## How do we measure Public Confidence in Policing? Analysis of large scale survey data

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# What does it mean when we ask the public if they are 'confident' in policing? The trust, fairness, presence model of 'public confidence'

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### **Abstract**

'Confidence' is widely taken to be a crucial measure of the relationship between citizens and public services such as policing. It is acknowledged that confidence is multifaceted and hard to measure, but often discussions are based on one 'headline' rating of a single item, for instance: 'What is your level of confidence in...'. The subsequent focus for research is explaining what might drive 'confidence', or what it might predict. We are interested in a more fundamental question: what does it mean when we ask the public if they are 'confident' in policing? To answer this, we analyse extensive and detailed survey data specifically designed to measure public confidence, within the jurisdiction of a UK police force – West Midlands Police. We develop then validate a three-part model of confidence as trust, fairness and presence, and find good evidence to support this model across different waves of the survey. This extends existing literature with implications for policy.

### **Keywords**

Confidence, public, trust, fairness, procedural justice

The question of public confidence is widely relevant because it takes us to the heart of the relationship between citizens and public institutions (TE Cook and Gronke, 2005; Miao et al., 2014). 'Public confidence' has been used to describe attitudes in relation to: European Union (EU) crisis management institutions (Persson et al., 2017); U.K. policies on business (Linsley et al., 2016), asylum (Boswell, 2015) and local government (James and Moseley, 2014); various branches of state government in the USA (Kelleher and Wolak, 2007); the Supreme Court (Caldeira, 1986) and lower courts (Benesh, 2006); Congress and the White House (Ladd and Bowman, 1998); social security (FL Cook et al., 2010) and other U.S. institutions (TE Cook and Gronke, 2005). There are long-standing concerns about

declining confidence across institutions by the American public (Heise, 1985; Lipset and Schneider, 1983), and these concerns are shared across Europe (Eriksson, 2012), and Canada and Japan, as shown in the World Values Surveys (see Pharr and Putnam, 2000). In these settings, confidence is often measured with a single item.<sup>1</sup>

'Public confidence' is a concern in the context of policing because the public are a key source of help and information. It is also important in any society that the public

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Kevin Morrell, Durham University, Durham DHI 3LB, UK. Email: kevin.morrell@durham.ac.uk have confidence in the executive branch of government because this underpins consent and cooperation (Tyler, 1990). There are overlaps in terms of what 'public confidence' means across these different settings. Several considerations shown to be important in public institutions are also understood as key in policing: the role of personal experience (Cook et al., 2010), perceptions of independence (Benesh, 2006), effective communication (Bain et al., 2014; Heise, 1985) and importance of procedural fairness and transparency (Tyler and Degoey, 1995). However, confidence in policing differs in important ways from confidence in other public institutions because of the nature of police work (MK Brown, 1988; Klockar, 1984; Mastrofski, 2004). With the power to use force (Davies and Thomas, 2008) and their role in maintaining order (Bradford et al., 2014; Morrell and Currie, 2015; Stott, 2011), the police represent state authority in ways that other public servants do not (Skogan and Frydl, 2004).

Given these unique powers, important contributions in understanding public confidence in policing emphasize procedural fairness (Tyler 1990; Tyler and Blader 2000; Tyler and Degoey, 1995; Tyler and Folger, 1980). Fair treatment involves affording: 'respect, dignity, voice, equity and neutrality to people when they are interacting with authority figures' (Bradford et al., 2018: 640). Whether treatment is deemed objectively fair or is subjectively perceived to be fair has been shown to be relationally complex because of sociodemographic factors such as gender (JM Brown and Heidensohn, 2000; Westmarland, 2002), ethnicity (Marks, 2008; Smith and Stephenson, 2005; Schuck and Rosenbaum, 2005) and age (Ren et al., 2005). Other factors, such as police culture (Myhill and Bradford, 2013), and location can influence perceptions of confidence and procedural fairness (Skogan, 2006; Skogan and Hartnett, 1997). These relational factors make it problematic to talk of 'the public'; there can be multiple publics (Callaghan and Wistow, 2006).<sup>2</sup>

Unlike other public servants at street level (Lipsky, 2010), the police often act in public spaces rather than within institutions, so their work can be more visible (Morrell and Currie, 2015). They are a continual source of media interest. They also carry out many tasks that are readily understandable: patrolling, crowd management, directing traffic, ticketing, stops, searches, questioning, arrest, pursuit, emergency response. These features - visibility, media interest, work in public spaces, understandable tasks, powers and use of force, association with authority – mean the police are not 'faceless' as public servants are sometimes portrayed (Bradford et al., 2018). On the contrary, policing is more readily personified than many institutions or types of work, in terms of the prototypical figure of the police officer who (as seen by some) maintains order and embodies moral authority (Sunshine and Tyler, 2003).

This personification is a form of stereotyping; for instance, the tasks listed (patrolling, ticketing, etc.) invite a very simplistic picture of police work. Stereotypes can be hugely problematic, but they also provide a kind of conceptual scaffolding that can be the basis for a relationship and social identification (Sunshine and Tyler, 2003). When citizens encounter the police, it can be like a mirror reproducing social identity – people are made to feel they either belong or do not belong to society (Bradford et al., 2014).

As with the public administration literature more widely (Benesh, 2006; FL Cook et al., 2010; Kelleher and Wolak, 2007), measurement of confidence is contested in work on policing, making it difficult to trace the effects of change or evaluate effectiveness (Bradford et al., 2014; Fitzgerald, 2010; Fleming and McLaughlin, 2012; Myhill and Quinton 2010; B Stanko et al. 2012). This debate within policing connects with a number of long-standing questions about the nature of measures in public administration: Should we use objective or subjective measures? Are differences in public attitudes based on direct experience, or generalized beliefs, or stereotypes (Hinds, 2009)? Are they at a neighbourhood, regional or national level? What is the relationship between related terms such as trust, confidence, procedural fairness, legitimacy?

Here, we contribute to understanding by focusing on a fundamental theoretical question: the actual meaning of 'public confidence' in policing, in search of a better measure. This contrasts with studies whose focus is a single-item measure of confidence, used either to identify predictors of that measure or to connect to outcome variables (Merry et al., 2012) - which has been the predominant focus for not only policing studies, but also studies of other public institutions (see Benesh, 2006). We are able to contribute to this more fundamental theoretical question because we draw on data from a large-scale survey specifically designed to measure different aspects of public confidence in policing. The survey has been incrementally refined over 39 waves to incorporate a very large array of relevant measures and potential proxies for confidence. In studying the final three waves of the survey, each administered to approximately 8,400 members of the public, we develop and test a three-part model of confidence incorporating dimensions of trust, fairness and presence. Below, we review the literature on public confidence in policing and outline the context and methodology for this survey, prior to presenting our analysis and contribution.

### Public confidence in policing

In both the USA and UK, and in other settings, the closest synonym for public confidence in policing is trust (Barton and Beynon, 2015). Following B Stanko et al. (2012: 321) initially, we can differentiate between confidence: 'an

overall attitude or orientation that people have towards the police'; and trust: something 'that people do – or do not'. To trust the police is to hold beliefs about how officers will act in certain situations (Bradford et al., 2009), for instance that they will be fair and also effective (Jonathan-Zamir and Weisburd, 2013; Kochel et al., 2013; Tankebe, 2009, 2010). An expectation of fair treatment and also competence is consistent with a prevalent definition of trust across different disciplines – the willingness of trustors to make themselves vulnerable to a trustee (PytlikZillig and Kiimbrough, 2015).

This definition resonates with themes we introduced earlier – that policing as a public institution is more readily personified (Sunshine and Tyler, 2003), and that the police have unique powers over citizens (Davies and Thomas, 2008). On this view then, to have confidence in the police will include expectations conducive to trust, but it is a more general evaluation – of whether the job the police are doing is one that citizens can rely on. It connects with other definitions of confidence as an assessment of whether the police are doing a 'good job' – more precisely the response to the survey item: 'how good a job do people think the police do in their local area?' (EA Stanko and Bradford, 2009). This definition also links to widely used definitions of confidence as an assessment as to whether the police are proving effective in 'reducing crime' and that accordingly 'cops count' (Bratton and Malinowski, 2008). More broadly still, because the police represent state power and authority (Skogan and Frydl, 2004), confidence in the police is likely to reflect broader social attitudes relating to moral consensus and social cohesion. Thus confidence could also be defined as the result of activity: 'promoting identification by generating a positive sense of the individual's place in society' (Bradford et al., 2014: 528).

The context for this study, England, is a particularly revealing one in which to study public confidence, because there was a concerted policy focus on confidence in policing during the last years of the New Labour government: the 'confidence agenda' (Lee and McGovern, 2013). This was most clearly expressed in the policy paper From the Neighbourhood to the National: Policing Our Communities Together (Home Office, 2008). At the heart of this paper was a commitment to abolish a host of measures of policing effectiveness and to 'set only one top down national target for police forces – to deliver improved levels of public confidence' (p. 3). Because of the decentralization of English policing into different forces, there were differences across the measures and methods used in these surveys. However, many forces used survey instruments that were refined and developed over successive waves, incorporating insights from a growing literature focused specifically on confidence. These surveys connected to theoretical concepts such as trust, identification and procedural fairness (Bradford et al., 2009; Jackson and Sunshine, 2007; Tyler, 2006;), as well as operational concerns such as visibility.

Since 2010, the 'confidence agenda' has faded given substantial reductions in budgets, which also led to a steep fall in officer numbers nationwide (Rogers, 2014; Sindall and Sturgis, 2013). It was formally abandoned as a national performance measure, although many forces and Police and Crime Commissioners (PCCs) have retained levels of confidence as a target. We focus on a large and detailed data set at West Midlands Police (WMP) – a police service serving three million people over a geographical area that combines metropolitan and rural areas, and areas of high and low household income. The next section provides background on this survey, which we advocate as a better source of understanding 'public confidence' than instruments we know of either in policing or in public administration more widely.

### The West Midlands Police confidence surveys

Overview. WMP public confidence surveys were initially conducted at least every 6 months from 2004, when extensive consultation among various stakeholders was used to develop the first version. Interestingly, unlike many forces, and until very recently, WMP continued to invest in carrying out these surveys in the same depth and detail even after a change in administration, an abandoning of the national confidence target, and in the wake of cuts. This was, senior officers told us, because they found the cost was repaid in greater understanding. Each wave has had a sample size of around 8,400 and the waves we analyse (2015-2016) are the culmination of a progressively sophisticated approach to attitudinal surveying, grounded in the relevant literature (Bradford et al., 2009). Over 39 waves, items have been retained, added or omitted according to whether they have proven useful in enhancing understanding of confidence. There are limitations with relying on pre-existing data sets; however, it is important to emphasize that the items in the survey were informed by the relevant literature on confidence in policing and surveys of the Metropolitan Police Service (B Stanko et al., 2012). As inspection of the surveys and interviews with the market research agency confirmed that there was what one might call an academic integrity to these survey instruments. For instance, where there was a battery of items making up an established scale, these items were repeated verbatim across different waves of the survey. Refinements were based not only on empirical outcomes, but on a more rigorous experimental logic that preserved established insights from the academic literature (EA Stanko and Bradford, 2009).

Administration. The survey is carried out face to face, at people's homes using computer-assisted personal

interviewing (CAPI), by professional researchers trained in accordance with the (UK) Market Research Society's guidelines. Random checks ensure surveys are administered appropriately. WMP has 28 parliamentary constituencies, 300 surveys are administered in each constituency. These are aggregated to the level of neighbourhood policing units, each comprising at least two, and at most four constituencies. With such surveys representativeness is an important consideration. Quota sampling is used to achieve this and for the entire sample there is a sampling error of approximately  $\pm$  1% in terms of representativeness on the lines of ethnicity, age and gender. At the level of a neighbourhood policing unit (a smaller sample) this error is between 3% and 4%.

Content. The latest version of the survey is extremely extensive and wide-ranging, incorporating 61 separate sections designed to evaluate residents' views of police practices and tactics, and related measures. Questions evaluate people's perceptions or experiences of: types of crime, including antisocial behaviour (ASB); feelings of safety and worry about victimization; perceptions of police responsiveness and reliability; ability of the police to deal with a range of crimes such as ASB, knife crime, gun crime, gangs; perceptions of police tactics like stop and search, overall perceptions of the force; perceived value for money; and a word of mouth recommendation measure. Demographic measures include marital status, number of children, disability, gender, age, work status, type of work, ethnicity and religion. Overall, the survey yields 370 variables. In the next section, we show how we progressively develop a three-dimensional model of confidence: Trust, Procedural Fairness and Presence.

### **Analysis**

As a first step, we separately and independently content analysed all the survey questions. This was to select questions whose meaning overlapped with our initial definition of public confidence (above), and drew on relevant literature we had identified across different public institutions (TE Cook and Gronke, 2005; Heise, 1985; Ladd and Bowman, 1998; Lipset and Schneider, 1983; Pharr and Putnam, 2000), policing; Fleming and McLaughlin, 2012; Myhill and Quinton, 2010; B Stanko et al., 2012) and related themes of trust (Bradford et al., 2018; PytlikZillig and Kiimbrough, 2015) and procedural fairness (Tyler 1990; Tyler and Degoey, 1995; Tyler and Folger, 1980).

We did not simply select items that we thought were likely to be correlated with confidence. This is important to emphasize since we were not looking at what we consider to be a second-order question: whether public confidence was associated with outcomes. Instead, we focused on the first-order, fundamental question of what public confidence means, making use of a uniquely detailed and extensive survey instrument to do so. Putting this another way, our first-order question is concerned with 'criterion' validity, whereas work to date overwhelmingly looks at 'predictor' validity for a fuller account of the difference between these forms of validity). Criterion validity — what this measure actually means — is a crucial question in public administration because many studies have relied on a single-item measure of public confidence to draw inferences about population level attitudes to public institutions (Benesh, 2006; FL Cook et al., 2010; Kelleher and Wolak, 2007; see Lipset and Schneider, 1983 for an earlier review).

In the underlying literature on psychometrics, the use of single-item (or 'global') measures rather than multipleitem scales ('sum-of-facet' measures) is widely understood to be problematic when the construct being measured is a complex one. Indeed, the reliance on single-item measures in such circumstances has been described as a 'fatal error' (Wanous et al., 1997). Much of this literature has considered the relative merits of global versus sum-of-facet measures of job satisfaction (simply because this is one of the most frequently measured constructs at work). Although there are arguments on both sides when it comes to measuring job satisfaction (with some favouring global measures, some favouring scales), 'confidence' is a more complicated construct than job satisfaction because it is an assessment of a public institution rather than a reflection on direct experience. As Hoggett (2006) explains, citizens' attitudes to public organizations are complex because the purpose of public organizations is contested, 'public organizations have to contain much of what is disowned by the society [such as] value conflicts and moral ambivalence' (p. 175).

In common with other studies (Benesh, 2006; FL Cook et al., 2010; Kelleher and Wolak, 2007), the survey also incorporates a single-item measure for public confidence: 'Taking everything into account I have confidence in the police in this area' (on a 7-point Likert scale anchored by semantic opposites 'completely agree' and 'completely disagree' with semantic anchors on every point). We had a choice of including the single-item measure of confidence in our pool of items or treating it as a separate variable. We chose to treat it as a separate variable, because this allows the possibility of both a global (single-item) measure of confidence and a sum-of-facet measure. It also allows a test of the reliability of the measures of confidence we developed.

We compared the results of our content analysis to arrive at a common pool of 28 items (below). All are measured on a 7-point Likert scale with semantic opposites: satisfied...dissatisfied or agree...disagree. A word in each item is underlined because we used this as

the variable name. Including the variable name helps to show what happens to questions across the stages of analysis as the item pool was reduced in search of a more parsimonious measure.

- 1. How satisfied are you... With the level of foot <a href="mailto:patrol">patrol</a> in your neighbourhood; that the police in this area... are <a href="mailto:friendly">friendly</a> and approachable; make <a href="mailto:fair">fair</a> decisions when dealing with local problems; can be <a href="mailto:relied">relied</a> on to be there when you need them; would treat you with <a href="mailto:respect">respect</a> if you had contact with them for any reason; treat everyone fairly <a href="mailto:regardless">regardless</a> of who they are; can be relied on to deal with <a href="mailto:minor">minor</a> crimes; <a href="mailto:understand">understand</a> the issues that affect this community; deal with things that <a href="mailto:mailto:mailto:minor">mailto:minor</a> to this community; work with people in the community to <a href="improve">improve</a> your neighbourhood.
- 2. To what extent do you agree or disagree that West Midlands Police (WMP)...provide good <u>value</u> for money; is committed to <u>serving</u> the public; understands what matters to <u>people</u>; is open and <u>honest</u>; is <u>modern</u> and forward looking; has a positive <u>reputation</u> within the local community; works hard to engage with local residents.
- 3. To what extent do you agree or disagree that WMP's officers...are committed to <u>serving</u> the public; understand what matters to <u>people</u>; are open and <u>honest</u>; are <u>modern</u> and forward looking; have a positive <u>reputation</u> within the local community; work hard to <u>engage</u> with local residents.
- 4. To what extent do you agree or disagree that ... you are <u>proud</u> to be served by WMP; to gain better engagement with communities WMP officers and staff should reflect the <u>diversity</u> of the community it serves; WMP has good engagement with all sections of the community providing services that are <u>accessible</u> to all; WMP delivers a service that demonstrates it understands the <u>diverse</u> needs of the community it serves; WMP works hard to develop <u>cohesive</u> community responses to problems within your neighbourhood.

### Reducing our pool of items to avoid duplication

We reduced our pool of items prior to the exploratory factor analysis to avoid some clear duplication in semantic content. Otherwise, this can cause problems in interpretation of factors (Dragovic, 2004). As our review indicates, public attitudes to policing can reflect specific experiences and encounters, or more generalized opinions (Bradford et al., 2014; Sunshine and Tyler, 2003). The survey was designed to differentiate between specific encounters and general

beliefs. But as a result there is some duplication. The items in paragraph 2 above refer to WMP, i.e. the force generally, and paragraph 3 uses six of the same items but refers to WMP's officers. Testing correlations among these near duplicate pairs, *R*-values were much higher than all other correlations (ranging from 0.689 to 0.804) indicating potential redundancy. [Large samples have great advantages, but make *P*-values uninformative, whereas *R*-values stabilize as sample sizes increase (Lin et al., 2013): for instance, a correlation of only 0.041 is 'highly significant' with this many respondents.]

Rather than use both sets of items, we included items referring to WMP not WMP officers (i.e. paragraph 2 above). Although it can be valuable to differentiate between 'the police' as a whole and local police (Schuck and Rosenbaum, 2005), there are good reasons to look at force level when evaluating 'public confidence'. This level of analysis is appropriate for questions of governance in our setting, given the role of PCCs (Sampson, 2012). Also, because many people do not come into contact with the police, the most widely applicable measures among 'the public' will ask for opinions on the force as a whole, rather than officer behaviour. This choice also helps to differentiate more accurately between satisfaction (Miller and Davis, 2008) - an outcome of actual encounters with police officers, and confidence as an overall attitude (B Stanko et al., 2012).

One item, 'WMP officers and staff should reflect the diversity of the community it serves' had very low R-values (all < 0.25) with the other items we selected in this first stage of content analysis. It only had an R-value of 0.158 with respect to our single-item confidence measure. The underlying construct this is meant to tap, representativeness, is important in policy terms because police forces across the globe tend to have fewer people from minority ethnic communities (reference anonymized for peer review). This is sometimes proposed as an explanation for lower favourability ratings among some minority communities. Using analysis of variance (ANOVA) to compare means, we examined whether people from minority communities rated this item significantly more highly and did not find evidence for this. Speculatively, if it were worded more simply: 'WMP should have more officers from minority backgrounds' the results may have differed across different ethnicities. On reflection this item seemed poorly worded and we rejected it from subsequent analysis.

### Results of our exploratory factor analysis

Exploratory factor analysis (EFA) is appropriate for assessing dimensionality and developing more parsimonious and meaningful multivariate measures from related items.

There are many EFA methods available but larger sample sizes tend to reduce errors in choosing across these – if there is a clear structure (Hair et al., 2006). Details of the procedure are given in Supplementary Appendix 1.

Table 1 shows loadings above absolute 0.4. Some suggest a threshold of 0.32 ( $\sim 10\%$  of variance) for interpreting factor analysis, but this is a question of judgement and the 0.4 cut-off provides a clearer illustration of three factor structure. Re-examining the one item that cross-loaded: 'You are <u>proud</u> to be served by WMP', we felt it was not a good measure and removed this from further analysis. It is unclear why someone would be proud to be served by their police force – an emergency service provider for whom (in the UK) there is no alternative.

### Further reducing our pool of items to improve parsimony using focal variables

There are no hard rules as to the optimal number of items for a factor (a minimum of three is recommended), but with 14 of 20 items loading on just one factor we wanted to see if it were possible to have a sharper and more specific measure of Component 1. This is preferable for parsimony and makes it easier for others to adopt these measures in other settings and thereby to test their replicability (Vogt, 2011). The alpha for these items was also very high at 0.938, indicating redundancy.

Reading across the questions, we could identify common features our review had highlighted as important in terms of trust, understood as willingness to make oneself: (a) vulnerable (PytlikZillig and Kimbrough, 2015). Underpinning trust are beliefs that could be a basis for cooperation, including expectations about (b) fairness (Tyler, 1990; Tyler and Blader, 2000; Tyler and Degoey, 1995) and competent (c) performance (Jonathan-Zamir and Weisburd, 2013; Tankebe, 2009, 2010). We identified eight focal variables that were especially salient to these three features. Focal variables can help to refine scales where existing relevant theory indicates some questions in particular capture the essence of a factor (see DiStefano et al., 2009). These focal variables were: respect; regardless; serving (which we felt were relevant across all three –vulnerability, fairness and performance); relied; honest; modern (each relevant to vulnerability and also performance); minor; and value (relevant to performance).

As well as finding a theoretical basis for these items, we identified common features of 'non-focal' items suggesting that these might not prove to be precise measures. As indicated by the asterisk in Table 1, most of these 'non-focal' items cross-loaded at a 0.3 threshold – which is sometimes suggested as a guide in factor interpretation for model development (Field, 2009). Of more substantive theoretical importance, all but one of these had local markers of place

**Table 1.** Three-factor rotated component matrix (orthogonal rotation varimax).

	Component		nt
	I	2	3
The level of foot patrol in your neighbourhood			0.657
Police are friendly and approachable			0.835
Police make <u>fair</u> decisions when dealing with local problems			0.824
Can be <u>relied</u> on to be there when you need them*	0.642		
Would treat you with <u>respect</u> if you had contact with them	0.632		
Treat everyone fairly <u>regardless</u> of who they are	0.701		
Can be relied on to deal with minor crimes	0.672		
<u>Understand</u> the issues that affect this community*	0.726		
Deal with things that <u>matter</u> to this community*	0.736		
Work with the community to improve your neighbourhood*	0.664		
Provide good value for money*	0.578		
Is committed to serving the public	0.670		
Understands what matters to people*	0.702		
Is open and honest	0.716		
Is modern and forward looking	0.683		
Has a positive <u>reputation</u> within the local community*	0.687		
Works hard to engage with local residents*	0.659		
You are proud to be served by WMP	0.526	0.437	
Engage with all sections of the community accessible to all		-0.838	
Demonstrates it understands the diverse needs of the community		-0.859	
Develops <u>cohesive</u> community responses to neighb'd problems		-0.824	

<sup>\*</sup>Cross-loads at threshold of 0.3

('community', 'neighbourhood', 'local community', 'local residents'). Terms like neighbourhood are crucial operationally, and the survey is designed to guide respondents explicitly to consider at times local officers and at other times WMP as a whole. However, our analysis suggests distinctions between different markers of place are problematic – either because people do not differentiate between policing provision as a public service in this way, or because terms like 'community' and 'local' are open to interpretation.

To examine this further, we spoke to key staff from the agency responsible for administering these surveys, in particular separately interviewing two highly experienced researchers. Between them they had personally administered well over 1,000 surveys to the public. When asked to reflect on their experience, each independently

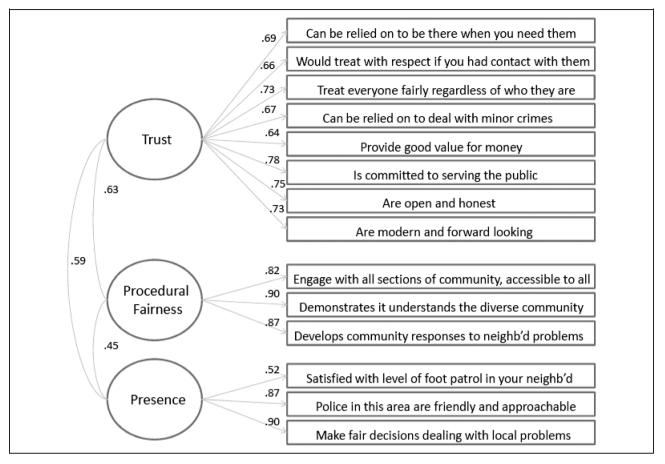


Figure 1. A three-component measure of confidence.

volunteered that interviewees struggled to interpret markers of place (like neighbourhood, local, community). We return to this in the discussion section. The one outstanding item 'understand what matters to people' cross-loaded at 0.3 and we could not connect it as closely to themes of vulnerability, fairness or performance from the literature. Removing it did not threaten scale reliability as the alpha for these eight focal items was still high at 0.871. We used these eight focal items to measure Component 1 in a confirmatory phase of testing (below).

### Validation of model through confirmatory factor analysis

For the second stage of analysis we tested this model using Confirmatory Factor Analysis (CFA) (Hair et al., 2006; Schreiber et al., 2006). This was appropriate because the three-factor model had good theoretical justification in terms of existing literature and the clear structure was also empirically compelling. We found good evidence validating our three-factor model, but for completeness also tested post-hoc modifications to this model, and two competing

models. We then replicated this analysis with additional fieldwork – two further waves of the survey using larger samples (since these were not split into exploratory and validation sub-samples). Figure 1 shows the results in graphic form, using data from the second half of our split sample. As with the EFA, more technical considerations including measures of model fit are given in Supplementary Appendix 1.

Alpha ratings for the subscales using the latest data are: Trust 0.876; Procedural Fairness 0.899; and Presence 0.732. We found these to be similarly reliable across gender, ethnicity and age (see Supplementary Appendix 1). This is good evidence of convergent validity and suggests each could be the basis for measures in other settings, with necessary modifications to evaluate services other than policing. Using mean scores for the items in each respective factor, we created three new variables. These explained 58.5% of the variance of our confidence item and also 38.3% of the variance in a measure of word of mouth recommendation (I would say good things about WMP without being asked...). They also explained considerable amounts of the variance in measures we had initially

selected in our content analysis and then dropped e.g. 44.3% of the variance in 'You are proud to be served by WMP' (also see Supplementary Appendix 1).

### **Discussion**

Our main theoretical contribution is to demonstrate the dimensionality of public confidence and in doing so propose a new way of measuring 'public confidence', with subscales for each of three factors. This integrates and extends existing literature in policing and in public administration more widely. A multifaceted scale supports the idea that confidence has several components and we differentiate more clearly between confidence and trust (Barton and Beynon, 2015; Fleming and McLaughlin, 2012; Myhill and Quinton, 2010). This contributes to long-standing debates about problems with interpreting expressed measures of citizen satisfaction in policing (Holdaway, 1982), and with other work in public administration on evaluating citizens' confidence in institutions (TE Cook and Gronke, 2005). It offers greater clarity about terms that are often used interchangeably in public administration (trust, confidence, satisfaction), but which we show in our setting can be defined more precisely and meaningfully.

To understand the relationship between citizens and public institutions better, our study shows the need to consider different components underpinning evaluations of 'public confidence'. We provide good evidence that confidence is multifaceted, so single-item measures will have limitations. We also show the need to consider whether attitudes to confidence are: generalized or specific; whether they are based on local experience or national issues; the extent to which a public service is actually understood; or whether it is personified and stereotyped; how perceptions of confidence relate to trust, effectiveness and fairness; and the validity of subjective measures. These are all important insights into the meaning of 'public confidence'. Although we focus on developing a measure at the general level of 'the public', the setting of policing shows assumptions need to be surfaced not just about the meaning of 'public confidence' but about 'the public'. As our review indicates there are multiple publics who interact with services in different ways.

Predominantly, contributions to understanding 'public confidence' highlight the importance of what we have called second-order questions — what actual ratings are, and how these can be tracked over time, or predicted, or related to other outcomes (Heise, 1985; Lipset and Schneider, 1983). We show it is important to consider a fundamental, first-order question: what is happening when we ask 'the public' to give ratings in response to specific items, but do not ask them to think about underlying concepts? This setting, and our detailed measures, offer a basis from which

to open up this question to other settings (TE Cook and Gronke, 2005) – for instance to evaluate perceptions of public institutions (Boswell, 2015; Linsley et al., 2016); different levels of government (James and Moseley, 2014; Kelleher and Wolak, 2007; Ladd and Bowman, 1998); the courts (Benesh, 2006; Caldeira, 1986), and European (Persson et al., 2017) or U.S. institutions (FL Cook et al., 2010).

The three-factor solution offers clear support for the idea that generalized measures of trust and beliefs about competence (factor 1: Trust) are meaningful and also separable from more specific questions to do with procedural fairness (factor 2: Procedural Fairness) or the local presence of police (factor 3: Presence). These findings essentially say that – at the level of the public as a whole – 'public confidence' in 'the police' is a combination of people's general beliefs about the police (Trust); their more specific evaluations of the fairness and appropriateness of police actions (Procedural Fairness); and more localized accounts of what they directly experience (Presence). This multidimensional account of 'public confidence' has different implications for understanding the relationship between citizens and their police. We show this is not simply a question of teasing apart different aspects to confidence based on semantics. Instead, beliefs about confidence take shape at different spatial scales, from local experience through to much more generalized attitudes.

Unlike a single-item measure, the three-factor solution can be the basis for answers to an important strategic question: should police agencies try to improve public confidence by focusing on local tactics or improving the quality of police–citizen encounters, or should they try to influence wider factors associated with the media and social media by challenging stereotypes, establishing new stereotypes or emphasizing learning points from failures? Although the easiest factor (in terms of tactics rather than cost) to influence may be presence (e.g. through reassurance patrols following incidents such as the attacks at London and Manchester), the multipart structure to public confidence, and existing literature emphasize the need to consider procedural fairness and different drivers of trust.

An important consideration is at what level should we evaluate a 'public service' when asking about 'public confidence'. Some institutions, like the Supreme Court (Caldeira, 1986) or the White House (Ladd and Bowman, 1998) are national, but in other cases, particularly in the absence of direct experience or contact – 'placing' the institution can be more complex.

In the UK, when evaluating public confidence in policing there are sound reasons for focusing on the level of the force (as we have here), but policing clearly takes shape at the local level, however defined. At the same time, our study suggests that the public themselves may not be able

to differentiate between these levels of analysis. We found supplementary evidence that this was an ongoing challenge in research in the UK. In 2012/13, guidance to market researchers implementing the British Crime Survey of England and Wales included this question: 'How long have you lived in this area? By this area, I mean within about a 15 minute walk from here.' Interestingly, in later versions, guidance changes:

I'd now like to ask you what you think about the police in this area. INTERVIEWER PROMPT IF NECESSARY: By local area I mean within a 15 minute walk from here (2015/16)

We find this detail revealing because the problem in defining 'local' (or 'community', 'neighbourhood' or 'this area') is either being evaded or devolved to the public. These terms are not self-evident, but in this example researchers have left it to individuals to decide what they mean. Our study illustrates there is a more general limitation - that when relying on single-item measures, we do not really know what people are thinking about when they answer them. This resonates with a long standing debate about the relationship between 'subjective' and 'objective' measures (Van de Walle and Van Ryzin, 2011). Any attitudinal survey (unlike measures of crime, say) always yields 'subjective' measures. However, there is another layer to subjectivity because assumptions in how questions are framed can be problematic. The public are asked to base responses on differences that are objective from the perspective of the policy-maker: for instance, to differentiate between local and regional policing. These distinctions are objective and operationally meaningful in terms of different policing tactics and priorities. But many of the public cannot distinguish between these or may interpret terms like 'neighbourhood' differently. We feel this has wider relevance in understanding 'the public'. There is a further, perhaps an even more fundamental question, as to whether apparently objective terms are valid and whether surveys are really robust enough or sophisticated enough to account for multiple 'publics'.

In policing, just as in public administration more generally, 'confidence' has been used in ways suggesting a multiplicity of meanings B Stanko et al., 2012). The underlying source for expressed confidence has been recognized as unclear (MacQueen and Bradford, 2015). Measures used to describe what counts as good policing (such as crime statistics, victim satisfaction, or public confidence) have tended to be single measures that are heavily contested and politicized (Loveday, 2006). These measures, to use a colloquial phrase from one of WMP's officers, 'take on a life of their own'. In policing in the UK and elsewhere this can be problematic because it may mean operational priorities are distorted. But here we have shown ample evidence of

latent (not directly observable) dimensions that are multifaceted and stable, and that tell us more about the underlying meaning of 'confidence'. Although these can be more difficult to use in determining operational priorities, they more faithfully represent the structure of the data and offer a comparatively parsimonious account of a complex setting and set of policy issues.

This contribution is timely in the UK given changes in the governance context and role of PCCs (Lister, 2013; Rogers and Thomas, 2013; Wood, 2016). It also connects with more established literature in North America where debate about the political context for commissioners (typically not directly elected) is longer established (Hargrove and Glidewell, 1990; Sampson, 2012). In many models of policing, elections play an important part in police governance. Sometimes elections appoint those directly responsible for policing (for instance, many U.S. sheriffs). At other times, people governing the police will be appointees of directly elected officials. Surveys of public confidence may be more informative about police governance than elections, where votes can be driven by many factors. This means we need greater understanding of the extent to which population-level measures of public confidence are effective or can be improved. More broadly, if we value accountability of administrations and officials, it is critical to understand what is happening in large-scale surveys that ask 'the public' if they have 'confidence' in their institutions.

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#### Supplemental material

Supplemental material for this article is available online.

### Notes

For instance, from the General Social Survey (GSS) 'I am
going to name some institutions in this country. As far as the
people running these institutions are concerned, would you say
you have a great deal of confidence, only some confidence, or
hardly any confidence at all in them?' (original emphasis) (TE
Cook and Gronke, 2005).

2. See also Supplementary Appendix 1 on differences in terms of gender, age, ethnicity in our data – each of which can be a basis for understanding multiple publics.

#### References

- Bain A, Robinson BK and Conser J (2014) Perceptions of policing: improving communication in local communities. *International Journal of Police Science & Management* 16(4): 267–276.
- Barton H and Beynon MJ (2015) Do the citizens of Europe trust their police? *International Journal of Emergency Services* 4(1): 1–21.
- Benesh SC (2006) Understanding public confidence in American courts. *Journal of Politics* 68(3): 697–707.
- Boswell C (2015) The double life of targets in public policy: disciplining and signalling in UK asylum policy. *Public Administration* 93(2): 490–505.
- Bradford B, Jackson J and Hough M (2018) Trust in justice. In: Uslaner E (ed.) *The Oxford Handbook of Social and Political Trust* Oxford: Oxford University Press, 633–665.
- Bradford B, Jackson J and Stanko EA (2009) Contact and confidence: revisiting the impact of public encounters with the police. *Policing and Society* 19: 20–46.
- Bradford B, Murphy K and Jackson J (2014) Officers as mirrors: policing, procedural justice and the (re) production of social identity. *British Journal of Criminology* 54(4): 527–550.
- Bratton WJ and Malinowski SW (2008) Police performance management in practice: taking COMPSTAT to the next level. *Policing: A Journal of Policy and Practice* 2(3): 259–265.
- Brown JM and Heidensohn F (2000) Gender and Policing. Basingstoke, UK: Macmillan.
- Brown MK (1988) Working the Street: Police Discretion and the Dilemmas of Reform. New York: Russell SAGE Foundation.
- Caldeira GA (1986) Neither the purse nor the sword: dynamics of public confidence in the Supreme Court. *American Political Science Review* 80(4): 1209–1226.
- Callaghan G and Wistow G (2006) Publics, patients, citizens, consumers? Power and decision making in primary health care. *Public Administration* 84(3): 583–601.
- Cook FL, Jacobs LR and Dukhong K (2010) Trusting what you know: information, knowledge, and confidence in social security. *Journal of Politics* 72(2): 397–412.
- Cook TE and Gronke P (2005) The skeptical American: revisiting the meanings of trust in government and confidence in institutions. *Journal of Politics* 67(3): 784–803.
- Davies A and Thomas R (2008) Dixon of Dock Green got shot! Policing identity work and organizational change. *Public Administration* 86(3): 627–642.
- DiStefano C, Zhu M and Mindrila D (2009) Understanding and using factor scores: considerations for the applied researcher. *Practical Assessment, Research & Evaluation*, 14(20): 1–11.

- Dragovic M (2004) Towards an improved measure of the Edinburgh Handedness Inventory: a one-factor congeneric measurement model using confirmatory factor analysis. *Laterality: Asymmetries of Body, Brain and Cognition* 9(4): 411–419.
- Eriksson K (2012) Self-service society: participative politics and new forms of governance. *Public Administration* 90(3): 685–698.
- Field A (2009) Discovering Statistics Using SPSS: Introducing Statistical Method, 3rd edn. Thousand Oaks, CA: SAGE.
- Fleming J and McLaughlin E (2012) Researching the confidence gap: theory, method, policy. *Policing and Society* 22(3): 261–269
- Hair JF, Black WC, Babin BJ, Anderson RE and Tatham RL (2006) Multivariate Data Analysis, Vol. 6. Upper Saddle River, NJ: Pearson Prentice Hall.
- Hargrove EC and Glidewell JC (1990) *Impossible Jobs in Public Management*. Lawrence, KS: University Press of Kansas.
- Heise JA (1985) Toward closing the confidence gap: an alternative approach to communication between public and government. *Public Administration Quarterly* 9(2): 196–217.
- Hinds L (2009) Public satisfaction with police: the influence of general attitudes and police-citizen encounters. *Interna*tional Journal of Police Science & Management 11(1): 54–66.
- Hoggett P (2006) Conflict, ambivalence, and the contested purpose of public organizations. *Human Relations* 59(2): 175–194
- Holdaway S (1982) Police accountability: a current issue. *Public Administration* 60(1): 84–91.
- Home Office (2008) From the Neighbourhood to the National: Policing Our Communities Together. London: Home Office.
- Jackson J and Sunshine J (2007) Public confidence in policing: a neo-Durkheimian Perspective. British Journal of Criminology 47: 214–233.
- James O and Moseley A (2014) Does performance information about public services affect citizens' perceptions, satisfaction, and voice behaviour? Field experiments with absolute and relative performance information. *Public Administration* 92(2): 493–511.
- Jonathan-Zamir T and Weisburd D (2013) The effects of security threats on antecedents of police legitimacy: findings from a quasi-experiment in Israel. *Journal of Research in Crime and Delinquency* 50(1): 3–32.
- Kelleher CA and Wolak J (2007) Explaining public confidence in the branches of state government. *Political Research Quar*terly 60(4): 707–721.
- Kim JO and Mueller CW (1978) *Introduction to Factor Analysis:* What It Is and How to Do It. Beverly Hills, CA: SAGE.
- Kochel TR, Parks R and Mastrofski SD (2013) Examining police effectiveness as a precursor to legitimacy and cooperation with police. *Justice Quarterly* 30(5): 895–925.

Ladd EC and Bowman KH (1998) What's Wrong; A Survey of American Satisfaction and Complaint. Washington, DC: AEI Press.

- Lee M and McGovern A (2013) Force to sell: policing the image and manufacturing public confidence. *Policing and Society* 23(2): 103–124.
- Linsley P, McMurray R and Shrives P (2016) Consultation in the policy process: Douglasian cultural theory and the development of accounting regulation in the face of crisis. *Public Administration* 94(4): 988–1004.
- Lipset SM and Schneider W (1983) *The Confidence Gap.* New York: Free Press.
- Lipsky M (2010) Street-Level Bureaucracy: Dilemmas of the Individual in Public Services. 30th anniversary expanded edition. New York: Russell Sage Foundation.
- Lister S (2013) The new politics of the police: police and crime commissioners and the 'operational independence' of the police. *Policing* 7(3): 239–247.
- Loveday B (2006) Policing performance: the impact of performance measures and targets on police forces in England and Wales. *International Journal of Police Science & Management* 8(4): 282–293.
- MacQueen S and Bradford B (2015) Enhancing public trust and police legitimacy during road traffic encounters: results from a randomised controlled trial in Scotland. *Journal of Experimental Criminology* 11(3): 419–443.
- Marks M (2008) Looking different, acting different: struggles for equality within the South African Police Service. *Public Administration* 86(3): 643–658.
- Mastrofski SD (2004) Controlling street-level police discretion. Annals of the American Academy of Political and Social Science 593: 100–118.
- Merry S, Power N, McManus M and Alison L (2012) Drivers of public trust and confidence in police in the UK. *International Journal of Police Science & Management* 14(2): 118–135.
- Miao Q, Newman A, Schwarz G and Xu L (2014) Servant leadership, trust, and the organizational commitment of public sector employees in China. *Public Administration* 92(3): 727–743.
- Miller J and Davis RC (2008) Unpacking public attitudes to the police: contrasting perceptions of misconduct with traditional measures of satisfaction. *International Journal of Police Science & Management* 10(1): 9–22.
- Myhill A and Bradford B (2013) Overcoming cop culture? Organizational justice and police officers' attitudes toward the public. *Policing: An International Journal of Police Strategies & Management* 36: 338–356.
- Persson T, Parker CF and Widmalm S (2017) Social trust, impartial administration and public confidence in EU crisis management institutions. *Public Administration* 95(1): 97–114.
- Pharr SJ and Putnam RD (eds) (2000) Disaffected Democracies: What's Troubling the Trilateral Countries? Princeton, NJ: Princeton University Press.

- PytlikZillig LM and Kimbrough CD (2015) Consensus on conceptualizations and definitions of trust: are we there yet?
  In: Shockley E, Neal TMS, PytlikZillig L and Bornstein B (eds) Interdisciplinary Perspectives on Trust: Towards Theoretical and Methodological Integration. New York: Springer, 17–47...
- Ren L, Cao L, Lovrich N and Gaffney M (2005) Linking confidence in the police with the performance of the police: community policing can make a difference. *Journal of Criminal Justice* 33(1): 55–66.
- Rogers C (2014) Opinion: police accountability in the age of austerity. *The Police Journal: Theory, Practice and Principles* 87(1): 1–2.
- Rogers C and Thomas G (2013) Applying the Peelian vision in the age of commissioners. *Police Professional* 349: 16–17.
- Sampson F (2012) Hail to the chief? How far does the introduction of elected police commissioners herald a U.S.-style politicization of policing for the U.K.? *Policing* 6(1): 4–15.
- Schreiber JB, Nora A, Stage FK, Barlow EA and King J (2006) Reporting structural equation modeling and confirmatory factor analysis results: a review. *Journal of Educational Research* 99(6): 323–338.
- Schuck AM and Rosenbaum DP (2005) Global and neighbourhood attitudes toward the police: differentiation by race, ethnicity and type of contact. *Journal of Quantitative Criminology* 21(4): 391–418.
- Sindall K and Sturgis P (2013) Austerity policing: is visibility more important than absolute numbers in determining public confidence in the police? *European Journal of Criminology* 10(2): 137–153.
- Skogan WG (2006) Asymmetry in the impact of encounters with police. *Policing & Society* 16(2): 99–126.
- Skogan WG and Frydl K (2004) Fairness and Effectiveness in Policing: The Evidence. Washington, DC: The National Academic Press.
- Skogan WG and Hartnett SM (1997) *Community Policing, Chicago Style*. Oxford: Oxford University Press.
- Smith G and Stephenson S (2005) The theory and practice of group representation: reflections on the governance of race equality in Birmingham. *Public Administration* 83(2): 323–343.
- Stanko B, Jackson J, Bradford B and Hohl K (2012) A golden thread, a presence amongst uniforms, and a good deal of data: studying public confidence in the London Metropolitan Police. *Policing and Society* 22(3): 317–331.
- Stanko EA and Bradford B (2009) Beyond measuring 'how good a job' police are doing: the MPS model of confidence in policing. *Policing: A Journal of Policy and Practice* 3(4): 322–330.
- Stott C (2011) Crowd dynamics and public order policing. In: Madensen TD and Knutsson J (eds) Preventing Crowd Violence. Boulder, CO: Lynne Rienner, 25–46.

- Sunshine J and Tyler T (2003) Moral solidarity, identification with the community, and the importance of procedural justice: the police as prototypical representatives of a group's moral values. *Social Psychology Quarterly* 66(2): 153–165.
- Tankebe J (2009) Public cooperation with the police in Ghana: does procedural fairness matter? *Criminology* 47: 1265–1293.
- Tankebe J (2010) Public confidence in the police: testing the effects of experience of police corruption in Ghana. *British Journal of Criminology* 50(2): 296–319.
- Tyler TR (1990) Why People Obey the Law. New Haven, CT: Yale University Press.
- Tyler TR (2006) Psychological perspectives on legitimacy and legitimation. *Annual Review of Psychology* 57: 375–400.
- Tyler TR and Blader SL (2000) Cooperation in Groups: Procedural Justice, Social Identity, and Behavioral Engagement. Philadelphia, PA: Psychology Press.
- Tyler TR and Degoey P (1995) Collective restraint in social dilemmas: procedural justice and social identification effects on support for authorities. *Journal of Personality and Social Psychology* 69(3): 482–497.
- Tyler TR and Folger R (1980) Distributional and procedural aspects of satisfaction with citizen–police encounters. *Basic and Applied Social Psychology* 1(4): 281–292.
- Van de Walle S and Van Ryzin GG (2011) The order of questions in a survey on citizen satisfaction with public services: lessons

- from a split-ballot experiment. *Public Administration* 89(4): 1436–1450.
- Vogt WP (2011) SAGE Quantitative Research Methods. Thousand Oaks, CA: SAGE.
- Wanous JP, Reichers AE and Hudy MJ (1997) Overall job satisfaction: how good are single-item measures?. *Journal of Applied Psychology* 82(2): 247.
- Westmarland L (2002) Gender and Policing. London: Routledge.
- Wood DA (2016) The importance of liberal values within policing: police and crime commissioners, police independence and the spectre of illiberal democracy. *Policing and Society:*An International Journal of Research and Policy 26(2): 148–164.

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