# BIROn - Birkbeck Institutional Research Online

**Why do People Comply with the Law? Legitimacy and the Influence of Legal Institutions**

Jonathan Jackson*, Methodology Institute and Mannheim Centre for Criminology, LSE
Ben Bradford, Centre for Criminology, University of Oxford
Mike Hough, Institute of Criminal Policy Research, Birkbeck, University of London
Andy Myhill, National Policing Improvement Agency
Paul Quinton, National Policing Improvement Agency
Tom R. Tyler, Department of Psychology, New York University

**Abstract**

This paper extends Tyler's procedural justice model of public compliance with the law. Analysing data from a national probability sample of adults in England and Wales, we present a new conceptualisation of legitimacy based not just on the recognition of power but also the justification of power. We find that people accept the police's right to dictate appropriate behaviour, not only when they feel a duty to obey officers, but also when they believe that the institution acts according to a shared moral purpose with citizens. Highlighting a number of different routes by which institutions can influence citizen behaviour, our broader normative model provides a better framework for explaining why people are willing to comply with the law.

**Key words:** Public confidence; public contact with the police; trust; legitimacy; compliance; policing by consent

**Word count:** 9,874 with references and appendix; 9,992 with abstract, references and appendix.

'Legitimacy depends on what Reiner (2000: 55) has called the mystical sense of an identification between the police and the British people. It depends on the myth that police and people share a single set of coherent and consistent norms and values, and that the police have a unique function in using force if necessary to impose them.' (Smith, 2007a: 280)

Legitimacy is the right to rule and the recognition by the ruled of that right (Sternberger, 1968; Beetham, 1991; Coicaud, 2002; Tyler, 2006a; Bottoms and Tankebe, in press). Social institutions need legitimacy if they are to develop, operate, and reproduce themselves effectively (Easton, 1965). This is as true for the police as it is for other institutions of government. But peculiar to the police function is the state-sponsored use of violence and force, the resolution of conflict, and the enforcement of legally-prescribed conduct and rule-following (Banton, 1964; Bittner, 1970; Reiner, 2010). Police legitimacy and public consent are necessary conditions of the justifiable use of state power: those who are subject to policing must see the police as right and proper (Tyler, 2006b, 2011a; Schulolfer *et al.,* in press).

People's motivations to comply with the law lie at the heart of crime-control policy. Many criminal policies are premised on the idea that compliance is secured by the presence of formal policing and severe sanctions for wrong-doers (Tyler, 2007; Nagin, 1998; Kahan, 1999). Social control mechanisms and credible risks of sanction hope to persuade rational-choice individuals that – while otherwise desirable – a criminal act is not worth the risk (Tyler *et al.,* in press). If offenders are responsive primarily to the risk of punishment, then agents of criminal justice must send out signals of strength, effectiveness, force, detection and justice (Hough *et al.,* 2010).

But people's compliance may stem at least as much, if not more, from personal commitment to law-abiding behaviour (Tyler, 2006b; Robinson and Darley, 2004). Based upon the idea that people comply with the law because they believe it is the right thing to do, a normative model of crime-control posits that institutions can secure compliance and cooperation by developing policies that generate legitimacy (Tyler, 2006b; Tyler and Huo, 2002). Tyler's procedural justice model of policing states that when institutions act according to principles of procedural fairness, this helps sustain and strengthen the ability of legal authorities to encourage citizens to regulate themselves (Tyler, 2008). Institutions can thereby avoid the cost, danger and alienation that are associated with policies based on external rules underpinned by deterrent threat (Scholhofer *et al.,* 2011).

Yet, the evidence for Tyler's procedural justice model of compliance remains almost entirely US-based (although see Murphy *et al.,* 2009[1]). The lack of a robust comparative empirical base means that we do not know whether the central tenets of his normative model of social regulation (focused on public compliance) hold in other contexts. The US context may predispose its citizens to be especially sensitive to the way they are treated by legal authorities (Tonry, 2007: 4). The political culture of the US emphasises notions of small government and the need to protect citizens from an over-powerful state. If other countries have different conceptions of the relationship between individual and state, some of Tyler's prescription may prove less effective. Even if successful in narrow terms, policies to improve public trust and institutional legitimacy in Europe may not increase public compliance with the law.

In this paper we present the first test of Tyler's procedural justice model of public compliance with the law in England and Wales.[2] Prior non-US work has explored the link between legitimacy and *cooperation* (e.g. Murphy and Cherney, 2012). But with just one exception[3], no study outside the US has

---

[1] For non-US work that applies the procedural justice model to public cooperation with legal authorities, see Tankebe (2009), Reisig and Lloyd (2009), Murphy and Cherney (2012) and Jackson *et al.* (2012). For non-US work that applies the procedural justice model to other issues (aside from cooperation and compliance) see Stott *et al.,* (2011), Jonathan-Zamir and Weisburd (2011), Ward *et al.* (2011), Kochel (2011) and Bradford (2011).

[2] An overview of the study has been foreshadowed in two recent publications (xxx, xxx). Importantly, this paper not only presents the full findings, it also documents the complete theoretical framework under investigation.

[3] Murphy *et al.* (2009) linked legitimacy to compliance behavior in an Australian study. However, they operationalized compliance in three different ways over three different studies, and only one study measured something approaching actual compliance behaviour.

addressed the link between legitimacy and *compliance*. Our study makes three important contributions to the literature. First, we test the model in the UK for the first time. Second, we extend a new definition of legitimacy based both on obligation to obey and moral alignment. We consider the importance not just of consent to power but also moral alignment, or what Smith (2007a: 280) calls in the above quote the 'myth about unity of purpose and values.' Third, we interpret our findings in the light of two psychological mechanisms, identification and internalization, and we highlight how different dimensions of legitimacy might shape compliance with the law.

Drawing upon work by Kelman (2006) and Tyler (2006a, 2006b) we examine multiple pathways from (a) public trust in police effectiveness and procedural justice, to (b) the legitimacy that individuals invest in the police and the law, to (c) compliance with the law. Presenting data from a national probability sample of adults in England and Wales, we show that moral alignment between citizens and the police is as least as important in explaining variation in compliance as felt obligation to obey the police and the law. Our paper begins with a review of Tyler's framework. We then extend his model by (a) defining police legitimacy as both obligation to obey and moral alignment with the police (cf. Jackson *et al.,* 2011; Jackson *et al.,* 2012, in press), and (b) distinguishing between police and legal legitimacy (cf. Murphy and Cherney*,* 2012). Put together this new set of distinctions provides us with multiple pathways by which institutions can influence the behaviour of citizens. We conclude with the idea that people consent to being policed not just when they feel obligated to the police, but also when they believe that the police are operating within an appropriate ethical framework. Partly legitimated by procedural justice, unjustified police action seems to discourage people to adhere to the law in England and Wales.

**Procedural justice and normative compliance**
How can crime-control policies increase public commitment to institutions and laws? At the core of Tyler's procedural justice model are the processes by which the police exercise their authority (Tyler, 2006a, 2004; Tyler and Blader, 2000; Tyler and Huo, 2002). First, the experience of procedural unfairness – including disrespectful treatment and unfair decision-making – erodes feelings of shared group membership with the authority concerned. Group leaders, rules, norms, and values symbolically represent the group (Lind and Tyler, 1988), and the manner in which group members are treated by their leaders communicates information to the individual about their status within the group (Smith *et al.,* 1998). Authorities provide subordinates with identity-relevant and status-relevant information. People then use their evaluations of process to gain self-knowledge and construct their personal identities.

Second, the experience and sense of procedural unfairness harms not only an individual's self-worth, but also the connection between citizens, the police and the rule of law. By treating citizens unfairly, the police's message to citizens is stark: *you are not valued by society*. Disrespectful treatment and unfair decision-making erode the extent to which citizens value the police as group authorities, as well as the subsequent identification that individuals have with the set of rules that legal authorities enforce. This leads individuals to question whether the authorities are in a position to dictate proper conduct.

Third, legitimacy leads individuals to follow rules not because they agree with each specific rule, nor because they expect punishment, but because they accept that it is morally right to abide by the law. Legitimacy is a '…a psychological property of an authority, institution, or social arrangement that leads those connected to it to believe that it is appropriate, proper, and just' (Tyler, 2006b: 375). Thus viewed, legitimacy is the belief that the law and agents of the law are rightful holders of authority; that they have the right to dictate appropriate behaviour and are entitled to be obeyed; and that laws should be obeyed simply because *that is the right thing to do* (Tyler, 2006a; Tyler, 2006b; cf. Easton, 1965).

By linking legitimacy to public compliance, Tyler's work generates a psychology of authorization and consent. The legitimacy of the police and the law leads to a respect for legal guidelines for action that dictates appropriate and personally binding behaviour. These guidelines may not be perfectly aligned with everyone's moral system. We do not always agree with the moral force of each and every law. But legitimacy involves the public recognition that the social order needs a system of laws that generate compliance and respect above and beyond individual preferences (or disagreements) with specific laws.

When people believe it is morally just to obey the law, so long as they know that a particular act is illegal, then the immorality of illegal behaviour becomes a given. A different sort of morality 'kicks in.'

Naturally, there are other reasons why individuals do (or do not) comply with the law (Bottoms, 2001). Compliance may be related in large part to habitual or routinized behaviours and orientations. If one complies with the law because such compliance is 'ingrained in everyday life' (Robinson and McNeill, 2008: 436), it is unlikely that one will perceive breaking the law as an option when confronted with a situation which, objectively at least, offers such an opportunity. Equally, there will be those who are deterred by the presence of formal or informal mechanisms of social control. Genetic and psychological factors may be an influence; community context and effects might also be important; all these and other notions have been brought to bear on attempts to explain why people commit crime.

**Normative commitment and the influence of police and legal legitimacy**
But our focus in this study is on normative motivations to comply with the law. We consider those normative motivations that are most amenable to crime-control policy. For the first time in England and Wales we test different pathways linking contact, trust, legitimacy and *compliance*. An important part of this paper is to consider the meaning of police legitimacy. So let us start with the context of the study.

*Expanding the conceptualisation of legitimacy*
The Metropolitan Police Force for London was established in 1829 by Robert Peel, and it is commonplace to refer to his principles of policing operation that speak to accountability and notions of policing by consent. While doubts exist as to the primary source (Lentz and Chaires, 2007),[4] the spirit and theme of the principles remain important. Phrases like 'The police are the public and the public are the police' and 'The ability of the police to perform their duties is dependent upon public approval of police actions' (e.g. Reith, 1952: 154) speak to a close social connection between the police and what were then 'subjects of the crown.' As mediators between citizens and the state – so the myth goes – the police were to work closely with the public, to regulate social order, to generate citizen consent. The police were members of the public; they enforced the law and abided by the law themselves; and they secured the consent of citizens to the law because of their close connection to citizens.

From a psychological perspective, legitimacy means that citizens recognise the police's right to exist, the right to determine authority, and the right to exert power (Tyler, 2006a, 2006b). Given the close connection between the policed and the police, we consider police legitimacy in England and Wales to be best displayed not just as the recognition of power (felt obligation to authority and a corresponding duty to obey) but also the justification of power (through shared moral purpose in the co-production of social order). We propose that legitimacy is not just obligation to obey (public recognition of power based upon the idea that a legitimate authority has the right to expect deference) but also moral alignment (justification of power based upon the perception that the police share their moral values and are a source of moral authority in the community). Legitimacy may thus be instantiated not only in obedience as prerogative but also in the belief that the police share the values of those they police – that there is a shared moral purpose driving informal and formal social control mechanisms.

We start, then, with the premise that obligation to obey is not uniquely constitutive of the legitimacy of legal authorities, but part of a broader set of ideas, beliefs and behaviours that individuals exhibit in relation to those authorities that combine to establish (or negate) their legitimacy. Importantly, to say that legitimacy is both (a) obligation to obey police directives and (b) moral alignment with the police is not to say that the police must enforce laws that all citizens agree with if they are to be considered legitimate. By demonstrating moral alignment – through procedural fairness, through defending and representing community values, through being a formal agent of social control that is aligned with the precepts of right and wrong that underpin appropriate social regulation – the police can embody a general sense of right and wrong, as well as a commitment to the rule of law. This does not

---

[4] Lentz and Chaires (2007) suggest that these principles may be somewhat the 'invention' of twentieth-century textbooks.

require them to be moralists. Nor does it require them to demonstrate moral superiority. But it does require them to negotiate order in a way that maximises consent. And such consent is more readily granted when people feel that the values the police are upholding accord with their own sense of right and wrong.

*Multiple pathways to compliance via social influence*
We make one further distinction in our empirical study. We distinguish between obligation to obey the police and obligation to obey the law. The police in the US are powerful symbols of law enforcement. If police legitimacy resides most importantly in public judgements that it is right to follow the directives of the police regardless of their content – and, if it is accepted that the police powerfully represent the law – then the link between obligation to obey the police and obligation to obey the law seems unproblematic. Indeed, they are almost the same thing.

But police legitimacy and the legitimacy of the law may lack such a direct congruence in England and Wales. While the police are strongly associated with the law, they also conjure up powerful images of social order and stability (Loader and Mulcahy, 2003). Carefully built up over the century to the 1960s, the authority of the British police may rest in part on sources of public affiliation and respect removed from narrow legalism (Girling *et al.*, 2000; Smith, 2007b). The *practise* of policing may be as often concerned with maintaining order as it is with enforcing the law, indeed officers frequently ignore illegal behaviour, particularly if acting upon the behaviour risks significant disruption or the breakdown of critical relations. The very nature of police discretion may militate against the total identification of police with law.

So how do our two distinctions (first, between obligation to obey the police and moral alignment with the police; and second, between obligation to obey the police and obligation to obey the law) combine to form a procedural justice model of compliance for England and Wales? Figure 1 specifies a number of pathways to compliance. Consider pathway A. *Instrumental compliance* is where an individual responds in a self-interested way to policing, whether to gain a reward or avoid punishment.[5]

FIGURE 1 ABOUT HERE

Next consider pathway B. Individuals here comply with a given law because they believe a given act (proscribed by law) is wrong. They might refrain from behaving in a certain way – even if that act was suddenly made *legal* or they would benefit personally – because their moral principles lead them to comply. They might equally engage in an *illegal* act if they see the behaviour as morally correct (or at least morally neutral).

Pathway C keeps with the normative, but the focus moves toward the morality of obeying the law simply because it is the law. This is not the moral belief about the right or wrong of a particular law,[6] but a more general *internalised* belief that it is morally just to obey the law (Tyler, 2006a, 2006b). Reflecting the idea that a person authorizes an authority to determine appropriate behaviour within some situation, Kelman and Hamilton (1989) refer to legitimacy as 'authorization.' A person feels obligated to follow the directives or rules that authority establishes; he or she *internalises* the value that it is morally just to obey the law; and authorization obviates the necessity of making judgments or choices. The authorization of actions by authorities thus carries automatic justification for them. Believing that it is the right thing to do to respect legal rules precludes the possibility of seeing crime as an option (c.f. Wikstrom, 2006). And inasmuch as such orientations are embedded in the routines of everyday life, one does not need to think about the morality of the specific act or the likelihood of getting caught.

---

[5] For more nuanced accounts of the interplay of moral and instrumental motivations, see; Nagin and Paternoster, 1993; Pogarsky, 2002; Jacobs, 2010; Kronenberg *et al.,* 2010; Matsueda *et al.,* 2006).
[6] If one believes it is wrong to cheat on taxes, one will presumably believe that a law banning tax fraud is morally just.

Pathways D1 and D2 turn our attention to people's feelings of obligation to the police and their recognition of police authority. D1 is the pathway from felt obligation to obey the police (via felt obligation to obey the law) to law-abiding behaviour. This pathway is premised on the idea that authorisation of the police to dictate appropriate behaviour leads to authorisation of the law to dictate appropriate behaviour. People then allow the law to influence their behaviour, with the duty to obey the police feeding though to a corresponding duty to conform to the expectations of the law (Tyler, 2006a).

By contrast, pathway D2 is the direct path from obligation to obey the police to law-abiding behaviour. Here, authorising the police to dictate appropriate behaviour shapes one's compliance (separate to any effect of authorisation of the law to dictate appropriate behaviour). Irrespective of whether one feels obligated to obey the law, people comply because obligation to authority figures exerts influence.

Pathways E1 and E2 refer to moral alignment, with the link going from moral alignment to compliance via legal legitimacy in pathway E1. The proposition here is that people believe that laws are binding (even if they disagree with the specifics of a given law) in part because they feel morally aligned to the most visible agent of criminal justice. As Tyler and Sunshine (2003b: 155) state (albeit in a slightly different context):

> '…people support leaders who they feel represent the group's values. That is, people's connections to groups and leaders contain an important ethical or moral dimension linked to values and identity rather than to material or instrumental concerns. When people in groups view leaders as reflecting group norms and values, they feel that their leaders have moral solidarity with the group.'

When people feel a sense of moral solidarity with the police, their sense of identity moves from the individual to the group. They *identify* with the group that the police represents (Sunshine and Tyler, 2003b; Jackson and Sunshine, 2007). Activating the importance of group values and their salience as guides to behaviour, one group value is the belief that it is right and proper to obey the law. *Moral identification* with the police as moral authorities thus leads to the *internalisation* of the value that is morally just to obey the law (c.f. Aquino *et al.,* 2009; Hardy and Carlo, 2005; Aquino and Reed, 2002; Reed and Acquino, 2003).

Pathway E2 refers to the direct effect of moral alignment on compliance. The idea here is that moral alignment with the police shapes compliance not through the belief that it is morally just to obey the law, nor because of the belief that the particular act is wrong, but because people morally identify with the police and the group that the police represent. Such self-perception transitions goals or motives from the individual to the group, placing greater weight to the outcomes of the group as a whole (Blader and Tyler, 2009; Tyler and Blader, 2003; Tajfel and Turner, 1986; Turner, 1975; Turner, Brown and Tajfel, 1979). *Identifying* with the group then generates role and expectation involvement. People accept a reciprocal-role relationship (the law-abiding and upstanding citizen) and they feel a corresponding need to meet the expectations of that role (Kelman, 2006), engaging in reciprocal-role relationships that revolve around notions of a 'morally-upstanding citizen.'

Finally, central to all the possible pathways involving police legitimacy (D1, D2, E1 and E2) are the encounters that people have with the police (Skogan, 2006; Tyler, 2006a; Bradford *et al.,* 2009; Gau and Brunson, 2010; Myhill and Bradford, 2011; Jackson *et al.,* 2012). We predict significant effects of contact on trust in the police, with knock-on effects on legitimacy and compliance. Differentiating between positively-received contact and negatively-received contact, we address Skogan's (2006) idea of asymmetry in the impact of personal contact. Our contribution allows us to assess the extent of asymmetrical effects on trust and trace pathways from contact to compliance with the law for the first time.

Before we turn to the study, it is important to be clear about the specific crimes we investigate. Our survey asked individuals whether they had recently bought stolen goods, illegally disposed of rubbish or litter, vandalised public property, shoplifted, and committed a traffic offence. We assume that these

'everyday crimes' straddle the line between more serious crimes and those which according to Karstadt and Farrall (2006: 1011) '…fall into a grey zone of legality and morality.' The procedural justice model may not apply to so-called 'hard-core' criminals and more serious crimes. But it may apply to the more 'low-level' behaviours that each of us may or may not be tempted by or engage in. And as we show, there is an important distinction between traffic offences and the rest.

**Method**
A nationally representative survey of adults in England and Wales was conducted between June and August 2009. Our analysis relies on data collected from the control sample for a piece of research unrelated to the topic of this paper.[7] Half of the control group was fielded the entire body of the current questions about contact with the police, trust, legitimacy and compliance. Because the final sample consisted of 7,434 respondents aged 16 and over (yielding a response rate of 62%), the sample available for the current analysis is 937. The study thus constitutes a major test of Tyler's model, albeit using a random sub-sample of a larger representative sample survey.

Our measures largely mirror those of Tyler and colleagues (Sunshine and Tyler, 2003; Tyler 2006; see also Reisig *et al.*, 2007, and Gau, 2011). A full list of question wordings and factor loadings is contained in a methodological appendix. Interviews were conducted face-to-face in respondents' homes using Computer Assisted Personal Interviewing (CAPI). Since it was likely that measures of personal morality and compliance behaviour would be affected by social desirability bias, we made provision for questions relating to those two concepts to be completed via Computer Assisted Self-Interviewing (CASI). Responses were entered directly into the computer, out of sight of the interviewer.

*Analytical strategy*
We use structural equation modelling (SEM) to investigate the relationships between latent variables, implementing full information maximum likelihood estimation, to deal with missing values. Our models contain both categorical and continuous manifest and latent variables, so different types of regression are used in different parts of the model. Because compliance with the law and personal morality are dichotomous and manifest variables, probit regression is used in that part of the model. All models control for gender and age with all latent constructs.

Our analytical strategy seeks to clarify what can be said about the correlations between contact, trust, legitimacy, and compliance in our sample. By collecting data from a representative sample, we try to explain variation in self-reported compliance, legitimacy, trust and contact with the police. Modelling patterns of trust, legitimacy and compliance, evidence for one rather than another pathway emerges when particular patterns of associations emerge. The direction of the arrows in the SEM is not meant to imply that we have *demonstrated* causality. We infer from our sample that these pathways of correlations exist in the general population. We recognise the need for longitudinal or experimental research to provide more robust tests of causation – but that is for future study.

**Results**
*Model 1: Everyday crimes without contact with the police*
We start by testing the model of compliance using measures of non-compliance involving everyday crimes – buying stolen goods, illegally disposing of rubbish, vandalism, and shoplifting. Figure 2 presents the findings. Because the model places few constraints on paths between latent constructs, the adequate fit of the model (CFI >.95; TLI >.95; RMSEA = .06, see Hu and Bentler, 1999) refers mostly to the

---

[7] The survey was conducted as part of a randomised controlled trial carried out by the National Policing Improvement Agency into the impact of crime and policing information on public perceptions (see Quinton, 2010). To maximise the value derived from the study, questions on procedural justice were included to the end of the interview for respondents in the control group, whose interviews would have otherwise been rather short. For details of sampling see Coleman *et al.*, 2009).

measurement models (Mulaik *et al.,* 1989; McDonald and Ho, 2002). Factor loadings are high in every case.

FIGURE 2 ABOUT HERE

Is there evidence for instrumental motivations to comply with the law? According to Figure 2, the answer is *no*. Consider pathway A (described earlier in Figure 1). This is the link from (a) trust in police effectiveness, to (b) perceived risk of sanction, to (c) offending behaviour. Trust in police effectiveness is a significant predictor of people's perceptions of the risk of being caught (if they were to commit an 'everyday crime'). The more the police seem effective the greater the sense of getting caught, on average. Yet, the pathway from perceived effectiveness to compliance breaks down, precisely in the link between perceived risk of sanction and offending behaviour. Thinking it likely that one would be caught is not a significant predictor of reporting one has committed one of the crimes.

By contrast, personal morality is a significant predictor of compliance. Providing empirical support for pathway B, we find that the more people believe that acts like buying stolen goods are wrong, the less likely they are to say that they have done these acts in the past year. Pathway C is also supported by the data. Felt obligation to obey the law explains some variation in compliance, net of other factors in the model. The more legitimacy that individuals invest in the law, the less likely they are to report having committed the three particular offences.

To suggest that weak obligation to obey the law *causes* non-compliance would be excessive. But the observed association is consistent with the idea that legal legitimacy involves *internalisation* of the value that it is right to obey the law, which then leads to the authorisation of the law to dictate appropriate behaviour. Additive to any effect of personal morality – and additive to any effect of obligation to obey the police and moral alignment with the police – legal legitimacy may strengthen the tendency of people to comply with the law.

The pathway from obligation through legal legitimacy to compliance is statistically significant ($D_1$). Procedural justice may thus strengthen public *internalisation* of the value that it is right to obey the police, which may then shape compliance with the law via the legitimacy of the law. When individuals authorise the police to dictate appropriate behaviour, they also tend to authorise the law to dictate appropriate behaviour and thus to obey the law. Pathway $D_2$ receives less empirical support. There is no direct effect of obligation on compliance, net of other factors in the model. In other words, feeling one should obey the police is not associated with compliance behaviour.

$E_1$ also does not receive empirical support. Conditioning on obligation to obey the police, people who feel morally aligned with the police are no more likely to feel obligated to obey the law than people who do not. Pathway $E_2$ seems plausible however. People who feel morally aligned with the police are more likely to comply with the law than people who do not. Net of personal morality and felt obligation to obey the police and law, the more someone identifies with the police, the more likely they are to comply with the law. First, when people identify with important authorities of a group, they may be especially likely to think that the interests of the group are their own personal interests. Second, identifying with moral exemplars may lead them to internalise the moral standards of the group.

What role does procedural justice play? Starting from the left (Figure 2), we find that trust in police procedural fairness is a strong predictor of moral alignment with the police, and a moderate predictor of obligation to obey the police. By contrast, trust in police effectiveness is only a weak predictor of moral alignment and not a significant factor in explaining variation in obligation to obey. When police provide individuals with appropriate status information (through fair procedures and respectful personal treatment), they seem more likely to perceive the police to be legitimate. They are also more likely to comply with the law, largely with the effect flowing through moral alignment (Figure 2).

*Model 2: Everyday crimes and contact with the police*
Not shown here for pressure of space – please contact the first author for more details – we also tested the model adding public contact with the police. Respondents were asked whether they had been approached

8

or stopped by the police in the last 12 months or whether they had contacted the police in the last 12 months. If they had, they were asked how satisfied or dissatisfied they were with how the police handled the matter. We created four dummy variables, indicating whether an individual had experienced a satisfactory or dissatisfactory police-initiated or public-initiated contact.

The model fitted well. Regressing trust onto contact, we find that negatively-received encounters are associated with lower levels of trust in effectiveness and procedural fairness, and that positively-received public-initiated encounters are associated with slightly higher levels of trust in procedural fairness (Table 1). A particular strength of our model is its ability to trace pathways from contact to compliance (via trust and legitimacy). Effect decomposition indicated that negatively-received contact of both sorts was associated with higher odds of committing an everyday crime. Of the .15 total effect ($p$=.013) of public-initiated and negatively-received contact on self-reported crime, most of it (.10, $p$=.026) was via trust in procedural fairness and moral alignment with the police. Of the .20 total effect ($p$=.027) of public-initiated and negatively-received contact on self-reported crime, most of it (.16, $p$=.031) was via trust in procedural fairness and moral alignment with the police.

TABLE 1 ABOUT HERE

*Model 3: The special case of traffic offences*
It is an unspoken assumption of much of the above discussion that illegal behaviour provokes widespread moral censure amongst the public – that the link between police legitimacy and compliance with the law is similar for all laws, because all are seen in the same moral light. Yet, this is unlikely to be the case. While higher legitimacy might be linked to greater compliance in the aggregate, what of the special case of laws which are not popular or – perhaps more importantly – do not attract very widespread moral censure? Do the relationships discussed above hold in these cases?

The two most obvious examples of such laws in England and Wales are those surrounding cannabis and those governing traffic offences. The data collected here included respondent's self-revealed compliance with traffic laws. Traffic policing has long been known to be a problematic area for police-public relations (Girling *et al.,* 2000; Wells, 2008), and it does not seem controversial to say that a major reason for this is that many people simply do not think current road legislation is correctly formulated, that it is over-harshly enforced, and in many cases that it does not apply to them and serves as a distraction from the things the police should 'really be doing'. The link between morality and law may, in such cases, be severely attenuated. Conversely, the risk of sanction may become a relatively much more important predictor of compliance.

To test this idea, the analysis that follows presents a model not for 'general compliance' – as in Figure 2 above – but for compliance-behaviour relating specifically to traffic offences. We hypothesised that police and legal legitimacy will be less important in compliance with the traffic laws than compliance with everyday crimes like buying stolen goods. This is for the simple reason that individuals do not think of traffic offences in terms of the law and obligation to obey authority figures.

Figure 3 shows that moving to traffic offences only has an important effect. Most strikingly, there is no association between the legitimacy of the police and compliance; the link between legitimacy and compliance is not in evidence, with no significant path running from either aspect of police legitimacy to compliance (net of other predictors in the model). Rather, compliance is associated with personal morality, and to a lesser but still significant extent with perceived risk of sanction. This suggests that people comply with traffic laws most importantly because they think it is wrong to commit traffic offences. They are also more likely to comply when they think they will be caught if they do not (again with the usual caveats about observational data and modelling self-reports).

INSERT FIGURE 3 ABOUT HERE

The fact that obligation to obey the law has no significant association with propensity to comply with traffic laws may, on the face of, seem perplexing. Surely it should be that feeling 'laws are made to

be broken' should be linked to the propensity to do so? Yet, it could be that traffic law of the type considered here is so unpopular, de-legitimised or simply ignored that people do not think about it in the same way as they do other laws. They might think laws are definitely not made to be broken, but that traffic law is not 'real' or does not apply in the same way. This underlines the difference between compliance with traffic law and the more general compliance considered above.

**Conclusions**
We have presented in this paper the first ever test of a procedural justice model of *compliance* in England and Wales. Our contributions to the literature are threefold. First we have outlined a new and expanded conceptualisation of legitimacy. The British history of *policing by consent* stresses a shared moral purpose between citizens and the police. As Reiner (2010) and Smith (2007: 280) suggest, the legitimacy of the police may be partly based on the myth of shared values and purpose between people and the police. Our study has examined people's consent to police power, their justification of police power, and their belief that it is morally just to obey the law. We have presented evidence for two key pathways from trust to legitimacy to compliance. One is from the procedural fairness of the police to compliance, via citizen's moral alignment with the police. The other is from the procedural fairness of the police to compliance, via citizens' obligation to obey the police and law. We have focused on those 'everyday crimes' that may be committed by '…those who think of themselves as respectable citizens, and who would definitely reject the labels of "criminals" and "crime" for themselves and their action' (Karstedt & Farrall, 2006: 1011). Our findings suggest that when people feel obligated to obey the police and moral aligned with officers, they are more likely to comply with the law.

We thus demonstrate the empirical value of a twin-pronged conception of legitimacy. We show the utility of differentiating between perceived obligation and the perception of shared moral values (i.e. moral alignment), both of which seem to be important in motivating compliance with the law. Psychologists have traditionally recognized that internalization, i.e. the process by which people take on values as their own, provides an important basis for compliance with rules. Obligation to obey the police and moral alignment with the police both involve internalization, and internalisation can involve obligations (i.e. to obey the law) or moral principles or both. But Kelman (2006) also points to the importance of identification with authorities as a basis for deference. Such identification reflects an emotional connection based upon perceived shared values and purposes (moral alignment) and a common definition of social roles and expectations. Identification and internalization may thus be two important social psychological mechanisms linking legitimacy to compliance behavior.

Second, our study highlights the importance in England and Wales of procedurally fair policing. We have presented evidence that procedural justice explains significant variation in compliance, through its conditional association with obligation to obey both the police and law, as well as with moral alignment with the police. The police is the most visible agent of social control, the most high-profile agency in a justice system empowered to define right and wrong behaviour, and if officers wield their authority in unfair ways, it not only damages people's sense of obligation to obey their directives (their authority in the normal sense of the word), it also affects public perceptions of their moral authority. Because the police are powerfully linked to – although not synonymous with – the law, police unfairness also undermines people's sense that the law defines appropriate behaviour. If the police are seen to act in ways in conflict with social norms around fair treatment and decision-making, this generates a powerful cynicism: 'if the police can behave unfairly, so can I.' By contrast, exercising authority via fair procedures seems to build normative commitment to the police and enhances compliance with the law.

Third – and finally – we conclude with some thoughts on two idealised and contrasting models of crime-control policy. In recent decades the exercise of legal authority to obtain compliance has become primarily associated with the use of threat and punishment, aimed at deterring people from engaging in criminal behaviour (e.g., Kahan, 1999; Nagin, 1998). Irrespective of the type of case involved, the traditional means of obtaining compliance is via attempts to deter rule-breaking by threatening apprehension and punishment. The argument driving this perspective is threefold. Fear of possible future punishment leads to compliance with the law; risk calculations are partly shaped by both the anticipated

likelihood of punishment and by judgments about its severity; and the focus is (and should be) on the power of legal authorities and institutions to shape behaviour by threatening to deliver (or by actually delivering) negative sanctions for rule-breaking. 'Deterrence' or 'social control' models of crime control, based on such thinking, currently dominate law and public policy.

By contrast, normative models of crime-control are premised on the idea that the best way for the criminal justice system to influence compliance is to communicate procedural justice and legitimate authority (leading people to comply with the law because they want to). Our findings speak to the centrality of normative factors in shaping public behaviour in relationship to the police. These include not only the sense of obligation to obey the police and the law, but also the judgment that the police acts in ways consistent with people's views about what is right and wrong. These value-based factors motivate compliance; they highlight the importance of a broader range of normative motivations than is encompassed with the concept of legitimacy as traditionally defined (felt obligation and trust). English and Welsh justice institutions should design policies that promote normative modes of compliance and cooperation which are both more stable and more sustainable in the long run.

A value-based perspective on human motivation suggests the importance of developing and sustaining a civic culture in which people more willingly abide by the law because they feel that legal authorities are legitimate and ought to be obeyed. For this model to work, social institutions such as the police must foster and maintain appropriate values. Psychological social capital must be created. Political scientists refer to this set of values as a 'reservoir of support' for government and society (Dahl, 1956). But however labelled, a value-based model is consistent with a social psychological understanding of how authorities can effectively regulate citizen behaviour, maintain social order, and promote an effective, well-functioning society – by developing and maintaining a culture of supportive social values that will be internalized by the citizenry (Tyler, 2011a; Tyler *et al.,* in press). Such values include feelings of obligation and responsibility. But they also include judgments about the degree of moral alignment that people feel with the police, the courts and the law. And, they include broader types of social connections to society, for example identification with authorities and institutions. All of these values may provide a more just basis for the effective operation of the legal system.

**References**

Aquino, K., and Reed, A., II. (2002), 'The Self-importance of Moral Identity', *Journal of Personality and Social Psychology*, 83: 1423—1440.

Aquino, K., Freeman, D., Reed, A. II, Lim, V. K. G., and Felps, W. (2009), 'Testing a Social Cognitive Model of Moral Behavior: The Interaction of Situational Factors and Moral Identity Centrality', *Journal of Personality and Social Psychology*, 97: 123—141.

Banton, M. (1964), *The Policeman in the Community*. London: Tavistock.

Beetham, D. (1991), *The Legitimation of Power*. London: Macmillan.

Bittner, E. (1970), *The Functions of the Police in Modern Society*. Chevy Chase, MD: National Institute of Mental Health.

Blader, S., and Tyler, T. R. (2009), 'Testing and Expanding the Group Engagement Model', *Journal of Applied Psychology*, 94: 445—464.

Bottoms, A. (2001), 'Compliance with Community Penalties', in Bottoms, A., Gelsthorpe, L., and Rex, S., eds., *Community Penalties: Change and Challenges.* Cullompton: Willan.

Bottoms, A., and Tankebe, J. (in press), 'Beyond Procedural Justice: A Dialogic Approach to Legitimacy in Criminal Justice', *Journal of Criminal Law and Criminology*.

Bradford, B. (2011), 'Voice Neutrality and Respect: Use of Victim Support Services Procedural Fairness and Confidence in the Criminal Justice System', *Criminology and Criminal Justice*, DOI: 10.1177/1748895811408832.

Bradford, B., Jackson, J., and Stanko, E. (2009), 'Contact and Confidence: Revisiting the Impact of Public Encounters with the Police', *Policing and Society*, 19: 20—46.

Coicaud, J.-M. (2002), *Legitimacy and Politics*. Cambridge: Cambridge University Press.

Coleman, N., Hales, J., Hayllar, O. and Chanfrea, J. (2009), 'A Randomised Controlled Trial on Public Information Provision', London: National Centre for Social Research, http://www.npia.police.uk/en/17091.htm.

Dahl, R. (1956), *A Preface to Democratic Theory*. Chicago: University of Chicago Press.

de Cremer, D., De, Dijke, M. H. van, and Mayer, D. M. (2010), 'Cooperating When "You" and "I" are Treated Fairly: The Moderating Role of Leader Prototypicality', *Journal of Applied Psychology*, 95: 1121—1133.

de Cremer. D., and Tyler, T. R. (2005), 'Managing Group Behavior: The Interplay between Procedural Justice, Sense of Self, and Cooperation', *Advances in Experimental Social Psychology*, 37: 151—218.

Doob, A., and Webster, C. (2003), 'Sentence Severity and Crime: Accepting the Null Hypothesis' in M. Tonry, ed., *Crime and Justice: A Review of Research*, 143—195.

Easton, D. (1965), *A Framework for Political Analysis*. Englewood Cliffs: Prentice-Hall.

Gau, J., and Brunson, R. (2010), 'Procedural Justice and Order Maintenance Policing: A Study of Inner-City Young Men's Perceptions of Police Legitimacy', *Justice Quarterly,* 27: 255-279.

Girling, E., Loader, I., and Sparks, R. (2000), *Crime and Social Control in Middle England: Questions of Order in an English Town*. London: Routledge.

Hardy, S. A., and Carlo, G. (2005), 'Identity as a Source of Moral Motivation', *Human Development*, 48: 232—256.

Hogg, M. A. (2001), 'A Social Identity Theory of Leadership', *Personality and Social Psychology Review*, 5: 184—200.

Hough, M., Jackson, J., Bradford, B., Myhill, A., and Quinton, P. (2010), 'Procedural Justice, Trust and Institutional Legitimacy', *Policing: A Journal of Policy and Practice,* 4/3: 203—210.

Hu, L. T., and Bentler, P. M. (1999), 'Cutoff Criteria for Fit Indexes in Covariance Structure Analysis: Conventional Criteria versus New Alternatives', *Structural Equation Modeling*, 6: 1—55.

Jackson, J., and Sunshine, J. (2007), 'Public Confidence in Policing: A Neo-Durkheimian Perspective', *British Journal of Criminology*, 47: 214—233.

Jackson, J., Bradford, B., Hough, M., and Murray, K. H. (in press), 'Compliance with the Law and Policing by Consent: Notes on Police and Legal Legitimacy', in Crawford, A. and Hucklesby, A., eds., *Legitimacy and Compliance in Criminal Justice*. London: Routledge.

Jackson, J., Bradford, B., Hough, M., Kuha, J., Stares, S. R., Widdop, S., Fitzgerald, R., Yordanova, M., and Galev, T. (2011), 'Developing European Indicators of Trust in Justice', *European Journal of Criminology*, 8: 267—285.

Jackson, J., Bradford, B., Stanko, E. A., and Hohl, K. (2012), *Just Authority? Trust in the Police in England and Wales*. London: Routledge.

Jacobs, B. A. (2010), 'Deterrence and Deterrability', *Criminology,* 48: 417—441.

Jonathan-Zamir, T., and Weisburd, D. (2011), 'The Effects of Security Threats on Antecedents of Police Legitimacy: Findings from a Quasi-Experiment in Israel', *Journal of Research in Crime and Delinquency*, doi:10.1177/0022427811418002

Kahan, D. (1999), 'The Secret Ambition of Deterrence', *Harvard Law Review*, 113: 413—500.

Karstedt, S., and Farrall, S. (2006), 'The Moral Economy of Everyday Crime*:* Markets, Consumers and Citizens', *British Journal of Criminology*, 46: 1011—1103.

Kelman, H. C., and Hamilton, V. L. (1989), *Crimes of Obedience*. New Haven: Yale.

Kelman, H. C. (2006), 'Interests, Relationships, Identities: Three Central Issues for Individuals and Groups in Negotiating their Social Environment', in S. T. Fiske, A. E. Kazdin, and D. L. Schacter, eds., *Annual Review of Psychology*. 57: 1—26. Palo Alto, CA: Annual Reviews

Kochel, T. R. (2011), 'Can Police Legitimacy Promote Collective Efficacy?', *Justice Quarterly*, DOI: 10.1080/07418825.2001.561805.

Kroneberg, C., Heintze, I., and Mehlkop, G. (2010), 'The Interplay of Moral Norms and Instrumental Incentives in Crime Causation', *Criminology*, 48: 259—294.

Lentz, S. A., and Chaires, R. H. (2007), 'The Invention of Peel's Principles: A Study of Policing "Textbook" History', *Journal of Criminal Justice*, 35: 69—79.

Lind, E.A., and Tyler, T.R. (1988). *The Social Psychology of Procedural Justice.* New York: Plenum

Loader, I., and Mulcahy, A. (2003). *Policing and the Condition of England: Memory, Politics and Culture*. Oxford: Oxford University Press.

Matsueda, R. L., Kreager, D. A., and Huizinga, D. (2006), 'Deterring Delinquents: A Rational Choice Model of Theft and Violence', *American Sociological Review,* 71/1: 95—122.

McDonald, R., and Ho, M. (2002), 'Principles and Practice in Reporting Structural Equation Analysis', *Psychological Methods*, 7: 64—82.

Mulaik, S., James, L., Van Alstine, J., Bennett, N., Lind, S., and Stilwell, C. (1989), 'Evaluation of Goodness-of-fit Indices or Structural Equation Models', *Psychological Methods*, 105: 430—445.

Murphy, K., and Cherney, A. (2012), 'Understanding Cooperation with Police in a Diverse Society', British Journal of Criminology, 52: 181—201.

Murphy, K., Tyler, T. R., and Curtis, A. (2009), 'Nurturing Regulatory Compliance: Is Procedural Justice Effective when People Question the Legitimacy of the Law?', *Regulation and Governance*, 3: 1—26.

Myhill, A., and Bradford, B. (2011), 'Can Police Enhance Public Confidence by Improving Quality of Service? Results from Two Surveys in England and Wales', *Policing and Society*, iFirst, DOI: 10.1080/10439463.2011.641551

Nagin, D. S., and Paternoster, R. (1993), 'Enduring Individual Differences and Rational Choice Theories of Crime', Law and Society Review, 27: 467—496.

Nagin, D. S. (1998), 'Criminal Deterrence Research at the Outset of the Twenty-first Century', *Crime and Justice: A Review of Research*, 23: 1—42.

Pogarsky, G. (2002), 'Identifying Deterrable Offenders: Implications for Deterrence Research', *Justice Quarterly,* 19: 431—452.

Pratt, T.C., Cullen, F. T., Blevins, K.R., Daigle, L.E., and Madensen, T. D. (2006), 'The Empirical Status of Deterrence Theory: A Meta-analysis', in Cullen, F. T., Wright, J. P., and Blevins, K. R., eds., *Taking Stock: The Status of Criminological Theory—Advances in Criminological Theory*, 367–395. New Brunswick, NJ: Transaction

Quinton, P. (2010), The Impact of Information about Crime and Policing on Public Perceptions. The Results of a Randomised Controlled Trial. London: NPIA. http://www.npia.police.uk/en/17090.htm

Reed, A. II, and Aquino, K. (2003), 'Moral Identity and the Circle of Moral Regard towards Out-groups', *Journal of Personality and Social Psychology*, 84: 1270—1286.

Reiner, R. (2010), *The Politics of the Police*. Oxford: Oxford University Press (fourth edition).

Reisig, M. D., Bratton, J., and Gertz, M. G. (2007), 'The Construct Validity and Refinement of Process-based Policing Measures', *Criminal Justice and Behavior*, 34/8: 1005—1028.

Reisig, M. D., and Lloyd, C. (2009), 'Procedural Justice, Police Legitimacy, and Helping the Police Fight Crime: Results from a Survey of Jamaican Adolescents', *Police Quarterly*, 21: 42—62.

Reith, C. (1952), *The Blind Eye of History: A Study of the Origins of the Present Police Era*. London: Faber and Faber Limited.

Robinson, G., and McNeill, F. (2008), 'Exploring the Dynamics of Compliance with Community Penalties', *Theoretical Criminology*, 12: 431—449.

Robinson, P. H., and Darley, J. M. (2004), 'Does Criminal Law Deter? A Behavioural Science Investigation', *Oxford Journal of Legal Studies*, 24: 173—205.

Schulhofer, S., Tyler, T., and Huq, A. (in press), 'American Policing at a Crossroads: Unsustainable Policies and the Procedural Justice Alternative', *Journal of Criminal Law and Criminology*.

Skogan, W. (2006), 'Asymmetry in the Impact of Encounters with the Police', *Policing and Society,* 16: 99—126.

Smith, D. J. (2007a), 'New Challenges to Police Legitimacy' in Henry*,* A., and Smith, D. J., eds., *Transformations of Policing*, 273—306. Ashgate*.*

Smith, D. J. (2007b), 'The Foundations of Legitimacy', in Tyler, T. R. (ed.) Legitimacy and Criminal Justice: International Perspectives, 30—58, New York: Russell Sage Foundation.

Smith, H. J., Tyler, T. R., Huo, Y. J., Ortiz, D. J., and Lind, E. A. (1998), 'The Self-relevant Implications of the Group-value Model: Group Membership, Self-worth, and Procedural justice', *Journal of Experimental Social Psychology*, 34: 470—493.

Sternberger, D. (1968), 'Legitimacy' in Sills, D. L., ed., *International Encyclopedia of the Social Sciences* Vol. 9 (p. 244). New York: Macmillan.

Stott, C., Hoggett, J., and Pearson, G. (2011), '"Keeping the Peace": Social Identity, Procedural Justice and the Policing of Football Crowds,' *British Journal of Criminology*, doi:10.1093/bjc/azr076.

Sunshine, J., and Tyler, T.R. (2003), 'The Role of Procedural Justice and Legitimacy in Shaping Public Support for Policing', *Law and Society Review*, 37: 513—548.

Tajfel, H., and Turner, J. C. (1986), 'The Social Identity Theory of Intergroup Relations', in S. Worchel, and W. G. Austin, eds., *Psychology of Intergroup Relations*, 7—24. Chicago, IL: Nelson-Hall.

Tankebe, J. (2007), *Policing and Legitimacy in a Post-Colonial Democracy: A Theoretical and Empirical Study of Ghana*. Ph.D. Thesis (Unpublished), University of Cambridge.

Tankebe, J. (2009), 'Public Cooperation with the Police in Ghana: Does Procedural Fairness Matter?', *Criminology*, 47/4: 1265—1293.

Tonry, M. (2007), 'Foreword', in Tyler, T. R. (ed.) Legitimacy and Criminal Justice: International Perspectives, 3—8, New York: Russell Sage Foundation.

Turner, J. C. (1975), 'Social Comparison and Social Identity: Some Prospects for Intergroup Behavior', *European Journal of Social Psychology*, 5: 5—34.

Turner, J. C., Brown, R. J., and Tajfel, H. (1979), 'Social Comparison and Group Interest in Ingroup Favoritism', *European Journal of Social Psychology*, 9: 187—204.

Tyler, T. R., and Fagan, J. (2008), 'Legitimacy and Cooperation: Why do People help the Police Fight Crime in their Communities?', *Ohio State Journal of Criminal Law*, 6: 231—275.

Tyler, T. R. (2006a), 'Psychological Perspectives on Legitimacy and Legitimation', *Annual Review of Psychology*, 57: 375—400.

Tyler, T. R. (2006b), *Why People Obey the Law*. Princeton: Princeton University Press.

Tyler, T. R. (2008), 'Psychology and Institutional Design', *Review of Law and Economics*, 4/3: 801—887.

Tyler, T. R., and Blader, S. (2000). *Cooperation in Groups: Procedural Justice, Social Identity, and Behavioral Engagement*. Philadelphia, Pa.: Psychology Press.

Tyler, T. R. (2011a), 'Trust and Legitimacy: Policing in the USA and Europe', *European Journal of Criminology* 8: 254—266.

Tyler, T. R. (2011b), *Why People Cooperate: The Role of Social Motivations.* Princeton: Princeton University Press.

Tyler, T. R., and Blader, S. (2003), 'Procedural Justice, Social Identity, and Cooperative Behavior', *Personality and Social Psychology Review*, 7: 349—361.

Tyler, T. R., and Huo, Y. J. (2002), *Trust in the Law: Encouraging Public Cooperation with the Police and Courts*. New York: Russell-Sage Foundation.

Tyler, T. R., Jackson, J., and Bradford, B. (in press), 'Social Connections and Material Interests: On the Relational Basis of Voluntary Cooperation with Legal Authorities', in Harris, N., ed., *Encyclopedia of Criminology and Criminal Justice*. Springer-Verlag.

Ward, J. T., Nobles, M. R., Lanza-Kaduce, L., and Levett, L. (2011), 'Caught in their Own Speed Trap: The Intersections of Speed Enforcement Policy, Police Legitimacy and Decision Acceptance, *Justice Quarterly*, DOI: 10.1177/1098611111413992.

Wells, H. (2008), 'The Techno-fix versus the Fair Cop: Procedural (in)justice and Automated Speed Limit Enforcement', *British Journal of Criminology*, 48/6: 498—517.

Wikström, P-H. O. (2006), 'Individuals, Settings and Acts of Crime: Situational Mechanisms and the Explanation of Crime', in Wikström, P-H. O. and Sampson, R.J., eds., *The Explanation of Crime*, 31—60. Cambridge: Cambridge University Press.

**Figure 1: Pathways to compliance with the law**



Perceived risk of sanction

PATHWAY A: Compliance

Obligation to obey the police

PATHWAY D2

PATHWAY D1

Police action & public trust

Legitimacy of the law

PATHWAY C

Compliance with the law

Moral alignment with the police

PATHWAY E1

PATHWAY E2

Personal morality

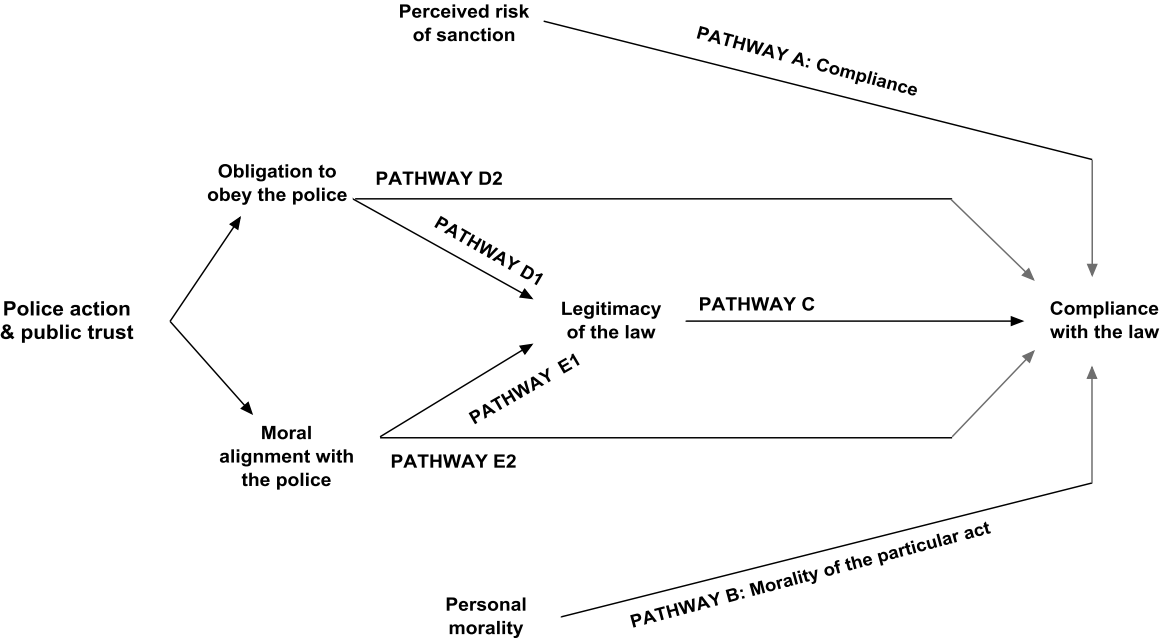PATHWAY B: Morality of the particular act

**Figure 2: A model of the antecedents of compliance with the law for everyday offences**



Structural equation modeling with categorical indicators and probit regression for committing crime (Mplus 5.2).
Measurement models not shown for visual ease.
Perceived risk of sanction is allowed to co-vary with obligation to obey the police, moral alignment, obligation to obey the and personal morality.
All latent variables are regressed on to gender and age.
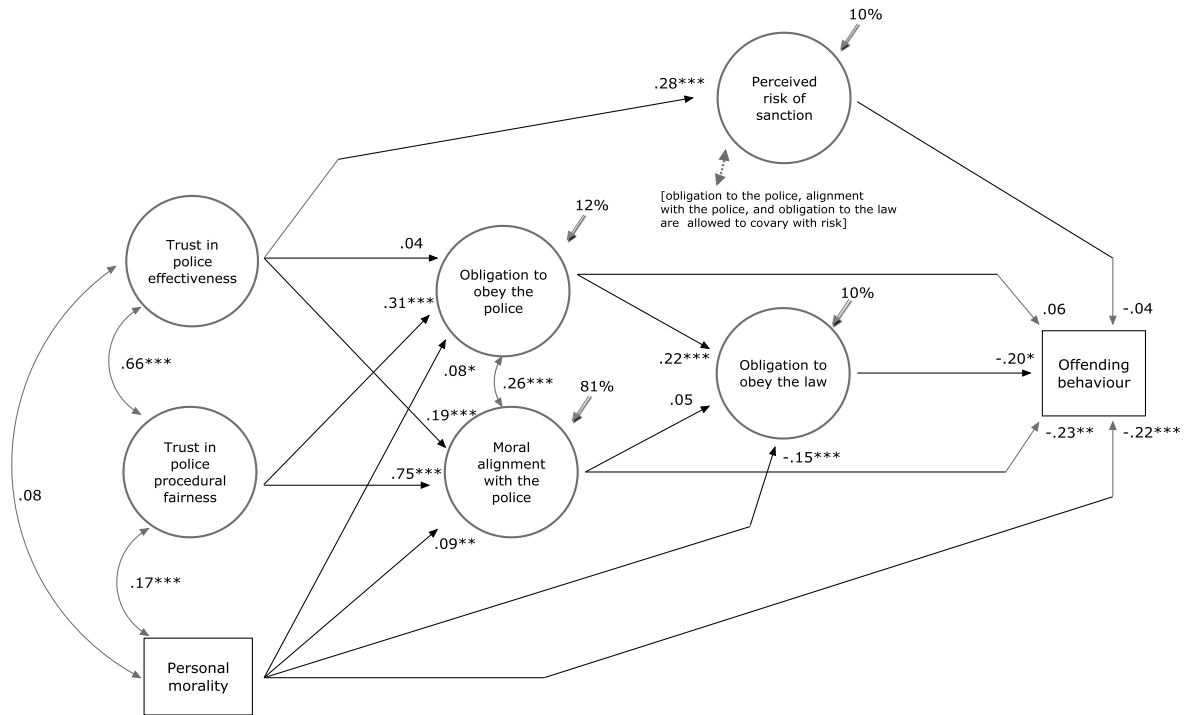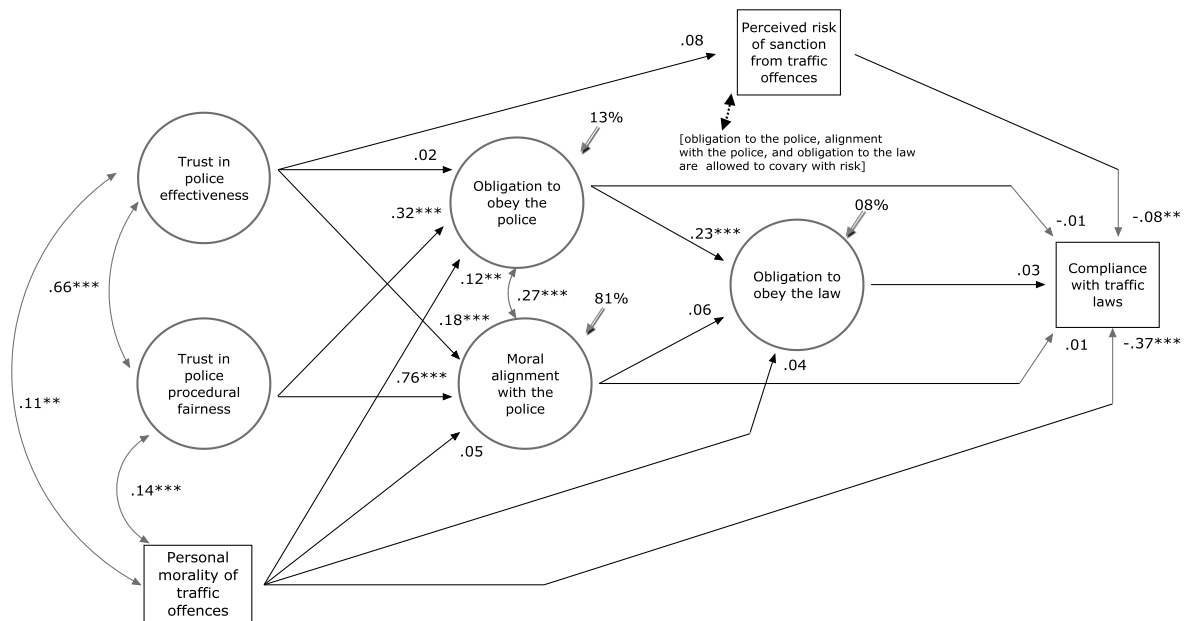Standardized coefficients. Chi-square 496, df 103, $p<.0005$. CFI 0.97; TLI 0.98; RMSEA 0.06.

**Figure 3: A model of the antecedents of compliance with the law for traffic offences**



Structural equation modeling with categorical indicators and probit regression for committing crime (Mplus 5.2).
Measurement models not shown for visual ease.
Perceived risk of sanction is allowed to co-vary with obligation to obey the police, moral alignment, obligation to obey the and personal morality.
All latent variables are regressed on to gender and age.
Standardized coefficients. Chi-square 474, df 87, $p$<.0005. CFI 0.96; TLI 0.98; RMSEA 0.07.

**Table 1: Regressing trust in the police on contact with the police**

| PATHWAY FROM | TO | COEFF. | (SE) | COEFF./SE | P-VALUE |
|---|---|---|---|---|---|
| Public-initiated, positively-received contact | Trust in police effectiveness | .08 | .09 | .89 | .37 |
| Public-initiated, negatively-received contact | | -.47 | .12 | -3.84 | <.01*** |
| Police-initiated, positively-received contact | | .03 | .12 | .23 | .82 |
| Police-initiated, negatively-received contact | | -.55 | .21 | -.26 | .01** |
| Public-initiated, positively-received contact | Trust in police procedural fairness | .16 | .08 | 1.93 | .05* |
| Public-initiated, negatively-received contact | | -.52 | .12 | -4.43 | <.01** |
| Police-initiated, positively-received contact | | .09 | .11 | .83 | .41 |
| Police-initiated, negatively-received contact | | -.79 | .19 | -4.15 | <.01** |

NOTE: standardised coefficients estimated within a broader structural equation model (extension of Figure 1)

**Methodology appendix**

*Compliance with the law*. This part of the interview was self-completion. Respondents were given the laptop; interviewers left the room; and respondents indicated how often during the past year that they had committed any of five criminal offences. (Response options were 'never', 'seldom', 'sometimes' and 'often.'):

- 94% reported never having bought something that they thought might be stolen;
- 95% reported never having illegally disposed of rubbish or litter ('fly tipping');
- 66% reported never having committed a traffic offence;
- 99% reported never having vandalised public property; and,
- 98% reported never having taken something from a shop without paying for it.

We used latent class analysis to combine answers to these five questions into one dichotomous variable that indicated whether or not someone fell into the 'non-compliance' group (please contact the first author for more details). The model allocated 93% of the sample into class one (very unlikely to report having committed any of the offences) and 7% of the sample into class two (likely to admit occasionally committing one or more of the offences). A dichotomous variable was then derived that identified the modal category. This categorised each respondent into one of two groups: individuals were either 'compliant' or 'occasionally non-compliant.' A second binary variable was created to cover traffic offences only.

*Personal morality*. Respondents were asked 'how wrong' five offences were. Response options were 'not wrong at all', 'not too wrong', 'somewhat wrong' and 'very wrong.' Percentages saying 'very wrong' were:

- 86% for buying stolen property;
- 86% for disposing of rubbish;
- 62% for committing a traffic offence;
- 96% for vandalising public property; and,
- 96% for shop-lifting.

We created a binary variable using latent class analysis: 81% of the sample fell into class 1 (believing most of these behaviours were 'very wrong') and 19% of the sample fell into class 2. A separate (dichotomous) variable covered traffic offences. Conditional on being in class 2 of the multi-offence variable, the probability of thinking that traffic offences are 'not too wrong' was .20.

*Perceived risk of sanction*. Respondents were asked how likely they thought it was that they would be caught and punished (by being fined and/or arrested) if they committed any of the five crimes. Response options were 'very unlikely', 'fairly unlikely', 'fairly likely' and 'very likely.' Answers were evenly distributed across the response options. The percentages of respondents who thought that it was unlikely that they would be caught and punished if they committed each of the following offences were:

- 44% for buying stolen goods;
- 51% for illegally disposing of rubbish or litter;
- 27% for traffic offences;
- 36% for vandalism vandalised public property; and
- 23% for shoplifting.

Confirmatory factor analysis indicated a reasonable fit for a one factor model ($\chi^2$ =41, $df$=5, $p$<.001; CFI=.98; TLI=.97; RMSEA=.08, 90% CI .06-.11). The RMSEA was above the standard cut-off point of .06. Appropriate cut-off points for approximate fit indices have, however, generated debate (see Jackson *et al.,* 2009; Marsh *et al.,* 2004); and Gau, 2010: 146-148). Mindless use of cut-offs is tempting. But on this matter, things are rarely as simple as binary decision rules.

*Police legitimacy.* We measured obligation to obey using a three-item scale focusing on people's expressed intention to do what the police, even if one is not in agreement with the decisions or actions. Table 1 provides the question wording. Moral alignment was captured by two questions concerning whether the police act in ways consistent with respondents' views of what is right and wrong and whether the police can be trusted to make decisions that are right for respondents' neighbourhoods (cf. Sunshine and Tyler, 2003b: 156-157). In order to assess scaling properties – and examine whether these items combined to reflect two latent variables or one latent variable – we tested two confirmatory factor models (Table 1). The two-factor model fitted the data well, indicating that these constructs were empirically distinct (even if correlated).

**Table 1**
**Confirmatory Factor Analysis testing the dimensions of trust and legitimacy**

| | Trust in the police | | Police legitimacy | |
|---|---|---|---|---|
| | Model 1 | Model 2 | Model 3 | Model 4 |
| | 1 single factor | 2 factors | 1 Factor | 2 factors |
| **Trust in police effectiveness** | | | | |
| How effective do you think the police in your local area are at: | | | | |
| Solving crimes | 0.77 | 0.86 | | |
| Preventing crimes | 0.80 | 0.86 | | |
| Keeping order on the streets | 0.69 | 0.77 | | |
| Responding to emergencies | 0.60 | 0.69 | | |
| **Trust in police procedural fairness** | | | | |
| To what extent do you agree with these statements about the police in this area? | | | | |
| They would treat you with respect if you had contact with them | 0.80 | 0.83 | | |
| They are helpful | 0.86 | 0.88 | | |
| They make decisions upon the facts | 0.84 | 0.85 | | |
| They explain their decisions to the people they deal with | 0.83 | 0.85 | | |
| They make fair decisions when handling problems | 0.89 | 0.91 | | |
| **Moral alignment with the police** | | | | |
| To what extent do you agree with these statements about the police in this area? | | | | |
| They usually act in ways that are consistent with my own ideas about what is right and wrong | | | 0.85 | 0.91 |
| They can be trusted to make decisions that are right for the people in this neighbourhood | | | 0.85 | 0.91 |
| My own feelings about what is right and wrong usually agree with the law | | | 0.45 | 0.55 |
| **Perceived duty to obey police** | | | | |
| Please tell me if you agree or disagree with each of these statements | | | | |
| You should do what the police tell you, even if you disagree | | | 0.76 | 0.84 |
| You should accept decisions made by the police, even if you think they are wrong | | | 0.78 | 0.86 |
| You should do what the police tell you to do, even if you don't like the way they treat you | | | 0.71 | 0.79 |
| | | | | |
| Factor covariance | | 0.66 | | 0.40 |
| | | | | |
| Chisquare | 624.9 | 167.2 | 523.1 | 9.7 |
| p | <0.005 | <0.005 | <0.005 | 0.08 |
| CFI | 0.91 | 0.98 | 0.87 | 1.00 |
| TLI | 0.93 | 0.98 | 0.82 | 1.00 |
| RMSEA | 0.21 | 0.10 | 0.33 | 0.03 |

*Source: National Police Improvement Agency 2009*

*Trust in the police*. Trust in *police procedural justice* – was measured by asking about whether they believed that the police are friendly and approachable, helpful, use fair processes when dealing with people, make informed, fair decisions and take the time to explain them. *Trust in police effectiveness* was measured using a four-item scale asking people how effective they though their local police were at solving crime, preventing crime, keeping order on the streets, and responding to emergencies. Table 1

examines the scaling properties. The two-factor model, which differentiates between fairness and effectiveness, fitted the data well.

*Obligation to obey the law.* A three-item scale adapted from Sampson and Bartusch (1998) asked people to agree or disagree with value statements relating to whether 'laws are made to be broken', application of the harm principle ('it's ok to do anything you want as long as you don't harm anyone'), and whether 'to make money there are no right or wrong ways anymore, only easy and hard ways.' Between 80% and 90% of respondents disagreed or strongly disagreed with these statements. To test the empirical distinctiveness and scaling properties of obligation to obey the law, we conducted a confirmatory factor analysis that included (1) obligation to obey the law, (2) obligation to obey the police, (3) moral alignment with the police, and (4) intentions to cooperate with the police (see below). Findings indicated a good fit for a four factor model ($\chi^2$=75, *df*=38, *p*<.001; CFI=.99; TLI=.98; RMSEA=.03, 90% CI .02-.04), with appropriate factor loadings for all measurement models.