Policing the COVID-19 pandemic: police officer well-being and commitment to democratic modes of policing

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Abstract

Police organisations have a wealth of experience in responding to emergencies, but COVID-19 is unprecedented in terms of the speed, scale and complexity of developing doctrine and its implementation by officers. The crisis also threw into sharp relief the fact that police policy and, crucially, practice are always implemented within wider social, political and economic contexts. Using online survey data collected from 325 police officers based at forces operating across different UK contexts (cities, conurbations, towns and rural areas), we seek to understand officer experiences and perceptions of policing COVID-19. In particular, we examine whether (internally) organisational climate and (externally) the UK government's response to COVID-19 were important to (a) officers' support for police use of force at times of emergency, (b) officer's support for procedurally just policing at times of emergency, and (c) their health and well-being; and whether identification and perceptions of self-legitimacy mediate the associations between these variables. We show that a positive organisational climate was associated with *less* support for police use of force, *more* support for procedurally just policing and *increased* police officer health and well-being. Our results, however, suggest potential negative correlates of police officer self-legitimacy: higher levels of self-legitimacy were associated with *poorer* police officer health and well-being and *increased* support for police use of force. These results have important implications for our understanding of police officer well-being and police officers' commitment to democratic modes of policing when faced with policing a pandemic.

key words: COVID19; police officer well-being; democratic modes of policing

Introduction

Police officer commitment to the notion of policing by consent, and democratic modes of policing, lies at the heart of the British policing model. Policing the pandemic was not exempt to this: the College of Policing (CoP) and National Police Chief Council (NPCC) jointly issued guidance advising police forces to adopt a '4E' approach (CoP/NPCC 2020) to the enforcement of the coronavirus legislation. At the height of the pandemic, and indeed throughout, the advice was to first, 'Engage' with the public - ask individuals about their circumstances when they are outside and listen to their responses. Second, 'Explain' the social distancing regulations and why they are in place, including risks to public health and protecting the NHS. Third, 'Encourage' individuals to follow the regulations and return home if they have no reasonable grounds to be outside. Finally, as a last resort, officers may 'Enforce' the law, fining people for breaching the legislation and using reasonable force to return individuals to a place of residence. There was an emphasis on securing consent-based compliance with the restrictions, rather than via deterrent threat; and it seems UK police relied far less on formal sanctions (e.g. fines) than some other European forces (SAGE, 2020).

Yet, the COVID-19 pandemic created social upheaval and altered norms for police as for all members of society. While securing public consent remained a core aim – and policing in this sense continued as before – the pandemic had profound effects on police organisations, the ways they work, their relationships with the publics they serve and, of particular interest in the current paper, on police officers themselves. The COVID-19 pandemic extended the boundaries of policing well beyond that which had previously been understood by both police and the public as legitimate. It became illegal to be outside the home more than once a day without reasonable excuse. People could no longer gather or mix. Policing this was

fundamentally new and therefore uncertain territory for most police officers, raising powerful questions about their relationship with the public and their legitimacy. At the same time, police officers' and their organisation were placed under significant stress as a result of dealing with the new situation, with potentially significant implications for the well-being of the former and the ability of the latter to function effectively and appropriately.

Yet, the effect of the pandemic on first responders such as the police – though assumed to be profound – have not yet been explored nor quantified in the UK (Stogner et al. 2020; c.f. Frenkel et al. 2020). Police officer health and well-being is, by the very nature of the profession, at increased risk compared to that of the general population (Hartley et al. 2011), even before dealing with the challenges, stress and uncertainty brought about by the pandemic. The extent to which police officers experience stress, diminished well-being and ill-health may have important implications for their individual and collective ability to behave in the ways prescribed by the 4E's, in particular, and by notions of democratic policing, in general (Gershon et al. 2009; Kop et al. 1999).

Three factors relevant to the current pandemic have been linked to police officer well-being and/or to adherence to democratic policing at times of emergency. These are the *context* within which police are operating in at the time of the crisis (Stogner et al. 2020), the sense of *identification* officers feel with salient social categories (Radburn et al. 2020), and *the level of confidence officers have in their own authority* (Bradford & Quinton 2014). At a time when the context of police operations shifted wildly, collective identities were activated in the fight against the virus, and the authority of the Government waxed and waned as a result of its (mis)handling of the crisis (Fancourt et al. 2020), police officers were asked to take on a new, and for many unfamiliar, role of public health worker, at the same time as being tasked with

enforcing a constantly evolving set of laws and guidelines (Stott, 2020). This context seems almost designed to weaken officers' confidence in their own authority and thus their ability to police in appropriate ways.

This paper seeks to understand police officer's experiences and perceptions of policing the COVID-19 crisis. Our aims are two-fold:

1. We examine whether the organisational climate in which police officers were operating, and the government's wider response to COVID-19, had an impact on police officer health and well-being, and on commitment to democratic modes of policing at times of emergency.

2. We also consider whether this relationship can be explained by officers' confidence in their own authority and sense of identification with the police.

The paper proceeds as follows. First, we outline the ways in which the COVID-19 policing context might have affected those tasked to police the pandemic, before considering the role of police officer self-legitimacy and police identification in this process. We then outline the methods and data used in the study before proceeding with the results and discussion. We conclude the paper by outlining three key findings: (1) a positive organisational climate matters; (2) external relationships seem to matter less; and (3) self-legitimacy can have negative, as well as positive, implications.

Policing the pandemic: the impact on police practices and police officer well-being

Research has classified sources of stress in policing into two general categories (Shane, 2010): those associated with 'job content', such as work schedules and threats to physical and psychological health; and those associated with 'job context' (i.e. organisational stressors),

such as participation in decision making, organisation communication and co-worker relations (also see Mafini 2016; Ali & Xiao-Yong Wei 2018). These stressful workplace exposures have been found to significantly impact on the mental and physical well-being of police officers (Violanti et al. 2017; Purba & Demou 2019). Negative outcomes include depression and suicide ideation, a strained family life, and a loss of confidence in police integrity. On the flip side, the link between the way police organisations are led and managed and workforce well-being is well established. There is a wealth of evidence showing that employee engagement (e.g. good communication, continuous feedback, autonomy at work) is linked with improved performance and psychological well-being amongst police officers in the UK (The Police Foundation 2019; Robertson & Cooper, 2010; Brunetto et al., 2012).

It seems inevitable that a global crisis like the COVID-19 pandemic will have affected police practices and the mental health of officers: among the many stressful experiences police are exposed to in their line of work, COVID-19 was unprecedented in terms of its scale and complexity, presenting simultaneous 'job content' and 'job context' stressors (Frenkel et al. 2020). Compounding normal risk factors, police had to work and respond to calls for service under the threat of virus exposure. Indeed, police resources came under increasing pressure as there were significant numbers of officers and staff off sick and self-isolating (Crest 2020). Officers experienced increased stress because COVID-19 social distancing policies resulted in numerous changes and alterations in protocols, including requirements to wear personal protection equipment (PPE), altered patrolling routines, and changes to shift schedules and work hours (see Stogner et al. 2020). Additional anxiety could have been induced as officers were expected to implement new policies to ensure social distancing, while stay-at-home directives were challenged on political, economic, and legal grounds (see Shirzad et al. 2020). Moreover, police officers have previously questioned or even resisted the policing of

public health-related demands, such as mental health in the public, in part due to a lack of training, and therefore policing a pandemic posed an additionally complex policing context (Lane 2019).

What is more, the legislative and guidance frameworks imposed on policing during the COVID-19 crisis were unclear and fast-changing. Commentaries on the UK government's response to COVID-19 (e.g. Hogarth 2020) have been critical of the government for not drawing a clear line between law and guidance during the coronavirus crisis. The argument was that guidelines to the public were not backed by legislation; and, relatedly, that the legislation itself was problematic and unclear. These fast-changing and unclear frameworks may also have been an important influence on officers' ability to do their job in socially and ethically desirable ways.

However, the College of Policing (CoP) and National Police Chief Council (NPCC) jointly issued guidance advising police forces to adopt the '4E' approach (CoP/NPCC 2020) while policing the pandemic. As usual, solutions offered by the police had to respect the rights of those affected, officers were to use force proportionately and only when necessary, and in line with the premises of procedurally just policing (CoP/NPCC 2020), officers were instructed to behave in as open, honest and respectful manner as possible. But, their responsibility for maintaining public safety, risk of exposure to the virus through interactions with the community, and the concern of exposing family members, *on top of* operating within a fast-changing and unclear legislative framework characterised by uncertainty, might have led police officers to question their very commitment to such 'democratic' modes of policing. Indeed, police misconduct has been associated with increases in organisational stressors of this kind (Bishopp et al. 2016).

The internal structures of police organisations are likely to be important factors in the processes described above because they condition the ability, and indeed desire, of officers to deliver appropriate styles of policing (Sklansky 2008; Bradford & Quinton 2014; Trinkner et al. 2016). As, of course, will the wider social and political context within which police are operating. In this paper we consider the organisational climate of policing in the COVID-19 context. Defining organisational climate as something created and characterised by organisational communication and front-line/senior officer relations, we consider the salience of this climate as a predictor of police officer health and well-being, and of commitment to democratic modes of policing, and we compare this 'internal' factor against 'external' stressors that may be placed on police by, specifically, the government's response to COVID-19.

We also note at the threshold that democratic policing is a multidimensional construct, and as such can often be very broadly defined. But at its core is the idea that police are democratic when they are publicly accountable, subject to the rule of the law, and respectful of human dignity (Bonner, 2020). In this paper we measure officer commitment to democratic modes of policing in emergencies by gauging levels respondents' views on the use of force and procedurally just policing.

The role of self-legitimacy and police identification

There is much to suggest that police officers' self-legitimacy and identities *as police* may be important influences on their ability to do their job in socially and normatively desirable ways; and, relatedly, may also be conducive to increased health and well-being. Firstly, research has indicated that when officers feel confident in their own authority and believe

that they are legitimate holders of the power vested in them (i.e. 'high' self-legitimacy – Bottoms and Tankebe 2013), they report stronger support for policing tactics that increase fairness in police processes and decision making (Trinkner et al. 2017; Tankebe and Meško 2014). As Bradford and Quinton (2014) explain, greater self-legitimacy may make them more able to engage in difficult decisions in constructive ways, less ready to reach for force to re-establish order or solve problems, and more willing to allow members of the public a say during processes of interaction. A sense of confidence in their own authority, that is, may provide an over-arching account of their role as police officers, and their wider place in society, against which slights or negative encounters can be offset. A weaker sense of self-legitimacy, alternatively, might make officers more sensitive to problems and provocations, more vulnerable to challenges to their authority, more ready to use physical force (as they are less certain their authority can be asserted and maintained in other ways), and less willing to engage in processes or interactions that may throw up difficult questions or challenges to their authority.

Secondly, within policing and in many other contexts, the concept of legitimacy is closely aligned with that of identification (see *inter alia* Barker 2001, Kelman and Hamilton 1989) Classic accounts of police sociology have tended to stress the potentially negative effects of officer identities – particularly in as much as they are inward looking, group-centric and aligned with a 'thin-blue line' mentality (Bowling et al. 2019) Yet recent research in the field of organisational justice has suggested a more positive role for processes of identification within police organisations, and a stronger sense of identification *as police* has been linked to greater commitment to democratic modes of policing. On this account, organisational justice - the use of fair procedures, neutral, transparent and consistent decision-making, polite, dignified and respectful interpersonal interactions, transparent decision-making and effective

two-way communication (Blader and Tyler 2003, Colquitt 2001, Greenberg 2011) – provides for a sense of value and integration, and generates pride in and identification with the organisation, among police officers just as it does among other types of employees. In turn, this enhances the legitimacy of internal structures and processes, and encourages positive orientations toward service-oriented policing (Bradford et al. 2013; Myhill and Bradford 2013) – at least in as much as these are avowed aims of the organisation that it promotes and, by demonstrating fair process and procedure internally, models to its members.

Furthermore, a positive social identity in relation to an (occupational) group can serve several important psychological functions for the individual, such as fostering self-worth, helping make sense of people and situations, satisfying the need to belong and fostering well-being (Blader and Tyler 2009; Jetten et al., 2012; Haslam, 2012). A strong social identity, encouraged by positive justice perceptions, may also therefore assist individuals in dealing with workplace uncertainty concerning outcomes, status, trustworthiness and morality, since it provides for emotional stability and a sense of mutual interest and support (Colquitt 2008).

When officers feel fairly treated by their organisation, then, their sense of positive identification with it is enhanced (Bradford et al. 2013). Such identification may be linked not only to internalisation of organisational goals (Tyler and Blader 2003), but also to a sense that they are supported and 'enabled' by the organisation to enact those goals (Wolfe and Lawson 2020). Officers' attitudes and behaviours towards policing may thus stem from identification with the police organisation and internalisation of the values it presents to itself and its members: in the UK, this includes that physical force should be used proportionately and only when necessary; and that policing should be delivered in as open, honest, and respectful manner as possible. Unfair organisations, by contrast, are unlikely to encourage

such attitudes among their staff, and organisational *in*justice may lead to the development of a different set of cultural adaptations typically associated in the policing literature with occupational sub-cultures (see Bradford & Quinton 2014). On this account 'bad' policing – procedurally unjust, undemocratic, overly reliant on the use of force – is at least in part a product of organisational structures and practices that do not motivate a sense of positive identification and legitimacy among police officers.

Naturally the behaviour of police organisations will not be the only factor shaping the identity and legitimacy judgements of their members. Negative publicity, and a feeling that the public do not support police, has been shown to be associated with lower self-legitimacy, (Nix and Wolfe 2017), as has stereotype threat arising from suggestions that the police are racist (Trinkner et al. 2019). In this paper, though, we concentrate not on public opinion of police (and officer's perceptions thereof), but on the institutional context within which police operate.

The relationships police have with other institutions can be both a source of and a challenge to legitimacy (Martin and Bradford 2019). Specifically, we argue that within the context of COVID-19 the rapid evolution of the crisis and the state response to it, the constant debate about the appropriateness of restrictions, and the success or failure of the government in general and specific agencies in particular in maintaining and enforcing these restrictions might all predict levels of police self-legitimacy. If officers perceive that the governmental response to the crisis is failing, and that the rules they are being asked to enforce are ambiguous and not consistent with established norms, this may damage their confidence in their authority precisely because it creates doubt, confusion and a sense of failure.

Since identities are also, of course, formed in institutional context, we might also expect perceptions of the government response to be associated with officers' identification as police. Here, though, the potential relationship may be more complicated. On the one hand, pride and emotional attachment to the police organisation may be promoted by a sense that it is part of a successful collective effort against the virus. Social psychological research on the role of social identity processes in mass emergency behaviour that has shown that a sense of common fate (where group members engage in a collective effort to accomplish shared objectives) is the source of an emergent shared social identity (Drury 2018). On the other hand, though, a positive police identity may be fostered in *opposition* to perceived failures on the part of the government, perceptions which motivate firmer drawing of group boundaries. Such a process can be conceptualised as an identity-based reaction to the ambiguity and perceived illegitimacy that the powerful actor in this context (the government) introduced for the police; which has impacts on their own identity (c.f. Haslam et al. 2020). The government in this case stands in the way of the pursuit of achieving their group goals; and as such officers might identify more strongly as police 'in the face' of the increasing adversity imposed upon them by an ineffectual – increasingly outgroup - government.

Considering the positive effects of self-legitimacy and shared police identity evident in existing work, in this paper we consider whether these can explain the relationship between the COVID-19 operational context (organisational cohesion and the government's response to COVID-19), police officer health and well-being, and officer's commitment to democratic modes of policing at times of emergency.

The present study

UK police forces have a wealth of experience in responding to emergencies. But COVID-19 is unprecedented in terms of the speed, scale and complexity of developing doctrine and its implementation by officers across the UK. The fast-changing legislative and guidance frameworks imposed on policing during the COVID-19 crisis have created immense leadership and operational challenges. In this paper we explore police officers' experiences and perceptions of policing the pandemic. Although we now know more about the public's experiences of the pandemic (see e.g., Seale et al. 2020), the perspective of police officers in the UK has not yet been considered in any detail (see Frenkel et al. 2020 for police officer experiences outside of the UK context). We examine whether the organisational climate police officers were operating in, and the government's response to COVID-19, had an impact on police officer health and well-being and their commitment to democratic modes of policing when faced with policing a pandemic. We also consider whether this relationship can be explained by officers' confidence in their own authority and sense of identification with the police service.

Method

Participants and design

Police leaders within two of the largest forces in England and Wales alongside a medium sized and a small provincial police force were asked to distribute the link to an online survey as widely as possible to police officers in their organisations. Our (convenience) sample is therefore not representative of the police forces sampled. Officers (N = 324) completed the survey in their own time, solely on the basis of their willingness to participate, and responses to the online survey were collected anonymously.

The demographic characteristics of the sample are presented in Table 1. Some 59% of participants were male; 91% were white British; 29% worked in response, 25% in specialist operations, 19% in neighborhood policing teams, 4% in senior command/ managerial (23% chose to not disclose this information); 58% ranked themselves as police constable, 18% as sergeant, and 12% as higher ranks (13% chose to not disclose this information); and 68% reported having served more than 10 years as a police officer. Some 60% of respondents self-reported that policing COVID-19 'often' required them to do things that might lead them to catch the virus (26% said 'sometimes', 11% said rarely, and 3% said never).

[Table 1 here]

Data was collected between July 2020 and September 2020. We set out to achieve 200 participants, the typical recommended sample size for structural equation modeling (SEM) analysing models of average complexity (Kline 2011). We are confident that our study is sufficiently powered because our final sample number exceeded our expectations (N = 325) and because two more recent simulation studies recommended even smaller sample sizes for SEM models of similar complexity to those we report in this paper (Wolf et al. 2013; Sideridis et al. 2014).

The online survey included items assessing the organisational climate in the COVID-19 context (force communication and front-line/senior officer relations), the government response to the pandemic (government advice/ law balance and clarity of legislative framework), identification (as a police officer, with their organisation and with their policing borough), police officer self-legitimacy, commitment to democratic modes of policing in emergencies in the form of support for police use of force and support for procedurally just

policing, and police officer health and well-being during COVID-19. All questions were asked regarding the UK's response to COVID-19 between June 2020 and the time at which participants completed the survey. Participants were also asked to provide information about their job (job experience, force, role, rank), and they were asked to report risk perceptions (how often policing COVID-19 required them to do things that might lead them to catch the virus) and demographic information (ethnicity and gender).

Informed consent was obtained from all participants. The online survey took approximately 10 minutes to complete. The research was approved by the ethical review board at University College London.

Measures

All items were answered on a 1-5 (disagree-agree) scale unless otherwise indicated. See the Appendix for full item wordings. Scale reliability was acceptable for all measures reported (see Table 2), but we further validate these measure in the Results section below. We took a conceptual *(a priori)* modelling approach to form key constructs: *Organisational climate in the COVID-19 context*, *Government response to COVID-19*, and *Identification*.

Organisational climate in the COVID-19 context was measured using 11 items. Three items measured force communication (e.g. senior police leaders communicated clearly and effectively with their staff), and nine items measured front-line/senior officer relations - four items relating to relationship with supervisor, which were rated on a scale from 1 Never to 5 Very often (e.g. How often did your immediate supervisor treat you with respect?), and five items relating to relationship with force (e.g. The force pulled together to deal with the situation). Existing work that has measured organisational climate often includes manager-

employee relationships, and organisation communication as organisational climate factors (e.g. Mafini 2016; Ali & Xiao-Yong Wei 2018).

Higher scores on the *Organisational climate in the COVID-19 context* measure indicate a more positive organisational climate characterised by better force communication and more positive relationships between police officers and their supervisors/force.

Government response to COVID-19 was measured using 6 items. It was made up of a combination of three items measuring government advice/ law balance (e.g., there was a significant gap between Government advice/ announcements and the law), and three items measuring clarity of legislative framework (e.g., the COVID-19 legislation was ambiguous). Commentaries on the UK government's response to COVID-19 (e.g. Hogarth 2020) often made the criticism that the government had not drawn a clear line between law and guidance during the coronavirus crisis. In other words, the argument put forward was that guidelines to the public were not backed by legislation; and, relatedly, that the legislation itself was problematic and unclear.

Higher scores on the *Government response to COVID-19* measure indicate a poor government response characterised by a disconnect between government advice and the law and an unclear legislative framework.

Police officer identification was measured using 9 items. It was made up of a combination of four items measuring police officer identity (e.g. I feel strong ties with other police officers), two items measuring organisational identity (e.g. I have a strong emotional attachment to the force), and three items measuring identification with the policing borough (e.g. I feel a sense

of loyalty to the geographical area I police). Arguably, these three distinct, albeit overlapping, constructs are capturing respondents 'overall' identification as a police officer. Higher scores on the *Identification* measure indicate stronger identification with categories the police can internalise into their sense of self.

Self-legitimacy was measured using 8 items (e.g. I am confident in using the authority that has been vested in me as police officer to deal with COVID-19). Higher scores on the *Self-legitimacy* measure indicate greater police confidence in their own legitimacy.

Support for police use force at times of emergency was measured using two items (e.g., overall, the police should use more force to control members of the public at times of emergency). Within policing 'use of force' is defined as using handcuffs, CS spray, batons, some form of restraint, use of police dogs, TASER or firearms. It is however likely that in this research context 'use of force' was understood by officers as police officers exercising the COVID-19 powers against those that the officer believes have breached the COVID-19 laws.

Support for procedurally just policing at times of emergency was measured using three items (e.g., it's important for the police to take the time to explain decisions to members of the public at times of emergency). Higher scores on the *Support for police use of force* and the *Support for procedurally just policing* measures indicate support for increased use of force and procedurally just policing respectively.

Police officer health and well-being was measured using two items (e.g., I feel that my job during this period is negatively affecting my physical or emotional well-being (e.g., I am at

greater risk of catching COVID-19). Given the negative valence of the two items used to measure police officer health and well-being, higher scores on the *Police officer health and well-being* measure indicate poor police officer health and well-being.

Analysis plan

In order to validate our measures, we first tested the factorial structure of the latent variables by specifying a measurement model using confirmatory factor analysis (CFA) in MPlus 8. The relationships between these were then investigated using structural equation modelling (SEM) to estimate regression paths between latent constructs, again in MPlus 8. For each outcome variable (support for police use of force at times of emergency, support for procedurally just policing at times of emergency, and poor police officer health and well-being in the context of policing COVID-19) we tested the relationship between positive organisational climate, poor government response to the crisis, identification, self-legitimacy, and support for the use of force/support for procedurally just policing/poor police officer health and well-being respectively.

<div align="center">**Results**</div>

CFA measurement model

We tested whether a measurement model that included seven covarying latent constructs of positive organisational climate, poor government response, police identification, self-legitimacy, support for police use of force, support for procedurally just policing, and poor police officer well-being fitted the data well (where one typically looks for CFI >.95; TLI >.95; RMSEA <.08 – see Hu & Bentler 1999). This model produced adequate fit indices (Chi-Square = 947.39 df = 499, p = <.001; RMSEA = .053 [.048, .058]; CFI = .961; TLI = .956), with all standardised factor loadings >.55, after dropping low-loading items and adding covariances to

within factor items based on modification indices.[1] Conceptually, in each case it made sense to include these covariances because the items involved measured different facets of the relevant factor. See Appendix for a list of the items used in the final model.

Descriptive statistics

Descriptive statistics and correlations between latent constructs are presented in Table 2. Importantly, mean levels of positive organisational climate and poor government response were significantly higher than the mid-point of 3 on the 5-point scales; such that police officers, on average, reported a relatively positive organisational climate ($t(323) = 14.42$, $p <$ .001) and judged the government response to COVID-19 to be relatively poor ([], $t(323) =$ 23.65, $p < .001$). Note that the *positive organisational climate in the COVID-19 context* measure indicates a more positive organisational climate characterised by better force communication and more positive relationships between police officers and their supervisors/force; and that the *poor government response to COVID-19* measure indicates a poor government response characterised by a disconnect between government advice and the law and an unclear legislative framework.

[Table 2 here]

Testing our research questions: structural equation modelling

We tested our research questions by specifying a structural model, which investigated direct and indirect pathways from positive organisational climate and poor government response to

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[1] Items dropped: two of the items measuring relationship with supervisor and three of the items measuring relationship with force from the organisational climate factor; one of the items measuring police officer identity from the police identification factor; two of the items from the self-legitimacy factor. Items allowed to covary within the following measures within factors: 2 covariances between items measuring force communication, 1 covariance between items measuring relationship with force, 1 covariance between items measuring identification with policing borough, 1 covariance between items measuring police identity, 2 covariances between items measuring government advice/ law disconnect.

police identification and self-legitimacy to support for police use of force/support for procedurally just policing/poor police officer health and well-being (see Figure 1). The model included positive organisational climate and poor government response as exogenous predictor variables, police identification, and self-legitimacy as the mediating variables, and support for police use of force/support for procedurally just policing/poor police officer health and well-being as the ultimate outcome variables.

[Figure 1 here]

We present standardised regression coefficients for all paths in Table 3. The model (Chi-Square = 1072.724, df = 500, $p = <.001$; RMSEA = .059 [.055, .064]; CFI = .950; TLI = .944) explained 41% of the variance in identification ($R^2 = .41$), 23% of the variance in self-legitimacy ($R^2 = .23$), 20% of the variance in support for police use of force ($R^2 = .20$), 19% of the variance in support for procedurally just policing ($R^2 = .19$), and 13% of the variance in poor police officer health and well-being ($R^2 = .13$).

[Table 3 here]

We first turn to the association between the independent variables and the mediating variables. A (subjectively) positive organisational climate during COVID-19 positively predicted police officer identification, and police officer self-legitimacy. In other words, adequate force communication and front-line/senior officer unification (i.e., a positive organisational climate) was associated with increased identification (as a police officer, with their organisation and with their policing borough), and greater police confidence in their own legitimacy (i.e., higher self-legitimacy).

A (subjectively) poor government response to COVID-19 positively predicted identification and police officer self-legitimacy. In other words, a government/advice law disconnect and an unclear legislative framework (i.e., a poor government response) was associated with increased identification (as a police officer, with their organisation and with their policing borough) and greater police confidence in their own legitimacy (i.e., higher self-legitimacy).

We next consider each of the outcome variables in turn.

Support for police use of force at times of emergency

There was no direct association between the poor government response to COVID-19 and support for police use of force. There was, however, a negative direct effect of positive organisational climate during COVID-19 on support for police use of force. In other words, adequate force communication and front-line/ senior officer unification (i.e., a positive organisational climate) was associated with *less* support for police use of force.

There was no association between identification and support for police use of force. There was, however, a positive conditional effect of self-legitimacy on support for police use of force. The more confidence police officers had in their own legitimacy (i.e., higher self-legitimacy), the *more* they endorsed use of force. Moreover, self-legitimacy (but not identification) mediated the effect of the positive organisational climate during COVID-19 on support for police use of force. Although there was no direct association between the poor government response to COVID-19 and support for police use of force, the indirect effect of the poor government response to COVID-19 on support for police use of force via self-legitimacy (but not identification) was significant. In other words, any association between

the poor government response to COVID-19 and support for increased or greater police use of force was completely mediated by police officer confidence in their own legitimacy.

Support for procedurally just policing at times of emergency

There was no association (direct or indirect) between the poor government response to COVID-19 and support for procedurally just policing. There was also no association between identification, nor self-legitimacy and support for procedurally just policing. Although all indirect effects of positive organisational climate during COVID-19 on support for procedurally just policing were not significant, there was a positive direct effect of positive organisational climate during COVID-19 on support for procedurally just policing. In other words, adequate force communication and front-line/senior officer unification (i.e., a positive organisational climate) was associated with *more* support for procedurally just policing.

Police officer health and well-being

There was a positive direct effect of the poor government response to COVID-19 on poor police officer health and well-being in the COVID-19 context. There was also a negative direct effect of positive organisational climate during COVID-19 on poor police officer health and well-being. In other words, a poor government response was associated with *decreased* police officer health and well-being in the COVID-19 context; and adequate force communication and front-line/ senior officer unification (i.e., a positive organisational climate) was associated with *increased* police officer health and well-being in the COVID-19 context.

There was no association between identification and poor police officer health and well-being. There was, however, a positive effect of self-legitimacy on poor police officer health

and well-being. The more confidence police officers had in their own legitimacy (i.e., higher self-legitimacy), then, the poorer their health and well-being. Indeed, self-legitimacy (but not identification) mediated the effect of the positive organisational climate during COVID-19 on poor police officer health and well-being. Given the significant negative direct effect of the positive organisational climate during COVID-19 on poor police officer health and well-being, this means that self-legitimacy partly negated that association.

Robustness checks

Despite our sample size justification above, to increase our confidence in our SEM model's results, and mitigate any concerns regarding statistical power, we also (a) fitted the same model without specifying any indirect effects, (b) conducted path analysis of the same models using manifest indicators (saved component scores from principle components analysis), and (c) tested three separate models, one for each outcome variable. The results remained the same. In addition, in line with Greenland and colleagues (2016), to determine whether our study was suitably powered we conducted ad-hoc power analyses (using G*Power) given α (.05), sample size (325), and effect sizes for the significant effects of the two key independent variables (positive organizational climate and poor government response) on the three dependent variables (support for police use of force, support for procedurally just policing, and police officer well-being): positive organizational climate on support for police use of force (-.48), support for procedurally just policing (.34), and police officer well-being (-.30); and poor government response on police officer well-being (.16). Results confirmed that our sample size was suitably powered to detect the significant effects (above 90% power for all ad-hoc power analyses conducted).

Discussion: implications for theory and practice

The effect of the pandemic on first responders such as the police – though assumed to be profound – have not yet been explored nor quantified in the UK (Stogner et al. 2020; c.f. Frenkel et al. 2020). There is therefore still much to be understood in this arena, including adapting knowledge and learning from previous natural disasters and public health emergencies (Laufs & Waseem 2020). Our findings have important theoretical and practical implications relating to the quality of the organisational climate and police officer self-legitimacy when in crisis. We outline these below.

A positive organisational climate matters

In order to institute organisational justice, police leaders must communicate clearly and effectively with their staff and listen and take on board their perspectives (Trinkner & Tyler 2020). We reported that a positive organisational climate was associated with *less* support for greater police use of force, *more* support for procedurally just policing and *increased* police officer health and well-being. In line with research that has linked the way police organisations are led and managed and improved performance and psychological well-being amongst police officers (The Police Foundation 2019), and existing work linking the internal structures of police organisations to the ability and desire of officers to deliver democratic or procedurally just forms of policing practice (see Sklansky 2008 and Bradford & Quinton 2014), we provide evidence that good force communication and positive front-line senior officer relations were key to maintaining an proportionate police response during COVID-19.

Especially in trying times, if police officers are to remain committed and loyal to the organisation it is important they identify and agree with organisational goals, mission and values. We reported that a positive organisational climate was also associated with heightened

identification with the police service. We are the first to demonstrate this in the context of policing COVID-19, but our findings echo existing work linking organisational justice to enhanced social identification with the police service (Bradford et al. 2013).

It is also important in the current fast-evolving legislative context that officers themselves continue to be confident in the authority vested in them. Or in other words, that they continue to believe in their own (or 'self') legitimacy and consequently in their ability to do their job effectively. Research suggests that this can be achieved by instituting forms of internal procedural (or organisational) justice. For example, Bradford and Quinton (2014) demonstrated that officers' belief that they are legitimate holders of the power invested in them related in important ways to the extent to which those officers themselves felt that they were treated fairly by senior management. We reported that a positive organisational climate was associated with increased perceptions of self-legitimacy in this specific context too.

External relationships seem to matter less

The gap between Government guidance and the law must be closed to reduce ambiguities for both the public and the police officer; not least because the police are tasked to enforce the law, and not Government guidelines. The police must be afforded sufficient powers to allow for necessary intervention when enforcement becomes necessary, or they should be informed that a police intervention is not appropriate. Blurring the line between these two positions seems to have been a problem for our respondents. Yet, while the government's response to COVID-19 seemed to have a negative impact on police officer health and well-being, it did not have an impact on officer commitment to democratic modes of policing. These latter outcomes, even during a pandemic, seem to be framed through officers' relationships with the police service, and not the government. This is an important point for police training because protecting

commitment to democratic modes of policing seems to be about what *the police as an organisation* do.

In fact, a poor government response was associated with *stronger* feelings of identification and self-legitimacy amongst officers. We suggest that these effects can be explained through reference to social identity and inter-group processes (see Tajfel & Turner 1979; Turner et al. 1987). The data suggests that officers may have felt the lack of clarity, both for themselves and the public, rendered their relationship with Government and the public as less legitimate and stable. As one would expect, in this context of feelings of increasing intergroup illegitimacy and instability, police officers coalesced around a stronger sense of their own cohesion and solidarity as they geared themselves up for collective action. In other words, a sense of 'common fate' in relation to the perceived failings of the Government meant they were more inclined to the idea that 'we are in this together' ('we', in this case, being the police), which led to an increase of perceived group entitativity, which in turn enhances ingroup identification (Drury 2018; Stott & Drury 2004).

We did not find evidence that police identification, made stronger by a positive organisational climate and a poor government response to the pandemic, had any knock-on effects (on any of the outcomes variables). It is however interesting that greater attachment to the organisation seemed to largely insulate officers from poor and/or confusing government action. This attachment to the organisation, we suggest, allows officers to confidently align themselves to the direction proscribed by their force (c.f. Waddington 1999).

Finally, it is worth noting that the above discussion does not mean that the government's poor response to the pandemic (Hogarth, 2020) did not negatively affect police officers in (other) ways that we were not able to capture in the present study.

Self-legitimacy can have negative effects

Our findings highlighted the potential negative knock-on effects of police officer self-legitimacy: although we expected that greater self-legitimacy would be associated with higher well-being amongst police officers and less support for police use of force, we actually found that officers' confidence in their own authority to police COVID-19 *hindered* their well-being and led to *more* support for police use of force. These findings are not in line with existing research that has instead highlighted the positive effects of self-legitimacy on police officers' ability to do their job in socially and normatively desirable ways (Trinkner & Kerrison 2019), nor with literature demonstrating the well-being benefits associated with having confidence in their own authority (Bradford & Quinton 2014; Tankebe & Mesko 2015; Trinkner et al. 2019).

Greater self-legitimacy may lead to better outcomes in normal operating conditions, but our findings suggest that having strong self-legitimacy might actually present a barrier to normatively desirable modes of policing in non-normal times. It may be that when the external environment changes and necessitates a shift in the powers vested in police, some officers find this transition difficult to handle. Excessive confidence in the rightness of their authority may mean they are not able to flex and change rapidly enough. While too little confidence may lead to a lack of commitment in times of change and difficulty, a recent study found that a stronger organisational identity (a strong correlate of self-legitimacy; see Bradford & Quinton 2014) among employees of small organisations in India (Batra and

Sharma 2017) hindered organisational performance and employee well-being because it restricted openness to change and made it difficult for organisations to respond to the external environment. We therefore suggest that there may be an 'optimal' self-legitimacy, which requires that police officers are constantly, or at least periodically, reviewing both their own and the organisation's goals, mission and values in the context of their operational environment. This requires a level of conscious appraisal, cognitive and emotional flexibility, continual discussion and emotional resilience.

Conclusion

Commentaries on policing the pandemic speculate that COVID-19's largest impact on policing has likely been on organisational protocols and officer mental health and call on researchers to provide evidence for their claims, and quantify the scope of these impacts (see Stogner et al. 2020). Using online data collected from 325 police officers based within two of the largest forces in England and Wales alongside a medium sized and a small provincial force, we sought to understand police officer's experiences and perceptions of policing the COVID-19 crisis. Our findings highlighted the importance of a positive organisational climate at times of emergency. Positive effects were found for protecting police officer health and well-being, for promoting a commitment to democratic modes of policing in the form of rejection of police use of force unless it is absolutely necessary and support for procedurally just policing, for boosting officers' sense of identification with the police service and for promoting greater confidence in their authority. However, our findings highlighted the potential negative knock-on effects of officer self-legitimacy: higher levels of self-legitimacy were associated with *increased* support for greater police use of force and ill-being amongst police officers.

A key limitation of this paper is of course that 'snap shot' surveys allow only correlational analysis. We are not able to demonstrate causality with the data available to us. However, the findings reported above hint at a complex dynamic in officer experiences of policing the pandemic. Multiple and conflicting factors seem to have shaped the ways our respondents thought about their work during this crisis. What is clear, however, is that organisational climate was at the heart of this process. On this basis we might conclude that police organisations which do well in generating a positive organisational climate to their members will be in a significantly better position to deal with a crisis when it arrives. Officers may be more likely to maintain appropriate standards of policing, and less likely to need to take time off for reasons of stress, if they feel well supported by their employers.

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Tables

Table 1. Study 1: Demographic characteristics of sample

Sample characteristic		Percentage of sample[1]	N
Gender	Male	59%	191

	Female	41%	119
Ethnicity	White British	91%	295
	White Other	3%	10
	Asian/ Asian British	3%	9
	Black/ Black British	1%	1
	Mixed background	1%	3
	Other ethnic group	2%	6
Job	Response	29%	93
	Specialist operations	25%	80
	Neighbourhood	19%	62
	Senior command/managerial	4%	14
Rank	Police constable	58%	189
	Sergeant	18%	57
	Inspector	9%	29
	Chief inspector	2%	6
	Superintendent	1%	2
Time served as police officer	More than 10 years	68%	219
	5-10 years	5%	16
	2-5 years	15%	50
	1-2 years	7%	22
	Less than a year	5%	17

[1]Percentages calculated with missing values excluded

Table 2. Descriptive statistics and covariances between latent constructs

	a	*M*	*SD*	*Variance*	1	2	3	4	5	6
1.Positive organisational climate	.84	3.53	.66	.38						

					1	2	3	4	5	6
2.Poor government response	.84	3.95	.73	.33	**-.19***					
3. Identification	.83	3.77	.61	.40	**.48****	.08				
4. Self-legitimacy	.79	3.40	.67	.39	**.30****	.01	**.46****			
5. Support for police use of force	.84	3.23	1.09	.80	**-.17***	.07	-.01	**.27****		
6. Support for PJ policing	.52[2]	3.83	.75	.45	**.41****	-.13	**.32****	**.19***	**-.25****	
7. Poor police officer well-being	.72	3.60	1.09	.45	**-.27****	**.24****	**-.14***	.04	**.32****	**-.19***

***p<.001, *p<.05*

Note: all indicators set as ordinal categorical variables

Table 3. Standardised regression coefficients for direct and indirect paths

Direct paths		*b*	*SE*	*p*
Positive organisational climate (OC) to	Identification	**.65****	**.04**	**.000**

---

[2] Note that Cronbach's alpha of .5 and above is considered acceptable (Taber, 2018). Nevertheless, item R^2 (all > .3) and item factor loadings (all >.6) negate the low Cronbach alpha value.

|				
	Self-legitimacy	**.50****	**.05**	**.000**
	Support for UOF	**-.48****	**.13**	**.000**
	Support for PJ	**.34***	**.13**	**.007**
	Poor well-being	**-.30***	**.12**	**.015**
Poor government response (GR) to	Identification	**.27****	**.05**	**.000**
	Self-legitimacy	**.19***	**.06**	**.001**
	Support for UOF	-.09	.08	.242
	Support for PJ	-.06	.09	.497
	Poor well-being	**.16**	**.08**	**.044**
Identification to	Support for UOF	.14	.09	.145
	Support for PJ	.13	.10	.197
	Poor well-being	-.04	.10	.712
Self-legitimacy to	Support for UOF	**.45****	**.07**	**.000**
	Support for PJ	.01	.09	.998
	Poor well-being	**.18***	**.08**	**.025**
Indirect paths				
OC to UOF via	Identification	.13	.09	.161
OC to UOF via	Self-legitimacy	**.34****	**.08**	**.000**
GR to UOF via	Identification	.06	.04	.169
GR to UOF via	Self-legitimacy	**.13***	**.05**	**.010**
OC to PJ via	Identification	.09	.07	.198
OC to PJ via	Self-legitimacy	.01	.05	.998
GR to PJ via	Identification	.04	.03	.202
GR to PJ via	Self-legitimacy	.01	.02	.998
OC to WB via	Identification	-.03	.07	.711
OC to WB via	Self-legitimacy	**.10***	**.05**	**.048**
GR to WB via	Identification	-.01	.03	.714
GR to WB via	Self-legitimacy	.04	.09	.052

Figures
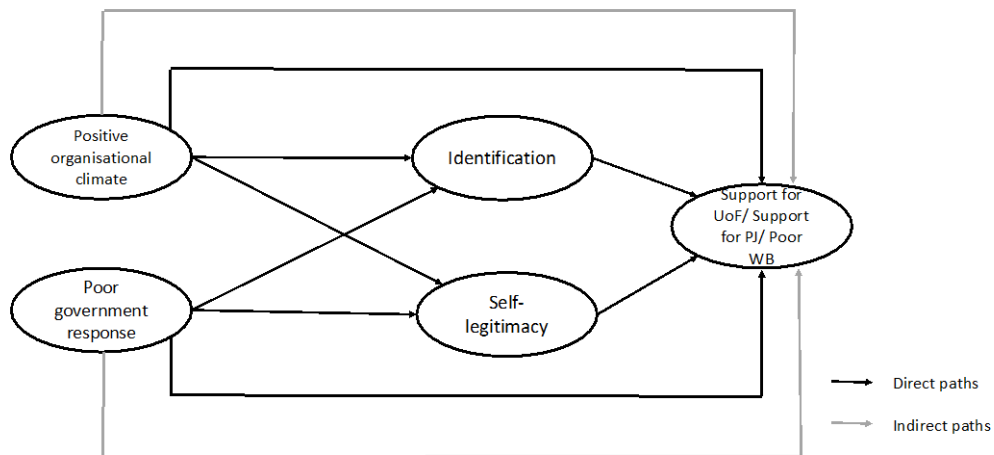
Figure 1. Specified direct and indirect paths of the model with outcome variables support for police use of force, support for procedurally just policing, and poor police officer health and well-being.

Appendix: Item wordings and factor loadings for latent variables used in analysis

	Factor loadings[3]
Positive organisational climate in the COVID-19 context	
[Force communication]	
Senior police leaders provided front line officers with appropriate updates around the changing nature of the situation and policing response.	.617
Senior police leaders communicated clearly and effectively with their staff.	.621
Senior police leaders listened and took on board their staff's perspectives.	.702
[Front-line/ senior officer relations]	
How often did your immediate supervisor make decisions based on the facts?	.588
How often did your immediate supervisor treat you with respect?	.579
The force pulled together to deal with the situation	.846
The force did the best to deal with the pressures placed on the police	.906
Poor government response to COVID-19	
[government advice/ law balance]	
There was a significant gap between Government advice/ announcements and the law	.570
The gap between Government advice/announcements and the law created ambiguities for the public	.581
The gap between Government advice/announcements and the law created ambiguities for police officers	.677
[clarity of legislative framework]	
The *COVID-19* legislation was too complicated	.779
The *COVID-19* legislation was ambiguous	.887
The *COVID-19* legislation was poorly written	.871
Identification	
[police officer identity]	
Being a police officer is important to who I am	.628
I am glad I am a police officer	.673
I feel strong ties with other police officers	.671
[organisational identity]	
I have a strong emotional attachment to the force	.884
I feel a sense of loyalty to the force	.890
[identification with the policing borough]	
I feel a sense of loyalty to the geographical area I police	.649
I have an emotional attachment to my team/ unit in the borough I police	.608
I feel a sense of loyalty to my team/ unit in the borough I police	.680
Self-legitimacy	
As someone who works for the police, I believe I occupy a position of special importance in society, especially operating in the *COVID-19* context	.627
I believe my role is necessary to deal with *COVID-19*	.711
I sometimes think tackling the pandemic would be better off without the police (R)	.596
I believe it is right for me as an officer to have special powers over fellow citizens to deal with *COVID-19*	.796
The powers I have as an officer to deal with *COVID-19* are morally right	.811
An important part of what makes my role morally right is for me to act according to the *COVID-19* legislation	.703
Support for police use of force at time of emergency Overall, the police should use more force to control members of the public at times of emergency	.892

[3] Note that factor loadings greater than .5 are deemed acceptable (Truong & McColl, 2011).

The police should be allowed to use greater force at times of emergency	.880

Support for procedurally just policing

It's important for the police to take the time to explain decisions to members of the public at times of emergency	.670
We should allow members of the public to voice their opinions when we make decisions that affect them at times of emergency	.580
We should treat everyone with the same level of respect regardless of how they behave at times of emergency	.595

Poor police officer health and well-being

I feel that job pressures during this period interfere with my family or personal life (e.g. by having to stay away from my family due to worrying about them catching _COVID-19_)	.668
I feel that my job during this period is negatively affecting my physical or emotional well-being (e.g. I am at greater risk of catching _COVID-19_)	.979