officers and the percentage of officers available to carry out frontline policing, which offers the opportunity for more face-to-face contact with clients.

Inclusion of the interaction term adds about 4 per cent to the explanatory power of the statistical model, with diagnostic tests revealing this to be a statistically significant improvement in the $R^2$. Moreover, the coefficient for the interaction between women police officers and the percentage of time available for frontline policing is positive and
Marginal effect of discretion on domestic violence arrests

FIGURE 1 Marginal effect of police discretion on the relationship between women police officers and domestic violence arrest rates

statistically significant. This confirms our argument about the need for female police officers to have the opportunity to shape the content and outcomes of their police work if active representation is to occur. To fully explore the combined effect of frontline policing and female representation at the street level it is necessary to calculate the marginal effects of women police officers on domestic violence arrests at varying levels of discretion (see Brambor et al. 2006). Graphing the slope and confidence intervals of the marginal effects is the most effective way to present this information. Accordingly, figure 1 provides a graphical illustration of the moderating influence of discretion on the relationship between women police officers and the domestic violence arrest rate.

The centre line in figure 1 illustrates the predicted values of domestic violence arrests on the basis of women police officers and frontline policing, while controlling for all the other variables included in our model. The dotted lines represent the upper and lower bounds of the 95% confidence intervals for those predicted values. The area above the upper bound and below the horizontal zero line indicates the presence of a statistically significant relationship, so too does the area below the lower bound and above the zero line.

Examination of figure 1 confirms that the percentage of police officer time available for frontline policing has an important moderating effect on the relationship between women police officers and active representation in the gender policy area of domestic violence arrests. As the level of time devoted to frontline policing rises from its minimum level
(53.3 per cent), the effect of greater passive gender representation amongst police officers on the domestic violence arrest rate becomes positive and statistically significant. This relationship holds all the way through until the discretion measure reaches its maximum level at 76 per cent. The interaction effect we uncover is therefore strongly suggestive of the benefits women as a group can realize where there is more opportunity for female police officers to exercise discretion through face-to-face contact with clients.

At the same time, it is possible that the increased representation of women may also sensitize male colleagues in forces with a greater emphasis on frontline police work, even if the female officers are largely working at desk jobs. Unfortunately, we are unable to disaggregate the data to establish precisely how many female and male officers are serving in frontline positions to explore this possibility in full, though we do observe a positive correlation between women police officers and our discretion measure, which suggests that women may be better represented in forces with a greater focus on frontline policing. Further detailed qualitative research on a case-by-case basis is therefore required to enable us to disentangle some of the complex causal mechanisms at work here.

DISCUSSION
Drawing on representative bureaucracy theory, we have presented arguments in this article on how female police officers require both authority and discretion to enact policies that benefit women as a group. These arguments were confirmed through statistical analysis of the independent effect of female police chiefs on domestic violence arrests in England, and for the combined effect of women police officers and the discretion to conduct frontline policing on such arrests. Female chiefs and women officers with greater discretion over the work they carry out appear to be able to actively represent their constituent group by working to increase arrests of domestic violence perpetrators.

In this study, we provide the first evidence of the link between passive and active representation in the upper echelons of high reliability/high risk public organizations. Higher rates of domestic violence arrests occur where female chief constables are present in a police force. It is possible that due to their position at the top of the organizational hierarchy, female chiefs are willing to risk making decisions which support their values and actively represent women (see Sowa and Selden 2003). Furthermore, the research findings build on those of Meier and Nicholson-Crotty (2006), highlighting that passive representation at the street level can lead to active representation by female police officers, although in the setting of our study this only occurs where there are increased opportunities for face-to-face contact with clients.

On the whole the research supports the hypothesis that discretion has an important influence on the link between passive and active representation. Furthermore, the research provides evidence for organizational factors which are hypothesized to affect the link between passive and active representation. These include organizational controls (see Scott 1997; Selden 1997), location in the hierarchy (see Rosenbloom and Kinnard 1977; Dolan 2000; Wilkins 2006), type of organization and policy area (see Kelly and Newman 2001), and size of agency (see Kim and Mengistu 1994). The research found that in terms of organizational controls, female police officers with greater authority and more opportunity to exercise discretion actively represented women. The policy area is significant as well since the gendered policy area of domestic violence reveals value congruence amongst female police officers and women as victims (Meier and Nicholson-Crotty 2006).
The research shows that an increase in women’s representation within public organizations can lead to the achievement of key gendered performance objectives in the field of policing, such as increasing the rate of domestic violence arrests. This has important practical implications for the shape and content of policies and statutory obligations to improve the status of women. The UK has subscribed to the objectives of the 1995 United Nations World Conference on Women in Beijing to prioritize equality for women and established an action plan, which included *inter alia* the promotion of women into decision making positions and addressing violence against women. As a member of the EU, the UK has adopted various directives to promote equality of women and is obliged to mainstream gender equality in public policy and service delivery (see Council of Europe 1998; HM Government 2010). Yet despite the promotion of gender equality in public policy, there remains an implementation gap with persistent occupational gender segregation, discrimination, and poor policy outcomes for women (EC 2008; EHRC 2008; Miller 2009; UN 2010). The research we have carried out is therefore highly relevant since it provides an evidence base that an increase in the representation of women in policing organizations can indeed result in favourable policy outcomes for women within this gendered policy area.

Our study also offers valuable evidence for policy-makers interested in addressing the issue of domestic violence, particularly given the high rates of domestic violence in the UK. The advancement of women into the upper echelons of the police appears likely to hold the promise of an improvement in this poor performance, as does an extension in the opportunities available for female officers to engage with clients face-to-face. However, the current policy environment in the UK does not appear to be altogether favourable towards the issue of gender equality within public organizations, let alone in gendered policy areas, such as domestic violence.

The UK Coalition Government has announced an agenda for preventing violence and reducing repeat victimization against women in recognition of the poor conviction rates in this gendered policy area (Home Office 2010). However, this agenda does not recognize the role that improving the representation of women in the police service might play in delivering service improvements. Indeed, the forthcoming cuts to the police budget and proposals to reduce the size of the police service as a whole may actually problematize attempts to address gender violence (see Kim and Mengistu 1994). Thus, there is a pressing need to ensure that initiatives that benefit women are not lost in the general clamour for cost-cutting and efficiency savings.

Our research demonstrates that the quality of life for women, as victims of domestic violence, can be greatly improved if there is greater representation of women within the police service. Although the findings are limited to achievements against a single policy objective within a very distinctive organizational and national setting, they raise important questions about the relationship between passive and active representation in gendered policy areas that are worthy of more detailed analysis in the future.

Given the global salience of the issue of domestic violence it is important to establish the generalizability of the findings by examining whether the relationships we uncover between representation at the top and at the street level of policing organizations and the role of discretion are replicated in other countries in Europe, North America, and across the globe more widely. It would also be valuable to examine how and in what ways the goal of advancing women’s rights in a gendered policy area, such as domestic violence, might be pursued by attempting to alter the behaviour of male bureaucrats without recourse to statutory mandates. For instance, Johnson (2010) illustrates how police officers...
in one metropolitan area in the Midwestern USA were more likely to make domestic violence arrests if they had received appropriate training and departmental recognition for their efforts in this area. In fact, answers to this final question may also hold the key to overcoming deeply entrenched cultural barriers in policing organizations to the pursuit of gender equality.

REFERENCES


