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Title: Bounded Authority: Expanding ‘Appropriate’ Police Behavior Beyond Procedural Justice

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Abstract

This paper expands previous conceptualizations of appropriate police behavior beyond procedural justice. The focus of the current study is on the notion of bounded authority – i.e. acting within the limits of one’s rightful authority. According to work on legal socialization, US citizens come to acquire three dimensions of values that determine how authorities ought to behave: (a) neutral, consistent and transparent decision-making; (b) interpersonal treatment that conveys respect, dignity and concern; and (c) respecting the limits of one’s rightful power. Using survey data from a nationally representative sample of US adults, we show that concerns over bounded authority, respectful treatment, and neutral decision-making combine to form a strong predictor of police and legal legitimacy. We also find that legal legitimacy is associated with greater compliance behavior, controlling for personal morality and perceived likelihood of sanctions. We discuss the implications of a boundary perspective with respect to ongoing debates over the appropriate scope of police power and the utility of concentrated police activities. We also highlight the need for further research specifically focused on the psychological mechanisms underlying the formation of boundaries and why they shape the legitimacy of the police and law.

Key words: Procedural justice; Legal socialization; Legitimacy; Public contact with the police; Trust; Compliance; Policing by consent

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Translational Statement: This study shows that perceptions of appropriate police behavior is not only dependent on the processes that guide how the police treat people and make decisions, but also on the extent to which they believe the police encroach on the personal lives of the public through unjust process *and* unjust outcome. In light of these findings, public discussions about the (il)legitimacy of law enforcement should be sensitive to the personal autonomy of citizens.

At the heart of the design and practice of legal institutions is the relationship between the law and the public (Justice & Meares, 2014). People's understanding of the justice system and the position and role of law in society is formed through the process of legal socialization. Legal socialization provides the foundation for people's beliefs about how the law wields power and asserts its authority (Cohn & White, 1990; Tapp & Levine, 1974). It is through this process that individuals acquire their expectations concerning the appropriate behavior of legal authorities, as well as their notions about the rights and responsibilities of citizens in relation to the law (Tyler & Trinkner, 2018).

In this paper we draw on recent work in the field of legal socialization (Trinkner & Tyler, 2016; Tyler & Trinkner, 2018) to extend procedural justice theory. Procedural justice theory argues that the use of fair procedures by legal authorities promotes legitimacy, and that legitimacy encourages a healthy and mutually reinforcing relationship between the legal system and the public, because it motivates voluntary compliance and cooperation (Tyler, 2006a; 2006b; 2017; Meares, 2017). Despite the impressive body of evidence supporting its central propositions (see Tyler, 2009 and Tyler & Jackson, 2013 for review), we agree with others who have argued that procedural justice theory presents a somewhat simplified view of the link between police-citizen interactions and promotion of police legitimacy (Bottoms & Tankebe, 2012; Huq et al., 2017). While we do not question that people are more likely to view the police as legitimate when they are treated respectfully and decisions are made impartially, there is a need to appreciate the broader context of police-citizen interactions beyond how police treat citizens and make decisions.

From a legal socialization perspective, individuals' understanding of their relationship with the law – and consequently what is considered appropriate and legitimate police behavior – is not only a function of “how” legal power is exercised, but also about “when,” “where,” and “what” power is exercised (Trinkner & Tyler, 2016; Tyler & Trinkner, 2018). Noting that, in some instances, people draw sharp lines concerning the appropriate role of regulatory authorities, this literature emphasizes the importance of police officers recognizing citizens' views of the rightful limits of their power. These “bounded authority” concerns represent individual and societal notions about the places, spaces, and things that people feel police have no business being involved in. Indeed, legal socialization scholars would argue that officers' respect for these extralegal limits have just as much of an impact on citizens' judgments of their legitimacy as the traditional procedural justice concerns of treatment and decision-making (Trinkner & Tyler, 2016).

Using this as a starting point, our paper draws a wider analytical net. Our purposes are twofold. First, we integrate a legal socialization perspective with traditional procedural justice theory by highlighting the central importance of boundary concerns in citizen judgements of police appropriateness and by linking perceptions of police legitimacy to the legitimacy of the law more generally as a source of social control. Second, we test our theoretical model using a nationally representative sample of US adults.

Procedural Justice Theory

The police embody the most tangible piece of law and regulation in people's day-to-day lives. According to procedural justice theory, when officers fail to exercise their authority in fair and just ways, people start to question whether the institution has the right to the power it holds, whether officers have the authority to dictate appropriate behavior, and whether this institution rightfully monopolizes the legitimate use of force in society (Jackson, Huq et al., 2013; Sunshine & Tyler, 2003; Tyler, 2006a). Law enforcement officials demonstrate procedural justice by (a) treating individuals with respect and dignity and (b) making decisions in open, transparent and neutral ways (Bradford, Murphy, & Jackson, 2014; Tyler & Blader, 2003). In support of procedural justice theory is a good deal of evidence from both the United States and abroad that the police are viewed as legitimate – i.e. seen as an appropriate and proper institution that is morally entitled to use its legal authority and have its directives obeyed and decisions accepted – in large part when officers are seen to act in procedurally just ways (Jackson et al., 2014; Bradford et al. 2014; Murphy et al. 2016).

People value fair procedures for two connected reasons. On the one hand, a widely shared normative expectation about the appropriate use of legal power is that justice officials should act in accordance with principles of fair treatment and impartial decision-making. Respecting norms creates institutional normativity, and respectful interpersonal treatment and fair decision-making in interactional settings help engender the sense among citizens that legal authority is valid and entitled

to be obeyed (Jackson, Bradford et al., 2013; Tyler, 2006a; Tyler & Huo, 2002). On the other hand, when fair processes guide actions and decisions, this helps to communicate status and value to subordinates on the receiving end of the actions of power-holders (Lind & Tyler, 1988). Procedural justice theory thus argues that exercising authority via the application of fair process strengthens the social bonds between individuals and groups by affirming the dignity of the individual and the lack of bias in the authority figure (Tyler & Blader, 2003).

Legal Socialization & Police–Citizen Relationships

Legal socialization is the mechanism by which people come to understand law within society, the institutions that create laws, and the people within those institutions that enforce the laws (Trinkner & Cohn, 2014; Tyler & Trinkner, 2018). This field of inquiry examines how childhood development and experiences with legal and non-legal authorities shape later beliefs about the law and legal system (Cohn et al., 2012; Fine & Cauffman, 2015; Trinkner & Cohn, 2014). During this process, individuals begin to acquire their beliefs and expectations concerning the appropriate role of the legal system as a regulatory force within society and their understanding of what it means for the legal system to be legitimate. These notions are the foundation of adult expectations concerning the way legal authorities are supposed to behave when interacting with citizens and vice versa (Tapp, 1991; Tyler & Trinkner, 2018).

A central element of the legal socialization process involves the internalization of law-related values that form the basis of how people conceptualize their relationship with the law (Tapp & Levine, 1974; Tyler & Trinkner, 2018). These legal values create expectations about the appropriate ways for legal agents to utilize their authority. Individuals judge legal authority to be legitimate to the extent they believe authorities are meeting these expectations (Jackson et al., 2012; Jackson, Bradford et al., 2013; Tyler, 2006b). Recently, Tyler and Trinkner (2018; see also Trinkner & Tyler, 2016) have argued that people's understanding of their relationship with the law can be organized across three dimensions of legal values. While the three dimensions are interrelated, each taps into a distinct issue about how they believe legal authority should interface with the public.

The first issue concerns how individuals expect to be treated by the legal system. Membership in a community carries with it entitlement about the quality of treatment by public figures. Individuals expect and demand to be treated in accordance with these entitlements by the officers that serve the community (Tyler, 2006a). Concerns of appropriate treatment encompass the protection of the law, but they also include how police officers interact with citizens at an interpersonal level.

The second issue concerns how legal authorities should make decisions when interacting with the public. The police hold immense power over the communities they serve and how they use that power to make decisions during the implementation and enforcement of rules is largely at their discretion (Alpert & Dunham, 1997). Despite this, the public has standards about how police officers are supposed to make decisions and expect that police officers will maintain these standards.

The third issue concerns the boundaries of the power that legal authorities possess. People demarcate their lives into different domains (Smetana, 1995) and within each of these domains they place limits on whether and to what degree authorities have the right to regulate their behavior (Smetana, 2002). Within the legal world, this means that agents are not given absolute authority to utilize their power over any situation or behavior however they see fit (Trinkner & Tyler, 2016; Tyler & Trinkner, 2018). Individuals recognize limits on their power and expect police officers to behave in accordance with this bounded authority, in a way that transcends fairness of interpersonal treatment and fairness of decision-making.

Bounded Authority: Respecting the Limits of Rightful Power

Citizens are sensitive to the power position of legal authorities; they look for signs that power is being exercised appropriately—i.e., legitimately—in their eyes. To the extent that this is the case, they are more willing to accept even negative outcomes during encounters with law enforcement (Mastrofski et al., 1996; McCluskey, 2003). According to the procedural justice literature, perceptions of appropriate police conduct are determined by the fairness of the process during police encounters (Tyler, 2006a; Bradford, 2017). In this respect, procedural justice focuses on “how” police exert their authority, with emphasis placed on the degree to which officers are respectful and objective in a given interactional setting. Indeed, one could read the procedural justice literature and come to the

conclusion that anything the police do is appropriate and legitimate, so long as it is done respectfully and impartially (Epp et al., 2014; Harkin, 2015).

Yet, from a legal socialization perspective, people's understanding of the appropriate use of legal power is not only concerned with "how" legal authorities behave when exercising power, but also "what" power is being exercised "when" and "where" (Tyler & Trinkner, 2018). These latter concerns are a reflection of legal values concerning the rightful boundaries of authority. Like treatment and decision-making concerns, the bounded authority of police action is tied to the overall quality of the interaction itself, but unlike these concerns, it represents broader questions that center upon whether the police have the right to be in a particular space in the first place. People value their agency to behave free of regulation or surveillance in their personal lives. Even though they understand that in some instances they will have to agree to sublimate that personal autonomy so that law can maintain social order, they still expect the law and law enforcement officials will recognize their agency to some degree.

Despite the importance of boundary concerns in the perception of appropriate police conduct, few studies have empirically identified it as a source of legitimacy. Yet, its importance is hinted at in recent studies. For example, Epp et al. (2014) noted that simply treating people with respect during traffic stops is not enough to promote the legitimacy of such stops, especially among African American drivers (interestingly, the authors did not discuss the decision-making component of procedural justice). Worden and McClean (2017) found that *whether* officers used forced or stopped people was the key determining factor in judgments of appropriateness rather than *how* officers behaved (although again biased decision-making in the lead-up to the encounter is clearly an issue here). In their study of pedestrian stops, Tyler et al. (2014) found that the perceived intrusiveness of stops undermined legitimacy independent of traditional procedural justice concerns. In this respect, increased intrusion by legal authorities can be *in-and-of-itself* delegitimizing — a point underscored by Tyler et al. when they noted that "more police intrusion of any type in the lives of people in the neighborhood was linked to lower legitimacy" (p. 766). This suggests that concerns about procedure are not enough to understand delegitimation in the policing context, and that widespread (mis)use of power in inequitable, intrusive and unjust ways could lead citizens to call for a specific power (e.g. stop-and-frisk) to be taken away or regulated more effectively.

Boundaries vs. Legality

While it may be tempting to equate boundary concerns with statutes determining lawful police conduct, bounded authority is not a synonym for legality in the eyes of citizens (although there is a clear overlap). Bounded authority judgments are about whether the police seem to overstep the powers that citizens themselves believe are right and proper, or encroach on domains that citizens' believe should be off limits (Tyler & Trinkner, 2018). Police officers work under an amalgam of department, local, state, and federal laws that determine when they can and cannot engage the public, and whether the police follow such laws is an important factor in their legitimacy among the public (Tankebe, 2013). But citizen knowledge of the complex statutes defining legal police conduct is generally not well-informed (e.g., Rogers, 2011). As Meares et al. (2015: 301) argue, "whether the police are, in fact, acting legally is not central to the judgments the public makes about the appropriateness of their actions."

This disconnect between actual laws defining appropriate police conduct and the public's perception of it can be seen in Klockars' (1980) discussion of the "Dirty Harry" problem. In some instances the public believes that officers should pursue moral ends, even if that requires illegal behavior. The public is essentially extending the boundaries of appropriate police authority and power beyond that which is allowed by law. And it could be argued in these instances that the legitimacy of officers might be higher despite violation of the law. Hence, evaluations of the appropriateness of police behavior are not simply determined by the degree to which the police follow the law, but rather the degree to which they follow people's normative ideas about the boundaries of their authority.

Tyler and Trinkner (2018) make a similar argument, but in reverse. They emphasize that it can also be the case that police officers exercise their power in perfectly legal ways, but they do so within arenas that people feel goes beyond the legitimate scope of their power. Stop and frisk is a good example of this phenomena. Some citizens are not only concerned about the manner in which the police conduct such stops, but also question whether the police have the right to enter individuals'

personal space, given what they see as widespread discriminatory use of the power. This is despite the Supreme Court's decision that such stops are legal (*Terry v. Ohio*, 1968). Whether or not those citizens actually know the law is, in some sense, moot. Crucially, it is about those who the police serve and protect defining the content of the boundaries that is of central concern, and different individuals and different communities may draw those boundaries in varying ways reflecting culture, history, development and other related factors.

Expanding the Scope of Legitimacy: Police & Law

In addition to expanding the conception of appropriate police behavior beyond procedural justice, the scope of legitimacy also needs refinement. A central tenet of most accounts of legal socialization is the notion that the public continuously evaluates the degree to which the law embodies the principles upon which its authority is founded (Tapp, 1991; Tyler & Trinkner, 2018). There is an important distinction between tangible interactions with legal authorities and the more abstract representation of the law that permeates society. The latter represents people's ideas about the purpose of law and how it assists in the creation and maintenance of a just and mutually beneficial scheme of social cooperation (Rawls, 1964). The former is a more concrete representation of the values that underlie that scheme (Tapp & Levine, 1974). Whereas laws represent societal norms about what is right and proper behavior, law enforcement represents notions about how right and proper behavior should be transmitted and enforced within the populace.

What this means in practice is that law enforcement is inextricably tied to people's orientations toward the law. Because they are tangible representations of the law, interactions with the police provide not only information about their authority, but also information about the law and government more generally (Meares, 2009; Tyler et al., 2014). On this account, the legitimacy of the law is not a given power, but is rather shaped through day-to-day encounters with its agents. Such encounters serve an educative function in that they facilitate the internalization of values from which the law gains its legitimacy (Justice & Measures, 2014; Trinkner & Tyler, 2016).

If this is the case, behaving inappropriately should undermine both the legitimacy of the police and the law. Conversely, when they behave in an appropriate manner, they should foster the belief that the law itself is also legitimate. Yet, despite this inherent link between police legitimacy and legal legitimacy, only a handful of studies have empirically examined the relation between citizens' perceptions of police legitimacy and their overall belief that the law is a legitimate and just social institution (Jackson et al., 2012). This gap in the literature is a problem because perceptions of the police and perceptions of the law, while related, are not interchangeable (Jackson, forthcoming).

Current Study

Our review of the legal socialization literature has pointed to two ways to expand current procedural justice theory. First, because individuals base their relationship with the law along three dimensions of values, judgments of appropriate police behavior should reference the ways in which legal authorities treat citizens, make decisions, and recognize the boundaries of their authority. Second, given that individuals are continuously reevaluating their views of the legal system based on their interactions with individual legal agents, judgments of appropriate police behavior should be associated with perceptions of officers' legitimacy, which will in turn be associated with the legitimacy of the law more generally. In this study, we use a nationally representative survey of US citizens to examine the utility of this expansion to procedural justice theory.

The conceptual model we test is presented in Figure 1. Moving from left to right, we first see people's attitudes toward how police behave. Following the argument set forth by Tyler and Trinkner (2018), we differentiate between interpersonal treatment, decision-making and boundary concerns. These are combined into a formative index (see analytical strategy below) that constitutes citizens' perceptions of the degree to which the police engage in appropriate behavior when wielding their authority. Next, we link the index to both police and legal legitimacy. For each construct the model defines legitimacy along two dimensions: obligation to obey (see Tyler, 2006a, 2006b) and normative alignment (see Jackson et al., 2012; Jackson, Bradford et al., 2013). Finally, the model examines the extent to which legal legitimacy predicts general compliance with the law, as predicted by traditional procedural justice theory.

Method

Sample

Our data come from an internet-based survey fielded to a random selection of individuals drawn from a GFK Knowledge Networks research panel of U.S. adults (see Tyler & Jackson, 2014 for full discussion). Knowledge Networks uses random digit dialing and address-based sampling methods to construct and maintain the panel. 2,561 respondents were initially selected from the larger panel; the study was described, an offer of compensation extended; and a reminder email was sent to all people on the list who had not responded after three days. The survey was fielded in August and September of 2012, either in English or in Spanish. A total of 1,603 individuals completed the survey, representing a response rate of 62.5% from the existing internet panel.

Measures

Descriptive statistics and individual items for all measures are presented in Table 1. Unless otherwise specified, all items used a 5-point response scale with higher numbers reflecting a greater amount of the construct being measured.

Contact with the police. Respondents were asked whether police officers in their community had made contact with them for any reason in the past 2 years. Out of the 1,588 respondents who answered this question, 570 reported experiencing at least one police-initiated encounter. Respondents were also asked the extent to which they had approached police officers for assistance of any kind in the past 2 years. Out of the 1,571 respondents who answered this question, 392 reported experiencing at least one citizen-initiated encounter. For each type of encounter, respondents were asked to rate the fairness of their experiences with the officer. We derived three dummy variables for police-initiated contact and three dummy variables for citizen-initiated contact. Treating no contact as the reference category for each, we combined ‘very unfairly’ and ‘unfairly’ to create a negative contact indicator, treated ‘neither unfairly nor fairly’ as a neutral contact indicator, and combined ‘fairly’ and ‘very fairly’ to create a positive contact indicator.

Appropriate police behavior. Respondents were asked a series of questions tapping into three dimensions of normatively appropriate police behavior: interpersonal treatment, decision-making, and respect for boundaries. Following procedural justice theory (Tyler & Blader, 2003), we selected items that tasked respondents to think about the ways in which local police officers’ interaction with citizens at an interpersonal level and make decisions during such encounters.

Given that there were no previously used measures of bounded authority to guide item selection (although see Huq et al., 2017, which was conducted after the current study), we chose items that fit with Tyler and Trinkner’s (2018) argument that boundary concerns represent citizens’ perceptions that police act in restrained and bounded ways. The first two items—the degree to which officers follow the law and respect rights—were chosen because both laws and rights represent limits on what police can do, when they can do it, and where they are allowed to exert their authority. The third item asks respondents about the degree to which police officers arrest people for no good reason. This item was chosen because it reflects police officers using their power unjustifiably to encroach on citizens’ freedoms (i.e., detaining people when they believe there is no good reason for it).

Police legitimacy. In order to assess respondents’ perceptions that the police are an appropriate authority that possess qualities that justify their power, they were asked questions tapping into two dimensions of legitimacy. First, following conventional work on police legitimacy (Tyler, 2006a, 2006b), respondents’ felt obligation to obey police authority was assessed by tapping into their expressed intention to acquiesce to police directives and decisions, even when they may not agree. Second, following work on the normative justifiability of power (Jackson et al., 2012; Tyler & Jackson, 2014), respondents completed items assessing the degree to which they felt that the police acted in ways that signaled respect for societal values about appropriate behavior.

Legal legitimacy. As with police legitimacy, we differentiate between two dimensions of respondents’ perceptions that the law is a legitimate authority. The first dimension assessed the degree to which respondents’ felt it was their own personal duty to obey laws in cases where they disagree with the law. The second dimension concerned the degree to which respondents’ believed that the laws enforced in their neighborhood align with their views of what is right and wrong, as well as the degree to which the community benefits from people obeying laws. For discussion, see Jackson (forthcoming).

Compliance with the law. In order to assess respondents' compliance with the law, they were asked how often they had engaged in different illegal behaviors in the previous five years. The vast majority of respondents' reported engaging in no illegal behavior. While there is clear potential for bias with self-report data, comparisons between self-report and other methods have indicated that self-report can be a reliable and valid means to establish frequency of criminal activity (Hindelang, Hirschi, & Weis, 1981; Thornberry & Krohn, 2000). Table 1 does not present the alpha value of this variable given that it is a count of various illegal behaviors and there is no reason to assume that people would answer each question in a similar manner.

Control variables. Two control variables were included in order to isolate significant statistical effects of legitimacy on compliance. First, the *perceived morality* of illegal behavior was assessed by asking participants' how wrong it was to engage in the same behaviors used for the measure of compliance. Perceived morality is included to increase the confidence that any statistical effects of legitimacy on compliance are tied to a normative influence on behavior above and beyond the morality of the acts themselves. This variable was logged because it had a skewness level of -1.7.

Second, the *perceived risk of sanction* was assessed by asking participants the likelihood of being caught and punished for engaging in the same behaviors used in the compliance measure. Legal institutions do not only shape citizen behavior through the legitimate use of authority, but also through the use of deterrence. The inclusion of perceived risk adjusts for this factor.

Analytic Strategy

Our approach to measurement is formative. Formative and reflective measurement models represent two different ways of conceptualizing the connections between constructs and indicators (for discussion see: Edwards and Bagozzi, 2000; Grace & Bollen, 2008; Howell et al., 2007). In the current context, we assume that our measures can be combined to empirically define the construct, where variation in the items cause the construct rather than the construct causing variation in the items. In this case, appropriate police action is modeled as a formative index, consisting of the degree to which officers treat citizens with respect, make fair decisions, and respect the limits of their authority. We used a formative index for two connected reasons. First, the three beliefs are likely to be extremely highly correlated, making it difficult to tease apart their roles in explaining variation in legitimacy. Second, we do not expect that there is a second-order attitude causing variation in the three judgments.

Additionally, normative alignment toward the law and obligation to obey are modeled as two different potential predictors of compliance. This specification is helpful because it allows us to more precisely isolate the role of deference in explaining why people report abiding by the law. Measured with items such as '*All laws should be strictly obeyed*' (Tyler, 2006a), legitimacy is typically operationalized as an obligation to obey a law, regardless of the local value content of a law. This is about the suspension of judgment. Yet, there is a possibility that people agree with such a statement '*All laws should be strictly obeyed*' because they agree with the content of most, if not all, laws. In such incidences, people are expressing the binding nature of the law in their lives and community, not because of a suspension of judgment, but because they believe that most laws are normatively appropriate. By adjusting for normative alignment with the law, we can more precisely assess whether a content-free duty to obey is explaining significant variation in legal compliance.

Results

Preliminary Analysis

Before testing the model presented in Figure 1, we first wanted to ensure that contact with the police does indeed impact the three types of value judgments highlighted by Tyler and Trinkner (2018). In order to establish these associations we modelled each judgment of "fair treatment", "fair decision-making" and "bounded authority" as a function of recent contact with the police, adjusting for gender, age, ethnicity, education and work status (Table 2).

Starting with police-initiated contact, we find a consistent pattern. Compared to no police-initiated contact, individuals with bad contact tend to have more negative views on treatment, decision-making and boundaries. People with neutral contact tend to have more negative views on police behavior, although this time the effect sizes are smaller. Finally, people with good contact tend to have more positive views, with similar effect sizes to neutral contact.

Turning to citizen-initiated contact, we also find a consistent pattern (although the effect sizes are weaker than police-initiated contact). Compared to no citizen-initiated contact, individuals with bad contact tend to have more negative views on treatment, decision-making and boundaries. People with neutral contact tend to have more negative views on police behavior, although again the effect sizes are smaller than bad contact. Finally, people with good contact tend to have more positive views, with similar effect sizes to neutral contact.

Primary Analysis

Having established that police contact is associated with judgements about police behavior, we now turn to testing the model in Figure 1 using path analysis. Standardized coefficients are presented in Figure 2. Starting with the left-hand side, the three factors (treatment, decision-making and boundaries) combine to form a formative index of appropriate police behavior. Following the recommendations of Grace and Bollen (2008), the formative index is represented as a hexagon to distinguish it from observed indicators (i.e., squares) and latent variables (i.e., circles). Here, the standardized regression coefficients reflect the extent to which each factor contributes to the index. Importantly, authority boundaries contributes the most to the index ($\beta=.46, p<.001$), although both interpersonal treatment ($\beta=.26, p<.001$) and decision-making ($\beta=.38, p<.001$) significantly contribute to the index as well.

In turn, this composite index explains a significant amount of variation in both normative alignment and felt duty to obey the police. Appropriate police behavior explains 55% of the variance in normative alignment and the strong positive association ($\beta=.74, p<.001$) indicates that when US citizens believe that the police in their community are fair in their personal interactions with citizens, fair in their decision-making, and respect the limits of their power and authority, they are more likely to believe that the same officers have an appropriate sense of right and wrong.

Additionally, 21% of the variance of duty to obey is explained by perceptions of appropriate police behavior ($\beta=.46, p<.001$). The moderate positive association indicates that when US citizens believe that the police in their community are fair in their personal interactions with citizens, fair in their decision-making, and respect the limits of their power and authority, they are more likely to feel that they should obey police directives and support police decisions even if they disagree, out of a sense of deference and duty. Interestingly, normative alignment and duty to obey are positively correlated, even after adjusting for the index ($r=.35, r=.55$ without), indicating that people feel a duty to obey an external authority in part because they believe the authority acts in normatively appropriate ways that extend beyond fair treatment, fair decision-making, and bounded authority.

Next, we wanted to assess the extent to which including boundary concerns increased the utility of the index. To do this we re-fitted the model without bounded authority (results available upon request). Without boundaries, treatment and decision-making contributed .45 ($p<.001$) and .58 ($p<.001$) to the index of appropriate police behavior. Furthermore, the index explained less variance in normative alignment with the police (the R^2 drops from .55 to .50), it was less strongly associated with felt duty to obey the law ($\beta=.18, p<.01$ to $\beta=.10, p<.05$), and normative alignment with the police became more strongly associated with felt duty to obey the law ($\beta=.04, n.s.$ to $\beta=.11, p<.05$).

Turning to legal legitimacy (Figure 2), normative alignment with the law was predicted by appropriate police behavior and both aspects of police legitimacy, with 42% of the variance explained overall. The strongest predictor was normative alignment with the police ($\beta=.44, p<.001$), indicating that the more US citizens believed that officers had an appropriate sense of right and wrong, the more likely they were to think that the law was also morally appropriate. Of note is that felt duty to obey the police was only a weak predictor of normative alignment with the law ($\beta=.08, p<.05$), indicating that the degree to which US citizens felt compelled to obey the directives of the police was minimally associated with the degree to which they believed the law represents their values about right and wrong. Additionally, the index of appropriate police behavior was both directly ($\beta=.20, p<.001$) and indirectly (via normative alignment with the police, $\beta=.12, p<.001$, *se* .03, 95% CI 0.06, 0.18, estimated using the MPlus effect decomposition procedure) associated with normative alignment with the law.

By contrast, only 8% of the variance in felt duty to obey the law was explained. The only statistically significant predictor was the index of appropriate police behavior ($\beta=.23, p<.001$). This suggests that when US citizens believe that officers in their daily activities are fair in their

interpersonal treatment, fair in their decision-making and respect the boundaries of their authority, they are slightly more likely to feel a duty to obey the law.

Finally, legal compliance was strongly associated with the perceived morality of the acts measured in the compliance index ($\beta=.61, p<.001$). The perceived risk of getting caught was not a significant predictor ($\beta=.15, n.s.$). Strikingly, duty to obey the law was almost as strong a predictor of legal compliance as personal morality ($\beta=.47, p<.05$). In order to assess whether adjusting for normative alignment with the law helps us to isolate the role of content-free deference, we fitted the model without normative alignment with the law (results available upon request). Without normative alignment, the standardized correlation coefficient for duty to obey is slightly higher than with normative alignment ($\beta=.59, p<.01$). This is consistent with the idea that adjusting for the perceived morality of most of the laws enforced in one's community helps with the identification of the psychological influence of the internalised value of deferring to the law.

Discussion

In this study we drew from the field of legal socialization (Trinkner & Tyler, 2016; Tyler & Trinkner, 2018) to expand procedural justice theory. We were particularly interested in assessing the role of bounded authority in perceptions of appropriate police behavior and the subsequent associations with the perception of the police and law as legitimate authorities. Using a nationally representative sample of US citizens, the results largely supported our expectations. First, boundary concerns contributed to a significant degree to judgments of appropriate police behavior, in addition to concerns over interpersonal treatment and decision-making. Crucially, boundary concerns contributed to the measure of appropriate police behavior in addition to treatment and decision-making concerns, and the model had additional explanatory power when boundary concerns were included (compared to when only the traditional procedural justice concerns of treatment and decision-making were considered). Second, judgments of appropriate police behavior were positively associated with perceptions of police legitimacy and, in turn, perceptions of the legitimacy of the law more generally. Finally, legal legitimacy (specifically, duty to obey the law) was positively associated with compliance even after accounting for the perceived morality of compliance and the risks of breaking the law.

A good deal of prior research on procedural justice has supported the legitimating function of interpersonal treatment and decision-making (e.g., Tyler & Jackson, 2013). To date, however, the notion of bounded authority – that police officers should recognize and respect the boundaries of their authority – has largely been unaccounted for in this literature (for an exception see Huq et al., 2017). From a legal socialization perspective, this is problematic as boundary concerns represent a fundamental component of the relationship between citizens and the law and a key determiner of what citizens believe is appropriate police behavior (Tyler & Trinkner, 2018). The present results support the idea that citizens are sensitive to boundary concerns when judging whether police behave in an appropriate fashion. Our study highlights the importance of conventional procedural justice factors, but also expands this discussion beyond them to include a greater understanding of how individuals make judgments about appropriate police behavior.

In addition to highlighting the role of bounded authority, legal socialization scholars also argue that the actions of the police not only influence their legitimacy in the eyes of citizens, but the legitimacy of the legal system as a source of formal social control in society. When law enforcement regulates behavior in ways that embody the values that underlie the legal system, they provide citizens information about the law more generally. On this account, police authority is the lynchpin of the entire legal socialization process with day-to-day police encounters serving as “teachable moments” in which officers can embody the values that are so vital toward understanding the societal purpose of law (Tyler et al., 2014). Our results largely support this argument. Respondents were more likely to perceive the police and the law as legitimate when they believed police officers behave in an appropriate manner when interacting with the public. Moreover, perceptions of police legitimacy were also directly associated with perceptions of legal legitimacy.

The relationship between the law and the public at the heart of the legal socialization process is reciprocal in nature (Tapp, 1991). In this respect, the public has a set of legal values concerning how they should behave when interacting with the law as well. When the police hold up their end of the relationship by wielding their power in appropriate ways, citizens in turn feel a sense of

responsibility as members of society to comply with the law, cooperate with law enforcement, and participate in the legal system (Tyler & Trinkner, 2018). The results presented here largely support this argument. Participants were more likely to comply with laws when they believed that the law was legitimate, which was driven by their perceptions of police officer behavior. Crucially, the strong link between legal legitimacy and compliance remained even after controlling for the effects of personal morality and deterrence. This highlights a long standing argument in the procedural justice literature (Tyler, 2009): namely, that the law can better foster obedience with fair and appropriate behavior than relying on punishment and coercion, regardless of where people stand morally.

Implications

The present findings highlight the need for law enforcement officials to recognize the importance of normative boundaries in citizens' perception of their authority. As demonstrated here (and in the UK context, see Huq et al., 2017), procedural justice and bounded authority can be combined in a way that produces a more comprehensive account of what constitutes public perceptions of appropriate police behavior. And as noted previously, this is not simply an issue of whether the police have a legal right to intervene (which in many cases they do). It is about appreciating how citizens may react when officers enter areas that the public believes they have no right to be in, and understanding ways to manage the situation once such contact is made. Incorporating boundary concerns into the discussion will provide a more expansive perspective that better incorporates the contextual nature of police–citizen interactions and better represents the current public dialogue around the appropriate scope of police activity in the 21st century.

Expanding the framework of appropriate police behavior beyond procedural justice to include bounded authority provides a new theoretical lens for understanding the potential impact of concentrated police activities, such as stop-and-frisk, hot spots policing, or zero-tolerance order maintenance, on community relations. Much of the research in this area has focused on the crime reducing effectiveness of these policies, rather than the impact they have on citizens' perceptions (Braga et al., 2014). Only recently have researchers begun to examine the latter, finding equivocal results. For example, Weisburd et al. (2011) found little evidence of backfire effects of hot spots policing on perceptions of police legitimacy. On the other hand, Tyler et al. (2014) found that police intrusions were associated with lower legitimacy in their study of stop-and-frisk.

What was missing from both of these studies is an account of citizens' views about the appropriate boundaries of police authority and the degree to which they believed those strategies violated those boundaries. Overstepping the limits of rightful authority can involve unjust decision-making — one could accept that officers should have the power to stop and search people in the street, but justification for the practice depends on appropriate use of discretion. Abusing stop-and-frisk powers by using them in a biased and discriminatory way creates a pattern of unjust outcomes that leaves minority community members feeling harassed, stigmatized and intruded upon in a way that transcends traditional procedural justice concerns (cf. Tyler et al. 2015). Unjust process *and* unjust outcomes produce a sense of intrusion, unfairness and inappropriateness that is separate to the traditional focus of procedural justice theory. Analyzing these issues through a bounded authority lens (or legal socialization perspective more generally) will provide a more complete picture of how police activity shapes the dynamic relationship between officers and citizens.

Consider, also, the controversy around the use of surveillance by law enforcement, which has expanded exponentially in recent years with the explosion of digital technology (Bates, 2017; Ozer, 2016). While questions of transparency and accountability (traditional procedural justice factors) are obvious and important components of the debate, the idea of surveillance representing a violation of personal space regardless of its legality is also of central concern (e.g., Erlanger, 2016). As more departments acquire surveillance technology, the normative boundaries of police authority will gain more attention. Indeed, overstepping the limits of rightful authority could involve not only the use of a controversial power, but also the enforcement of a controversial law. If one believes that the law has no right to dictate which recreational drugs one can put in one's body, for instance, an officer arresting someone for cannabis possession could be seen as unjust intrusion, irrespective of whether the officer follows principles of fair process. The bounded authority construct opens up a new debate within the procedural justice literature about the rightfulness of police powers, police use of discretion, and the moral content of certain controversial laws.

Future Directions

Although the current study supports Tyler and Trinkner's (2018) argument that boundary concerns influence evaluations of police and legal legitimacy, it does little to shed light on the mechanisms that account for where, when, and why individuals draw boundaries and the mechanisms that link bounded authority to legitimacy. On one hand, traditional legal socialization scholars have emphasized the role of development (Tapp & Levine, 1974). As individuals age, they move from an instrumental orientation toward the law based on punishments and rewards to a conventional orientation where legal authority is recognized to the extent that it enforces social conventions and finally to a principled orientation toward the law defined by recognition of one's personal autonomy in drawing boundaries that may or may not coincide with laws and social conventions. On the other hand, Tyler and Trinkner (2018) also point to interactions among youth and non-legal authorities as sources of legal values, highlighting that children are more likely to recognize the legitimacy of authorities when they regulate moral behavior domains (i.e., acts that can harm others), but resist regulation of personal domains (i.e., acts pertaining to individual welfare). At the same time, youth distinguish between situational domains, recognizing that the power of some authorities is restricted to particular contexts (e.g., teachers and school property) (Yariv, 2009). Taken together, this literature suggests (1) boundary concerns are likely age-graded, (2) a distinction between collective and individual needs, and (3) both behavioral and situational specificity in recognition of legitimate legal authority.

But more work needs to be done. Heuer et al.'s (1999) work on the role that deservingness plays in the relation between authority behavior and fairness judgments may be a useful starting point. They showed that in instances where people believed they deserved respect, respectful treatment led to higher fairness judgments. However, in instances where people felt that they did not deserve respect, disrespectful treatment actually led to higher fairness judgments. A similar effect might be occurring with respect to boundaries, whereby perceptions of appropriate police behavior are shaped by feelings of entitlement to be left alone. For example, people might think that they deserve to be left alone if they are in their home and engaging in behavior that only harms their individual welfare (e.g., drug use). Alternatively, if they are engaging in the same behavior but in a public venue (e.g., a park), they may feel that the police are not overstepping the boundaries of their authority. In addition, deservingness may moderate the relationship between boundary concerns and legitimacy. Imagine, for instance, someone who sees an officer using an unusual amount of force on a citizen. If the observer deems the citizen to deserve it (e.g. someone who looks like he or she could be dangerous), the legitimacy of the police may not take as much of a 'hit', compared to a parallel scenario in which the observer seemed to the citizen to be undeserving of such aggressive behavior.

Another line of research would focus on the mechanism(s) linking boundary concerns to legitimacy. One mechanism linking procedural justice to legitimacy is solidarity threat/affirmation. The group-value model posits that procedural justice communicates group status and value, and that people are motivated to see as legitimate the authority figures of a group that they draw self-worth from and strongly identify with (Lind & Tyler, 1988). This helps to explain why procedural justice can be such a strong predictor of legitimacy (in addition to that fact procedural justice is a strong societal norm about how power should be exercised). A plausible parallel mechanism for boundary concerns is autonomy threat/affirmation. People want to feel that they are in control over their lives and that expect others to respect their right to determine how they live. Police intrusion threatens their sense of autonomy, and people start to question whether the police have the right to power and authority to govern when they believe that power-holders do not respect the limits of their rightful authority, because overstepping represents an intrusion into space that they have no right to be in.

One more area to explore is the ability of police actions to enhance people's sense that the law is legitimate (Jackson et al., 2012). The links between police behavior, police legitimacy, and the legitimacy of the law as a whole indicate the importance of police behavior to the effectiveness of the criminal justice system, given their status as "gate keepers" (Alpert & Dunham, 1997). Although the general procedural justice model has been confirmed across many criminal justice agencies (e.g., corrections, Reisig & Meško, 2009; courts, Tyler & Rasinski, 1991; parole, Wallace et al., 2016; police, Jackson, Bradford et al., 2013), less work has examined the interrelationship between the behavior of these agencies and the legitimacy of the law more generally. This issue seems especially

pertinent today as multiple controversial police shootings have motivated discussions not only of policing, but of the entire criminal justice apparatus (Travis & Western, 2014). As a result, law enforcement needs to be cognizant that what their officers do on the street will not only impact how people view the police, but also their views of the entire criminal justice system and the role of law in society more generally.

Limitations

This study is not, of course, without its limitations. Most importantly, the measure of bounded authority used here needs refinement. This is consistent with much of the procedural justice literature, which lacks a standardized measure. Indeed we would argue that measures of procedural justice sometimes include items tapping boundary concerns instead of treatment decision-making concerns (e.g., Tyler & Jackson, 2014). In the present study, we were limited in our analysis given that there were no preexisting measures of bounded authority and that the dataset used here was not designed to assess boundary concerns. The measures used are likely not optimal (those of Huq et al. 2017 may be better). One particular issue is that the items are confounded with legal definitions of police boundaries. Legal socialization scholars have noted that legal and normative considerations are different things (although there is overlap) and that an optimal measure of boundary concerns would tap into the latter rather than the former. Additionally, it is not entirely clear if the current measure of boundaries was comprehensively covering the concept. For example, as noted above, boundary concerns are likely context-specific (e.g., regulating behavior in the home versus in public). Despite these limitations, the present results are important in providing new areas of inquiry, especially given the lack of discussion in prior literature about bounded authority and its possible impact on police legitimacy.

This study also utilized correlational methodology, which limits the ability to draw any causal conclusions about the relations among police behavior, legal perceptions, and compliance. The directions of the arrows in our model is not meant to imply that we have demonstrated causality. Although experimental work has shown that the experience of procedural fair contact with the police leads to higher legitimacy (e.g., Mazerolle et al., 2012; Trinkner & Cohn, 2014), it does not supplant the need for future work to examine the model tested here using longitudinal and/or experimental methods (especially given the complexity of the present model).

Additionally, this study utilized a nationally representative sample of US citizens examining general perceptions of police officers and their behavior. By collecting data from a representative sample and weighting appropriately, the findings can be generalized to the US adult population. However, this introduces a specificity problem in that these findings are difficult to apply to specific real-world contexts associated with strained police–citizen relations. For example, we have noted both the use of stop-and-frisk and surveillance technology as areas potentially ripe for concerns over boundary violations. Findings do not speak directly to either of these issues in that they do not address the extent to which conflict in these areas are driven by boundary concerns or where the boundaries lie. Alternatively, substantial amount of research has shown that racial and ethnic minorities, particularly young Black men, are especially likely to be over-policed (Trinkner & Goff, 2016). Given this experience, it seems likely that boundaries (and violations) might be drawn, experienced, and reacted to in different ways across different racial and ethnic groups. While an exploration of this is beyond the scope of this paper, it does warrant inquiry in future research.

Final Words

Legitimacy is central towards efforts to provide stability and social order as it promotes compliance and cooperation between the police and the public. Although the last few decades have witnessed a rise in the aggressive policing of minor crimes (Harcourt, 2001) and a focus on sanction-based social control (Garland, 2001), researchers have shown these policies are limited in their effectiveness and expensive in their implementation (Trinkner & Tyler, 2016; Tyler, 2009). Additionally, aggressive policing tactics can create resentment and hostility within the public, lowering trust and cooperation with the police rather than promoting it (Tyler & Huo, 2002).

In this paper, we have shown the benefits of an alternative model of appropriate policing that emphasizes dignified treatment, impartial decision-making, and mindfulness of the boundaries between police power and personal autonomy. This work adds to a growing chorus of researchers and

policy makers extolling legitimacy as a vital commodity for police officers and an essential component of a healthy and functioning legal institution. The legal system and its authorities are tasked with providing and maintaining a formal means of social control within our communities. By doing so, they provide an invaluable mechanism to establish and increase social cohesion among the populace. By maintaining order with the community, police and the legal system provide the stability that is a prerequisite for individuals to invest in developing the community economically and socially (Tyler & Jackson, 2014). In short, the police are essential for a community to thrive.

References

- Alpert, G. P., & Dunham, R. G. (1997). *Policing urban America*. Long Grove, IL: Waveland Press.
- Bates, A. (2017). *Stingray: A new frontier in police surveillance*. Washington, DC: Cato Institute.
- Bottoms, A. & Tankebe, J. (2012). Beyond procedural justice: A dialogic approach to legitimacy in criminal justice. *Journal of Criminal Law and Criminology*, 102, 119-170.
- Bradford, B., Huq, A., Jackson, J., & Roberts, B. (2014). What price fairness when security is at stake? Police legitimacy in South Africa. *Regulation & Governance*, 8, 246-268. doi: 10.1111/rego.12012
- Bradford, B., Murphy, K., & Jackson, J. (2014). Officers as mirrors: Policing, procedural justice and the reproduction of social identity. *British Journal of Criminology*, 54, 527-550. doi: 10.1093/bjc/azu021
- Bradford, B. (2017). *Stop and search and police legitimacy* (Vol. 42). Taylor & Francis.
- Braga, A. A., Papachristos, A. V., & Hureau, D. M. (2014). The effects of hot spots policing on crime: An updated systematic review and meta-analysis. *Justice Quarterly*, 31(4), 633-663. doi: 10.1080/07418825.2012.673632
- Cohn, E. S., Trinkner, R. J., Rebellon, C. J., Van Gundy, K. T., & Cole, L. M. (2012). Legal attitudes and legitimacy: Extending the integrated legal socialization model. *Victims and Offenders*, 7(4), 385-406. doi: 10.1080/15564886.2012.713902
- Cohn, E. S., & White, S. O. (1990). *Legal socialization: A study of norms and rules*. New York: Springer Verlag. doi: 10.1007/978-1-4612-3378-7
- Edwards, J. R., & Bagozzi, R. P. (2000). On the nature and direction of relationships between constructs and measures. *Psychological methods*, 5, 155-174. doi: 10.1037/1082-989X.5.2.155
- Epp, C. R., Maynard-Moody, S., & Haider-Markel, D. P. (2014). *Pulled over: How police stops define race and citizenship*. Chicago: University of Chicago Press. doi: 10.7208/chicago/9780226114040.001.0001
- Erlanger, S. (2016, September, 16). Edward Snowden says disclosures bolstered individual privacy. *New York Times*. Retrieved June 15th, 2017 from https://www.nytimes.com/2016/09/17/world/europe/edward-snowden-defending-his-patriotism-says-disclosures-helped-privacy.html?_r=0.
- Fine, A., & Cauffman, E. (2015). Race and justice system attitude formation during the transition to adulthood. *Journal of Developmental and Life Course Criminology*, 1, 325-349. doi: 10.1007/s40865-015-0021-2
- Garland, D. (2001). *The culture of control: Crime and social order in contemporary society*. Chicago: University of Chicago Press.
- Grace, J. B., & Bollen, K. A. (2008). Representing general theoretical concepts in structural equation models: The role of composite variables. *Environmental and Ecological Statistics*, 15, 191-213. doi: 10.1007/s10651-007-0047-7
- Harcourt, B. (2001). *Illusion of order: The false promise of broken windows policing*. Cambridge, MA: Harvard University Press.
- Harkin, D. (2015). Police legitimacy, ideology and qualitative methods: A critique of procedural justice theory. *Criminology and Criminal Justice*, 15, 594-612. doi: 10.1177/1748895815580397
- Heuer, L., Blumenthal, E., Douglas, A., & Weinblatt, T. (1999). A deservingness approach to respect and a relationally based fairness judgment. *Personality and Social Psychology Bulletin*, 25(10), 1279-1292. Doi: 10.1177/0146167299258009
- Hindelang, M. J., Hirschi, T., Weis, J. G. (1981). *Measuring delinquency*. Beverly Hills: Sage Publications.
- Howell, R. D., Breivik, E., & Wilcox, J. B. (2007). Reconsidering formative measurement. *Psychological Methods*, 12, 205-218. doi: 10.1037/1082-989X.12.2.205
- Huq, A. H., Jackson, J., & Trinkner, R. (2017). Legitimizing practices: Revisiting the predicates of police legitimacy. *British Journal of Criminology*, 57, 5, 1101-1122. doi: 10.1093/bjc/azw037.
- Jackson, J., Asif, M., Bradford, B., & Zakar, M. Z. (2014). Corruption and police legitimacy in Lahore, Pakistan. *British Journal of Criminology*, 54, 1067-1088. doi: 10.1093/bjc/azu069
- Jackson, J., Bradford, B., Hough, M., Myhill, A., Quinton, P., & Tyler, T. R. (2012). Why do people comply with the law? Legitimacy and the influence of legal institutions. *British Journal of Criminology*, 52, 1051-1071. doi: 10.1093/bjc/azs032
- Jackson, J., Bradford, B., Stanko, B., & Hohl, K. (2013). *Just authority? Trust in the police in England and Wales*. New York: Routledge.
- Jackson, J., Huq, A., Bradford, B. and Tyler, T. R. (2013). Monopolizing force? Police legitimacy and public attitudes towards the acceptability of violence. *Psychology, Public Policy and Law*, 19(4), 479-497, doi: 10.1037/a0033852.
- Jackson, J. (forthcoming). Norms, normativity and the legitimacy of legal authorities: International perspectives. *Annual Review of Law and Social Science*.
- Justice, B. & Meares, T. (2014). How the criminal justice system educates citizens. *The Annals of the American Academy of Political and Social Science*, 651(1), 159-177. doi: 10.1177/0002716213502929
- Klockars, C. B. (1980). The Dirty Harry problem. *The Annals of the American Academy of Political and Social Sciences*, 452, 33-47. doi: 10.1177/000271628045200104

- Lind, E. A., & Tyler, T. R. (1988). *The social psychology of procedural justice*. Springer Science & Business Media.
- Mastrofski, S. D., Snipes, J. B., & Supina, A. E. (1996). Compliance on demand: the public's response to specific police requests. *Journal of Research in Crime and Delinquency*, 33(3), 269-305. doi: 10.1177/0022427896033003001
- Mazerolle, L., Antrobus, E., Bennet, S., & Tyler, T. R. (2012). Shaping citizen perceptions of police legitimacy: A randomized field trial of procedural justice. *Criminology*, 51(1), 33-64. doi: 10.1111/j.1745-9125.2012.00289.x
- McCluskey, J. D. (2003). *Police requests for compliance: Coercive and procedurally just tactics*. New York: LFB Scholarly Publishing.
- Meares, T. L. (2009). The legitimacy of police among young African-American men. *Marquette Law Review*, 92, 651-666.
- Meares, T. L., Tyler, T., & Gardener, J. (2015). Lawful or fair? How cops and laypeople view good policing. *The Journal of Criminal Law and Criminology*, 105(2), 297-344. doi : 10.2139/ssrn.2116645.
- Meares, T. L. (2017). The path forward: Improving the dynamics of community-police relationships to achieve effective law enforcement policies. *Columbia Law Review*, 117(5), 1355-1368.
- Murphy, T., Bradford, B., & Jackson, J. (2016). Motivating compliance behavior among offenders: Procedural justice or deterrence?. *Criminal Justice & Behavior*, 43(1), 102-118. doi: 10.1177/0093854815611166.
- Ozer, N. (2016, September 22). Police use of social media surveillance software is escalating, and activists are in the digital crosshairs. American Civil Liberties Union. Retrieved June 15th, 2017 from <https://www.aclu.org/blog/free-future/police-use-social-media-surveillance-software-escalating-and-activists-are-digital>.
- Pehrson, S., Devaney, L., Bryan, D., & Blaylock, D. L. (2017). Beyond group engagement: Multiple pathways from encounters with the police to cooperation and compliance in Northern Ireland. *PLoS one*, 12(9), e0184436.
- Rawls, J. (1964). Legal obligation and the duty of fair play. In S. Hook (Ed.), *Law and philosophy* (pp. 3-18). New York: New York University Press.
- Reisig, M. D., & Meško, G. (2009). Procedural justice, legitimacy, and prisoner misconduct. *Psychology, Crime & Law*, 15, 41-59. doi: 10.1080/10683160802089768
- Rogers, R. (2011). Getting it wrong about Miranda rights: False beliefs, impaired reasoning, and professional neglect. *American Psychologist*, 66(8), 728-736. doi: 10.1037/a0024988
- Smetana, J. G. (1995). Morality in context: Abstractions, ambiguities and applications. In R. Vasta (Ed.), *Annals of Child Development* (Vol 10, pp. 83-130). London: Jessica Kingsley Publishers.
- Smetana, J. G. (2002). Culture, autonomy, and personal jurisdiction in adolescent-parent relationships. *Advances in Child Development*, 29, 51-87. Doi: 10.1016/S0065-2407(02)80051-9
- Sunshine, J., & Tyler, T. R. (2003). The role of procedural justice and legitimacy in shaping public support for policing. *Law & Society Review*, 37(3), 513-538. doi: 10.1111/1540-5893.3703002
- Tankebe, J. (2013). Viewing things differently: The dimensions of public perceptions of police legitimacy. *Criminology*, 51(1), 103-135. doi: 10.1111/j.1745-9125.2012.00291.x
- Tapp, J. L. (1991). The geography of legal socialization: Scientific and social markers. *Droit et Société*, 19, 331-358.
- Tapp, J. L., & Levine, F. J. (1974). Legal socialization: Strategies for an ethical legality. *Stanford Law Review*, 27(1), 1-72. doi: 10.2307/1227929
- Terry v. Ohio, 368 U.S. 1 (1968)
- Thornberry, T. P., & Krohn, M. D. (2000). The self-report method for measuring delinquency and crime. *Criminal Justice*, 4(1), 33-83.
- Travis, J., & Western, B. (2014, December, 16). Protests shine light on deeper issues with modern justice. *The Boston Globe*. Retrieved from <https://www.bostonglobe.com/opinion/2014/12/16/ferguson-nyc-protests-shine-light-problems-with-modern-justice/G61uXpCgWBIPATV0hxDMaO/story.html>
- Trinkner, R., & Cohn, E. S. (2014). Putting the 'social' back in legal socialization: Procedural justice, legitimacy, and cynicism in legal and nonlegal authorities. *Law and Human Behavior*, 38(6), 602-617. doi: 10.1037/lhb0000107
- Trinkner, R., & Goff, P. A. (2016). The color of safety: The psychology of race and policing. In B. Bradford, B. Jauregui, I. Loader, & J. Steinberg (Eds.), *The SAGE handbook of global policing* (pp. 61-81). Los Angeles: Sage. doi: 10.4135/9781473957923.n5
- Trinkner, R., & Tyler, T. R. (2016). Legal socialization: Coercion vs. consent in an era of mistrust. *Annual Review of Law and Social Science*, 12, 417-439. doi: 10.1146/annurev-lawsocsci-110615-085141
- Tyler, T. R. (2006a). *Why People Obey the Law*. New Haven, CT: Yale University Press.
- Tyler, T. R. (2006b). Psychological perspectives on legitimacy and legitimation. *Annual Review of Psychology*, 57, 375-400. doi: 10.1146/annurev.psych.57.102904.190038

- Tyler, T. R. (2009). Legitimacy and criminal justice: The benefits of self-regulation. *Ohio State Journal of Criminal Law*, 7, 307-359.
- Tyler, T. R. (2017). Can the police enhance their popular legitimacy through their conduct: Using empirical research to inform law. *U. Ill. L. Rev.*, 1971.
- Tyler, T. R., & Blader, S. L. (2003). The group engagement model: Procedural justice, social identity, and cooperative behavior. *Personality and Social Psychology Review*, 7(3), 349-361. doi: 10.1207/S15327957PSPR0704_07
- Tyler, T. R., Fagan, J., & Geller, A. (2014). Street stops and police legitimacy: Teachable moments in young urban men's legal socialization. *Journal of Empirical Legal Studies*, 11(4), 751-785. doi: 10.1111/jels.12055
- Tyler, T. R. & Huo, Y. J. (2002). *Trust in the law*. NY: Russell-Sage.
- Tyler, T. R., & Jackson, J. (2013). Future challenges in the study of legitimacy and criminal justice. In J. Tankebe and A. Liebling (Eds.), *Legitimacy and criminal justice: An international exploration*. Oxford: Oxford University Press. doi: 10.1093/acprof:oso/9780198701996.003.0006
- Tyler, T. R., & Jackson, J. (2014). Popular legitimacy and the exercise of legal authority: Motivating compliance, cooperation and engagement. *Psychology, Public Policy and Law*, 20(1), 78-95. doi: 10.1037/a0034514
- Tyler, T. R., Jackson, J. & Mentovich, A. (2015). On the consequences of being a target of suspicion: Potential pitfalls of proactive police contact. *Journal of Empirical Legal Studies*, 12(4), 602-636, doi: 10.1111/jels.12086.
- Tyler, T. R., & Raskinski, K. (1991). Procedural justice, institutional legitimacy, and the acceptance of unpopular U.S. Supreme Court decisions: A reply to Gibson. *Law & Society Review*, 25, 621-630. doi: 10.2307/3053729
- Tyler, T. R., & Trinkner, R. (2018). *Why children follow rules: Legal socialization and the development of legitimacy*. New York: Oxford University Press.
- Wallace, D., Papachristos, A. V., Meares, T., & Fagan, J. (2016). Desistance and legitimacy: The impact of offender notification meetings on recidivism among high risk offenders. *Justice Quarterly*, 33(7), 1237-1264. doi: 10.1080/07418825.2015.1081262
- Weisburd, D., Hinkle, J. C., Famega, C., & Ready, J. (2011). The possible 'backfire' effects of hot spots policing: An experimental assessment of impacts on legitimacy, fear and collective efficacy. *Journal of Experimental Criminology*, 7, 297-320. doi: 10.1007/s11292-011-9130-z
- Worden, R. E., & McLean, S. J. (2017). *The mirage of police reform: Procedural justice and police legitimacy*. Oakland, CA: University of California Press. doi: 10.1525/luminos.30
- Yariv, E. (2009). Students' attitudes on the boundaries of teachers' authority. *School psychological international*, 30(1), 92-111. Doi: 10.1177/0143034308101852

Table 1. Items and measure descriptive statistics.

	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>	<i>α</i>
Interpersonal Treatment	2.8	0.8	1	4	0.87
How often do the police treat people with dignity and respect?					
How often do the police try to do what is best for the people they are dealing with?					
Decision-making	0.0	0.9	-2.3	1.8	0.86
How often do the police make fair and impartial decisions in the cases they deal with?					
How often do the police give people a chance to tell their side of the story before they decide what to do?					
How often do the police make decisions based upon the law and not their personal opinions or biases?					
How often do the police explain their decisions and actions in ways that people can understand?					
Bounded Authority	0.0	0.9	-2.8	1.4	0.79
When the police deal with people they almost always behave according to the law.					
How often do the police respect people's rights?					
The police often arrest people for no good reason [†]					
Police Legitimacy: Duty to obey	0.0	0.9	-2.9	1.8	0.83
You should support the decision made by police officers even when you disagree with them.					
You should do what the police tell you even if you do not understand or agree with the reasons.					
The police in your community are legitimate authorities and you should do what they tell you to do.					
You should do what the police tell you to do even if you do not like how they treat you.					
Police Legitimacy: Normative alignment	0.0	1.0	-3.3	1.6	0.91
The police stand up for values that are important to you.					
You generally support how the police act in your community.					
The police usually act in ways consistent with your own ideas about what is right and wrong.					
Legal Legitimacy: Duty to obey	0.0	0.9	-2.3	2.5	0.83
All laws should be strictly obeyed.					
Some laws are made to be broken. [†]					
Sometimes doing the right thing means breaking the law. [†]					
There are times when it is ok to ignore the law. [†]					
Sometimes you have to bend the law for things to come out right. [†]					
Legal Legitimacy: Normative alignment	0.0	0.9	-4.4	1.8	0.88
Your own feelings about what is right and wrong usually agree with the laws that are enforced by the police and the courts.					
The laws in your community are consistent with your own intuitions about what is right and just.					
The laws of our criminal justice system are generally consistent with the views of the people in our community about what is right and wrong.					
People should do what the law says.					
A person who disobey laws is a danger to others in the community.					
Obeying the law ultimately benefits everyone in the community.					
Legal Compliance	0.5	1.3	0.0	16	
How often in the last five years have you made an exaggerated or false insurance claim?					
How often in the last five years have you bought something you think might be stolen?					
How often in the last five years have you illegally disposed of rubbish or litter?					
How often in the last five years have you taken something from a store without paying for it?					
Personal Morality (logged index)	1.6	0.2	0.4	1.7	0.80
How wrong is it to make an exaggerated or false insurance claim?					
How wrong is it to buy something you think might be stolen?					
How wrong is it to illegally dispose of rubbish or litter?					
How wrong is it to take something from a store without paying for it?					
Perceived Risk of Sanction	0.0	0.9	-2.0	1.4	0.88
What is the likelihood that you be caught and punished if you made an exaggerated or false insurance claim?					
What is the likelihood that you be caught and punished if you bought something you think might be stolen?					
What is the likelihood that you be caught and punished if you illegally disposed of rubbish or litter?					
What is the likelihood that you be caught and punished if you took something from a store without paying for it?					

[†] Item reverse-scored.

Note: aside from Cronbach's alpha, the descriptive statistics refer to the indices created by saving the component scores using principal components analysis (applied separately to each individual set of items). The exception here is interpersonal treatment where the mean of the two items was calculated.

Table 2. Linear models predicting treatment, decision-making and boundaries.

	Treatment		Decision-making		Boundaries	
	β	95% CI	β	95% CI	β	95% CI
Police-initiated contact (ref: no contact)						
Bad contact	-0.70***	-0.92, -0.49	-0.78***	-1.00, -0.56	-0.85***	-1.11, -0.59
Neutral contact	-0.26***	-0.40, -0.11	-0.27**	-0.44, -0.10	-0.34***	-0.53, -0.15
Good contact	0.24***	0.14, 0.34	0.29***	0.16, 0.41	0.27***	0.15, 0.39
Citizen-initiated contact (ref: no contact)						
Bad contact	-0.44**	-0.73, -0.15	-0.39*	-0.71, -0.07	-0.47*	-0.88, -0.06
Neutral contact	-0.24*	-0.46, -0.02	-0.33**	-0.54, -0.12	-0.30*	-0.55, -0.06
Good contact	0.13*	0.02, 0.25	0.22**	0.07, 0.36	0.16*	0.03, 0.29
Gender						
Female	-0.44***	-0.59, -0.30	-0.54***	-0.70, -0.37	-0.56***	-0.74, -0.38
Age (ref: 18-29)						
30-44	-0.08	-0.30, 0.13	-0.05	-0.29, 0.20	-0.18	-0.43, 0.07
45-59	-0.13	-0.28, 0.02	-0.23**	-0.39, -0.07	-0.21*	-0.40, -0.03
60+	0.11	-0.03, 0.25	0.07	-0.10, 0.24	0.07	-0.10, 0.24
Ethnicity (ref: White)						
Black	0.15*	0.02, 0.29	0.11	-0.05, 0.27	0.18*	0.02, 0.33
Other	0.18*	0.03, 0.34	0.16	-0.03, 0.35	0.22*	0.05, 0.39
Hispanic	-0.04	-0.12, 0.05	-0.07	-0.17, 0.03	-0.05	-0.15, 0.05
Education (ref: less than high school)						
High school	0.22*	0.05, 0.40	0.37***	0.17, 0.57	0.31***	0.13, 0.49
Some college	0.29***	0.12, 0.46	0.48***	0.29, 0.67	0.34***	0.16, 0.52
Bachelor's degree or higher	0.26**	0.09, 0.43	0.43***	0.23, 0.63	0.40***	0.22, 0.58
Employment status (ref: working - as a paid employee)						
Working - self-employed	-0.02	-0.20, 0.16	-0.11	-0.32, 0.09	-0.20*	-0.39, -0.01
Working - on temporary layoff from	0.08	-0.30, 0.46	0.17	-0.17, 0.51	-0.06	-0.46, 0.33
Not working - looking for work	-0.01	-0.17, 0.15	0.06	-0.15, 0.26	0.05	-0.13, 0.23
Not working - retired	0.13	-0.00, 0.27	0.16	-0.01, 0.33	0.00	-0.14, 0.14
Not working - disabled	-0.12	-0.29, 0.05	-0.17	-0.38, 0.04	-0.28*	-0.50, -0.06
Not working - other	-0.09	-0.26, 0.08	0.01	-0.18, 0.21	-0.07	-0.28, 0.14
Constant						
	2.50***	2.30, 2.70	-0.46***	-0.70, -0.22	-0.35**	-0.56, -0.14
n	1523		1518		1518	

* p<0.05, ** p<0.01, *** p<0.001

Figure 1. A conceptual model of appropriate police behavior and legitimacy.

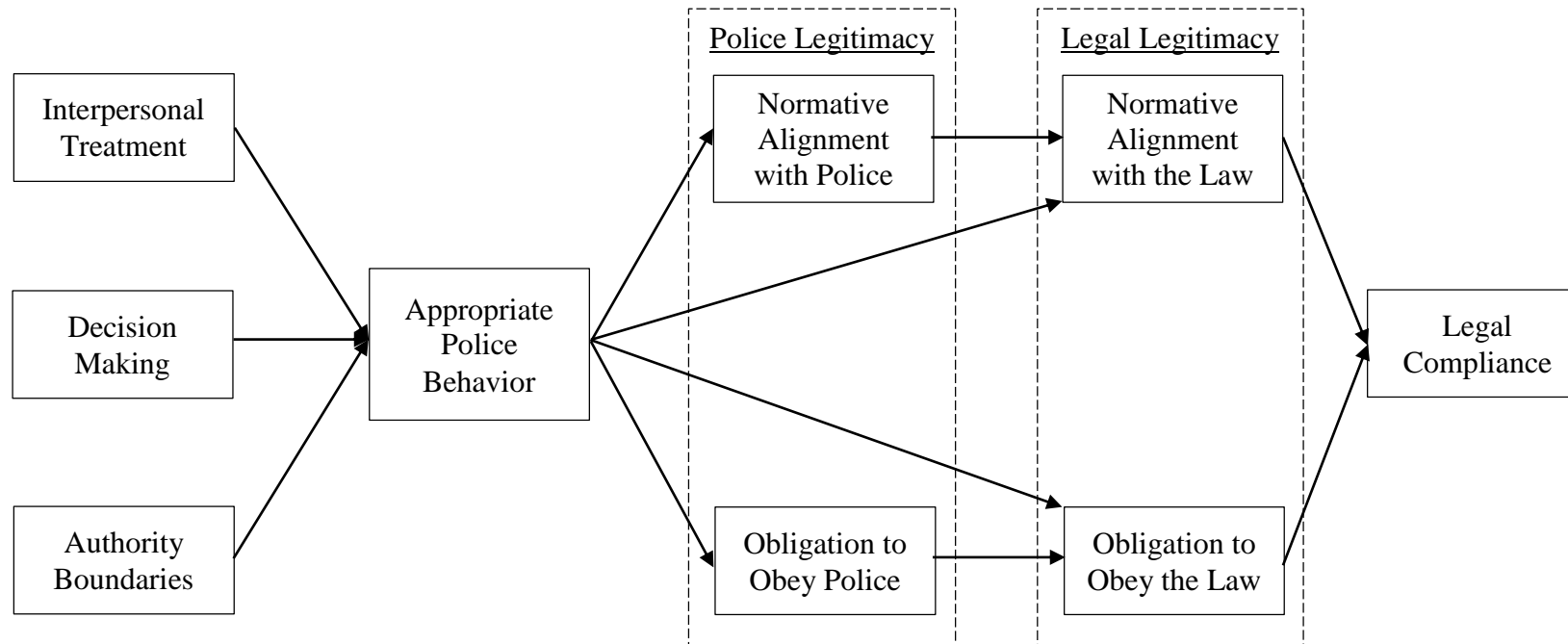
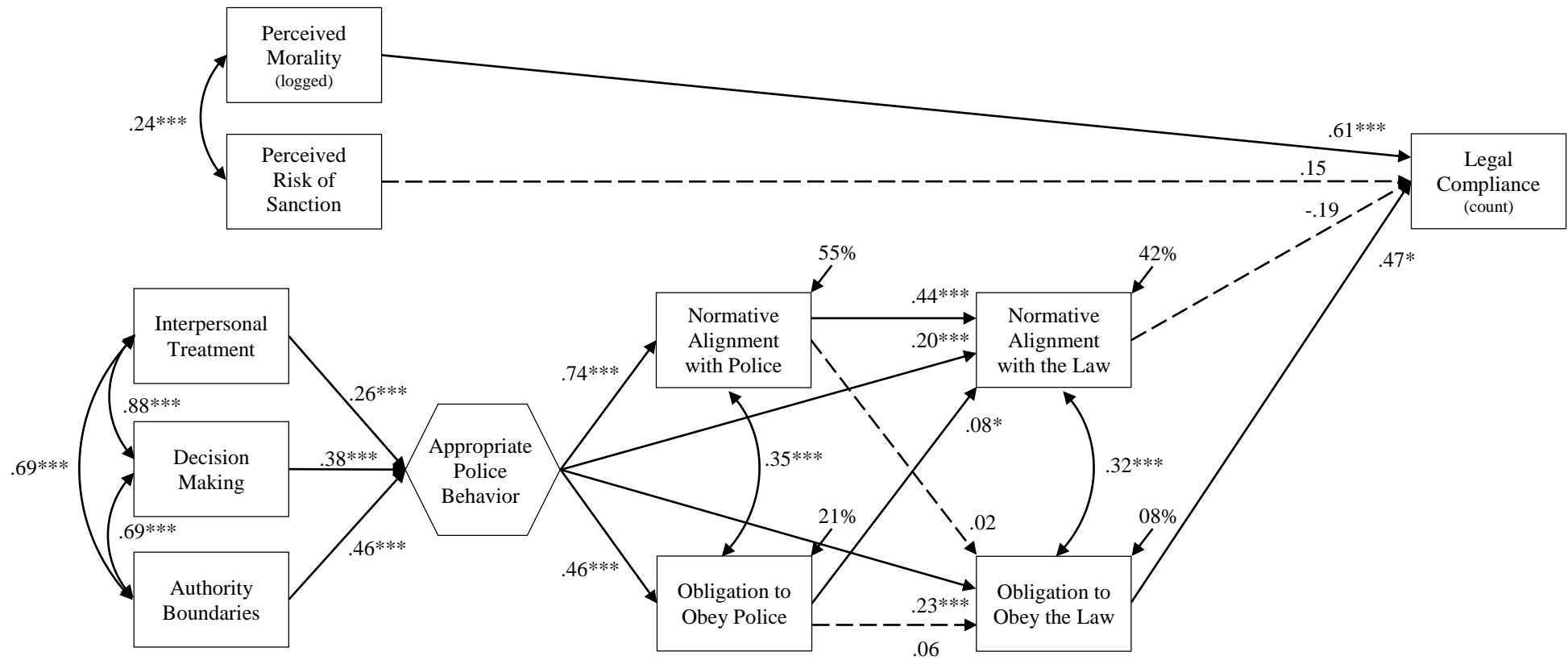


Figure 2. Standardized coefficients from path analysis predicting legal compliance.



* $p < .05$; ** $p < .01$; *** $p < .001$

Note: Path analysis conducted with MPlus 7.11 with negative binomial regression fitted for legal compliance (fit statistics are not provided by MPlus for such a model). Perceived morality and perceived sanction risk were allowed to covary with normative alignment with the law and obligation to obey the law (paths omitted). Perceived morality correlated with obligation to obey the law ($r = .20^{**}$) and normative alignment with the law ($r = .23^{***}$). Hashed lines represent nonsignificant paths. Hexagon = formative index (see Grace & Bollen, 2008).