

# Building popular legitimacy with reconciliatory gestures and participation: A community-level model of authority

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## Abstract

The research tests a model of reconciliation between authorities and communities. It expands past models of legitimacy to an intergroup dynamic model by identifying two community-level actions that legal authorities can undertake to build their popular legitimacy and promote cooperation. One type of action is a community-level reconciliatory gesture: an initiative that authorities make to communities to build trust by recognizing and trying to move beyond prior negative experiences. A second involves community-level opportunities for participating in decisions about how to manage social order. The results of this study with residents from a large metropolitan city suggest that both types of community-level gestures can make distinct contributions to building trust in and cooperation with the police.

**Keywords:** cooperation, criminal justice reform, intergroup relations, legitimacy, reconciliation.

## 1. Introduction

In recent years, greater public attention has been paid to the need to reform the relationship between police and communities. The rise in coverage of both everyday police actions in dealing with the residents of urban communities and the heightened awareness of shootings of unarmed civilians have increased attention to popular legitimacy in policing. This has resulted in greater attention to how people in policed communities experience the policies and practices of police, and to research on how popular legitimacy is created, maintained, or undermined by police actions (National Academies of Sciences, Engineering, & Medicine 2018).

Government and public efforts to change policing have reflected this awareness and increasingly embrace the need for the police to (re)build popular legitimacy. At the government level, the creation of the President's Task Force on 21st century Policing (President's Task Force on 21st Century Policing 2015) under the Obama Administration reflects an effort to devise strategies and training to enhance popular legitimacy. At the public level, movements such as "Black Lives Matter" and others organizing protests across the country demonstrate public demand for change in policing tactics. Together, these public and government efforts reflect the need to change the relationship between police and communities.

Research has demonstrated robust support of the viability of procedural justice to build and maintain popular legitimacy (Tyler & Lind 1992; Tyler 1994, 2006a; Tyler & Huo 2002; Tyler & Blader 2003). This research has grown from psychological research comparing the impact of legal procedures on decision acceptance (Thibaut *et al.* 1972; Thibaut & Walker 1975). Early research on decision acceptance by Thibault and Walker (1975) led to an investigation of how concerns about the relationship between authorities and individuals impact individuals' beliefs and behavior toward authorities (Lind & Tyler 1988). This research has demonstrated that fairness in interpersonal interactions shapes both the views of authorities as legitimate and cooperative behavior with authorities (Tyler & Huo 2002 Tyler & Blader 2003; Tyler 2006b; Tyler & Jackson 2014).

### 1.1. Individual-level models of authority

This body of research on procedural justice and legitimacy is a framework of consensual authority (Trinkner & Tyler 2016) that has developed out of the relational (Tyler 1994), group-value (Tyler, Degoe & Smith 1996), and

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group-engagement (Tyler & Blader 2003) models of authority. The framework views authorities and the individuals they have power over as part of one group. Whether considering police officers within a city or managers within an organization, this body of research demonstrates the primacy of relational concerns in people's decisions over how they act within the group.

People judge procedural justice based on criteria reflecting the value that authorities place on their relationship with them, including whether authorities consider their concerns, make decisions with neutrality, and treat them with respect (Tyler 1994). This evaluation encompasses beliefs about fairness in the process of making decisions and treating individuals (Blader & Tyler 2003; Tyler & Blader 2003). Along with shaping views of authorities as legitimate, perceiving authorities as procedurally just shapes individuals' feelings of pride for the group they share with authorities, their feeling that they are respected within that group, and the view that authorities recognize them as holding status within that group (Tyler *et al.* 1996). The outcomes of these individual-level elements expand beyond decision acceptance and include proactive cooperation with authorities, reflecting consensus with the power of the authority.

The value of procedural justice comes in part from the information it conveys about people's relationship to the community and with authorities (Tyler & Blader 2003; Bradford 2014). A critical point of this research is that people's beliefs about their relationship to authorities as part of a larger social group shapes legitimacy and cooperation beyond concerns such as: (i) whether people receive the outcome they desire in personal interactions with authorities (Tyler 2006); (ii) whether people perceive the outcomes (rather than the process) in these interactions as fair (Tyler 2006), or community-level judgments, such as in the case of police; (iii) police lawfulness (Meares *et al.* 2015); or (iv) the effectiveness of police at controlling crime (Sunshine & Tyler 2003). People also, of course, prefer that authorities decide on outcomes that favor their interests. However, how authorities come to decide on those outcomes – the fairness of the process – matters more (Lind & Tyler 1988; Sunshine & Tyler 2003) than the outcomes of single incidents. If authorities use procedural justice, whether or not they come to a decision that favors the individual, it reflects that they value their relationship with the public (Tyler 1994).

Policymakers have sought to apply the findings of this research. Efforts at building trust toward police have focused primarily on creating policies and practices that people evaluate as fair in personal experiences with legal authorities, individually and across the community; on training officers to act in ways that build trust (Tyler, Goff & MacCoun 2015); and on articulating the objective actions that officers can take for people to experience their interactions with officers as fair (Tyler 2017). Evidence supports the use of these strategies focused upon individual contact between officers and community residents (Sunshine & Tyler 2003; Tyler 2006a; Hough *et al.* 2010; Tyler & Jackson 2014). To our knowledge, research has not tested strategies that examine actions at a community level in tandem with beliefs about actions at the individual level.

## 1.2. The relationship between authorities and communities as an intergroup relationship

In addition to the interpersonal dynamic that the relational and group-value models have focused on, the relationship between authorities and the individuals they have power over is also an intergroup dynamic. In this dynamic, authorities and communities constitute groups. This distinction between an interpersonal and intergroup dynamic is informed by a large body of psychological research.

The psychological literature demonstrates that people identify with and categorize both themselves and others into social groups (Tajfel & Turner 1979; Turner *et al.* 1987). The groups that people feel a part of are important for the psychological and tangible resources they provide, and have important consequences for attitudes, emotions, and behavior (Leary & Baumeister 1995; Brown 2000; Correll & Park 2005). The boundaries of these groups may organize around race or ethnicity, gender, socioeconomic status, political ideology, religion, or any psychologically important category. Individuals hold multiple social identities and which one becomes salient at any given time depends on the individual and situations that trigger the importance of an identity for that individual (Roccas & Brewer 2002). Thinking about one's community in relation to authorities may create an intergroup dynamic that is reflected in the way that police departments address communities as a group, beyond individual interactions.

If authorities are prepared to make substantive improvements that are deserving of the communities' trust, they may communicate that by addressing communities as a whole. Addressing communities is part of how many police departments view their mission. Neighborhood policing in New York City (NYC), for example, has a

Community Affairs Bureau with the goal of reducing crime by “strengthening community relationships and trust” (New York City Police Department, 2019). This involves working with groups in the community who the department views as likely to experience crime-related problems. These efforts include both educating community members about what the police are doing and also seeking resident input on solutions. Developing around the time that data for the current research was collected, the neighborhood policing plan in NYC places officers in specific neighborhoods, allocates time for them to interact with the community, and assigns “Neighborhood Coordination Officers” (NCOs) to act as “liaisons between the police and the community, but also as key crime fighters and problem-solvers in the sector” (New York City Police Department, 2019). Beyond NYC, police in areas across the country hold police–community meetings in which both parties share information about crime and the relationship between police and the community. Police also may send out information via leaflets to the community (see Hohl *et al.* 2014) or deliver other forms of public addresses to relay community-level messages.

Research has examined the efficacy of community policing initiatives for impacting community members’ beliefs about police (Skogan 2006; National Academies of Sciences, Engineering, & Medicine 2018). This research has largely been an assessment of actual community-oriented policing programs (e.g. “community policing”) on public beliefs about police, including an evaluation of the impact of community policing in Chicago on public opinion over 10 years suggesting positive effects on trust and confidence of police (a component of legitimacy, Skogan 2006), and a meta-analysis suggesting the generally positive effects of such programs on satisfaction and beliefs about the legitimacy of police (Gill *et al.* 2014). Although this research has suggested the positive impacts of specific programs, it has not to our knowledge formulated a model through which community-level initiatives impact legitimacy and cooperation accounting for individuals’ beliefs about procedural justice.

Both the procedural justice and the community policing literature view building trust as developing out of programs that are created in the community. These programs change the way people interact with the police and over time, build trust. Experimental evidence demonstrates that programs to train officers in procedural justice are efficacious (Owens *et al.* 2018; Antrobus *et al.* 2019). However, procedural justice strategies can only be expected to change the communities’ views incrementally. The approach tested here addresses the community directly and at a community level. These strategies may impact large portions of the community in a short period of time and, if effective, are an important additional approach that could function in tandem with improvements in procedural justice.

Developing theory that incorporates intergroup dynamics into the relationship between authorities and communities requires an examination of the impact of community members’ actual knowledge of community-level initiatives by authorities. Quasi-experimental methods examining the relationship between living in a neighborhood that is the spot of an initiative or not (e.g. Hohl *et al.* 2010) or longitudinal methods examining changes in confidence that coincide with changes in policing methods (e.g. Skogan 2006) have the strong benefit of making inferences about the impact of specific programs. In contrast, a method of comparing beliefs about and behavior toward authorities among people who do or do not know about police initiatives to build trust has the potential to model intergroup dynamics, as it assesses people’s perceptions of initiatives directed toward what they perceive as their community. This perceptual approach provides a basis for developing theory about how people respond to police initiatives that they perceive as directed toward their community. The approach allows for a test of how intergroup dynamics between authorities and communities shape their relationship beyond the interpersonal dynamics that the procedural justice literature has examined.

### 1.3. Modeling the intergroup relationship between authorities and communities

The primary goal of this paper is to begin building an intergroup model of authority–community relations. We do this through empirical examination of community(group)-level elements in the relational model of authority. We define *community* as a social group meaningful to the individual within what they think of as their neighborhood. This subjective approach, allowing participants to self-define community, is important because it allows us to conceptualize community in reference to the participants’ state of mind rather than some boundary that may or may not be meaningful to the participant. An alternative way to model an intergroup relationship may be to consider specific types of groups, such as racial groups. As a generative foundation to research, we begin instead with people’s subjective definition of the “community” in their neighborhood. Grounded in the psychological

literature reviewed above, this definition is adaptable to the subjective and dynamic ways in which individuals identify with groups and makes possible a test of whether community (group)-level elements shape legitimacy and cooperation.

By *community-level elements*, we are referring to individuals' beliefs and perceptions of how authorities relate to the community as a whole beyond their interactions with individuals. Community-level elements of the relational model are similar to the individual-level elements that form people's judgements of authorities as acting with procedural justice: the elements on both levels communicate that authorities value their relationship with those from whom they seek legitimacy. Distinct from the individual-level elements, community-level elements are actions that authorities may use to affect their relationship with the community beyond interpersonal dynamics, potentially addressing conflict with the community that goes beyond interpersonal interactions.

In modeling this relationship, the current research focuses on two relational elements that we hypothesize are part of the intergroup relationship between authorities and communities: reconciliatory gestures and participation. The study tests whether these community-level elements – directed toward the community as a whole rather than toward individuals – strengthen beliefs about the legitimacy of authorities and increase cooperative behavior, and whether they have an influence that is unique from people's perceptions of authorities as procedurally just toward individuals. In hypothesizing the impact of these two elements on legitimacy and cooperation, we draw upon the psychological and political science literature.

#### **1.4. Defining community-level elements: Reconciliatory gestures and participation**

Similar to procedural justice at an individual level, both elements of identity and group (in this case, community) membership are central (Lind & Tyler 1988; Tyler 1989; Tyler & Lind 1992; Tyler & Blader 2000). They involve both signaling the intent to build trust through reconciliatory gestures and engaging the community through participation.

The key question is whether the psychological mechanisms that underlie the relational model operate at the community level. Individuals respond to evidence that authorities respect and value them, information that fair treatment and giving voice conveys in interpersonal interactions. Whether these same dynamics can operate at the community level beyond the role of beliefs about how authorities act on an individual level (e.g. beliefs about procedural justice) is generally untested in the context of police–community relations.

##### *1.4.1. Reconciliatory gestures*

The first relational element involves reconciliatory gestures: initiatives that community members recognize as coming from authorities with the intention to build trust with the community as a whole. In our model, reconciliatory gestures are part of a broader process of reconciliation between authorities and communities that builds legitimacy and cooperation for a consensual relationship. We use the definition of reconciliatory gesture to encompass a broad variety of actions that community members perceive on an intergroup level and that may be part of this reconciliation process: community meetings, public addresses, or programs assigning officers to become familiar with the community, are all examples. The defining characteristic is that community members perceive the gesture as an intention to build trust with the community.

The psychological literature on promoting positive intergroup attitudes is informative for predicting the impact of reconciliatory gestures. This research grew largely out of the intergroup contact theory (Allport 1954; Pettigrew & Tropp 2006) and theories of social identity and social categorization (Tajfel & Turner 1979; Turner *et al.* 1987) reviewed above. Intergroup contact research demonstrates robust support for the hypothesis that contact between members of different groups can reduce negative attitudes (Allport 1954; Pettigrew & Tropp 2006). Contact may also occur via direct and indirect experiences (Wright *et al.* 1997).

Gestures from authorities may constitute a form of exposure to an outgroup (e.g. Saguy & Halperin 2014; O'Brien *et al.* 2018), similar to a form of extended (Wright *et al.* 1997) or direct intergroup contact (for reviews, see Brown & Hewstone 2005; Pettigrew & Tropp 2011). As a signal of the intention to build trust, experiencing gestures directly or indirectly may be a form of positive intergroup contact that increases community members' beliefs that authorities are trustworthy with values aligning with their own, thereby motivating cooperative behavior with authorities. The power asymmetry of the authority–community relationship, however, complicates what type of contact would improve trust.

Groups of different levels of power have different needs and concerns in relating to one another (Dovidio *et al.* 2012). Groups that have less power in an intergroup relationship are motivated to focus on issues of difference in contact with a more powerful outgroup (Saguy *et al.* 2008), perhaps as a way to confront inequality, to gain empowerment (Shnabel *et al.* 2009), and to feel respected (Bergsieker *et al.* 2010). Although gestures may be a crucial element in the process of reconciliation between authorities and communities, research on the needs of less powerful groups highlights that the process of reconciliation between communities and authorities requires more than signaling the intention to build trust (Dovidio *et al.* 2012).

#### 1.4.2. Participation

The second element of the community-level framework is participation. There is a long history of discussions about participation in community governance within political science (e.g. Campbell 2013), including the factors that promote civic and political participation (e.g. Mutz 2002; Fung & Wright 2003; Karp & Banducci 2008; Fung 2009). Research has also theorized on the role of citizen deliberation and participation as legitimating the democratic process (Teorell 2006; Thompson 2008), and community policing research demonstrates evidence of this (Gill *et al.* 2014). In this analysis, we focus on the influence that providing an opportunity for participation in policing may have on the community, operationalizing this as a form of empowerment for the community, in line with research on government (including community policing) programs on community participation (e.g. “empowered participation,” Fung 2009).

Research at an individual level has demonstrated that the ability to voice perspective on decisionmaking shapes judgements of the process (Folger 1977; Lind *et al.* 1990). Even when people do not feel that they can control decisions by expressing their views, having the opportunity to express their views communicates respect, inclusion, and status; and it increases their perception of authorities as procedurally just and makes their evaluation of those authorities more positive (Tyler *et al.* 1985). Research has discussed the implications of participation for legitimacy and the antecedents of participation (Fung 2009). In contrast to past research, our question is whether community members perceive that the community has a role in the creation and implementation of the rules that impact the community, which then shapes community members’ beliefs about legitimacy and cooperative behavior with authorities, independent from their beliefs about procedural justice in interpersonal interactions.

Participation in the formation and implementation of policy may address the needs of community members as a group with less power than authorities. Having a voice in the creation and implementation of policies empowers community members to address their need for empowerment in relation to authorities (Fung 2009; Nadler & Shnabel 2015). Empowerment from participation may raise legitimacy for and cooperation with authorities.

#### 1.4.3. Legitimacy

In this study, we define legitimacy in three components: the belief in an obligation to defer to and obey authorities; trust and confidence in authorities; and normative alignment with authorities – the belief that authorities share one’s values (e.g. Tyler & Jackson 2014). Together, these three components reflect consensual authority.

This model of consensual authority is the goal of reconciliation, building a relationship between authorities and communities in which authorities earn the consent and trust of the community. Obtaining power through legitimacy reflecting consent is an important goal for authorities. Authority by consent enables authorities to use power with far greater efficiency than the coercive means that a lack of such legitimacy would leave them with (Trinkner & Tyler 2016; Tyler 2017). The legitimacy that people grant authorities when authorities use procedural justice is bound to a bond they share with authorities: pride for the group, and respect (Tyler & Blader 2003) and belonging within the group (Bradford *et al.* 2014). When people have trust and confidence in authorities, they believe that authorities sincerely want to help them and their communities, and they believe that authorities have the competence to do so (Tyler & Huo 2002; Tyler & Blader 2003). When people have normative alignment with police, they believe that police enforce rules in a way that reflect one’s own values (Jackson *et al.* 2012; Tyler & Jackson 2014). In this sense, the relationship between police and communities does not reflect authority by mere decree, but authority by consent.

#### 1.4.4. *Why combine individual and group-level experiences?*

The procedural justice literature provides a framework for how authorities can develop and sustain legitimacy at an individual level (Lind & Tyler 1988; Tyler 1994, 2006a,b; Hough *et al.* 2010; Bradford 2014). Beliefs about procedural justice are informed through direct or vicarious experiences with authorities, and although these may involve elements of group identity, assessments of procedural justice are assessments about how individual authorities act in interpersonal interactions (Tyler & Huo 2002). This research on the individual level thus provides a critical lesson for authorities on a day-to-day basis, but distrust between authorities and communities may benefit from and even require initiatives at the community level in tandem with individual-level experiences. Addressing the community as a whole signals that the authority as a group intends to build trust with the community, rather than one officer or a subset.

These two community-level elements, reconciliatory gestures and participation, are directed at the community as a whole and can occur alongside procedurally just interactions that people experience as individuals. These are not necessarily distinct: reconciliatory gestures might involve community participation. In the current research, we examine both reconciliatory gestures and participation by measuring separately the belief that authorities are undertaking initiatives to build trust with the community and the belief that they incorporate community views for managing social order. The main empirical question that the current research seeks to answer is whether community-level elements, reconciliatory gestures, and participation add impetus for improving legitimacy.

#### 1.4.5. *Barriers to trust-building in the relationship between authorities and communities*

There are reasons to doubt a positive impact of reconciliatory gestures. At the individual level, a key issue in police actions is the motive that police and community members infer for one another. Similarly, at the community level it is possible that gestures only succeed to the extent that the community views the police as sincere in wanting to help them. Powerful actors could have many reasons to promote a false sense of trust. Community members may anticipate that authorities do not sincerely want to help them, but instead have ulterior motives.

Barriers to conflict resolution and reconciliation are acute in the relationship between authorities and communities. The context is distinct for the extreme asymmetry of power and its potential consequences: accepting vulnerability is central to the definition of trust (Rousseau *et al.* 1998). It is also possible that community members are aware of the potential for positive contact experiences to deter motivation for social change (Saguy *et al.* 2008), and see reconciliatory gestures from police as insincere (Nadler & Liviatin 2006). People may be resistant to trusting a group (in this case, authorities) that could abuse that trust, making it harder to create gestures that community members perceive as sincere. When people perceive an outgroup as insincere in their gestures toward reconciliation, they are less willing to reconcile (Shnabel *et al.* 2015).

If people believe that gestures are not sincerely intended to help the community, it is possible that they will backfire. Everyday expectations of authorities may also shape the interpretation of gestures. If people believe that authorities are not procedurally just at an individual level, for example, the inconsistency between the group level message the gesture sends and what people experience or expect to experience in individual interactions with authorities might undermine the group level message. We test both the positive and negative potential of gestures in the current research, as well as the potential for inconsistency between community-level and individual-level messages to render gestures ineffective.

#### 1.4.6. *The impact of participation and reconciliatory gestures on legitimacy and cooperation*

The two elements of a community-level model combine the promotion of harmony with empowerment. Reconciliatory gestures and participation send the message that authorities want a more positive relationship with community members, and the community can play an empowered role in that relationship. This combines the positive contact effect (Allport 1954; Pettigrew & Tropp 2006) with the empowerment that motivates groups who have felt victimized to begin a process of reconciliation (Nadler & Shnabel 2015).

The belief that the authorities are carrying out their role appropriately in the public interest should correspond to community members' beliefs about legitimacy. The three components of legitimacy reflect the belief that the authorities are acting on behalf of the community. As in past research (Tyler & Jackson 2014), we hypothesize that these components of legitimacy should promote voluntary cooperation to help authorities conduct this work.

### 1.5. Hypotheses and current research

We test a community-level model of authority with a sample of NYC residents. In testing the following hypotheses, we model the community-level elements (reconciliatory gestures and participation) as predictors of legitimacy and cooperation, independent of beliefs about general experiences of the community with procedural justice:

**Hypothesis 1:** *Reconciliatory gestures and participation will each positively predict beliefs about legitimacy.*

**Hypothesis 2:** *Reconciliatory gestures and participation will each positively predict cooperative behavior.*

**Hypothesis 3:** *Beliefs about legitimacy will mediate the relationship between these relational elements (gestures and participation) and cooperative behavior.*

**Hypothesis 4:** *The positive impact of gestures will be limited to those who perceive them as sincerely intended to help the community.*

**Hypothesis 5:** *Among those who do not perceive gestures as sincerely intended to help the community, knowledge of a gesture will be unrelated or negatively related to legitimacy and cooperative behavior.*

We also test the following hypothesis in supplementary analyses:

**Hypothesis 6:** *The impact of relational elements on both legitimacy and cooperative behavior depend upon one another: gestures may become less reliable or even a negative predictor of legitimacy and cooperative behavior when community members view police as not procedurally just and do not grant community members participation.*

## 2. Methods

### 2.1. Samples and procedures

Survey data were collected by Abt SRBI via telephone using random digit dialing of numbers in the five NYC boroughs. Interviews were conducted by landline or cell phone. Cell phone participants were offered \$10 to take a survey. All potential respondents were told the survey would last approximately 25 minutes. Upon consenting to the survey, participants were asked in which of the five boroughs they currently live; if they answered that they did not live in one of the five boroughs, they were thanked and told that they could not participate. The AAPOR3 response rate was 4.2 percent for landlines and 5 percent for cell phones, which is typical of recent telephone surveys (Keeter, Hatley, Kennedy & Lau 2017).

A total of 2,501 respondents participated, including 1,264 women and 1,223 men, ranging in age from 18 to 95 (mean [M] = 47.74, standard deviation [SD] = 17.99). Varying degrees of freedom reflect participants with missing data. We describe the racial/ethnic composition of our sample in Table 1. The mean total family income of respondents (on an eight-point scale ranging from "< \$25,000" to "> \$200,000"), was between \$35,000 and \$75,000 (M 3.79, SD = 2.22). The mean education level of respondents (on a scale ranging from 1, "some grade school" to 7, "graduate professional"), was just over the number reflecting "some college" (M = 5.07, SD = 1.67). On a scale of political ideology (ranging from 1, "extremely liberal" to 5, "extremely conservative"), most identified as liberal or extremely liberal (M = 2.76, SD = 0.97).

**Table 1** Racial/ethnic composition of sample

Group	Number	Percentage of sample
White non-Hispanic	945	38
Black or African American	595	24
White Hispanic	236	9
Black Hispanic	90	4
Latino Hispanic	223	9
Other or multiple racial groups	182	7
Asian	149	6
No answer	81	3

## 2.2. Variables and measures

There were two dependent variables: legitimacy and cooperative behavior with the New York Police Department (NYPD):

*Legitimacy* ( $\alpha = 0.86$ ,  $M = 3.00$ ,  $SD = 0.54$ ). The variable for legitimacy was based on a combined composite of the *Obligation*, *Trust and Confidence*, and *Normative Alignment* scales from prior research (e.g. Tyler & Huo 2002; Tyler 2006; Tyler & Jackson 2014). Using a four-point strongly disagree (1) to strongly agree (4) scale (neither agree nor disagree as 2.5; higher values reflect stronger endorsements of legitimacy), participants were asked to respond to shortened versions of the *Obligation* and *Trust and Confidence* scales, and the *Normative Alignment* scales. Each of these scales formed a composite, which were then averaged to form the composite of legitimacy. A shortened version of the *Obligation* scale ( $\alpha = 0.61$ ,  $M = 3.01$ ,  $SD = 0.60$ ) was used, including the following two items: *Overall, the NYPD officers in your neighborhood are legitimate authorities and people should obey the decisions they make* and *You should do what the NYPD in your neighborhood tell you to do even when you disagree with their decisions*.

*Trust* ( $\alpha = 0.79$ ,  $M = 2.98$ ,  $SD = 0.63$ ), was also assessed using a shortened scale, including: *You trust the NYPD in your neighborhood to make decisions that are good for everyone in the neighborhood*; *You have confidence that the NYPD in your neighborhood can do their job well*; and *The NYPD in your neighborhood are often dishonest* (reverse-scored). Normative alignment ( $\alpha = 0.88$ ,  $M = 2.98$ ,  $SD = 0.59$ ) was assessed using the following five items from past research (Tyler & Jackson 2014): *Your own feelings about right and wrong usually agree with the laws that are enforced by the NYPD in your neighborhood*; *The NYPD in your neighborhood generally have the same sense of right and wrong that you do*; *The NYPD in your neighborhood stand up for values that are important to you*; *The NYPD in your neighborhood usually act in ways consistent with your own ideas about what is right and wrong*; and *You and the NYPD in your neighborhood want the same things for your community*.

Although the obligation indicator had only two items and thus a relatively low alpha, we included it for theoretical reasons and in following past efforts emphasizing the importance of examining the three separate components of legitimacy (e.g. Tyler & Jackson 2014). To test discriminant validity between these three constructs, we conducted two confirmatory analyses to compare to a one-factor model with all items reflecting legitimacy,  $\chi^2(35) = 244.39$ , to a three-factor model distinguishing obligation, trust, and confidence and normative alignment,  $\chi^2(32) = 104.26$ . The three-factor model fit significantly better than the one-factor model,  $\chi^2(3)_{\text{diff}} = 140.12$ ,  $P < 0.001$ , supporting our decision to use three factors rather than one.

*Cooperative behavior* ( $\alpha = 0.77$ ,  $M = 3.56$ ,  $SD = 0.55$ ). Participants were asked to report how likely they would respond in the following ways "If the situation arose...", from not likely at all (1) to very likely (4): *Answer questions from the NYPD about someone in your neighborhood suspected of a crime*; *Report dangerous or suspicious activity*; *Call the NYPD to report a crime in which you were the victim*; and how likely they would be to report it to the NYPD if they witnessed the following crimes in their neighborhood: *a non-violent crime in your neighborhood such as vandalism*, and *a violent crime in your neighborhood such as assault*.

*Knowledge of reconciliatory gestures*. Participants were asked to answer "yes" or "no" to whether they had heard of the NYPD "taking any initiatives to improve their relationship with the community and build trust" in their neighborhood. The responses of participants who answered that they had heard of such an initiative were coded as "1," and the responses of those who said they had not, or did not know, or did not answer were coded as "0." Of 2,501 participants, 850 (34 percent) reported knowledge of a reconciliatory gesture.

*Perceived sincerity of reconciliation gestures* ( $M = 3.29$ ,  $SD = 0.61$ ). Using the same strongly disagree (1) to strongly agree (4) scale as above, among the participants who had reported hearing of the NYPD in their neighborhood taking such initiatives, they were asked to state their agreement that in undertaking these initiatives, *The NYPD sincerely want to help the community in your neighborhood*. Higher values reflect stronger agreement.

*Participation* ( $\alpha = 0.69$ ,  $M = 3.74$ ,  $SD = 1.12$ ). To assess the extent to which participants viewed police in their neighborhood as giving them the chance to participate in the development and implementation of policing policies, participants were asked how frequently the NYPD in their neighborhood do the following on a scale of never (1) to always (5) (based on what they had seen or heard): *Considers your views and the views of people like yourself when deciding what crimes are most important to deal with in your neighborhood* and *Considers your*

*views and the views of people like yourself when deciding how to police this neighborhood.* This measure is similar to past measures of beliefs about the creation of policy (e.g. Tyler *et al.* 2014) but the use of two items reflecting the use of community members' views in both creation and implementation of policy allows a test of the specific component of community participation that is involved in both the creation (deciding what crimes are most important) and implementation (deciding how to police) phases.

*Procedural justice of police in neighborhood* ( $\alpha = 0.77$ ,  $M = 4.19$ ,  $SD = 0.81$ ). Using the same never (1) to always (5) scale as above, participants were asked how often NYPD in their neighborhood do the following (based upon what they had seen or heard): *Use fair procedures when making decisions about what to do*; *Treat people fairly*; and *Treat people with courtesy and respect*. Higher values reflect greater procedural justice.

### 2.3. Discriminating between community-level participation and beliefs about procedural justice

We conceptualized participation as reflecting beliefs that the community has the opportunity to take part in the process of policymaking and implementation, distinct from beliefs about how authorities are procedurally just to individuals given the rules that already exist. However, this has a direct relationship to the concept of voice, which past research has examined as an antecedent to beliefs about procedural justice (e.g. Folger 1977; Tyler *et al.* 1985; Lind *et al.* 1990). We thus tested whether the items reflecting participation were empirically distinct from the items reflecting procedural justice toward individuals in the neighborhood. In confirmatory factor analysis, we compared a one-factor model with the three items reflecting beliefs about procedural justice in the neighborhood and the two items for participation, and a two-factor model separating out the two constructs. As predicted, the two-factor model,  $\chi^2(4) = 57.87$ , had a significantly better fit than the one-factor model,  $\chi^2(5) = 217.97$ ,  $\chi^2(1)_{\text{diff}} = 160.10$ ,  $P < 0.001$ , demonstrating discriminant validity between the two constructs.

*Personal contact with police.* We also asked participants to report the number of times they had personal contact with NYPD in their neighborhood in the past two years ( $M = 1.91$ ,  $SD = 11.24$ ). We transformed this variable to a z-score for supplementary analyses testing whether initial estimates of outcomes were sensitive to this personal contact.

## 3. Results

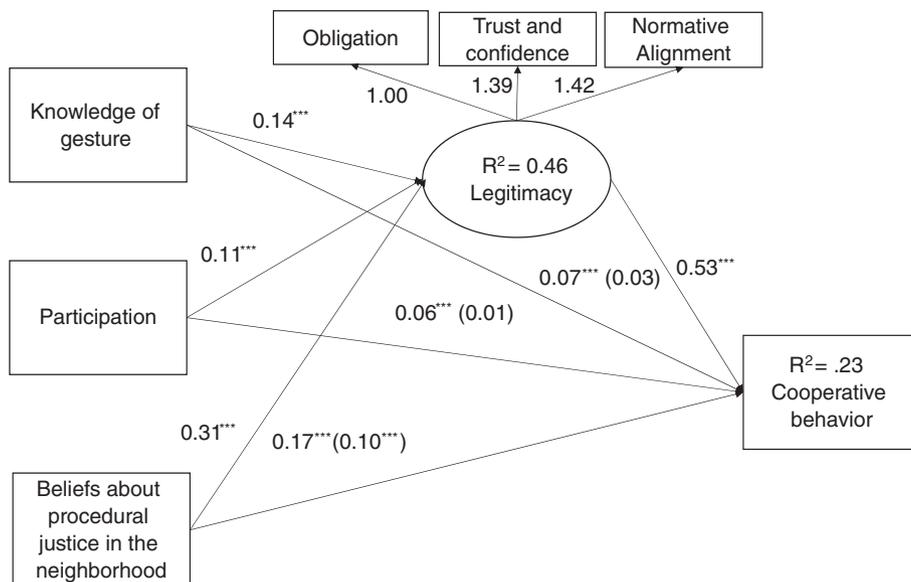
### 3.1. Analytical approach

Before testing our predictions, we first examine group differences. The next set of analyses test our hypotheses using multiple regression analyses of knowledge of gestures, participation, and beliefs about procedural justice in the neighborhood predicting legitimacy and cooperative behavior. We then show the estimates for these models controlling for demographic variables (including race/ethnicity, gender, citizenship status, political ideology, age, income, and education) in full path models.

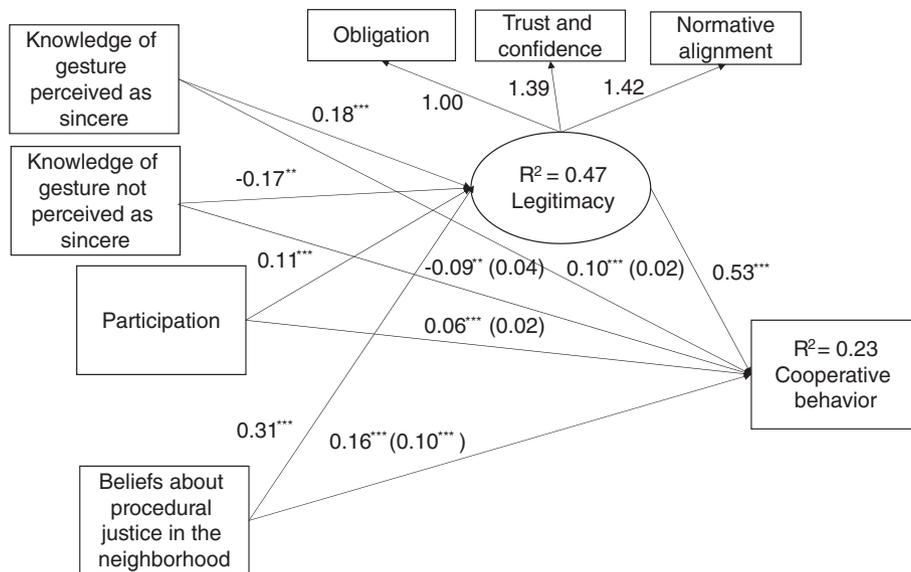
Following multiple regression analyses of direct effects, we present two models examining the impact of relational elements on legitimacy and, through it, cooperative behavior. In Model 1, the main test of our hypotheses, we tested whether mere knowledge of reconciliation initiatives to build trust with the community and participation predict legitimacy and cooperative behavior over and above beliefs about procedural justice in the neighborhood, and demographic controls (Model 1/Fig. 1).

We then tested the impact of perceiving gestures as sincerely intended to help the community. The model replicated Model 1 but replaced the variable representing knowledge of a gesture with two dummy variables: one representing participants who reported knowledge of a gesture that they perceived as sincerely intended to help the community and one representing participants who reported knowledge of a gesture that they did not agree was sincerely intended to help the community. The model (Model 2/Fig. 2) tests the hypothesis that gestures have a positive impact when perceived as sincerely intended to help the community, and a negative impact when not perceived as sincerely intended to help the community.

After presenting the overall models in Figures 1,2 we present supplementary analyses testing ways in which relational elements may interact, and how both beliefs about procedural justice and participation may shape whether people perceive gestures as sincerely intended to help communities.



**Figure 1** Model 1: Direct and indirect effects of community-level elements of a relational model of authority. Parameter estimates adjusted for demographic variables (African American or Black; Hispanic; gender; citizenship; political ideology; age; income; and education) predicting beliefs about procedural justice, legitimacy, and cooperative behavior. Direct and indirect paths to cooperative behavior are represented inside and outside parentheses, respectively. \*\*\**P* < 0.001, \*\**P* < 0.01. Direct and indirect effects are represented inside and outside parentheses, respectively. Parameters are based on a model also controlling for covariance knowledge of gesture, participation, and beliefs about procedural justice in the neighborhood, as well as paths from demographic variables described in the text predicting beliefs about procedural justice, legitimacy, and cooperative behavior, omitted for ease of presentation.



**Figure 2** Model 2: The impact of perceiving sincerity in reconciliatory gestures. Parameter estimates adjusted for demographic variables (African American or Black; Hispanic; gender; citizenship; political ideology; age; income; and education) predicting beliefs about procedural justice, legitimacy, and cooperative behavior. Direct and indirect paths to cooperative behavior are represented inside and outside parentheses, respectively. \*\*\**P* < 0.001, \*\**P* < 0.01. Direct and indirect effects are represented inside and outside parentheses, respectively. Parameters are based on a model also controlling for covariance knowledge of gesture, participation, and beliefs about procedural justice in the neighborhood, as well as paths from demographic variables described in the text predicting beliefs about procedural justice, legitimacy, and cooperative behavior, omitted for ease of presentation.

**Table 2** Mean differences in beliefs and cooperative behavior across ethnic groups<sup>†</sup>

Variable	Asian	African American	Hispanic	White	All
Procedural justice	4.32 (0.67)*	3.92 (0.85)***	4.17 (0.86)	4.39 (0.65)***	4.19 (0.81)
Participation	3.79 (1.00)	3.53 (1.13)***	3.62 (1.18)*	3.98 (1.03)***	3.74 (1.12)
Gestures	36/149	229/595	196/549	311/945	850/2501
Sincerity	3.28 (0.45)	3.14 (0.66)***	3.25 (0.58)	3.43 (0.55)***	3.29 (0.61)
Legitimacy	3.02(0.43)	2.86 (0.58)***	2.97 (0.49)+	3.13 (0.51)***	3.00 (0.54)
Cooperation	3.55 (0.48)	3.46 (0.64)***	3.53 (0.58)+	3.66 (0.44)***	3.56 (0.55)

<sup>†</sup>\*\*\*, \* and + connote *P*-values of < 0.001, < 0.01, and < 0.05.

**Table 3** Results of multiple regression analyses for model 1

Variable	Legitimacy			Cooperative behavior		
	<i>B</i> (SE)	<i>t</i> ( <i>df</i> )	<i>P</i>	<i>B</i> (SE)	<i>t</i> ( <i>df</i> )	<i>P</i>
Beliefs about procedural justice in neighborhood	0.49 (0.03)	19.25	< 0.001	0.30 (0.03)	10.24	< 0.001
Participation	0.20 (0.03)	7.84	< 0.001	0.10 (0.03)	3.59	< 0.001
Gestures	0.25 (0.04)	5.94	< 0.001	0.15 (0.05)	3.08	0.002

SE, standard error.

### 3.2. Ethnic group differences

For each variable, Table 2 shows the mean and SD (in parentheses) for each ethnic group and the overall mean collapsing across ethnic groups. Although the differences are not large, they are notable. Overall, on the variable of procedural justice, Whites were more positive than any other group, with the exception of Asian Americans, while Blacks and African Americans were most negative. These differences reflect long-standing ethnic group differences in beliefs about procedural justice, legitimacy, and policing in the United States (US; see Tyler & Huo 2002; Tyler 2005; Morin & Stepler 2016; Fingerhut 2017). Drawing on this research and polling data, the models we present in Figures 1,2 control for potentially important demographic characteristics described in the section “Testing hypothesis III: Model 1, elaborating a community-level model of authority.”

### 3.3. Multiple regression analyses of direct effects

We conducted regression analyses without controlling for demographic variables before testing our hypotheses in a full path model. Results of regression analyses are reported using composite variables with all continuous variables standardized as *z*-scores, except for the categorically-coded knowledge of a reconciliatory gesture.

Each model specified beliefs about procedural justice in the neighborhood, participation, and knowledge of a gesture as independent predictors of the outcome. The first column to the right of predictor labels, under the header legitimacy, describes the results of these variables predicting legitimacy. The next column describes the results of these variables predicting cooperative behavior.

### 3.4. Testing hypothesis 1

Table 3 shows that knowledge of a gesture, participation, and beliefs about procedural justice in the neighborhood independently and positively predict legitimacy, supporting the hypothesis. In a supplementary analysis, we also controlled for the number of times participants reported having come into contact with the NYPD in their neighborhood in the past two years (transformed to a *z*-score). This variable neither predicted outcome nor changed the results substantially. For this reason, we omit it from further analyses.

### 3.5. Testing hypothesis 2

The next set of columns shows the results of an analysis with these elements predicting cooperative behavior, not controlling for legitimacy. The estimates of gestures, participation, and beliefs about procedural justice are all significant and positive. This supports the hypothesis that knowledge of gestures, participation, and beliefs about procedural justice independently promote cooperative behavior.

### 3.6. Testing hypothesis 3: Model 1, elaborating a community-level model of authority

We tested the two versions of the community-level model using structural equation modeling with latent variables in the R Package Lavaan (Rosseel 2012). We based estimation on full maximum likelihood with missing values (e.g. using pairwise deletion). The models treated all variables as observed except for legitimacy, for which the models used a latent variable predicting the three indicators of obligation, trust, and confidence and normative alignment. Each continuous observed variable (e.g. every variable except for the dichotomous variables representing race, ethnicity, gender, citizenship, and knowledge of a gesture) was standardized as a z-score.

The focus of each model was on the unique value of community-level (knowledge of a gesture and community participation) and individual-level (beliefs about procedural justice of authorities toward individuals in the neighborhood) relational elements for predicting legitimacy and cooperative behavior. The models also controlled for the potential influence of demographic characteristics on beliefs about procedural justice, legitimacy, and cooperative behavior: identifying as Black or African American, identifying as Hispanic, citizenship (US citizen or not), gender, political ideology, income, education, and age. The models specified demographic characteristics as predictors of beliefs about procedural justice, legitimacy, and cooperative behavior because past polling, research, and theory suggest important differences in beliefs about policing between racial, ethnic (Tyler & Huo 2002; Tyler 2005), and political groups (Fingerhut 2017), and because other individual characteristics, such as age, gender, and class, may all shape experience.

Testing the main hypotheses, the model also specified paths from each relational element to legitimacy and cooperation, and from legitimacy to cooperation. The purpose of these paths was to test the direct effects of relational elements on cooperation and indirect effects through legitimacy. The model specified a correlated error between all demographic variables and, separately, between the relational elements: knowledge of a gesture (or in the case of Model 2, knowledge of a gesture perceived as sincere or insincere), participation, and beliefs about procedural justice.

Figure 1 shows the paths from each relational element to legitimacy and cooperation. Direct paths from each element to cooperation are shown in parentheses, with indirect paths represented outside parentheses. The estimates are controlling for the demographic characteristics predicting beliefs about procedural justice, legitimacy, and cooperative behavior. Not shown in the figure, African Americans and Hispanics both express significantly less positive beliefs about procedural justice and the legitimacy of police in their neighborhood; there is also a significant, negative indirect effect of African American ( $b = -0.06$ , standard error [SE] = 0.01,  $z = -6.00$ ,  $P < 0.001$ ) and Hispanic ( $b = -0.02$ , SE = 0.01,  $z = -2.07$ ,  $P = 0.039$ ) identity on cooperation via procedural justice and legitimacy. As Figure 1 shows, knowledge of a community-level reconciliatory gesture, judgements about the general procedural justice of police actions in the neighborhood, and community-level participation each independently predicted more legitimacy. Each of the relational elements likewise predicted more cooperative behavior indirectly through legitimacy. Beyond the indirect relationship through legitimacy, procedural justice of police in the neighborhood also had a significant direct effect predicting more cooperative behavior. Neither knowledge of a gesture nor participation had a significant direct effect on cooperation. The indirect effects of knowledge of a reconciliatory gesture, participation, and procedural justice support the hypothesis that the community-level elements of a relational model of authority have a distinct and positive influence on cooperative behavior through legitimacy. The model fit the data well:  $\chi^2(48) = 514.67$ , comparative fit index (CFI) = 0.943, Tucker–Lewis index (TLI) = 0.875, root mean square error of approximation (RMSEA) = 0.06, [lower limit confidence interval (LLCI) 90 percent: 0.058, upper limit confidence interval (ULCI) 90 percent: 0.067], standardized root mean residual (SRMR) = 0.045 (see Kenny 2015).

### 3.7. Testing hypotheses 4–5: The impact of perceived sincerity

Most participants who reported knowledge of a gesture agreed or strongly agreed that it was sincerely intended to help the community (754 out of 850 who knew of a gesture). Eighty-one participants reported that they neither agreed nor disagreed, disagreed, or strongly disagreed that the gesture was sincerely intended to help the community; the remaining 15 participants who knew of a gesture responded that they did not know or did not answer the question. This variability permitted a preliminary test of our hypothesis that gestures have a positive impact when perceived as sincere but a negative impact when perceived as insincere by dividing the entire sample into three groups: one group that had heard of a gesture and perceived it as sincerely intended to help the community

(including those who agreed or strongly agreed, 754 participants); one group that heard of a gesture but either disagreed or strongly disagreed that it was sincerely intended to help the community (81 participants); and one group that did not report knowledge of a gesture (1,651 participants). We coded two dummy variables to test these hypotheses: a variable coded as “1” for those in the group who had heard of a gesture and agreed or strongly agreed it was sincerely intended to help the community and “0” for those in one of the two other groups; and a variable coded as “1” for those in the group who had heard of a gesture and neither agreed nor strongly agreed that it was sincerely intended to help the community. These dummy-coded variables enabled us to contrast the estimates between participants who had heard of a gesture perceived as sincere or not relative to those who had not heard of a gesture, testing the hypothesis that gestures perceived as sincere would have a positive impact and gestures perceived as insincere would have a negative impact.

Model 2 differed from Model 1 only in that two dummy variables representing the perceived sincerity of gestures were used instead of the one dummy variable representing whether participants reported knowledge of a gesture. As Figure 2 shows, the estimate of each element on legitimacy was significant, and all were positive except for the negative estimate of gestures not perceived as sincere. Beliefs about procedural justice and legitimacy both significantly and positively predicted cooperative behavior. The path model showed significant indirect effects of gestures perceived as sincere and insincere predicting cooperation through legitimacy. The direction of indirect effects of gestures perceived as sincere and insincere were positive and negative, respectively. The results support the hypothesis that gestures indirectly increase cooperative behavior through legitimacy when perceived as sincerely intended to help the community and indirectly reduce cooperative behavior through legitimacy when not perceived as sincerely intended to help the community. The model also fit the data well,  $\chi^2(58) = 525.57, p < 0.001$ , CFI = 0.944, TLI = 0.884, RMSEA = 0.06, [LLCI 90 percent: 0.052, ULCI 90 percent: 0.061], SRMR = 0.043.

### 3.8. Hypotheses 4–5: Does the impact of gestures depend upon other relational elements?

We considered the possibility that people’s beliefs about procedural justice and participation may both shape how they perceive reconciliatory gestures. If people do not believe that police are procedurally just, gestures may be perceived as insincere and thus will not be effective. Alternatively, gestures may be perceived as insincere if they are not accompanied by efforts to invite community participation.

To test this, we model two and three-way interactions between gestures, participation, and procedural justice in predicting legitimacy and cooperation. Table 4 shows the estimates testing the three-way interaction on beliefs about legitimacy, cooperative behavior not controlling for legitimacy, and cooperative behavior controlling for legitimacy. As Table 4 shows, the three-way interaction is significant for both legitimacy and cooperative behavior. Notably, the main, positive effect of gestures is significant over and above the three-way interaction for all outcomes.

We conducted simple slopes analyses to understand the nature of the interaction using the procedures described by Aiken and West (1991, pp. 18–19). Because our primary interest was the influence of gestures and participation, we began decomposing analyses by treating both as independent variables, plotting estimates of both predictors at weak and strong (one SD below and above the mean) levels of procedural justice. After examining the simple slopes of gestures and participation at weak and strong levels of procedural justice, we proceeded to plot the estimate of gesture at weak and strong levels of participation.

**Table 4** Supplementary analyses testing interactions between relational elements

Variable	Legitimacy			Cooperative behavior		
	B (SE)	t(df)	P	B (SE)	t(df)	P
Beliefs about procedural justice in neighborhood	0.52 (0.03)	15.60	< 0.001	0.29 (0.04)	7.73	< 0.001
Participation	0.20 (0.03)	6.45	< 0.001	0.16 (0.04)	4.42	< 0.001
Gestures	0.29 (0.05)	6.21	< 0.001	0.21 (0.05)	3.85	< 0.001
Procedural justice × participation	0.07 (0.02)	3.43	0.001	0.06 (0.02)	2.53	0.012
Procedural justice × gestures	0.02 (0.06)	0.33	0.744	0.11 (0.07)	1.68	0.093
Participation × gestures	0.07 (0.06)	1.17	0.243	−0.11 (0.07)	−1.61	0.107
Three-way interaction	−0.16 (0.05)	−3.15	0.002	−0.16 (0.06)	−2.80	0.005

SE, standard error.

Plotting estimates for weak levels of procedural justice, the estimate of gestures was still significant and positive ( $B = 0.27$ ,  $SE = 0.08$ ,  $t(1581) = 3.34$ ,  $P = 0.001$ ); the estimate of participation was positive and significant ( $B = 0.13$ ,  $SE = 0.03$ ,  $t(1581) = 3.72$ ,  $P < 0.001$ ); and the interaction between gestures and participation became significant ( $B = 0.22$ ,  $SE = 0.08$ ,  $t(1581) = -2.74$ ,  $P = 0.006$ ). We next plotted the impact of gestures at low levels of procedural justice and participation. At both low levels of procedural justice and participation, the impact of gestures becomes non-significant ( $B = 0.05$ ,  $SE = 0.09$ ,  $t(1581) = 0.57$ ,  $P = 0.567$ ). In contrast, whether at high levels of procedural justice and mean levels of participation ( $B = 0.31$ ,  $SE = 0.07$ ,  $t(1581) = 4.52$ ,  $P < 0.001$ ), or at high levels of both procedural justice and participation ( $B = 0.22$ ,  $SE = 0.07$ ,  $t(1581) = 3.04$ ,  $P = 0.002$ ), the impact of gestures is significant and positive.

We decomposed the interaction predicting cooperative behavior in the same manner. At weak levels of procedural justice and mean levels of participation, gestures are not a significant predictor of cooperative behavior ( $B = 0.10$ ,  $SE = 0.09$ ,  $t(1674) = 1.05$ ,  $P = 0.293$ ). At weak levels of procedural justice and low levels of participation, the non-significant estimate drops further from significance.

#### 4. Discussion

This research demonstrates evidence that the initiatives authorities direct at the community as a whole can build legitimacy and public cooperation. Both participation and reconciliatory gestures distinctly predict beliefs about the legitimacy of the police (as authorities) in their neighborhood, over and above the impact of beliefs about how procedurally just police are in individual interactions. By predicting legitimacy, reconciliatory gestures and participation predict cooperation with authorities.

This study fulfills a need in the literature on conflict resolution for a model of reconciliation between authorities and communities. It does so by addressing the gap in the literature on legitimacy for a relational model of authority at a community level, and informs the literature on conflict resolution with the extensive literature on participation and legitimacy (Carpini *et al.* 2004; Thompson 2008). Our research, in line with other research conceptualizing participation as a legitimating process (Thompson 2008) and as a form of empowerment (Fung 2009) and community policing research (Gill *et al.* 2014), demonstrates evidence that beliefs about community participation in policing are associated with popular legitimacy and cooperation with police.

The goal of the community-level elements, reconciliatory gestures, and participation, is to create a relationship such that communities will choose to grant authorities popular legitimacy, leading them to cooperate with authorities. If community members see authorities as part their own group, then cooperating is part of helping the group (Tyler & Blader 2003). The findings also have relevance for past research on community policing initiatives that have not had significant effects on crime. Research reviewing these effects has speculated that such initiatives may impact crime through an impact on compliance (Gill *et al.* 2014); as this and past research suggests, legitimacy may have opposite effects on the crime rate cancelling each other out: more people follow the law (decreasing the actual crime rate), but more people also report crime (increasing the reported crime rate). Integrating the study of these initiatives with the literature on legitimacy and cooperation (Tyler & Blader 2003), the current research suggests that initiatives may increase public safety by increasing cooperation in reporting crime, although we would not expect to see this reflected in crime rates.

Model 2 demonstrated the potential for gestures to have a negative impact. Those community members who knew of a gesture and did not agree that the police sincerely intended for it to help the community viewed police as less legitimate, relative to community members who did not know of a gesture at all. The potential negative impact of reconciliatory gestures highlights that gestures are part of a larger process that involves both the content of the gesture and people's surrounding experiences.

The process of reconciliation may involve both interactive and causal relationships between community-level elements and beliefs about procedural justice toward individuals. Indeed, the meta-analysis of community policing programs examined perceptions of beliefs about procedural justice as an outcome, and coded community policing programs as those that involved some form of participation (Gill *et al.* 2014). The current research takes a broader approach and distinguishes the two elements in recognition of the possibility that police take initiatives to build trust but do not invite participation, and that people perceive community participation opportunities on a continual, non-discrete basis. We do not have data to speak precisely to where gestures are occurring across

NYC; however, the existence of the Community Affairs Bureau, its website, and announcements of programs such as the NCO program illustrate both the existence of programs that we would conceptualize as gestures, and the variability in content, duration, and process. Modeling community-level elements from this broad approach using subjective perceptions allows us to capture variability across initiatives that take multiple forms, providing a basis for future research to discern which forms are most effective at promoting legitimacy.

The test of reconciliation in this research combines multiple aspects of people's beliefs about authorities and their relationship to cooperation. It combines elements that past research demonstrates robust support for (Gill *et al.* 2014; Fung 2009), modeling them in a unique way with reconciliatory gestures and beliefs about the sincerity of the gestures. This was purposeful to test evidence for a model that can serve as a generative platform for future research with more direct tests of specific reconciliation programs. Such direct tests will be important for identifying how specific actions or policies may shape perceptions (see Nagin & Telep 2017). The current data offer strong cross-sectional evidence for the model; the causal aspects are based on theory.

We expect gestures and participation to enhance beliefs about procedural justice over time because beliefs about procedural justice likely form as an accumulation of experiences. In addition, we expect that gestures must be accompanied by experiences of procedural justice on an individual level in order to be successful, and that gestures have to be accompanied by actions that signal power to the community, such as opportunities for participation. Supplementary analyses presented in the results and additional bivariate analyses support this hypothesis. Although these analyses support the hypothesis that relational elements feed into one another and interact, we present our main models with these elements in parallel to test for stronger evidence of their distinct relationships to legitimacy and cooperative behavior.

Vicarious experience also likely plays a role. Procedural justice beliefs are not just about one's direct experiences, but also about their vicarious experiences through close others (Eller *et al.* 2007a,b). Gestures could also play a similar role as indirect forms of contact (Wright *et al.* 1997); people may learn about gestures through their friends or family, and it may both influence their own perceptions, or they may form their perceptions of the gesture as they weigh direct or indirect experiences of procedural justice.

#### **4.1. Reconciliation as a process**

We hypothesize that the long-term success of reconciliatory gestures requires substantive improvements in the implementation of policy and how people experience (directly or indirectly) authorities in individual interactions. Whereas it is possible that gestures increase positive expectations for community members anticipating interactions with authorities, feeling that the community does not have the opportunity to impact the creation or implementation of policies through participation, or experiencing procedural *injustice* in interpersonal interactions after a reconciliatory gesture, may undermine the positive impact of the gesture. Model 2 demonstrating the pivotal role of sincerity and supplementary analyses supports this hypothesis.

The importance of emphasizing the role of process becomes even more clear when considering racial disparities in the history of US governance. Such history begins before the founding of the US with slavery (Kendi 2017) and the consequences persist in the inequalities of the US criminal justice system (Alexander 2011; Munger & Seron 2017). It is clear from this history and ongoing inequality why African Americans are particularly likely to perceive initiatives that authorities direct toward communities as insincere in their intention to help the community. Our model of reconciliation is one in which authorities can only build trust in the long term with substantive improvements in procedural justice. Gestures communicate recognition of the need for building trust, and both gestures and participation begin a transformation of the relationship between authorities and communities. Consistent with past research (e.g. Tyler & Huo 2002), the current data demonstrate that beliefs about procedural justice and legitimacy mediate racial and ethnic differences in cooperation. The results of our study, in particular Model 2 examining sincerity and the interactive analyses, highlight the point that application of this model would require improvements in procedural justice in interpersonal interactions.

#### **4.2. Advantages and disadvantages of a cross-sectional approach for developing theory**

This research uses a cross-sectional approach that assesses people's knowledge of community-level initiatives by police (reconciliatory gestures) and community participation. The advantage of this approach is that it

frames an intergroup dynamic, and by doing so it allows us to examine the relationship between perceptions of reconciliatory gestures and participation and the outcomes of legitimacy and cooperation separate from the relationship between beliefs about procedural justice and these outcomes, as well as various demographic predictors. By framing the intergroup dynamic, this approach allows for an integration of theory on authority–community relations with the psychological literature on intergroup reconciliation.

This approach is advantageous for promoting the study of authority–community relations because it provides a basis for insights on intergroup relations to inform such study. The psychological literature on intergroup reconciliation (Nadler & Shnabel 2015) and relations between groups of asymmetric power (Dovidio *et al.* 2009) has demonstrated the primacy of confronting issues of difference between groups (Saguy *et al.* 2008) and empowering the less powerful group (Shnabel *et al.* 2009). Participation in how authorities govern may be a form of empowerment that future research can examine through experiments, building on insights from the psychological literature on intergroup relations.

Although we choose a robust set of covariates to account for variability in procedural justice and outcomes, the cross-sectional nature of our data limits the strength of causal conclusions. It is possible that viewing police as legitimate makes people aware of initiatives to build trust and more likely to believe that authorities take their views into account. Our covariates reduce the possibility of confounding variables, especially that of a generally “pro-police” or positive orientation; however, they do not provide the causal evidence that an experiment does. Future research must incorporate experiments to demonstrate further causal evidence of the role of community-level relational elements and develop the model of reconciliation as a process.

One important aspect of the cross-sectional method is that we do not know precisely how participants declared knowledge of a reconciliatory gesture. It is possible, for example, that some people had knowledge of an initiative but said “no” because they did not see it as effective or sincere. In this sense, reporting knowledge of a gesture may also be a consequence of prior beliefs. We expect that beliefs about sincerity are in part a consequence of beliefs about procedural justice, an expectation that the supplementary analyses suggest. Future research must test the experimental effects of gestures and participation. The cross-sectional research leaves certain questions open to theorizing and thus serves as a generative platform for future research.

In addition to the limitations of causal claims, all research must address the question of whether the sample represents the population of interest. Our sample is not far off the racial demographics of NYC according to 2017 American Community Survey estimates (U.S. Census Bureau, 2017). However, the rate of people who receive a call and decide to take surveys is low in modern times (Pew 2017), and our research must be interpreted in light of the consideration of how those people might differ from the average population. Research demonstrates strong evidence that telephone participants are not significantly different in ways that would bias polls. Based on this research, people who respond may have higher civic engagement, and this could bias descriptive data (Pew 2017). The ways in which they are different, of course, are most important for the goal of describing populations, with claims such as “10 percent of Americans...;” that is not our goal. We would not expect any biases to impact the relationships between variables that we observed. Nonetheless, it is important that the findings reported here and in all research involving human consent consider the ways in which those who decide to participate differ from the population at large.

## 5. Conclusion

The goal of this research was to develop a community-level framework of police authority and integrate it with the individual-level framework of procedural justice analysis. This was achieved by identifying methods that authorities can use to address the relational needs of the community and influence legitimacy and cooperation. The research has tested a model that incorporates people’s beliefs about procedural justice in interpersonal interactions and community-level efforts to build legitimacy. In demonstrating their distinct relationship to legitimacy and cooperative behavior, this research contributes to the discussion of effective strategies that authorities can use to build legitimacy and cooperation with communities.

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