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# Understanding minority recruitment to the police: beyond systematic review

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# Understanding minority recruitment to the police: beyond systematic review

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**ABSTRACT**

Recruiting ethnic minority police officers is widely seen as a way to improve police effectiveness and police/public relations, and systematic reviews are often commended as the most robust way to evaluate such policies. We argue that the tenets of classic systematic review are, however, inadequate to that task, and that a more inclusive methodological palette would advance our understanding of this and other important policing policies. Our principal empirical example is a systematic review we conducted that examined whether ethnic minority recruitment has beneficial effects on arrest rates and public satisfaction with police. After evaluating 10,791 studies, eleven satisfied methodological inclusion criteria, but they could not offer conclusive evidence on the effects of minority recruitment on arrest rates or public satisfaction. The example illustrates the obstacles to systematic reviews in contemporary police research. We then profile recent studies that benefit cumulative understanding of the effects of minority recruitment by employing more diverse methodologies, with each study addressing a distinct component that coheres around a logic model.

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Ethnic minority police; minority police recruitment; police/public relations; systematic review methods

## Introduction and context

This article originates from conducting a systematic review of the research evidence base on the relationship between increased recruitment of ethnic minority police officers and crime rates, arrest rates and public satisfaction with police. Among these three relationships the effect of minority police share on arrest rates and public opinion remain topical concerns, but interest in police effect on crime rates has been overtaken by theoretical refinement and empirical research demonstrating that the direct effect of police on crime rates is limited and that crime rates are driven by complex and interrelated causes. Indeed, where police practices are effective it results not from individual officer discretion – represented by random preventive patrol – but from the interpretation and construction of the police organisation's mandate – represented, for example, by hotspots policing and Problem-Oriented Policing (Telep and Weisburd 2012). Moreover, although the relationship between officer ethnicity, arrest rates, and public opinion regarding the police remain topical, applying standard systematic review methods yielded studies of these relationships that were mostly rather dated. They preceded a period not only of theoretical refinement but of innovatory police interventions, such as systematic directed patrol and using DNA in property cases, interventions that did not register in studies selected by systematic review.

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These lacunae illustrate a prime message of this article, that applying 'classic' systematic review methodology (whose selection criteria put large-scale quantitative random control studies at the top of a hierarchy of 'scientific' methods and heavily caveat or entirely exclude qualitative and mixed methods studies) to the police research evidence base reveals stark limitations. An alternative approach is needed if we are to understand the relationship between the ethnic composition of police organisations and effective police practice. In that regard, the 'Realist Evaluation' approach (see below) offers relevant principles and supports methodologies that are better suited to interrogating the evidence base with a view to answering the kinds of questions that evaluation research addressed to policymaking is apt to ask. Nor are the alternatives confined to Realist Evaluation. Mixed Methods research designs can extend our analytical reach, and Rapid Evidence Assessments can extend the scope and policy-relevance of the evidence base. Our argument should thus be understood as (i) a critical appraisal of the police research evidence base (ii) whose limitations render it unsuitable for the exercise of the formal conventions of classic systematic review methodology (as in, for example, large-scale control design trials performed in clinical medicine) but (iii) which does afford a secure footing for nuanced analysis and evaluation of police practice according to, *inter alia*, the precepts of Realist Evaluation (Pawson *et al*. 2005). Proponents of Realist Evaluation argue that the standard procedures of systematic review (statistical meta-analysis of random control trial studies with very large samples, dismissing other research designs as lacking robustness) produce findings that describe 'what works' but tell us little about *how* effective interventions work (mechanism), *why* they work (causality), and *when and where* they work (context). To set the scene for this methodological theme we need to sketch in why the ethnic composition of police forces is considered important.

Policing is a social institution whose functioning reveals the polarising effects of minority status (Donohue and Levitt 2001). Outright prejudice, disproportionate use of force, and double standards that disadvantage minorities have caused everyday friction and periodic violent conflict between police and minority citizens (Kerner 1967, Scarman 1981, Fielding 2005, Hoekstra and Sloan 2022). Policing in North America and Western Europe was long an ethnically white occupation, and studies across many jurisdictions find that minority citizens have less confidence in, and satisfaction with, the police than do white citizens (Walker *et al*. 1972, Decker 1981, Tuch and Weitzer 1997, Karn 2013, Yesberg *et al*. 2022).

Enhanced minority recruitment is prominent in policy initiatives to provide increased accountability to communities (Kerner 1967, Decker and Smith 1980, Scarman 1981, Macpherson 1999, MOPAC 2014). The symbolic dimension aside, pragmatics also feature. It is argued that minority officers better understand and communicate with minority citizens, defusing community tensions more effectively, using their discretion with greater cultural sensitivity, and garnering more intelligence (Kerner 1967, Regoli and Jerome 1975, Jacobs and Cohen 1978, Mastrofski 1983, Dulaney 1996, Brown and Frank 2006). Ability to overcome language barriers, a keener grasp of crime problems in minority areas, and being able to serve undercover amongst minorities, are also cited. Moreover, some look to minority officers to confront biased attitudes and prejudicial practice amongst majority officers (Maghan 1993, Paoline *et al*. 2000, Smith and Holmes 2003, Brown and Frank 2006).

Research has examined many dimensions of possible differences between white and minority officers in service delivery, including: how officer ethnicity influences citizen evaluations of police (e.g. Walker *et al*. 1972, Decker and Smith 1980, Sherman 1980, Engel 2005, Cochran and Warren 2012); whether ethnic and racial identity are less important than self-identity as a police officer (Alex 1969, Mast 1970, Bordua and Tifft 1971, Decker and Smith 1980); and differential propensity to use force and/or coercive powers (e.g. Alex 1969, Leinen 1984, Brown and Frank 2006). The broad picture is that the police/minority relationship is conditioned by social, political and economic factors that extend beyond race. Minority share of the police occupation has risen in Western democracies but uncertainty as to whether the predicted benefits have been realised still prevails (Davies *et al*. 2021).

The overview above only sketches the many ways in which ethnicity registers across the multiple dimensions of police practice, and we offer a fuller picture following presentation of the article's

empirical example. Before doing so we wish to raise a mildly epistemological argument for the necessity of addressing ethnicity in policing. Social science is founded on comparison. Comparison can expose both agency (here manifested in frontline practice and public response) and structure (here manifested in force organisation and public mandate) (Giddens 1986, Fielding 1988). Comparison – of cases, populations, outcomes – enables the recognition of differences and the identification of similarities. Searching for studies that bear on similarities and differences between minority and majority officers helps us understand the foundational core of police practice and the variation – functional or dysfunctional – around that core. In that respect, the analysis of gender in police practice that has run in parallel with the analysis of ethnicity also answers distinctive questions about what is core (Lonsway *et al*. 2002). So, apart from the importance of ethnicity and gender to policy-making in law enforcement, comparing the play of fundamental characteristics on practice, its consequent impact on citizens, and, in turn, the legitimacy accorded the police institution, is fundamental to understanding what constitutes good policing.

Complex, multiple, interrelated aetiologies surface in the kinds of outcome measures that feature in empirical attempts to explain the relationship between police ethnicity, arrest rates, and public satisfaction. Classics of the police research literature (such as Manning 1970, Bittner 1978, Muir 1979, Rubinstein 1981, Reiner 2010) are rich with putative explanations for these relationships. We consider it no coincidence that the prime methodology informing these classic studies is qualitative and often ethnographic. But despite their power in conceptual terms these are not the methods accepted as capable of causal explanation, transferability, and generalisation by proponents of systematic review nor by organisations championing Evidence-Based Policy such as the Campbell Collaboration. We see in some of the forays into causality in the studies selected by our systematic review a frustration on the authors' part that they cannot, with the kind of data standardly accepted as robust, push closer to demonstrating what theory tells them is probably there. As in other applications of systematic review in our field, it seems to us that the authors of the selected studies were let down by the twin limitations of the evidence base and the rigid standards of classic systematic review methodology.

The assumption that instrumental benefits result from diversity is tested in the research literature by examining several prominent relationships. Since police have more influence over crime clearance than crime occurrence (Hur 2012) the relationships tested include that between organisational diversity and arrest rates. Further, since many value diversity as much as a way to promote legitimacy as to boost productivity, another prominent relationship is that between the degree of organisational diversity and citizen satisfaction with police. Yet despite the magnitude of research literature ostensibly addressing these topics, we ended our systematic review with reason to be dissatisfied both with the evidence base and with standard systematic review as a means of interrogating and evaluating it. Not least amongst their limitations, the evidence base and standard systematic review procedures produced an outcome limited wholly to the US jurisdiction and mostly to studies that were dated. Moreover, the study that seemed to offer most purchase on the relationships of interest entered our final corpus only by relaxing standard systematic review criteria. Before exploring the implications of these concerns we should profile our conduct of the review.

## Research design and methods

Our systematic review defined 'police' and 'policing' as law enforcement delivered through a statutory law enforcement organisation, excluding law enforcement through prisons, courts, probation services or the criminal justice system *in toto*. Studies could include any rank and include civilian employees. The systematic review was the principal output of a project co-funded by the UK College of Policing and the Economic and Social Research Council. It was one of a number of such reviews on aspects of policing and crime reduction by the What Works Centre for Crime Reduction, which ran from 2013 to 2019. The Centre was a consortium of 9 universities and the UK College of Policing. In addition to systematic reviews it aimed to evaluate the costs and

benefits of conducting such reviews in the Criminology field and to assess best practice in knowledge transfer from systematic review outputs to frontline policing.

We began with a broad search to produce sufficient studies to address our research questions (Gough *et al*. 2012, p. 123). The questions were: what is the relationship between enhanced ethnic minority recruitment and crime rates; what is the relationship between such recruitment and arrest rates; and what is the relationship between such recruitment and public satisfaction with police. As noted earlier, the relationship to crime rates was not proceeded with in light of the weight of evidence that the direct effect frontline policing can have on crimes rates is minimal. The terms used as 'seeds' to grow search clusters (Hammerstrøm *et al*. (2010) were:

- Police
- Recruitment/deployment
- Minority – ethnic
- Community engagement
- Crime
- Anti-social behaviour
- Disorder
- Social cohesion

Search term clusters were generated using:

- terms known to be successful in locating crime-related studies,
- synonyms found in dictionaries (Oxford English, Cambridge American English),
- controlled language terms from the Applied Social Sciences Index and Abstracts (ASSIA) thesaurus, and natural language terms developed using the *termine* text mining application (http://www.nactem.ac.uk/software/termine/).

Our strategies to identify relevant studies were:

(1) Searching relevant online abstract databases, including grey literature and dissertation databases;
(2) Hand-searching key journals not usually included in the above databases[1];
(3) Keyword-searching outputs from government, research and professional agencies;
(4) Keyword-searching national policing organisations;
(5) Hand-searching conference abstracts (*American Society of Criminology*, *European Society of Criminology* and *British Society of Criminology*);
(6) Hand-searching the Australian Criminology Database ('CINCH') and grey literature by Phyllis Schultz, an information specialist at Rutgers University;
(7) Citation-chasing bibliographies found in the above searches.

Searches identified 23,960 publications ('records') up to 2015 for screening (the year the project's search stage concluded). After de-duplication, 10,791 records remained. When screening titles and abstracts we tagged 'potentially relevant' liberally. A random 10% underwent independent coding by two reviewers (agreement rate = 86%). Disagreements were resolved before proceeding. After screening titles and abstracts, 1,437 potentially relevant records remained.

Records excluded by first screening were:

(1) not in English, Danish, Swedish, Finnish or Dutch (languages in which members of the research team had linguistic competence);
(2) related to non-human populations (e.g. minority sub-species in animal experiments);
(3) not focussed upon recruitment or deployment of minorities;

(4) an evidence review, policy document, essay, blog, or opinion piece;
(5) conducted in a non-OECD country (OECD is the Organisation for Economic Cooperation and Development, whose member states are committed to democracy and the market economy). OECD status served as surrogate for countries having broadly similar systems of government such that their police institutions were comparable.

Second-screening selected records that related to ethnic minority recruitment to police as opposed to other organisations. We 'mapped' 735 records on geography, intervention, study type and outcomes (Gough *et al*. 2012, p. 47). Mapping sharpened the focus and inclusion criteria, yielding 405 records. Records with abstracts concerning ethnic minority recruitment/deployment, and outcomes relating to arrest or community engagement, were selected. This rendered 44 records for full inspection, minus two conference proceedings that proved unavailable. Studies lacking in terms of research design, appropriateness of method, delivery of method, analytical rigour, and/or completeness of description of these elements, were excluded at this stage, after independent reading and inter-rater conciliation. Seven were of insufficient quality based on research design, methodology, or both, when assessed in accord with the Maryland Scientific Methods Scale (Cochrane 2008), a widely used standard in systematic reviews; ten did not relate to an ethnic minority; and 14 reported outcomes unrelated to arrest or community engagement. This left eleven studies. No study fully satisfied the robust selection criteria represented by the Maryland Scale. Various caveats apply to the final selection (the most obvious being an age indicating a different socio-political context). Caveats also highlight issues of measurement and interpretation.

All eleven studies were from the United States and can be characterised as observational or correlational. Seven studies concerned the relationship between ethnic minority officers and arrest rates. These were Skogan (1976), Lovrich and Steel (1983), Lott (2000), Donohue and Levitt (2001), McCrary (2008), Hur (2012), and Sharp (2014). Four studies concerned the relationship between ethnic minority officers and community perceptions of, and satisfaction with, the police. These were Skogan (1979), Decker and Smith (1980), Weitzer (2000), and Brunson and Gau (2015).

Studies reporting quantitative results were assessed using the Maryland Scale, augmented using criteria described by Zara *et al*. (2000) where studies placed low on that scale. Studies reporting qualitative results were assessed using the Critical Appraisal Skills Programme tool (CASP n.d.). The heterogeneity of measures used in the studies precluded meta-analysis, since studies must measure similar effect types before being pooled.

## Results

Study characteristics are summarised in Table 1. Table 2 summarises quality assessments.

### *Effect of increasing minority share on arrest rates and public satisfaction*

To indicate the outcome of the review we will briefly note findings on increasing minority share, which often involved 'affirmative action' policies, on arrest rates and on public satisfaction.

The overall message of the selected studies regarding *arrests* was that enhanced minority recruitment had neither a conclusively positive nor negative effect. However, there was some evidence that enhanced minority recruitment may lower arrest rates by reducing arrests of minority citizens.

Skogan (1976) found that the relationship between arrest rates and percent of ethnic minority officers was positive for total arrest rates, robbery arrest rates and burglary arrest rates, with a correlation coefficient for total arrests of 0.13 – a tangible but minimal size of effect. Skogan argued that increased minority recruitment increased police efficiency in effecting arrests such that recruiting minorities maintained the department's 'input-output' ratio with less organisational effort. However, Skogan's data were from 1970, when minority representation was only just starting to increase. The first affirmative action case in police hiring was 1974 and there may be differences

**Table 1.** Study characteristics.

| | Intervention | Participants | Study Country | Unit of analysis | Sample details | Research design | Time period | Summary of data used | Maryland Scale position |
|---|---|---|---|---|---|---|---|---|---|
| Skogan (1976) | Increased minority share | Police employees & officers | USA | City (population 50,000+) | 386 cities | Cross-sectional | 1970 | Crime/arrest: 1970 UCR. Police employees: 1970/71 Municipal Yearbook. | 1 = Correlation between a programme and arrest/CE measure, single time point |
| Lovrich and Steel (1983) | Increased minority share | Municipal police chiefs | USA | City (population 25,000+) | 299 cities (254 Police Departments completed survey from which 136 were assigned to high/low affirmative action). | Panel | Crime rates: 1966-1980. Minority employment: 1969 & 1981. | Crime/arrest: 1970 and 1980 UCR mean clearance rate by arrest. Minority employment: National police chiefs survey 1969 and 1981. | 1 = Correlation between a programme and arrest/CE measure, single time point |
| Lott (2000) | Affirmative action consent decrees | Police officers of differing race and gender | USA | City | 331 cities with consent decrees, 21 cities without. | Time series | 1985–1994 | Police employees: LEMAS 1987, 1990, 1993. Crime/arrest: UCR 1985-1994. Population: City Population Survey 1987-1993. Consent decrees: DoJ 1972-1994. | 2 = Arrest/CE before/after programme, no comparison locality |
| Donohue and Levitt (2001) | Increased minority share | White and non-white officers | USA | City (population 100,000+) | 122 cities | Panel | 1977, 1981, 1984, 1986, 1989, 1993 | Crime/arrest: UCR & LEMAS 1987, 1990, 1997. Police employees: EEOC 1977, 1981, 1984, 1986, 1989, 1993. | 2 = Arrest/CE before/after programme, no comparison locality |
| McCrary (2008) | Court-ordered affirmative action | Black officers | USA | City | 314 cities with the largest police departments in quinquennial municipal government census 1972 - 1997 (92 Litigated and 222 unlitigated). | Panel | 1960–1999 | Crime/arrest: UCR 1975-1999. Police employees: EEOC 1973, 1974, 1980-1997. City: Decennial Population Censuses 1960-2000. Litigation: 1,300 + published decisions. | 2 = Arrest/CE before/after programme, no comparison locality |
| Hur (2012) | Increased minority share | Police officers | USA | Municipalities (population 50,000+) | 464 municipalities | Cross-sectional | 2003 | Crime: UCR. Police employees: LEMAS 2003. Sociodemographics: Decennial Population Census, 2000. | 1 = Correlation between a programme and Arrest/CE measure, single time point |
| Sharp (2014) | Increased minority share | Black officers | USA | City (population 100,000+) | 180 cities | Cross-sectional | 2003 | Police employees: LEMAS 2003. Crime/arrest: FBI 2003, author | 1 = Correlation between a programme and |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | request data.<br>Black political representation: Joint Center for Political and Economic Studies 1993 'Black Elected Officials'. | Arrest/CE measure, single time point |
| Skogan (1979) | Increased minority share | Citizens | USA | City (population 13 'large cities') | 10% sample of Census Bureau attitudinal survey, total circa 12,000 respondents. | Cross-sectional | 1975 | Attitudinal: Census Bureau survey 1975.<br>Police employees: Municipal administrative data. | 1 = Correlation between a programme and Arrest/CE measure, single time point |
| Decker and Smith (1980) | Increased minority share | Citizens | USA | City (population 150,000+; most considerably larger) | Citizens aged 16–69 (2,809 black, 2,950 white). | Cross-section-al | 1968 | Attitudinal: Primary survey. | 1 = Correlation between a programme and Arrest/CE measure, single time point |
| Weitzer (2000) | Increased minority share | Citizens | USA | City (Washington, DC). | Three neighbourhoods (one white, middle class; one black, middle class; one black, lower class) | Semi-structured interviews | 1996–97 | Attitudinal: Primary interviews. | N/A; CASP criteria used |
| Brunson and Gau (2015) | Increased minority share | Black citizens | USA | City (East St Louis, Illinois) | 44 black citizens (25 female, 19 male) who had interacted with black officers | Semi-structured interviews | 2009 | Attitudinal: Primary interviews. | N/A; CASP criteria used |

NOTE: CE: Community Engagement.
LEMAS: US Department of Justice Survey – Law Enforcement Management and Administrative Statistics.
UCR: Federal Bureau of Investigation – Uniform Crime Reports.
EEOC: Equal Employment Opportunity Commission.

**Table 2.** Study quality summaries.

| Key: 1 Yes<br>2 No<br>3 Not applicable<br>4 Not clear in paper | Crime rates and Arrest rates | | | | | | | Public Satisfaction | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Skogan (1976) | Lovrich and Steel (1983) | Lott (2000) | Donohue and Levitt (2001) | McCrary (2008) | Hur (2012) | Sharp (2014) | Skogan (1979) | Decker and Smith (1980) | Weitzer (2000) | Brunson and Gau (2015) |
| 1. Was there a clear statement of the aims of the research? Was it related to the SR questions? | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| METHODOLOGY | | | | | | | | | | | |
| 2. Was the methodology chosen appropriate? | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| RESEARCH DESIGN | | | | | | | | | | | |
| 3. Was the research design appropriate to address the aims of the research? Is there a discussion of the choice of research design? | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| SAMPLING | | | | | | | | | | | |
| 4. Was the recruitment strategy appropriate to the aims of the research? If representative sampling was used, was the sampling frame (selection of participants) representative of the population being studied? | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| DATA COLLECTION | | | | | | | | | | | |
| 5. Were the data collected in a way that addressed the research issue? Were the methods chosen clear and were they justified? | 1 | 1 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 6. If there was a comparison or control group, were they similar enough to the intervention group to be comparable? | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 7. If qualitative research design, has the relationship between researcher and participants been adequately considered? | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 1 |
| ETHICS | | | | | | | | | | | |
| 8. Have ethical issues been taken into consideration? Whether consent was obtained from participants and information sheets provided. | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 1 | 1 |
| DATA ANALYSIS | | | | | | | | | | | |
| | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 9. Was the data analysis sufficiently rigorous? Was it sufficiently described and an appropriate sample analysed?<br>For quantitative analysis, are enough data presented for results to be valid and useful (i.e. on both the dependent and independent variables). | | | | | | | | | | | |
| 10. Is there a clear statement of findings? Whether the studies gave enough depth and detail to give confidence in their findings. Whether the studies assessed the relevance of their findings to the wider population and/or context. | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

**Adapted from** http://www.casp-uk.net/#!casp-tools-checklists/c18f8

in terms of organisational disruption and outputs between organically increasing minority share and using policy *fiat*.

Lovrich and Steel (1983) found no evidence that increased minority share saw changes in arrest rates – clearance rates in high and low affirmative action cities were about the same at each time period observed, e.g. the mean Uniform Crime Report ('UCR', a measure compiled by the US Federal Bureau of Investigation) rate of clearance by arrest in 1980 for low affirmative action cities was 20.6, compared to 19.6 for high affirmative action cities, a non-significant difference.

Lott (2000) acknowledged the data difficulties affecting arrest rates (the year of arrest can differ from the year the crime occurred, and offences may involve multiple offenders; Lynch and Addington 2007). Lott reported that coefficients for the percentage of the police department comprising ethnic minorities were consistently negatively associated with arrest rates, but only the robbery arrest rate was *significantly* reduced by increasing minority share. Thus, in his fixed effect model, as the minority share increased by one standard deviation there was a significant decrease of 4.3% ($t = 2.65$) in the standard deviation of the total robbery arrest rate. Lott claimed an association between higher arrest rates and forces with a higher proportion of white officers, but even on the study's own terms the effect sizes were modest. Further, Lott's evidence for differences among specific minority groups was mixed, e.g. as black male officer share of force strength increased there were statistically significant falls in arrest rates for violent crime, rape, robbery and assault, but lower arrest rates associated with increasing the Hispanic male officer share did not reach statistical significance. In weighing Lott's claims his treatment of statistical significance and other elements of data analysis proved controversial.

Donohue and Levitt (2001, p. 367) found that an increase in the number of white officers (in forces where their proportion had risen relative to minority officers) was statistically associated with more arrests of minorities but little change in white arrests. Conversely, an increase in minority officers was associated with more white arrests but not more minority arrests. Specifically, an increase in white officers saw a (statistically nonsignificant) .13 increase in white arrests per capita, whereas additional non-white officers saw a (statistically significant) increase of 18.5 white arrests per capita. Conversely, an increase in white police was associated with a significant increase of 9.16 in non-white arrests and an increase in black police was associated with a decrease of 7.5 in non-white arrests. These patterns were pronounced for minor offenses.

McCrary (2008, p. 340) found 'remarkable similarity between litigated and unlitigated departments' in arrest and clearance rates. However, McCrary argued that broad similarities may mask modest differences such that 'affirmative action' litigation may be associated with reduced arrests of black citizens. Hur (2012) found that clearance-by-arrest rates decreased as minority share increased, with standardised total rates being significantly reduced by 0.19. Sharp (2014) found that black representation in forces had no impact on black order maintenance arrest rates. The correlation coefficient measuring strength of association between percent of police force that was black and the order maintenance arrest rate for blacks was non-significant at $r = 0.044$. However, Sharp also found that black *political* representation diminished black order maintenance arrests, but only in mayor-run cities with black mayors. Affirmative action, litigation, minority mayors, and greater social diversity over time (noting that evidence of minority recruitment effect on minority arrests features increasingly in the more recent studies), suggests a causal pathway more complex than minority recruitment alone.

Turning to minority share and *public satisfaction*, the review's overall finding was that there was little evidence that increasing minority share improved citizen evaluations of police services.

Skogan (1979) reported a positive association between increased minority share and racially polarised views about police performance, but correlations were modest. That between black representation on the force and percentage of white citizens who thought police performance was 'good' was 0.26 and the association between black police representation and the percentage of blacks who thought likewise was 0.49. Decker and Smith (1980) found little association between increased minority share and citizen evaluations of police. The zero-order relationship between

active efforts to recruit ethnic minorities and black citizens' evaluation of the police, while positive, was very low (eta squared = 0.01), while the relationship between minority police per capita and citizen satisfaction did explain a modest degree of variation in satisfaction (eta squared = 0.11). Overall the zero-order relationships between areas where minorities were actively recruited into departments, and black citizens' satisfaction, was low. Weitzer (2000) found officers' race immaterial to citizens' satisfaction, with no support for deploying officers to neighbourhoods on the basis of ethnicity. Brunson and Gau (2015) similarly found no association between minority share and positive perceptions of the police, the more noteworthy given the almost entirely African-American composition of both the community sampled and its police department. Citizens were consistently dissatisfied with, and lacked confidence in, their police. Although many problems with police were described neither the citizen's race nor that of the officers were mentioned. Both Brunson and Gau's, and Weitzer's, qualitative studies highlight the role of officer behaviour and neighbourhood context in shaping citizen satisfaction. In systematic review terms this bespeaks the role of 'moderators', factors that activate the mechanisms through which an intervention has its effect.

### *Interpreting the relationship between minority officer share and organisational outcomes*

The selected studies offered various explanations for the nature of the relationship between minority share and organisational outcomes. It is worth stressing that affirmative action was the specific mechanism through which increased minority share in many US police departments was achieved. Indeed, 'the overwhelming weight of the evidence suggests affirmative action played a pivotal role in the diversification of American police departments' (Sklansky 2006, p. 1235). Many studies in this review were thus measuring not simply the relationship, e.g. between minority share and arrest rates but the relationship between affirmative action and arrest rates.

Many, including policymakers, anticipated that increasing minority share would engender positive outcomes. Unlike crime rates, arrests are undeniably a function of officer decision-making. However, *interpreting* the evidence on the relationship between minority share and arrest rates is challenging. Although some selected studies regarded arrest rate as a measure of organisational efficiency – witness the use of the terms 'deleterious' (Lovrich and Steel 1983) and 'reduced crime control performance' (Hur 2012) – reduced arrests does not necessarily represent reduced efficiency. Indeed, Sharp (2014), who links arrests more to equality than efficiency, suggests that *fewer* arrests would flow from more fair-minded policing. Donohue and Levitt (2001) note that the greater arrest rate for whites when minority share is increased might be *desirable* if it corrected a skewed arrest propensity. However, they acknowledge that it is unclear 'whether increases in cross-race arrests suggest that greater harassment is being perpetrated or that cross-race policing is less effective because crime and, correspondingly, arrests, are higher when such policing is more prevalent' (Donohue and Levitt 2001, p. 391).

Matters of equality and perceived legitimacy aside, it is far from true that all arrests are 'good' arrests. Some may be unnecessary – a function of over-policing, stereotyping and 'fishing exhibitions' (Holdaway 1983). If a reduced arrest rate results from targeted, proportional and measured policing it might indeed represent enhanced performance, but this cannot be gleaned from the selected studies, nor are the quantitative study designs favoured in systematic reviews best able to capture such a relationship. In finding that 'the addition of officers of a given race is associated with an increase in the number of arrests of suspects of a different race but has little impact on same-race arrests', Donohue and Levitt (2001) do suggest that officers are making *different* calls depending on their ethnicity and that of the suspect, but we would have to know the nature of the difference to refute the studies that suggest that race does not matter.

Turning to the matter of minority share and citizens' satisfaction with police, the few studies bearing on enhanced minority recruitment and citizen satisfaction generally found no relationship with citizen satisfaction. While Skogan (1979) offered little interpretation of his 'no effect' finding, Decker and Smith (1980) offered several. They firstly argued that 'organizational variables' may

undermine black officers' responsiveness to black citizens' needs and, especially, that police subculture may blur racial differences by demanding loyalty that supersedes racial identity. Secondly, they suggested that having an innate understanding of black culture and communities does not necessarily translate into action (Decker and Smith 1980, p. 392). Thirdly, they cited explanations touching on housing, income, occupation and other socioeconomic variables (Mast 1970, Bordua and Tifft 1971). Decker and Smith's final explanation was that their research design may have been insufficiently sensitive to register differences in black citizens' perceptions of black and white police because their data concerned overall evaluations of the police.

Weitzer (2000) highlighted the role of socioeconomic conditions at neighbourhood level, noting that residents in middle class neighbourhoods perceived few differences in white and black officers' conduct. Satisfaction with policing in such areas may reflect low crime and disorder, which reduces dissatisfaction, leavening citizens' impressions of officers of different ethnicities. Weitzer also considered the hypothesis that officer behaviour rather than race explains citizens' evaluations. Many respondents subscribed to the 'blue cops principle', where identity as an officer trumps racial identity. Weitzer found that believing there are behavioural differences by officer race seldom led to preference for single-race police teams. Mixed teams were preferred on the basis that they 'check' the behaviours of both black and white officers, controlling any inherent differences between them.

Brunson and Gau (2015) found that shared race failed to guarantee positive interaction between officers and citizens and that black citizens were often very dissatisfied with black officers. They argued that citizen satisfaction is likely founded on officer behaviour and attitudes, not ethnicity, which accords with conceptualizations of police legitimacy. While black citizens mistreated by white officers may see this through the lens of race, those mistreated by black officers saw this through the lens of organisational corruption and mismanagement (Brunson and Gau 2015). 'By substituting black officers for white ones, policymakers may be able to reduce African Americans' perceptions of race-based discrimination but still fail to alter these citizens' overarching beliefs that they are the recipients of substandard policing' (Brunson and Gau 2015, p. 234). Moreover, 'the officer race hypothesis rests on the untenable assumption of homogeneity among African Americans' (Brunson and Gau 2015, p. 235). Shared race is not a proxy for mutual respect. Like Weitzer (2000), their analysis implicated macro-level socioeconomic context. Since minorities often live in areas of concentrated poverty with high crime rates and social and physical disorder, the racial composition of the police cannot effect real improvement, compounded if officers policing these areas experience high levels of demand, stress, and burn-out, leading to resentment and hostility towards residents (Cowell *et al*. 1982).

This section has profiled our application of standard systematic review methods to the question of minority share, police effectiveness and public satisfaction, and described the findings in respect of these relationships, so as to give a sense of the practice of conducting a systematic review in the criminal justice domain and to convey an impression of the outcomes resulting from such a systematic review. In the Discussion following we use this example to draw out some of the constraints on our understanding posed by the limitations of systematic review conventions. We then demonstrate how a more inclusive approach to evaluation methodology can address such limitations.

## Discussion

Systematic review broadly found little 'good' evidence that increasing minority officer share has an impact on organisational outputs and outcomes. We place 'good' in quotemarks because the field lacks the primary studies customarily rated high-quality in systematic reviews, reflecting technical difficulties in conducting them. This does not necessarily mean the selected studies were poorly executed but that putative causal relationships are provisional and findings must be interpreted cautiously.

All the selected studies were conducted in the United States. The particularities of race relations in any country inevitably affect its police/public relationship. In the US the history of slavery,

segregation, and ghettoisation are reflected in gross racial disparities of arrest, incarceration, and police use of force (Dulaney 1996, Ba *et al*. 2021). That context differs from the position of ethnic minority officers in Britain (Holdaway 2009, Davies *et al* 2021) and likely elsewhere, as suggested by emergent critiques contributed by scholars based in the global South. Such critiques draw on a long-established vein of critical treatments of policies relating to community policing in Latin America. This is not to deny the play of colonialism and racialism in many 'advanced' societies but to say that each has distinctive inflections forming its specific context. While context varies, the inter-related consequences of multiple forms of disadvantage make it hard for systematic reviews to isolate binary relationships.

There is a moral case for increasing minority share within police organisations, reflecting imperatives posed by the troubled relations between minority citizens and the police across societies that differ in their particular experience of colonialism, prejudice and unequal opportunities. We would acknowledge the body of literature demonstrating that minority officers do not behave very differently from majority officers and citing organisational culture and socialisation processes. Minority officers may simply absorb the perspectives of the majority officers with whom they work and come to display similar behaviours and attitudes towards minority citizens (Alex 1969, Palmer 1973, Leinen 1984, Cashmore 1991, Barlow and Barlow 2000, Cashmore 2002, Jones-Brown and King-Toler 2010). This may reinforce strained relations between police and minority communities (Alex 1969, Mast 1970, Bordua and Tifft 1971, Decker and Smith 1980, Jones-Brown and Maule 2010, Vomfell and Stewart 2021), particularly where minority officers who reject the prevailing occupational culture resign prematurely (Cooper and Ingram 2004).

Amongst our selected studies, Brunson and Gau (2015) argued that officer behaviour is more important than their ethnicity in conditioning officer/citizen interaction. This speaks to procedural justice theory which holds that perceived fairness is more important in shaping a social institution's legitimacy than its perceived effectiveness (Tyler and Huo 2002, Sunshine and Tyler 2003, Tyler 2003, 2007). Where citizens perceive officers to be trustworthy and competent and where officers treat citizens fairly and with respect, citizens are more likely to accept police authority as legitimate and defer to the law. These perceptions may flow from personal experiences of policing, from associates' accounts, or even media portrayals of policing. Empirical studies of procedural justice foreground the importance of processes and officer behaviour in shaping legitimacy and public satisfaction. A more representative force may not improve arrest rates but gain greater legitimacy (Riccucci *et al*. 2014). Moreover, Hong (2017) found an association between enhanced ethnic minority representation and reduced police misconduct. If increased minority share is to translate into improved organisational outputs and outcomes, attention to the structural dynamics that shape relationships between crime, policing and public is critical. Correcting macro-level inequalities in society is beyond the immediate grasp of the police, but the ways that officers behave is within their gift.

An example of the value of focusing on markers of officer behaviour in interaction with citizens can be drawn from a topic of high contemporary importance in policing, the case of ethnicity and officer propensity to use force. Here the urgent need to understand what lay behind very high profile cases of excessive use of force directed at minority citizens has produced a stream of studies that we would characterise as cumulatively benefiting from (i) 'mesh', by which we mean dovetailing their findings with cognate previous studies, (ii) a high degree of granularity of analysis, and (iii) methodological eclecticism. We might start with Menifield *et al*. (2019), a study that compiled a data set of all confirmed cases of the use of lethal force by officers in the US in a two year period (2014 and 2015). Persons killed by officers were indeed disproportionately of minority status, but white officers were no more likely than non-white officers to use lethal force against minority persons. The study answers the question whether police are more likely to apply lethal force to minority suspects but it also raises the question of why that may be. Might the answer lie in behaviour during the interaction?

Accordingly, Ba *et al*. (2021) examined the effect of officer ethnicity on interaction with minority citizens. Rather than sample across jurisdictions, they chose a single city sample – Chicago, a jurisdiction with a longstanding multiplicity of ethnicities, a demographic that is diverse in several other ways,

and a history of confining police recruitment to whites prior to the advent of mandated minority recruitment. Another prime characteristic of the study was the sample size for the study's key empirical indicators, measuring in the millions of patrol assignments, which helps to address the single-city design. Any tendency for self-selection of assignments was controlled-for by using pre-assigned rotations. Averages were drawn of behaviour by officers possessing differing demographic profiles in which given assignments displayed comparable conditions. The empirical indicators taken to represent officer/citizen interaction were chosen to reflect the key stress points in such interactions – numbers of stops, numbers of arrests, use of force. Relative to white officers, Black and Hispanic officers made statistically-significantly fewer stops and arrests, and less often used force, particularly in respect of Black citizens. The volume of assignments makes for a database offering powerful evidence of these key differences, suggesting that a similar scenario would likely be found in other large US cities, but even under strict criteria of generalizability Ba *et al*. (2021) offers a strong treatment of police ethnicity and interaction with citizens in contemporary Chicago. The study closely allies with Hoekstra and Sloan (2022), but here a large corpus of cases was examined using a different prime indicator, 911 (emergency) calls to police call centres. Some 1.6 million calls were examined, in two (anonymous) cities, neither of whose departments permitted the use of discretion in officer despatch. The researchers found that White officers increased force much more often in Black majority neighbourhoods than did ethnic minority officers, with Black citizens 55% more likely to experience force and Hispanics 75% more likely to experience force than if White officers scaled up force with the same restraint as did minority officers. They also found that White officers used force slightly more than minority officers in predominantly White neighbourhoods. These differences were pronounced, and the sample large, reducing the possibility that they arose by chance.

But while the Ba *et al*. (2021) and Hoekstra and Sloan (2022) studies point in the same direction, and their sample sizes add to the picture of different treatment, they do not elaborate an explanation. Jetalina *et al*. (2017) examined the use of different types of non-lethal force by ethnicity. They extracted cross-sectional data from 5,630 use-of-force reports in Dallas police. Each was categorised into ethnicity dyads. Multi-level, mixed logistic regression models were used to assess the relationship between these dyads and the types of use-of-force. This was a study with a sophisticated statistical analysis and a high level of transparency in categorisation of different use-of-force types, and it also enabled accounting for officer factors, citizen factors and situational factors. Some 48% of the studied interactions were between a White officer and a non-white person. When using bivariate models 'hard-empty hand control' (physical techniques that may cause injury but short of grievousness or death) and 'intermediate weapon-use' were significantly higher in White/Black dyads relative to all-White dyads. However, once individual and situational factors were controlled for the relationship between race/ethnicity and 'hard-empty hand control' was no longer significant. A final study, Wright and Headley (2020), drills down further by adding gender to ethnicity in pursuing officer/citizen interaction in encounters involving force. Individual officer-level data were drawn from the Dallas and Indianapolis departments to examine use of force in officer/civilian dyads whose composition varied by ethnicity, race and gender. Heightened levels of use-of-force were found where officer/civilian status was incongruent by race and gender, and this was particularly so where White officers interacted with Black civilians.

Together, these studies' increasing attuning to dimensions of officer/civilian interaction indicative of behavioural differences moves us towards a granularity of analysis, and a more deliberate attempt to build on work that has gone before, that promises to advance our understanding of the effects of minority officer status on police practice. Such efforts can be facilitated by taking on board a further idea from Realist Evaluation, that of a 'logic model'. Logic models graphically schematise each stage of the design, implementation, effects and evaluation of a policy intervention so as to understand how interventions produce their outcomes. Policy interventions are made in order to create a change, specifically one that solves an identified problem, such as whether recruiting more minority officers improves police effectiveness. The reasoning that lies behind the components of the intervention is its 'theory of change'. A logic model can be seen as an elaborated hypothesis that enables

us to systematically test that theory (Cohen and Cartwright 2020). Logic models can enable coordinated research efforts and identify where more knowledge is needed to help deliver desired outcomes.

## Conclusion

Increasing recruitment of minority officers will likely remain a policy priority in most democratic societies, given the moral case and its symbolic significance – even with little demonstrable impact on arrest rates or public satisfaction. Yet it remains frustrating that systematic review methodology applied to an issue of widespread concern such as ethnic minority police recruitment could not render a more conclusive result. Experimentalists say that a negative outcome is still a result. In the present case, we would substitute 'neutral' for 'negative'. But the safest conclusion is the overarching one that traditional systematic review methodology is constrained by narrow conventions about a valid evidence base, all the more frustrating given the acknowledged importance of achieving greater diversity in police institutions. In Common Law jurisdictions this is literally fundamental since the police are regarded as 'citizens in uniform', drawn from, and representative of, the community they police. A force drawn disproportionately from one fraction of the community cannot help but be perceived as an occupying force.

Although the studies that survived the review process did address the research questions, they were for the most part dated, confined to a single country, and highly context-specific. Together, these characteristics provide limited reliable evidence to apply to contemporary policing, bearing in mind the substantial transformations marking recent decades, along with the troubling endurance of the most severe forms of police misconduct and malpractice. Yet it is implausible, not least in that context, that the composition of the police workforce is of no consequence, nor is it plausible that the esteem or otherwise the public hold for the police is irrelevant. There is a strong implication, therefore, that methodologies alternative to classic systematic review are called for. To cite just one consideration, we would suggest that, because the relationships of interest are complex, the fact that the authors of the selected studies had to employ surrogate and/or indirect measures in order to metricate relationships prior to manipulating them statistically, led to a degree of simplification that fails to reflect the contemporary field's theoretical understanding of diversity in given types of law enforcement or order maintenance intervention.

Others have also noted the lack of good quality evaluations in the policing field (Smith 2014; Neyroud 2022). As well as the limited base of primary studies, the databases for searching vary in fitness for purpose, and abstracts could often do more to facilitate searching. In searching large numbers of publications for relevant material, decisions about what to include are complicated by what we might call the 'undisciplined norms' of reporting research in this field. For example, individual studies tend to offer findings relating to a large number of relationships and effects. These are at varying degrees of depth, and sometimes downright sketchy, with few relationships detailed to a point where they could be deemed robust, let alone definitive.

However, we would go beyond the prevailing critiques of classic systematic review. In this case the review methodology selected studies that mostly used just two data sources (UCR and LEMAS), were mostly cross-sectional in design, and drew samples entirely from cities. In short, classic systematic review rendered no diversity of sample and little of study method. As attention moves beyond the myopic focus on 'what works' towards 'how' and 'why' things work (Pawson *et al*. 2005), the rigid research design boundaries of traditional systematic reviewing would benefit from the wider methodological palette that characterises contemporary criminological research. Greater inclusivity would embrace studies using qualitative methodologies, mixed methods, and merged methods (Gobo *et al*. 2021), a point now acknowledged by proponents of systematic review (Noyes *et al*. 2018). This could benefit the quality standards of studies using such methods as well as the systematic review endeavour, since engaging with systematic review criteria alerts us to threats to validity and generalizability (Fielding *et al*. 2020).

Recent studies illustrate how a more inclusive methodological palette can provide more nuanced, theory-led empirical inquiry and greater analytical density through elaborated logic models (Fielding 2021), offering the prospect of an evidence base that better supports contemporary standards of theoretical sophistication alongside methodological rigour. There is an analogy in Mixed Method research, where a key stage is 'data integration', the stage at which findings from the methods in play are brought together. Conventionally, 'convergence' is sought, i.e. the various methods being combined produce equivalent findings. However, another form of data integration may be as compelling, and less open to premature conclusions that the 'mix' has produced robust results. Such data integration occurs when the results from different methods do not simply point to the same relationship but address distinct but related components of an *explanation* of the relationship, a quality we call 'mesh'.

Above we profiled recent studies of officer ethnicity and the use of force as an example of research into a topic of high contemporary importance in policing that benefited from sophisticated research designs and a variety of methods. In such cases we can build a logic model that links studies pursuing that relationship but using different designs and methods appropriate to the model's specific elements, while including in the corpus of studies only those that satisfy the quality standards of their particular method. The cumulative 'mesh' of studies – progressively addressing gaps in cognate previous studies while working from the leads they provide – can move the field forward to a point where as well as recognising 'what works' we can understand how to implement policy to make it work (mechanism), see what is essential and what is not (cause), and enable the fine-tuning needed to fit the policy to the jurisdiction and resources available (context). It is in that sense that our efforts at evaluating policy become 'realistic'. In our view this argues for drawing on studies from a wider range of methodologies rather than confining ourselves to the 'gold standards' of classic systematic reviews when pursuing matters of real-world importance and active public concern such as the effect of diverse police recruitment on the delivery of law enforcement.

## Note

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## References

Studies selected by the systematic review

Alex, N., 1969. *Black in blue*. New York, NY: Appleton-Century-Crofts.

Ba, B.A., *et al*., 2021. The role of officer race and gender in police-civilian interactions in Chicago. *Science*, 371 (6530), 696–702.

Barlow, D., and Barlow, M., 2000. *Police in a multicultural society*. Prospect Heights, IL: Waveland.

Bittner, E. 1978. *Functions of the police in modern society*. New York: Aronson

Bordua, D., and Tifft, L., 1971. Citizen interviews, organization feedback and police-community relations decisions. *Law and society review*, 6, 155–182.

Brown, R., and Frank, J., 2006. Race and officer decision making. *Justice quarterly*, 23 (1), 96–126.

Brunson, R.K., and Gau, J.M., 2015. 'Officer race versus macro-level context: A test of competing hypotheses about black citizens' experiences with and perceptions of black police officers'. *Crime & delinquency*, 61 (2), 213–242. doi:10.1177/0011128711398027.
Cashmore, E., 1991. *Out of order*. London: Routledge.
Cashmore, E., 2002. Behind the window dressing: ethnic minority police perspectives on cultural diversity. *Journal of ethnic and migration studies*, 28 (2), 327–341.
CASP UK. n.d. *Critical appraisal skills programme*.
Cochran, J., and Warren, P., 2012. Racial, ethnic and gender differences in perceptions of the police. *Journal of contemporary criminal justice*, 28 (2), 206–227.
Cochrane Collaboration, 2008. *Review manager version 5 (computer program)*. Copenhagen: Nordic Cochrane Centre.
Cohen, N., and Cartwright, N. 2020. Street level theories of change. In: N. Fielding, K. Bullock, and S. Holdaway, eds. *Critical reflections on evidence-based policing*. Abingdon: Routledge, 52–71.
Cooper, C., and Ingram, S. 2004. Retention of police officers. *Rds Occasional Paper No 86*, London: HMSO.
Cowell, D., Jones, T., and Young, J.. eds. 1982. *Policing the riots*. London: Junction Books.
Davies, T., *et al*., 2021. Visibly better? *Policing & society*, 31 (9), 1133–1148.
Decker, S., 1981. Citizen attitudes toward the police. *Journal of police science & administration*, 9, 80–87.
Decker, S.H., and Smith, R.L., 1980. Police minority recruitment: a note on its effectiveness in improving black evaluations of the police. *Journal of criminal justice*, 8, 87–393.
Donohue, J., and Levitt, S. 2001. The impact of race on policing and arrests. *Yale Law Faculty Scholarship Series*, Paper 37, New Haven: Yale University.
Dulaney, M., 1996. *Black police in America*. Bloomington: Indiana University Press.
Engel, R.S., 2005. Citizens' perceptions of distributive and procedural injustice during traffic stops with police. *Journal of research in crime and delinquency*, 42, 445–481.
Fielding, N., 1988. *Actions and structure*. Beverley Hills: Sage.
Fielding, N., 2005. *The police and social conflict*. 2nd ed. London: Routledge.
Fielding, N., 2021. Mixed methods, ethnography and criminology/criminal justice research. In: S. Bucerius, K. Haggerty, and L. Berardi, eds. *Oxford handbook of ethnographies of crime and criminal justice*. New York: Oxford University Press, 135–154.
Fielding, N., *et al*., eds. 2020. *Critical reflections on evidence-based policing*. Abingdon: Routledge
Giddens, A., 1986. *The constitution of society*. London: Polity.
Gobo, G., *et al*. 2021. *Merged methods*, London: Sage.
Gough, D., Oliver, S., and Thomas, J., 2012. *Systematic reviews*. London: Sage.
Hammerstrøm, K., Wade, A., and Klint, A., 2010. Searching for studies: a guide. *Campbell systematic reviews*, 13 (1), 1–73. doi:10.4073/csrs.2010.1.
Hoekstra, M., and Sloan, C., 2022. Does race matter for police use of force? Evidence from 911 calls. *American economic review*, 112 (3), 827–860.
Holdaway, S., 1983. *Inside the British police*. Oxford: Basil Blackwell.
Holdaway, S., 2009. *Black police associations*. Oxford: Oxford University Press.
Hong, S., 2017. Does increasing ethnic minority representativeness reduce police misconduct. *Public administration review*, 77 (2), 195–205.
Hur, Y., 2012. Racial diversity, is it a blessing to an organization? Examining its organizational consequences in municipal police departments. *International review of administrative sciences*, 79 (1), 149–164. doi:10.1177/0020852312467613.
Jacobs, J., and Cohen, J., 1978. The impact of racial integration on the police. *Journal of police science and administration*, 6, 168–183.
Jetalina, K.K., *et al*., 2017. Dissecting the complexities of the relationship between police officer-civilian race/ethnicity dyads and less-than-lethal use of force. *American journal of public health*, 107 (7), 1164–1170.
Jones-Brown, D., and King-Toler, E., 2010. The significance of race in contemporary urban policing policy. In: K. Ismaili, ed. *US criminal justice policy*. Burlington, MA: Jones and Bartlett, 42–74.
Jones-Brown, D., and Maule, B., 2010. Racially-biased policing. In: S. Rice, and M. White, eds. *Race, ethnicity, and policing*. New York: New York University Press, 140–174.
Karn, J., 2013. *Policing and crime reduction*. London: Police Foundation.
Kerner Commission. 1967. *National advisory commission on civil disorders*. Available from: http://www.eisenhowerfoundation.org/docs/kerner.pdf [Accessed 14 December 2015].
Leinen, S., 1984. *Black police, white society*. New York: New York University Press.
Lonsway, K., *et al*., 2002. *Men, women and police excessive force*. Washington, DC: The National Centre for Women and Policing.
Lott, J.R., 2000. Does a helping hand put others at risk? Affirmative action, police departments, and crime. *Economic inquiry*, 38 (2), 239–277.
Lovrich, N.P., and Steel, B.S., 1983. Affirmative action and productivity in law enforcement agencies. *Review of public service administration*, 4 (1), 55–66.
Lynch, J., and Addington, L., 2007. *Understanding crime statistics*. Cambridge: Cambridge University Press.

Macpherson, Sir W. 1999. *The stephen lawrence inquiry*. Cm 4262. London: HMSO.
Maghan, J., 1993. The changing face of the police officer. In: R. G. Dunham, and G. P. Alpert, eds. *Critical issues in policing*. 2nd ed. Prospect Heights, IL: Waveland Press, 348–360.
Manning, P., 1970. *Police work*. Cambridge, MA: MIT Press.
Mast, R., 1970. Police-ghetto relations. *Race & class*, 11, 447–462.
Mastrofski, S., 1983. The police and noncrime services. In: G. Whitaker, and C. Phillips, eds. *Evaluating the performance of criminal justice agencies*. Beverly Hills, CA: Sage, 33–61.
McCrary, J., 2008. The effect of court-ordered hiring quotas on the composition and quality of police. *American economic review*, 97 (1), 318–353.
Menifield, C.E., Shin, G., and Strother, L., 2019. Do white law enforcement officers target minority suspects. *Public administration review*, 79 (1), 56–68.
MOPAC, 2014. *Mps workforce diversity*. London: Mayor's Office for Policing and Crime.
Muir, W.K., 1979. *Police: streetcorner politicians*. Chicago: University of Chicago Press.
Neyroud, P., 2022. Policing "landscapes" for the rule of law and public protection. *Cambridge journal of evidence-based policing*, 6, 140–161. doi:10.1007/s41887-022-00081-y.
Noyes, J., *et al*., 2018. Cochrane qualitative and implementation methods group guidance series—paper 1: introduction. *Journal of clinical epidemiology*, 97, 35–38.
Palmer, E., 1973. Black police in America. *Black scholar*, 5, 19–27.
Paoline, E.A., Myers, S., and Worden, R.E., 2000. Police culture, individualism and community policing. *Justice quarterly*, 17 (3), 575–605.
Pawson, R., *et al*., 2005. Realist review–a new method of systematic review designed for complex policy interventions. *Journal of health services research and policy*, 10 (Suppl 1), 21–34.
Regoli, R., and Jerome, D., 1975. The recruitment and promotion of a minority group into an established institution: The police. *Journal of police science and administration*, 3, 410–416.
Reiner, R., 2010. *The politics of the police*. Oxford: Oxford University Press.
Riccucci, N., *et al*., 2014. Representative bureaucracy in policing. *Journal of public administration research and theory*, 24 (3), 537–551.
Rubinstein, J. 1981. *City police*. New York: Farrar, Straus and Giroux.
Scarman, L., 1981. *The Brixton disorders 10-12th April 1981*. London: HMSO.
Sharp, E.B., 2014. Minority representation and order maintenance policing: toward a contingent view. *Social science quarterly*, 95 (4), 1155–1171. doi:10.1111/ssqu.12078.
Sherman, L., 1980. Perspectives on police and violence. *The annals of the American academy of political and social science*, 452 (1), 1–12.
Sklansky, D., 2006. Not your father's police department: the new demographics of law enforcement. *Journal Of criminal Law & criminology*, 96 (3), 1209–1244.
Skogan, W., 1976. Efficiency and effectiveness in big-city police departments. *Public administration review*, 36 (3), 278–286.
Skogan, W.G., 1979. Citizen satisfaction with police services. In: R. Baker, and F.A. Meyer Jr, eds. *Evaluating alternative law enforcement policies*. Lexington, MA: Lexington Books, 29–42.
Smith, D. J., 2014. Wider and Deeper: the future of Criminology in Europe. *European Journal of Criminology*, 11 (1), 3–22.
Smith, B., and Holmes, M., 2003. Community accountability, minority threat and police brutality. *Criminology*, 41 (4), 1035–1064.
Sunshine, J., and Tyler, T., 2003. The role of procedural justice and legitimacy in public support for policing. *Law and society review*, 37 (3), 513–548.
Telep, C.W., and Weisburd, D., 2012. What is known about the effectiveness of police practices in reducing crime and disorder? *Police quarterly*, 15 (4), 331–357.
Tuch, S., and Weitzer, R., 1997. Trends: racial differences in attitudes toward the police. *Public opinion quarterly*, 61, 642–663.
Tyler, T., 2003. Procedural justice, legitimacy, and the effective rule of law. In: M. Tonry, ed. *Crime and justice*. Chicago: University of Chicago Press, volume 30, 431–505.
Tyler, T., 2007. *Legitimacy and criminal justice*. New York: Russell Sage Foundation.
Tyler, T., and Huo, Y., 2002. *Trust in the law*. New York: Russell Sage Foundation.
Vomfell, L., and Stewart, N., 2021. Officer bias, over-patrolling and ethnic disparities in stop and search. *Nature human behaviour*, 5, 566–575.
Walker, D., *et al*., 1972. Contact and support: public attitudes toward police and courts. *North Carolina Law review*, 51, 43–79.
Weitzer, R., 2000. White, black, or blue cops? Race and citizen assessments of police officers. *Journal of criminal justice*, 28 (4), 313–324. doi:10.1016/S0047-2352(00)00043-X.
Wright, J.E., and Headley, A.M., 2020. Police use of force interactions: Is race relevant or gender germane? *The American review of public administration*, 50 (8), 851–864.
Yesberg, J., *et al*., 2022. Race and support for police. *Policing & society*, 32 (7), 878–895.
Zara, S., *et al*., 2000. Data collection instrument and procedure for systematic revews. *American journal of preventative medicine*, 18 (1), 44–70.