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Tom Tyler
Yale Law School

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CAN THE POLICE ENHANCE THEIR POPULAR LEGITIMACY THROUGH THEIR CONDUCT?: USING EMPIRICAL RESEARCH TO INFORM LAW†

Tom R. Tyler*

INTRODUCTION

My goal is to demonstrate the value of evidence-informed law through an examination of its influence upon issues that have been central to recent discussions about the police. The first advantage of evidence-informed law is that it draws upon social science theories to suggest possible alternatives to traditional legal frameworks. The second advantage is that through social science research the value of such alternative frameworks can be validated or falsified. Hence, when legal frameworks are implemented their consequences are known.

In the case of the police empirical research has shown that the traditional deterrence model is not the only framework through which the police can operate. They can also exercise authority based upon their legitimacy, if and when they are legitimate. Further, research suggests that there are ways for the police to create and maintain their legitimacy while enforcing the law. The way for them to do so is to police in ways that people experience as procedurally just. This second factual statement is the focus of this paper. At this time, the statement that the police can heighten public trust during personal encounters if they act in ways people think are fair is contested. The results of a panel study of police-citizen interactions with young men in New York City are used to test whether experiences with the police change the perceived legitimacy of the police. In particular, does fair treatment increase trust? This question is central to arguing that the police can build trust if they change how they police.

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* Tom Tyler is the Macklin Fleming Professor of Law at Yale Law School. He is also a Professor in the Psychology Department. The research discussed was funded by grants for the National Institute of Justice (2010-IJ-CX-0025); the Robert Wood Johnson Foundation (69669); and to the Columbia Population Research Center from the National Institute of Child Health and Human Development.

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The results of this study strongly support the argument that fair treatment by the police during police interactions with members of their communities can raise the popular legitimacy of the police. In so doing, they support the general argument that it is possible for the police to use a legitimacy-based framework for policing since there are actions police officers can take that will create and maintain their popular legitimacy.

OVERVIEW OF RESEARCH ON POLICING

Empirical research on the police and the courts identifies a number of benefits for legal authorities that flow from building and maintaining high levels of popular legitimacy. When it exists, popular legitimacy—often referred to as trust and confidence—encourages deference to police/judicial authority, enhances compliance with the law in everyday life, and facilitates cooperation with efforts to maintain social order by being a witness or a juror.1 Hence, the police and courts should consider any possible impact on their legitimacy when developing and implementing their policies and practices.

Empirical research is important because it provides the basis for a clear, evidence-informed model that both documents the benefits of legitimacy and indicates how the police and other legal authorities can create and maintain their popular legitimacy. Regarding the second point, research findings from social psychology and management point toward a clear path for building legitimacy by showing that the antecedents of legitimacy are primarily linked to judgments about how fairly the police and the courts exercise their authority, i.e., to “procedural justice.” These results provide clear guidance concerning actions the police and courts can take to maintain their public support. They should design their policies and practices in accordance with public conceptions of procedural justice.

These research findings are especially important today because there is a national discussion about the lack of legitimacy currently enjoyed by the police.2 This lack of trust is shown in a 2016 national survey conducted by the Cato Institute, which found that at the time of the survey, 68% of White Americans, 40% of African Americans, and 59% of Hispanics had a favorable view of the police.3 Overall, around 40% of Americans expressed distrust in this survey. This same study found that 49% of Americans say that most police officers think they are above the law; 46% that the police are generally not held accountable for miscon-

duct; and 65% that police officers regularly racially profile Americans. This set of findings is typical of the results of national surveys.

Is the lack of procedural justice from the police a potential factor shaping these intermediate levels of legitimacy? A 2012 national survey can be used to benchmark public views about the police. That study asked a random sample of Americans to evaluate the perceived fairness of the behavior of the police in their community along the four central dimensions of procedural justice (justice of decision-making; voice and neutrality; and justice of interpersonal treatment: respect and trustworthiness). The results were: voice (58% fair); neutrality (impartial, 62%; follow the law, 63%; explain actions in understandable ways, 57%); respect (for people, 65%; for rights, 68%); and trustworthiness (care about needs and concerns of people they are dealing with, 64%; care about the people in the community, 64%). These findings suggest that, as is true of legitimacy, the majority of Americans view the police as exercising their authority fairly, but a substantial minority do not have that impression.

The racial gap in views of police legitimacy is also found with procedural justice. This can be highlighted by focusing only on African American respondents. The results for this subgroup were: voice (fair, 39%); neutrality (impartial, 35%; follow the law, 40%; explain actions in understandable ways, 39%); respect (for people, 42%; for rights, 41%) and trustworthy (care about needs and concerns of people they are dealing with, 37%; care about people in the community, 40%). As these percentages make clear, African Americans are much more likely to view the police as unfair on all four dimensions of procedural justice.

Consistent with the findings of past research, this national survey found that viewing the police as procedurally just was linked to expressing trust in the police (just decision making, \( r = 0.50 \); just treatment, \( r = 0.64 \)); labelling the police as legitimate authorities who ought to be obeyed (just decision making, \( r = 0.49 \); just treatment, \( r = 0.52 \)); and indicating support for the police (just decision making, \( r = 0.61 \); just treatment \( r = 0.67 \)).

Based upon empirical studies of procedural justice, there is a clear suggestion that the lack of procedural justice is a factor associated with low popular legitimacy. These studies are primarily conducted within social psychology and management. However, despite the promise of the procedural justice approach in social psychology and management, as well as in a set of studies of the courts, research in the field of policing has raised questions about whether these findings will work within the arena of policing, and, more particularly, about whether fairer procedures from police officers will raise overall police legitimacy. Answering this empirical question is central to strategic decisions about whether to

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4. Tyler & Jackson, Popular Legitimacy, supra note 1.

develop efforts to retrain police officers or to develop scripts for framing police actions when dealing with people in the community.

Why does this matter? In the face of public anger one approach for the police to take is to withdraw from contact with the public. For example, the number of street stops has dramatically dropped in New York City. This model might best be described as the absence of injustice approach. The public experiences contacts as unfair, so limit the number of contacts. We know from prior studies that street stops are, on average, found to undermine trust. So limiting their number is one strategy for preventing declines in public trust.

There is already evidence that the public alters their behavior to avoid contact with the police. For example, Charles Epp and his colleagues show that people indicate that they avoid driving in some areas of their city to avoid being stopped, and that they dress in ways they think are less likely to draw attention from the police. Hence, police changes in how they interact with the public would be consistent with the dynamic interplay between public views about the police and police views about the public.

Another possible approach is changing the type of police-citizen contact which occurs. A recent study of the police, for example, argues that traffic stops do not undermine trust, while investigatory street stops do—so a primary focus on traffic stops could be a strategy for dealing with mistrust. Similarly, in an earlier era, the police developed the 911 system so that many of their contacts would be built around service delivery.

Maximizing the absence of injustice is an incomplete goal for two reasons. First, it denies people the potential security and reassurance benefits that come from contact with the police in situations in which they need to redress injustice or seek help in response to victimization. As an example, the unwillingness of undocumented residents to contact the police has led to those undocumented residents being targeted for criminal victimization. Second, it is not a strategy for building trust through the presence of justice. It does not show that the police can take actions that build trust. Hence, it does not address the broader issue of public distrust in all of government and in other social institutions.


8. It is important to note that the criteria that matter to people do not differ in police initiated and citizen initiated interactions. TOM R. TYLER & YUEN HUO, TRUST IN THE LAW: ENCOURAGING PUBLIC’S COOPERATION WITH THE POLICE AND COURTS (2002). In both types of contact procedural justice is the key issue. In the national survey analyzed by Tyler & Jackson in 2014, 25% of respondents reported calling the police for help in the two years prior to the survey. Tyler & Jackson, Popular Legitimacy, supra note 1. Of those 80% reported fair decision making and 82% fair treatment. 34% reported being stopped by the police and 76% of those reported fair decision making; 59% fair treatment. Id. Hence, if the police responded to calls more and stopped people less people less would experience more fairness from the police.
The key to enacting a proactive strategy in which contact is desirable is having a model for trust building through police behavior when interacting with members of the public. Fortunately, that model exists, and it identifies procedural justice as a key antecedent of trust. Several studies suggest that if the police act in ways that are interpreted as being fair they can interact with members of the public, and in those interactions, the police can build legitimacy.

In this paper, data from a panel study of encounters between young people and the police are used to test this trust-building argument. The goal of the study is to examine whether research findings support prior suggestions about the importance of procedural justice in generalizations from personal experiences with particular police officers to general views about the legitimacy of the police.

The existing findings point toward current police behavior when interacting with the public as a key factor undermining trust, which suggests that an altered approach to how the police engage in policing should underlie any effort to use personal contact to promote trust in the police. These conclusions are consistent with those drawn from an analysis of the first wave of the panel study used in this analysis. The analyses discussed here are based upon a more methodologically sound panel dataset that involves two interviews with each respondent, and can therefore more effectively take account of methodological concerns inherent in cross-sectional data analysis.

EXISTING POLICING POLICIES

In the last several years, the police, in particular, and the criminal justice system, more generally, have been the focus of a great deal of attention both in American society and in the legal community. At Yale Law School, there has been an increase in expressions of interest in criminal law among law students and a growth in the number of junior job candidates writing about criminal law. Outside the legal academy, authorities ranging from Vanita Gupta from the Department of Justice, to Chuck Ramsey, the former police chief of Philadelphia and co-chair of President Obama’s Task Force on 21st Century Policing, have spoken about the state of policing in America today. In those presentations, these national criminal justice leaders have emphasized that this is a pivotal moment for American policing. This concern is widespread among police leaders, and there has been a higher level of attention directed at the police—raising more questions about their role in our democratic society today than there has been at any time since the 1960s, when the 1967 report, entitled The Challenge of Crime in a Free Society was written. Scrutiny has not only been directed toward the police. Public policies

9. Tyler, Goff & MacCoun, supra note 5.
in the entire criminal justice system—police, courts, and prisons—are being reexamined.

In this discussion, I will focus on the police. While all aspects of the criminal justice system are important, the police are the agency with the most widespread daily contact with the public. Consequently, they are also the natural focus of public distrust in law and, conversely, a key target in efforts to improve public trust in the law. I will use the police as an example and draw upon a recent study on the impact of policing. The arguments I make apply equally to the courts, both criminal and civil, and to pretrial detention, prison, and probation and parole.

Recent political events, in particular the election of Donald Trump as President, have raised questions about whether and how much a re-examination of policing will actually occur. We may be headed back into another era of “law and order” rhetoric and toward the widespread use of policies such as stop, question, and frisk. However, I will argue that this period of re-examination may also be an opportunity for change. One important aspect of policing is that it is local by design, and the United States does not have a national police force. Hence, while Federal leadership has been important in policing during the last decade, it is not necessarily the key to continued changes. Local city, county, and state authorities may continue to change if the value of change can be presented in compelling ways.

One precursor is to develop a broader framework than has been traditionally used in law for thinking about legal institutions. The past approach has been to think about legal authorities, such as the police, as acting within the framework of the constraints imposed upon them by the formal law. I will argue that in recent decades this approach has proven itself inadequate to manage the problems that have emerged in American policing. Many actions that undermine trust are lawful.

Second, there is a possibility of using this moment of self-examination to develop a different model for social-order maintenance, drawing upon the findings of empirical research. Evidence-based legal policies and practices are an alternative to traditional normative models and are better at explaining the reasons for the current issues of distrust in the police and courts. Further, social science provides a framework for moving from a harm reduction model that is focused upon social-order maintenance, to a model of police service in the aid of identification with the community; engagement in the community; and subsequent economic, social, and political development.

Trust matters because a legal system based upon consent, rather than coercion, is a more desirable system, both in operational terms and

11. Tyler & Huo, supra note 8.
12. This study was jointly conducted with Jeff Fagan and Amanda Geller. Results of the first wave of the study are reported in Tyler, Fagan & Geller, supra note 6. The analysis reported here is based upon the panel data from this same project.
13. Tyler, Goff & MacCoun, supra note 5.
because it is especially consistent with the normative values underlying democratic governance. The results of empirical studies provide a blueprint for achieving trust because they tell us what it is that shapes public reactions to the policies and practices of legal authorities, and thereby provide a path forward for building trust in the police, the courts, and the law.

The case for empirical approaches flows from believing that public views about the legitimacy of law and legal authority matter. This argument is supported by the research finding that a number of public behaviors related to the ability of legal authorities to effectively manage social order are linked to public trust. These behaviors include compliance with legal authorities in particular situations; general compliance with the law; cooperation with authorities in managing social disorder; and the willingness to use the legal system to resolve conflicts. Public distrust makes it more difficult for the police to do their jobs because it impacts these behaviors.

**WHAT SHAPES POPULAR LEGITIMACY?**

If we believe that popular legitimacy matters, it is important to recognize that the two dominant models of trust that have shaped discussions about policing in recent years have not received strong empirical support. First, is that lawfulness drives trust. The police should act lawfully for constitutional reasons, but studies suggest that the actual lawfulness of police conduct is not the central antecedent of public reactions to experienced or observed instances of police interaction with members of the public.14

Second, is the issue of crime control. The police have generally operated on the assumption that a key to their popular legitimacy is their ability to control crime. And, in recent decades, the police have shifted from a focus on solving crimes after they are committed to a proactive model of trying to prevent crime. Crime has declined in most American cities during this era of proactive policing. Whether proactive policing has produced that crime decline is a matter of dispute, but the relevant point to this discussion is that crime declines have not increased trust. At the same time that crime has declined, the popular legitimacy of the police has not risen.

If acting lawfully and controlling crime does not build public trust, what does? Research findings suggest that the primary antecedent of public judgments about police legitimacy is an evaluation of the procedural justice of police conduct. This is true both when people have personal interactions with police officers and when people are making evaluations of the overall actions of police departments. At this point, the procedural justice effect is both widely recognized and supported by vol-

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umes of research. The question is, what are its implications for future models of policing?

One implication is that many of the problems we are dealing with today are about the style through which proactive policing has been enacted in American communities. The problem in trying to address this issue is that our Constitution is not about style of law. People are not constitutionally entitled to procedurally just treatment. The law focuses on the conditions that exist when a stop is initiated. The police are required to have reasonable grounds for stopping, frisking, questioning and/or arresting them. But what if the “reasonableness” of those antecedent grounds is not central to how people react to police actions? It appears that there is little in the constitutional framework of the law that can compel a change in the policies and practices of policing so as to address the factors actually underlying public issues of distrust if those are related to how the police treat the people that they deal with, lawfully or unlawfully, after they have made a decision to stop them.

What is needed is an evidence-informed model that can shape change. I suggest that research findings justify a new model of consent-based policing. This model should be adopted not because it is constitutionally required, but because it is desirable. We need to think about legal institutions as organizations and use research to identify policies and practices that achieve system goals. What might those goals be? I suggest three goals that might be viewed as good consensus candidates for goals we might want to achieve: compliance with the law; cooperation; and individual/community well-being.

Such an evidence-based approach furthers the idea of institutional design. In this sense I am very supportive of the effort of the police to act proactively to achieve system goals. An institutional-design approach is based upon the premise that it is better to design institutions and shape their policies and practices so as to anticipate and avoid problems, rather than waiting until problems occur and then dealing with them. Instead of waiting for crimes to occur, strategies to anticipate and prevent them can be developed. As will be clear in this discussion, however, I suggest that efforts to do so should be based upon an evidence-informed approach that accurately explains the nature of the social dynamics underlying different models of social order maintenance.

**PAST POLICING MODELS**

In recent decades, the police have adopted an almost singular focus on harm reduction, defined as the control of violent drug and gun related crime. To achieve this goal, they have adopted a series of increasingly broad, proactive, policing policies and practices. These policies and practices have extended the breadth of policing into people’s everyday lives. This is true both because a broader range in the people the police proac-
tively deal with and because the number of everyday activities that are
drawn into the criminal system have increased, leading many people not
engaged in criminal conduct, or as least not in serious criminal conduct,
to be approached by police officers. This broader net of investigatory
contacts is a natural extension of a proactive policing model that regards
preventing crime as a police responsibility.

The original broken-windows approach, as initially conceived, fo-
cused upon a small group of community deviants (e.g., drug users; prosti-
tutes; bums). This approach argued that the police should proactively po-
lice this group of individuals that were generally viewed by others as
problematic, deviant, and undesirable. The zero-tolerance approach in-
creased the range of those targeted to people committing a wide variety
of lifestyle offences and increased the number and range of offenses for
which the police arrested people. Finally, policies of widespread stops,
questioning, and frisking people on the street draw in large numbers of
people from the community, many repeatedly, when they are not en-
gaged in criminal activity. Although these practices are most visibly asso-
ciated with New York City, cities such as Chicago, Philadelphia, and Bos-
ton have used variants of this approach. When viewed only from a crime-
control perspective, these expanding proactive approaches make sense. If
you stop 100 people and find one gun, there is one less gun on the street,
so continual increases in the range and frequency of proactive investiga-
tory contacts reflects increasing efforts to stop crimes before they occur.

The rate of crime has declined in America. This has occurred con-
sistently and over several decades. The police claim credit for such reduc-
tions, although they have occurred across cities varying in their policing
policies, as well as in countries such as Canada that have not engaged in
similar proactive-policing policies. It is hard to argue that the general
proactive-investigatory-stop policies used by the police are central to re-
ductions in crime because research findings have increasingly suggested
that police policies that target particular places (hot spots) or people are
a more effective use of limited police resources. Broad approaches to the
general community like stop, question, and frisk are found to have, at
best, a minimal crime-control impact.

My concern is with what has not happened as a consequence of
crime declines. Declines in crime have not increased the popular legiti-
macy of the police. Popular legitimacy has been more or less constant
across the last thirty years, ranging between 50-60% of adult Americans.
And, a large race-based gap continues to exist. In 1982, 52% of adult
Americans indicated that they have a great deal or quite a lot of “trust
and confidence” in the police, while in June of 2016, 56% of Americans
made that same judgment. African Americans are 20-30% less likely to
indicate that they trust the police. Compared to national level govern-
ment institutions, these levels of trust are high, but in absolute terms,
they are not. They indicate that almost half of American citizens do not
trust the police, and distrust among minorities is even lower.
Why does popular legitimacy matter and why is it important that it has been and remains at its current levels? As already noted, distrust undermines the ability of police officers to do their jobs, i.e., the effectiveness of law enforcement is impacted. This is the case because public behavior toward the police changes. An example is the lack of acceptance of police authority. A particular problem for the police in recent years has been the unwillingness of members of the public to defer to police authority in specific incidents in which defiance and rage has fueled escalations of force. This is generally true, but has been a particular concern when the police deal with minorities.

Many of the recent incidents of police use of force began in situations where the police sought compliance with their orders, leading to a spiral of increasing conflict that ends in the police using of force, often lethal force. Recent studies suggest that low trust is having an important impact upon contemporary events with minority group members both more likely to resist police orders and with the minority community more likely to be critical of police conduct and more skeptical of police integrity when the police are investigating police use of force. People are looking at the same events, but not understanding them in the same way. Minority group members are more likely to mistrust police motives and, after an incident, be more skeptical of police promises to investigate.

In other words, there is racial polarization in the police-citizen conflicts developing from civilian deaths. In the case of Ferguson, for example, The PEW foundation conducted a post-event survey and found that 80% of African Americans, but only 53% of whites thought that it was “important to pay more attention to the role of race in policing.” Similarly, 18% of African Americans expressed confidence in the police to investigate the incident; while 52% of whites expressed confidence. Similar racially linked differences can be identified in the series of recent controversial police-related events: the Gates incident in Cambridge; the Erik Garner death in Staten Island; and any one of a series of such recent encounters. Collectively, communities are unwilling to trust the police to investigate incidents of police use of force. The police, in turn, are drawn into a system in which they pay out large sums of money for civil settlements flowing from harm to civilians.

More generally, the ability of societal authorities to effectively manage social order is linked to public trust. One key behavior is obeying the law, which declines when legitimacy is lower.16 Further, if the police and courts are not trusted, their clearance rates go down. People will not call to report crimes; they will not identify criminals; they will not be witnesses in court.17 Finally, instead of bringing their grievances into the legal system, people settle them privately through violence and retaliation.

The public and the police both suffer from these negative consequences of public distrust.

Finally, the general community benefits of having a framework of trust are not achieved. Communities cannot arrest their way out of crime. They need to develop socially and economically. The creation of a climate of reassurance, as opposed to a climate of fear, facilitates such efforts. 18 If people trust the police they are more likely to identify with their community, to feel that the community can and will engage in informal social control and to shop, work, and vote in their community.

Given these benefits of legitimacy, it is very logical to focus on the level of trust in the police. And, when that is the focus, the generally static level of trust in the face of declining crime rates suggests that police focus on crime control does not address public concerns about legitimacy. Recent attention to the popular legitimacy of the American police has moved the focus of the empirical study of policing from an almost exclusive concern with objective measures indexing the crime rate toward a greater level of attention to public distrust of the police. This shift is reflected in the report of the President’s Task Force on 21st century policing, which labelled legitimacy the “first pillar” of American policing. 19 Through this shift in focus from issues of crime control to questions of popular legitimacy, discussions about the proper nature of policing have moved into a key arena of social/organizational psychology: the nature of authority dynamics in groups, organizations, communities, and societies. 20

Unlike the crime rate, trust concerns are explicitly subjective and inherently psychological. Subjective legitimacy has long been a core focus in psychological research on authority, beginning with the classic work of Lewin, Lippitt, and White. 21 Within the arena of policing, the current focus on legitimacy raises questions that have both theoretical and policy implications. A first question is whether social authorities can influence their popular legitimacy through their actions, in particular through their personal contact with members of the public. Addressing this question includes the impact that can be associated with simply having a contact. It then moves into a consideration of the influence of the particular behaviors that the police engage in during those encounters. Finally, it involves an examination of how police actions are interpreted and evaluated by those with whom they deal.

In the context of policing policies and practices, the ability of contact to enhance trust is of particular importance, and has widespread policy implications for how efforts to reframe police move forward. Unless contact can increase trust efforts at reframing conceptions of policing, for example, from a “warrior” to a “guardian,” i.e., moving from a police

18. Tyler & Jackson, Popular Legitimacy, supra note 1.
“force” to a police “service,” and retraining the police to interact with
the public in more positive ways is unlikely to build legitimacy. The an-
twer to this question is equally relevant to issues within psychology be-
cause of the widespread concern with understanding when people resist
versus accept efforts at attitude change and the research finding that if
they do change in response to experience, people are most strongly re-
sponsive to negative experiences.

A key question for police authorities trying to manage social order
using a consensual style is how to influence the legitimacy of the police,
i.e., with concerns about mechanisms of attitude change. And, in particu-
lar, with whether personal contact with police officers is a potential locus
for attitude change strategies. Personal contact is a natural focus for po-
licing changes because such contact is widespread.22

Police officers are the most visible and frequently encountered rep-
resentatives of local government, both because people ask the police for
help and because the police engage in regulatory contacts to enforce
laws. This is especially true for adolescents, who are disproportionately
likely to have regulatory interactions with police officers and who are al-
so at a crucial developmental point in terms of the formation of their
views about police legitimacy.23 Given the frequency of contact, it is dis-
turbing that studies suggest that the overall impact of contact is to un-
dermine legitimacy.24

The question of whether personal contact can be a loci of attitude
change is one about which there are different views. This is true as a gen-
eral proposition and within the arena of policing. Traditionally, social
psychologists have argued for the contact hypothesis—the idea that per-
sonal interactions can produce positive attitude change. This hypothesis
originated in the framework of efforts to reduce racial prejudice,25 but
has broadened into a general model of attitude change, and into “one of
psychologies most effective strategies for improving intergroup rela-
tions.”26 The contact model focuses on specifying and creating the condi-
tions under which contact produces attitude change toward lower levels
of prejudice. As with the police, the argument is that contact with indi-
vidual members of a group can generalize to change attitudes toward all
of the members of that group, and toward the group itself.

22. TYLER & HUO, supra note 8.
23. TOM R. TYLER & RICK TRINKNER, R, WHY CHILDREN FOLLOW RULES: LEGAL
SOCIALIZATION AND THE DEVELOPMENT OF LEGITIMACY (2017); Jeffery Fagan & Tom R. Tyler, Le-
gal Socialization of Children and Adolescents, SOC. JUST. RES., Sept. 2005, at 217–42; Rick Trinkner &
Tom R. Tyler, Legal Socialization: Coercion versus Consent in an Era of Mistrust, 12 ANN. REV. L. &
CAMPBELL SYSTEMATIC REVIEWS, Jan 2010.
26. John F. Dovidio et al., Intergroup Contact: The Past, Present, and The Future, J.
Favorable evidence about the potential impact of personal experiences can be found in the literature on cross-racial contacts.\(^{27}\) The contact literature speaks to the issue of whether change is possible in response to experience. The classic, cross-racial-contact hypothesis, which originated in the arena of race relations, suggests that personal contact can change attitudes. This area of social psychology is built upon Allport’s argument that one way to reduce race prejudice and stereotyping is through personal contacts between the members of different races.\(^{28}\) The cross-race contact situation is similar to police-citizen contact in that it involves personal encounters and that the goal is positive attitude change: in the case of police, a change in legitimacy; with racial prejudice, a change in stereotypes.

Allport is famous for putting forward four conditions under which positive change is more likely to occur: equal status, common goals, cooperation, and support from authorities and institutions. Of these four, one condition is met in the case of police-public contacts: (1) the contact has support from relevant authorities. Three other conditions are not necessarily met in police-public contacts: (2) the contact is not equal status; (3) there are not necessarily common goals; and (4) it may not be cooperative. It is important therefore that Pettigrew and Tropp’s extensive meta-analysis of the empirical literature finds that favorable contact effects occur (but are weaker) even when all of Allport’s conditions are not met.\(^{29}\) Their analysis suggests that having institutional support for the contact is a particularly desirable feature and this is one feature that is present with police contacts.\(^{30}\)

The question of when experience can change attitudes is not just an issue in studies of race relations. It is central to the general social psychological literature on attitude change, which recognizes that people resist changing long-standing dispositions when they have prior attitudes and beliefs (an example of belief perseverance).\(^{31}\) The impact of an experience is muted when the people involved have prior experience and/or stronger prior views.\(^{32}\) In spite of prior views, however, change can potentially occur. These findings point to the importance of testing whether change occurs in conditions such as those existing with the police, where those who deal with the police may already have an extensive prior history of contact.\(^{33}\) In an arena such as policing, in which people have prior

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27. Id.
28. ALLPORT, supra note 25.
30. Id. at 766.
33. Tyler, Fagan & Geller, supra note 6.
views and where many have had prior contacts, is it possible for new contacts to change views?

The challenge of building legitimacy through contact is further highlighted by the psychological finding that negative experiences are typically found to be more impactful than positive experiences. The negativity result is a widespread finding, and studies conducted on the interracial contact hypothesis find that negative contacts have a stronger impact than positive ones. On the other hand, studies find that positive contact is more frequent so the overall impact of personal contact is hard to assess. It might be that in spite of the negativity effect, an overall strategy of promoting contact would, on average, improve attitudes.

Despite these findings, a clear conclusion that can be drawn from the contact literature is that contact has the capacity to lead to attitude change, and, in particular, that positive contacts can diminish prejudice. This finding is supported by the meta-analysis conducted by Pettigrew and Tropp, who conclude that contact can produce both favorable and unfavorable changes in prejudice depending upon the conditions surrounding the contact. Hence, the contact literature suggests that the type of contact is important because it shapes what occurs during a contact, which is central to its impact. In different cases, both favorable and unfavorable changes can occur.

Can this model be applied to policing? Skepticism about the potential for positive impact via experience is raised in the police literature by Skogan, who points to asymmetry in the impact of police contact, with favorable contacts having little impact upon views about the police. Skogan argues that the police are in a no-win situation, suggesting that “a strong ‘negativity bias’ . . . shapes the interpretation that people give to their experiences.”


unfavorable outcomes when interacting with the police, and their impact upon satisfaction with the police.\textsuperscript{40}

Worden and McLean echo the Skogan argument in a study that focuses on the impact of the fairness of police actions upon police legitimacy, suggesting that "citizens' subjective experiences are shaped by their prior attitudes much more than their experiences shape their subsequent attitudes."\textsuperscript{41} Global attitudes tend to be stable, and any one contact has a limited effect on citizen's broader views of police. But global attitudes have strong effects on citizens' interpretations of their experiences.\textsuperscript{42} To the extent that this is indeed the case, the police face a serious problem trying to build their legitimacy through fair treatment.

On the other hand, Bradford, Jackson, and Stanko\textsuperscript{43} studied contact using the London Metropolitan Police Public Attitudes survey. They looked at the fairness or unfairness of contact and found that "consistent with the procedural justice model we also show that positively received contacts can improve perceptions of fairness and community engagement."\textsuperscript{44} The judgments about the willingness of police officers to engage in their communities were not about the specific officers with whom the person had contact but about the overall police force. Similarly, Myhill, and Bradford\textsuperscript{45} analyzed panel data in the UK and found that "single contacts, both negative and positive, are predictive of subsequent confidence in the police."\textsuperscript{46}

In addition to these non-experimental studies, several experiments have tested the impact of personal experience with the police. Mazerolle and colleagues examined police stops in Australia and found that a single experience of procedural justice generalized to shape trust in the police in the community.\textsuperscript{47} The Queensland Community Engagement Trial was a randomized controlled trial that provided for an experimental treatment in the form of scripted traffic checks for drunk driving. Officers were trained to follow a protocol designed to maximize the procedural justice of the brief interactions occasioned by the random breath testing. Scripts were formulated to incorporate the components of procedural justice into officers' administration of the random breath testing. The procedural justice treatment had the hypothesized effects on citizens' legitimacy judgments, i.e., fairness built legitimacy.

\textsuperscript{40} Skogan, \textit{Assessing Asymmetry}, \textit{supra} note 38.
\textsuperscript{42} \textit{Id.} at 4–4.
\textsuperscript{43} Ben Bradford et al., \textit{Contact and Confidence: Revisiting the Impact of Public Encounters with the Police}, POLICING & SOC’Y, no. 1, 2009, at 20–46.
\textsuperscript{44} \textit{Id.} at 20.
\textsuperscript{46} \textit{Id.} at 2.
\textsuperscript{47} Lorraine Mazerolle et al., \textit{Shaping Citizen Perceptions of Police Legitimacy: A Randomized Field Trial of Procedural Justice}, CRIMINOLOGY, Feb. 2013, at 33–64.
The Queensland Community Engagement Trial design, but not its results, have been replicated. The MacQueen and Bradford study used a block-randomized design with pre- and post-test measures. The treatment was a stop procedure that involved key messages and a leaflet to motorists. The study found no significant improvements in general trust in the police or police legitimacy. Similarly, a recent experiment using traffic stops in Turkey—conducted by Sahin, Braga, Apel, and Brunson—found that behavior during stops shaped views about the particular police officers involved, but did not generalize to overall perceptions about the legitimacy of the traffic police. Lowrey, Maguire, and Bennett studied street stops by having observers view video clips of traffic stops and found an impact upon specific evaluations of the stop, including obligation to obey, trust, and confidence in the officers, but not on generalizations to broader attitudes about the police. And, Antrobus, and Pilotto found that enhanced procedural fairness in police behavior in response to a residential burglary did not raise police legitimacy relative to a control condition. Experiments echo the pessimistic conclusion that what the police do during a specific experience may not significantly change attitudes about police legitimacy.

These research results suggest that it is important to distinguish two questions. The first is whether negative personal experiences can undermine trust and the second is whether positive experiences can build it. Either is, of course, only important after it has been demonstrated that experience can change prior attitudes. Absent any evidence that properly enacted police contact can raise legitimacy there is very little incentive for police departments to retrain their officers. Nonetheless, these findings further point to the challenge presented by using changes in personal contact as the centerpiece of a legitimacy enhancing strategy.

In other words, these issues are not only theoretical. They also have important consequences for decisions about how the police should address mistrust. Is it realistic to retrain police officers with the aim of changing their behavior in ways that will lead encounters with the public to have a favorable impact? Or, is the most realistic police recommendation to try to limit contact, viewing it as inevitably leading to diminished legitimacy? From a policy perspective, two opposing strategies have been

50. MacQueen & Bradford, supra note 48.
51. Sarah MacQueen & Ben Bradford, Where did it All go Wrong? Implementation Failure—and More—in a Field Experiment of Procedural Justice Policing, J. EXPERIMENTAL CRIMINOLOGY, Dec. 2016, at 1–16 (arguing that the study did not work because of design problems).
52. Emma Antrobus & Andrew Pilotto, Improving Forensic Responses to Residential Burglaries: Results of a Randomized Controlled Field Trial, J. EXPERIMENTAL CRIMINOLOGY, Sept. 2016, at 319–45.
used. One is to limit police contact with citizens. The other is to train officers using legitimacy enhancing approaches to dealing with the public.

Overall, these various literatures reach conflicting conclusions about contact as a strategy for enhancing the popular legitimacy of the police. The contact model has produced a large volume of research that supports the argument that contact can increase the favorability of attitudes toward initially negatively evaluated groups. In this respect, it seems directly applicable to the situation of the police. On the other hand, recent attitude change findings raise questions about whether experience can overcome strongly held prior views and whether positive contact can improve attitudes. This is in contrast to negative contact which is widely found to undermine attitudes. These more skeptical views of the impact of contact are consistent with recent discussions of contact in the policing literature. These discussions have emphasized findings of little favorable impact on police legitimacy from personal contact with police officers. The first goal of this study is to test these different hypotheses about the potential impact of personal contact.

**FACETS OF EXPERIENCE**

One of the defining aspects of contact theory is that it focuses on the conditions under which contact occurs, assuming that favorable conditions lead to positive contact. This does not address the question of what is happening during the contact, i.e., what makes contact favorable or unfavorable? However, a consideration of the conditions that promote positive change suggests that key elements include shared goals and cooperation. In this respect, the police can try to respond to concerns about their legitimacy by shaping their pattern of contact to emphasize service delivery and de-emphasize regulation. In other words, they could minimize investigatory stops. Studies of police contacts suggest that it is investigatory stops (i.e., stops in cars or on the street to investigate the possibility that a person is involved in or about to be involved in criminal activity as evidenced by the possession of guns, drugs, or through other types of information gathered), in particular, that undermine legitimacy. Of course, the Antrobus and Pilotto study focused on service delivery following a burglary and did not find any evidence of impact on legitimacy. Nonetheless, one approach is to reduce investigatory contacts, either in and of itself, or in combination with increases in other types of more cooperative interactions.

A strategy of focusing on particular types of contact can only be partially effective in that the police have only some control over the nature of their contact with the public. Some, but not all, of the conditions for favorable contact are typically met when police officers deal with the public, and the police can try to emphasize contact under the most favorable conditions, but, ultimately, the police are the first responders for a

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53. See **Epp et al., supra** note 7.
wide variety of types of problems. While they can decide to limit proactive contact, they have only a limited ability to determine what types of problems they need to react to because they need to respond to whatever 911 calls and emergency/criminal situations occur in their community. This point should not be overstated since the police have huge amounts of discretion over how they handle low-level crimes, but, at some basic level, they have to deal with crime as it occurs. As the default “go to” agency in most cities, the police deal with whatever problems arise in the community.

In contrast to trying to change the nature of contact, where they are constrained by events in their community, the police have considerable control over how they act during interactions. This strategy would be valuable under almost all circumstances and is entirely consistent with efforts to change the nature of police contacts with the community. The problem with prior studies of the police is that the studies often confound the fact of police contact with police style during that contact so the possibility of change through a different style is not addressed. The current style is generally one of command and control, in which the police dominate people and situations. It has been described as “aggressive order maintenance.” And, if the reports of young people are accepted, it is often characterized by the threat or use of force; by humiliation and embarrassment, and by what is perceived as unjustified harassment.

As noted, it is unclear whether police-initiated stops are inherently alienating, or whether it is the style of policing that is at issue. It is important to ask whether it is possible for the police to deal with the public through a different style and police preventively while maintaining, or even enhancing, their legitimacy. Raising this question recognizes that the use of instrumental mechanisms for compliance in recent policing is different than the idea of police officers as “street corner politicians” who know how to interact with and manage the conflicts and other issues that arise when dealing with people in the community. This older conception of policing imagines a more interpersonally sensitive style of policing linked to efforts to manage community problems informally, and as much as possible, without the use of force. As Greene notes, “the premise of the police as ‘philosopher, guide and friend’ which characterized much of the discussion about policing in the mid-twentieth century the focus was on balancing the social control and social facilitation roles of the police.” Similarly, Muir talks about police officers as civic educators.

54. TYLER & HUO, supra note 8.
i.e., in the role of teaching people about the obligations of living in a democracy. 60

Here, police research can draw upon the large literature that strongly supports the centrality of procedural justice as the key antecedent of legitimacy, suggesting that it is the central aspect of experience that shapes generalizations to trust and confidence. Hence, a focus of contact-based legitimacy enhancing strategies on what happens during contact fits better with the elements of interaction under police control, and the procedural justice literature points to a clear set of principles of conduct that the police can engage in to build trust. This study will focus upon these principles of procedural justice in evaluating contact, asking whether the degree to which the police are judged to be acting procedurally fairly.

Recently, Worden and McLean measured both procedural justice (positive) and procedural injustice (negative) in a cross-sectional study of personal experiences with police officers in two cities. 61 Their analysis suggests that people generally interpret police behavior that objective observers rate to be unfair as fair, i.e., they make charitable characterizations about the police, something they attribute to generally favorable prior views about the police. However, ratings of procedural injustice are stronger in their impact than are ratings of procedural justice, which is consistent with the findings of Skogan, on satisfaction. Overall, Worden and McLean argue that favorable, prior attitudes toward the police lead the police to be generally rated as being fair during contacts, even when observers indicate that they are not being fair. 62 Consequently, the relatively few negatively rated experiences are highly negative and therefore more impactful. A more optimistic result is obtained by Tyler and Fagan who examined panel data from a general sample of New Yorkers and suggest that both individual experiences with the police shape legitimacy and that fair and unfair experiences each impact upon people’s reactions to their experiences with the police. 63 Again, however, unfair experiences are found to have a greater impact. A series of randomized control trial experiments have manipulated procedural justice and differed about whether or not contact shapes legitimacy. 64

Finally, studies in organizational psychology distinguish between the justice and injustice of experiences, and argue that “justice may be seen as the normal state that people do not notice until something goes wrong, just as a fish notices that it needs water only when it taken out of the sea.” 65 As an example, Colquitt, Long, Rodell, and Halvorsen-

61. WORDEN & MCLEAN, supra note 41.
62. Id.
63. Tyler & Fagan, supra note 17.
64. See Antrobus & Pilotto, supra note 52; Mazerolle et al., supra note 47; MacQueen & Bradford, supra note 48; Sahin et al., supra note 48.
Gonepola\textsuperscript{66} found that reactions to justice-rule adherence and rule violations were linked to distinct aspects of experience. In fact, they even activate different regions of the brain.\textsuperscript{67}

**EMPIRICAL QUESTIONS ABOUT POLICING**

In keeping with the idea of evidence-based change, this Article is built around evidence about the impact of contact with the police on compliance, cooperation, and individual and community well-being. I draw upon the results of a panel study of 18 to 25-year-old men living in New York City. The initial wave of interviewees was a random sample of that population, and all of the respondents were recontacted approximately six months after their first interview. The original sample was weighted to ensure comparability with the population, and the second wave was similarly weighted. This analysis uses only those who completed both interviews, and that sample is weighted using the wave two weights to approximate a random sample of the population. Details about the sample are presented in an appendix to this paper.

I address two questions. The first is whether individual contact with the police shapes people’s trust in the institution of policing. This argument is central to discussions about both the origin of the problem of mistrust and the potential for changes in the nature of contact to be a part of the solution in efforts to build trust. The second question is whether contact with a particular individual or set of individuals generalizes to influence broader views about an institution and all of its representatives.

Studies of policing that focus on adolescents suggest that the predominant consequence of contact with the police, at least as the police interact with the community today, is to diminish trust in the law and increase subsequent criminal activity.\textsuperscript{68} The goal of this study is to examine the strength and range of these effects and the study also asks if there are other collateral consequences. This analysis builds upon prior analyses of the wave one interviews in this project,\textsuperscript{69} but adds the heightened value of analysis using panel data.

Second, can procedural justice be a viable model for advancing reform in policing? This involves questions about the power of experience to change attitudes. Favorable personal contact has long been put forward by social psychologists as a key to changing attitudes, for example, in the field of intergroup contact. On the other hand, early discussions of


\textsuperscript{68} Petrosino et al., supra note 24.

\textsuperscript{69} Tyler, Fagan & Geller, supra note 6; Amanda Geller et al., *Aggressive Policing and the Mental Health of Young Urban Men*, AM. J. PUB. HEALTH, Dec, 2014, at 2321–27.
contact with the police as a mechanism for rebuilding trust have met with skepticism and some discouraging evidence in the arena of policing. In particular, negative experiences have been found to have stronger influences than positive, raising questions about whether the police can raise trust through their conduct. This analysis is based upon the argument that these earlier efforts were based upon a misunderstanding of the framework through which people evaluated their experiences. If this issue is addressed through a framework of procedural justice then both positive and negative experiences are found to shape legitimacy.70

This study uses panel data to strengthen the test of the connection between police contact and police legitimacy using real world experiences with the police. Drawing upon the prior finding that procedural justice is the aspect of experience that most strongly shapes legitimacy, this study examines whether fair and unfair personal experiences with police officers influence views about police legitimacy among a group with extensive, and generally negative, prior experiences with the police: young male adults living in New York City. The benefit of panel data is that it allows legitimacy to be measured both prior to and following personal contact. Consequently, the impact of experience can be separated from that of prior attitudes.

Does contact shape legitimacy? This includes negative impacts from injustice and positive impacts from justice. The prior literature has already been reviewed and its implications are unclear. This study is a strong test of that question because it focuses on investigatory street stops and targets the key demographic of young men.

RESEARCH DESIGN

This study is a panel study in which pre- and post-experience attitudes and behaviors can be assessed. This design allows prior views to be taken into account. In the panel study, a random sample of the young men in New York City (18-26 at time one) were identified and contacted. In the first wave, 1,262 were interviewed. In the second wave, all possible individuals were re-contacted approximately six months after the first interview and 722 were successfully re-interviewed. The analyses presented are based upon these 722 cases.

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70. Tyler & Fagan, supra note 17 (suggesting that fair experiences with the police can build trust, suggesting the potential value of this approach).
The question wording and scale properties are outlined in the appendix.

**DEPENDENT VARIABLES.**

The dependent variable measured in both interviews was legitimacy. As conceptualized in policing research, legitimacy involves three components: trust and confidence; obligation to obey; and normative alignment.

The importance of legitimacy is tested by examining the association of legitimacy to criminal activity; willingness to cooperate with the police; and personal well-being. These variables were measured in both wave one and wave two using the same measures.

**INDEPENDENT VARIABLES.**

Respondents were asked about total number of lifetime street stops by the police, and in wave two, the number of stops since the last interview. Those respondents with personal experience between the interview time period were asked about police actions during their most important recent contact. They were asked about investigatory actions; harassing and threatening actions; and the actual use of force. They were further asked if the police officers were procedurally just and if the stop was for appropriate reasons.

**DOES LEGITIMACY MATTER?**

The underlying assumption of the focus on popular legitimacy is that popular legitimacy matters. This assumption is supported by an examination of the association between legitimacy and five important variables (all measured at time two). Higher legitimacy is associated with lower rates of criminal activity (unstandardized regression coefficient = 0.04(0.01), p < .001) and fewer recent arrests (unstandardized regression coefficient = 0.05(0.01), p < .001). It is also associated with lower levels of cynicism (unstandardized regression coefficient = 0.24(0.03), p < .001); lower stress (unstandardized regression coefficient = 0.13(0.06), p < .05); and with higher levels of cooperation (unstandardized regression coefficient = 0.15(0.04), p < .001).

These associations are shown in a regression analysis, shown in Table 1, which tests this relationship controlling on time one measures of these same variables and demographic characteristics. Those respondents who view the police as more legitimate are involved in lower levels of crime; are less stressed in their daily lives and less cynical; and cooperate more with legal authorities.
While the regression equation in Table 1 treats legitimacy as the antecedent of criminal behavior, and a panel design is used to control for wave one levels of criminal behavior it is nonetheless important to recognize that this temporal ordering must be accepted cautiously. The questions asked about legitimacy assessed that psychological state at the time of the interview and at that time also asked about recent criminal behavior. Therefore, it is only possible to view the connection between legitimacy and criminal behavior as an association, not a causal relationship. It is, of course, an advantage that the study is a panel study so the analyses do control for wave one levels of all the variables considered and therefore are focused on associated changes over time.

Additionally, in the case of cooperation, respondents are asked whether they would cooperate if the occasion arose, so this measure is hypothetical. It is not realistic to ask if people have cooperated because many people are not presented with opportunities to cooperate. A person cannot report a crime unless they see one. Hence, opportunity and willingness are intertwined. This leads to the approach of asking people what they would do if presented with an opportunity.

**Table 1: Does Legitimacy Matter?**

<table>
<thead>
<tr>
<th>General attitudes and behaviors (wave two)</th>
<th>Compliance</th>
<th>Cooperation</th>
<th>Well-being</th>
</tr>
</thead>
<tbody>
<tr>
<td>Few recent arrests</td>
<td>0.05(0.02)**</td>
<td>0.02(0.009)*</td>
<td>0.10(0.05)*</td>
</tr>
<tr>
<td>Low recent criminal behavior</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High cooperation</td>
<td>0.27(0.07)***</td>
<td>0.13(0.02)***</td>
<td></td>
</tr>
<tr>
<td>Low stress</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low cynicism</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Time one controls</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legitimacy (wave one)</td>
<td>0.11(0.04)*</td>
<td>0.05(0.04)</td>
<td>0.23(0.08)**</td>
</tr>
<tr>
<td>Little criminal activity (wave one)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Few arrests (wave one)</td>
<td>0.17(0.03)***</td>
<td>0.13(0.02)***</td>
<td>0.06(0.09)</td>
</tr>
<tr>
<td>High cooperation</td>
<td>0.04(0.01)**</td>
<td>0.59(0.03)**</td>
<td>0.07(0.05)</td>
</tr>
<tr>
<td>Low stress</td>
<td>0.00(0.00)</td>
<td>-0.02(0.05)**</td>
<td>-0.10(0.02)***</td>
</tr>
<tr>
<td>Low cynicism</td>
<td>0.01(0.02)</td>
<td>0.01(0.01)</td>
<td>0.05(0.04)</td>
</tr>
</tbody>
</table>

**Demographics**

| Hispanic                                  | 0.07(0.02)*** | 0.05(0.01) | -1.5(0.05)** | 0.00(0.00) | 0.02(0.03) |
| African-American                          | 0.02(0.02) | -0.02(0.01) | -1.3(0.05)** | 0.09(0.08) | 0.04(0.02) |

| Education                                 | 0.00(0.00) | 0.01(0.00) | 0.01(0.02) | 0.00(0.03) | 0.01(0.01) |
| Age                                       | 0.00(0.00) | 0.01(0.00) | 0.00(0.00) | 0.03(0.01)* | 0.00(0.00) |

Note. High scores indicate minority; highly educated; older. Entries are the unstandardized regression coefficient (standard error). *p < .05; **p < .01; ***p < .001. This analysis involved all 722 panel respondents.

The findings shown in Table 1 support the premise of this study: that the popular legitimacy of the police has a number of benefits for both the po-
lice and the communities within which they work. This study highlights benefits to the legal system and to the people who deal with it. Overall, a consensual system of authority allows the police to work with the public rather than seeking to coercively enforce rules and decisions. That has benefits in terms of lower criminal behavior and higher cooperation. It also benefits the people dealing with the police, who will have lower stress in their everyday lives.

**DOES EXPERIENCE SHAPE LEGITIMACY?**

Of the 722 people re-interviewed in the second wave of the panel study, 454 indicated having no new experience with the police in the time between the two interviews and 268 had at least one new experience. The no-new-experience group showed no significant change in legitimacy from the first to the second interviews ($t(453) = 1.84$, n.s.). Hence, within this sample there is the suggestion that legitimacy was generally stable across the time period examined, unless people had new experiences that provided them with new information.

Does contact itself shape legitimacy? Prior to addressing this question, it is important to distinguish two issues: number of prior contacts and police behavior during recent contact. A factor analysis was used to define the dimensions of police behavior. That factor analysis identified five distinct factors: intrusion (frisk, search bags, use force, take out weapon); arrest (handcuff, take to station, arrest); insult (harsh or insulting comments, threat of physical force); investigate (ask for name, ask to explain situation); cite (ask for identification, give desk ticket). The correlation among these dimensions is shown in Table 2.

**TABLE 2: DIMENSIONS OF POLICE CONDUCT**

<table>
<thead>
<tr>
<th>Intrude – frisk; search bags; use force; take out weapon</th>
<th>Intrude</th>
<th>Arrest</th>
<th>Insult</th>
<th>Investigate</th>
<th>Cite</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arrest – handcuff; take to station; arrest</td>
<td>0.56***</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insult – use harsh or insulting language; make threats to use physical force</td>
<td>0.32***</td>
<td>0.49***</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investigate – ask for name; ask to explain situation</td>
<td>-.05</td>
<td>0.06</td>
<td>0.03</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>Cite – ask for identification; give desk ticket</td>
<td>0.09</td>
<td>0.16***</td>
<td>0.11</td>
<td>0.13*</td>
<td>---</td>
</tr>
</tbody>
</table>

Entries are Pearson correlations. *p < .05; **p < .01; ***p < .001
A regression analysis examining the relationship of contact to legitimacy (Table 3) suggests that when controls are included for prior legitimacy and demographics frequency of prior contact does not influence legitimacy (unstandardized regression coefficient = 0.00, n.s.). Further, what the police do is generally unrelated to legitimacy. It is not contact *per se*, or even in general, that specific actions of the police shape the impact of experience on legitimacy. Hence, there is a need to provide a broader framework of specific police actions that build or undermine legitimacy.

**TABLE 3: DOES FREQUENCY OF CONTACT OR POLICE ACTIONS (WHAT THE POLICE DO) DURING CONTACT SHAPE POST-CONTACT LEGITIMACY?**

<table>
<thead>
<tr>
<th></th>
<th>Legitimacy at wave two</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legitimacy (wave one)</td>
<td>0.72(0.05)****</td>
</tr>
<tr>
<td>Lifetime number of street stops</td>
<td>0.00(0.00)</td>
</tr>
<tr>
<td>Intrude</td>
<td>-.14(0.11)</td>
</tr>
<tr>
<td>Arrest</td>
<td>0.00(0.16)</td>
</tr>
<tr>
<td>Insult</td>
<td>-.13(0.12)</td>
</tr>
<tr>
<td>Investigate</td>
<td>0.01(0.07)</td>
</tr>
<tr>
<td>Cite</td>
<td>-.17(0.07)*</td>
</tr>
<tr>
<td>Hispanic</td>
<td>-.12(0.07)</td>
</tr>
<tr>
<td>African American</td>
<td>-.04(0.07)</td>
</tr>
<tr>
<td>Education</td>
<td>-.01(0.02)</td>
</tr>
<tr>
<td>Age</td>
<td>0.00(0.01)</td>
</tr>
<tr>
<td>Adjusted R-sq</td>
<td>55%***</td>
</tr>
</tbody>
</table>

Note. Entries are the unstandardized regression coefficient. This analysis involved the 268 respondents with experience. *p < .05; **p < .01; ***p < .001.

**THE PSYCHOLOGY OF EXPERIENCE**

The procedural-justice literature suggests that it is not having an experience with a police officer, or not having that experience *per se*, that influences legitimacy, but how the person interprets their experience. It is about whether the person believes that they received procedural justice from the police. Additionally, the work of Epp and his colleagues suggests that whether the person thinks the police stop is occurring for appropriate reasons should matter. He argues that traffic stops are viewed as appropriate when the person believes that they were violating a law, *e.g.*, speeding, but that investigatory stops are typically not viewed as legitimate, since they most often occur when a person is not breaking the law.

In this sample, the two judgments of procedural justice and the appropriateness of police reasons for contact are highly intertwined ($r = 0.53$, $p < .001$), and it is impossible to separate them out. Of the two, procedural justice is more strongly related to police behavior ($r$-sq. = 39% for procedural justice; 30% for appropriateness), while appropriateness is more strongly related to more distal factors, including number of life-
time stops and demographic information (8% for appropriateness; 4% for procedural justice). These two judgments, however, are measured at the same time, so they are treated in this analysis as two simultaneous evaluations of experience.

The results shown in Table 4 support the argument that interpretations of one’s experience (i.e., police were procedurally just; stop was appropriate) are more important in shaping reactions to experience than statements about what the police did. Controlling for prior legitimacy—both police actions and demographics—whether police actions are interpreted as reflecting procedural justice (unstandardized regression coefficient = 0.13, p < .001) and whether the police are viewed as acting appropriately (unstandardized regression coefficient = 0.25, p < .001) shape post-experience legitimacy.71 And, as in the prior analysis, there are limited significant direct effects of frequency of prior stops or what the police do upon legitimacy. If the police harass or threaten a person that directly lowers legitimacy as happens if they handcuff, take them to a station and arrest them.

### Table 4: Does the Interpretation of Police Conduct Shape Legitimacy?

<table>
<thead>
<tr>
<th>Judgments about recent experience</th>
<th>Legitimacy at wave two</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procedural justice</td>
<td>0.13(0.03)***</td>
</tr>
<tr>
<td>Appropriate reason</td>
<td>0.25(0.03)***</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Police actions</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Intrude</td>
<td>-.06(0.10)</td>
</tr>
<tr>
<td>Arrest</td>
<td>-.31(0.14)*</td>
</tr>
<tr>
<td>Insult</td>
<td>-.47(0.12)**</td>
</tr>
<tr>
<td>Investigate</td>
<td>0.13(0.07)</td>
</tr>
<tr>
<td>Cite</td>
<td>-.13(0.07)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Background</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lifetime street stops</td>
<td>0.00(0.01)</td>
</tr>
<tr>
<td>Legitimacy at wave one</td>
<td>0.54(0.05)**</td>
</tr>
<tr>
<td>Hispanic</td>
<td>-.11(0.06)</td>
</tr>
<tr>
<td>African American</td>
<td>0.10(0.07)</td>
</tr>
<tr>
<td>Education</td>
<td>-.01(0.02)</td>
</tr>
<tr>
<td>Age</td>
<td>0.01(0.01)</td>
</tr>
</tbody>
</table>

| Adjusted R-sq. (n)               | 65% (263)              |

Note. Entries are the unstandardized regression coefficient. This analysis was conducted using the 268 respondents with experience. *p < .05; **p < .01; ***p < .001.

Do these findings suggest that repeated stops will not diminish legitimacy if the police act fairly and if people think they are being stopped for appropriate reasons? This contradicts the argument of Epp and his

71. A comparison of these two unstandardized coefficients indicates that appropriateness is significantly more important than procedural justice. The formula is \( z = \frac{(0.23 - 0.13)}{\sqrt{(0.03^2 + 0.02^2)}} = 2.38 \) (p < .01).
No. 5] EMPIRICAL RESEARCH TO INFORM LAW

colleagues that over time repeated stops undermine trust. It would also be inconsistent with the argument of that people are less likely to interpret stops as fair and appropriate after a history of stops. It is possible to use this dataset to replicate that analysis but with controls for prior legitimacy. When such an analysis is performed, (results shown in Table 5) it is found that those with more prior stops are more likely to view their most recent stop as involving unfair police procedures and as being inappropriate. These effects are small, but consistent with the earlier findings noted. They disappear when controls are placed upon prior legitimacy because prior legitimacy summarizes the impact of past experiences upon views about legitimacy.

### TABLE 5: IMPACT OF PAST CONTACTS ON INTERPRETATIONS OF RECENT ENCOUNTERS

<table>
<thead>
<tr>
<th>Number of prior stops</th>
<th>Procedural justice in last stop</th>
<th>Appropriateness</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.02(0.006)***</td>
<td>0.00(0.01)</td>
<td>0.03(0.01)***</td>
</tr>
</tbody>
</table>

Prior legitimacy

| Prior legitimacy | 0.90(0.05)*** | 0.88(0.08)*** |
|---------------------------------|
| 2%*                             | 32%***         |

The best place to focus our efforts to understand the dynamics of police legitimacy is upon public judgments about the fairness of the procedures through which the police exercise their authority.

The finding that procedural justice shapes legitimacy is, first, replicated here, and that finding is an important illustration of the value of evidence-informed policy-making. In recent decades, the police have focused upon behaving lawfully and managing the problem of crime. These goals are valuable for a variety of reasons, but they do not address the issue of police legitimacy. This finding, counterintuitive to many police leaders, strongly and consistently emerges from the research literature. Hence, research gives a clear picture of why people do or do not trust the police, the courts, and the law. That allows the police to develop a trust-building strategy.

**PSYCHOLOGICAL JURISPRUDENCE**

We can build upon the results reported here by encouraging the police not to do things that undermine fair interpretations of their actions and to do more of the things that enhance fair interpretations, *i.e.*, they should act to promote perceived justice. Table 6 shows the correlation between police actions and evaluations of experience. The results reinforce the argument that it is style—particularly the use of harsh language, insults, and threats of physical force—that undermine the interpretations.

shaping legitimacy. Regular police activities either do not automatically undermine trust or can even increase it (e.g., asking people’s names or for explanations of one’s situation).

What is interesting is that the activities that have a positive influence on legitimacy are more frequent than those that undermine it. It is typical for the police to ask for explanations, something that builds legitimacy. It is less typical for them to be insulting or threatening. Hence, the police are already frequently engaged in actions of the type being promoted here. The suggestion is simply that they do so more frequently and as part of a deliberate strategy of trust building. What is particularly compelling is that these actions are central to whatever appropriateness there is associated with police stops and they can be conducted in ways that enhance feelings of procedural justice.

<table>
<thead>
<tr>
<th>Categories</th>
<th>Actions</th>
<th>Frequency of occurrence</th>
<th>Procedural justice</th>
<th>Appropriate reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intrude</td>
<td>Frisk or pat-down</td>
<td>28%</td>
<td>-.36***</td>
<td>-.31***</td>
</tr>
<tr>
<td></td>
<td>Search bags</td>
<td>22%</td>
<td>-.18**</td>
<td>-.17**</td>
</tr>
<tr>
<td></td>
<td>Actual use of force</td>
<td>8%</td>
<td>-.27***</td>
<td>-.21****</td>
</tr>
<tr>
<td></td>
<td>Take out weapon</td>
<td>4%</td>
<td>-.08</td>
<td>-.12</td>
</tr>
<tr>
<td>Arrest</td>
<td>Handcuff</td>
<td>12%</td>
<td>-.34***</td>
<td>-.17**</td>
</tr>
<tr>
<td></td>
<td>Take to station</td>
<td>9%</td>
<td>-.24***</td>
<td>-.14*</td>
</tr>
<tr>
<td></td>
<td>Arrest you</td>
<td>4%</td>
<td>-.17</td>
<td>-.11</td>
</tr>
<tr>
<td>Insult</td>
<td>Harsh/insulting language</td>
<td>21%</td>
<td>-.58***</td>
<td>-.51***</td>
</tr>
<tr>
<td>Investigate</td>
<td>Ask your name</td>
<td>39%</td>
<td>0.08</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Explain your situation</td>
<td>54%</td>
<td>0.14*</td>
<td>0.08</td>
</tr>
<tr>
<td>Cite</td>
<td>Ask for ID</td>
<td>79%</td>
<td>-.11</td>
<td>-.11</td>
</tr>
<tr>
<td></td>
<td>Desk ticket</td>
<td>37%</td>
<td>-.13*</td>
<td>-.13*</td>
</tr>
</tbody>
</table>

Ideally it would be possible to directly map the actions of the police onto interpretations of experience. The results reported take a step in that direction by connecting respondent’s reports about what happened to their interpretations of their experience. This suggests that we can shape police behavior by pointing to actions that build or undermine legitimacy. A first conclusion is that contact does not necessarily undermine legitimacy. Actions such as asking people for their names or for explanations of their situation do not undermine trust. In some cases, it seems they enhance it. Why? One argument is that by behaving professionally and acting in ways that people recognize are related to the constructive policing role of managing order the police are reassuring people. On the other hand, insulting or threatening people clearly undermines legitimacy. Hence, the police should adjust their actions to emphasize those types of actions that build trust, and limit undermining
actions. The police can clearly create injustice, but they can also promote justice.

One point about raising trust is that a focus on what the police do is better for identifying negative actions than positive actions. Positive actions involve the elements of procedural justice: explanation, respect, etc. Those are actions that are clearly positive in their impact.

Beyond the specific situation of street stops, this approach suggests a broader model for evidence-informed policy development. In shaping their policies, authorities should consider how various types of actions enhance or undermine goals. In this case, building legitimacy is also a goal and encounters between officers and members of the community are “teachable moments” that can, and do, shape people’s views about legitimacy. Hence, the police need to use evidence about how their behavior during stops shapes legitimacy. And they need to use that information to influence their policies and practices.

The focus of this paper is on personal experience. It is also important to note, however, that the experiences people have resonate beyond their own views since they also impact on the views of family, friends, and neighbors. Further, people themselves form views about the police that are not only based upon their own experiences but also upon their views about how the police generally act within the community. The analysis of the wave one data indicates that when combining these different sources of information, people place greater weight upon their beliefs about how the police generally behave than they do upon their own personal experiences. Hence, in the long-term, an overall effort to create a psychological jurisprudence model requires an examination of both reactions to the behavior of particular police officers during encounters and reactions to beliefs about what the police are generally doing in the community.

JUST VS. UNJUST EXPERIENCES

A more specific concern is with the impact of fair and unfair experiences. It is only if fair experiences can raise legitimacy that encouraging the police to act in accordance with the principles of procedural justice can be a strategy change. Table 7 shows a regression equation that tests that proposition. It includes two terms: procedural justice and procedural injustice. Procedural justice is reflected through a score for everyone whose rating is 2.5 or higher; procedural injustice is everyone whose rating is below 2.5. This division reflects the midpoint in the 1–5 procedural-justice scale. The first group is the subgroup of people who indicate that their experience was fair; the second group only those who evaluated their experience as unfair. The results indicate that both fair and unfair experiences significantly shaped post-experience views about police legitimacy above and beyond the influence of pre-experience legitimacy.
Of course, these influences occurred in opposite directions, with fair experiences raising legitimacy more and unfair experiences lowering legitimacy more. A comparison of the two unstandardized regression coefficients indicates that their difference (0.30 vs. 0.17) was not statistically significant. In this sample, both types of experience has a similar strength of influence upon legitimacy.

Table 7. Positive and Negative Experience

<table>
<thead>
<tr>
<th></th>
<th>Legitimacy at wave two</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procedural justice</td>
<td>0.30(0.09)**</td>
</tr>
<tr>
<td>Procedural injustice</td>
<td>-0.17(0.04)**</td>
</tr>
<tr>
<td>Appropriate reason</td>
<td>0.24(0.04)**</td>
</tr>
<tr>
<td>Legitimacy (1)</td>
<td>0.51(0.05)**</td>
</tr>
<tr>
<td>Lifetime street stops</td>
<td>-0.01(0.01)</td>
</tr>
<tr>
<td>Intrude</td>
<td>-0.12(0.10)</td>
</tr>
<tr>
<td>Arrest</td>
<td>-0.30(0.14)*</td>
</tr>
<tr>
<td>Insult</td>
<td>-0.36(0.14)**</td>
</tr>
<tr>
<td>Investigate</td>
<td>0.09(0.07)</td>
</tr>
<tr>
<td>Cite</td>
<td>-0.08(0.06)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>-0.11(0.06)</td>
</tr>
<tr>
<td>African American</td>
<td>0.10(0.07)</td>
</tr>
<tr>
<td>Education</td>
<td>-0.01(0.02)</td>
</tr>
<tr>
<td>Age</td>
<td>0.01(0.01)</td>
</tr>
<tr>
<td>Adjusted R-sq. (n)</td>
<td>65% (264)**</td>
</tr>
</tbody>
</table>

Note. Entries are the unstandardized regression coefficient. This analysis was performed with the 268 respondents who had experience. *p < .05; **p < .01; ***p < .001

Another way to test fairness versus unfairness is to separate respondents into two groups: those justly treated and those unjustly treated. Table 8 shows the results of an analysis within each of these two subgroups. In both cases, the results indicate that experience had a significant influence upon post-experience legitimacy. As before, these influences are occurring in different directions.

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73. The formula is $z = (0.28 - 0.17)/\text{Square root of } ((0.09^2) + (0.04^2)) = 1.12$. The z-score associated with conventional statistical significance is at the $p < .05$ level is 1.96.
TABLE 8. SUBGROUP ANALYSIS BY FAIRNESS

<table>
<thead>
<tr>
<th></th>
<th>Legitimacy at wave two</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Police used fair procedures during experience</td>
</tr>
<tr>
<td>More procedural justice</td>
<td>0.10(0.05)*</td>
</tr>
<tr>
<td>More procedural injustice</td>
<td>---</td>
</tr>
<tr>
<td>Appropriate reason</td>
<td>0.26(0.05)**</td>
</tr>
<tr>
<td>Legitimacy</td>
<td>0.82(0.08)**</td>
</tr>
<tr>
<td>N</td>
<td>166</td>
</tr>
</tbody>
</table>
| Respondents are divided at the scale midpoint (2.5). The analysis used the 268 respondents with experience. It controls for demographics. *p < .05; **p < .01; ***p < .001

Taken together, these findings provide support for the argument that contact promotes changes in attitudes. Here, the key point is that people are generalizing from contact with one police officer to the police in general. Further, both negative and positive contact have an impact. Of particular policy relevance is the finding that procedurally fair treatment significantly increases legitimacy. Those departments seeking to build popular legitimacy can confidently move forward based upon a belief that fair treatment can have favorable consequences.74

Knowing that procedural justice is the key to legitimacy does not demonstrate that the police can build trust by focusing on procedural justice. The key attitude change question of whether personal contacts can change prior attitudes remains to be addressed. Unless the police can change trust through their behavior, no social-change strategy emerges from these findings. A large literature on race prejudice has developed from the assumption that contact can influence attitudes related to people of different races. In particular, it is believed that contacts that occur under favorable conditions can have a positive impact upon prior views. This view contrasts with the generally pessimistic predictions of the police literature, which has viewed positive contacts as of little value in raising trust and confident in the police.

The results of this study present an optimistic view about the potential of personal contact to change the popular legitimacy of the police and support a view more like that of the contact literature on prejudice. They show that the fairness of one officer or group of officers in one encounter can raise overall police legitimacy. The finding that personal contact can significantly increase popular legitimacy supports several propositions of attitude-change research. First, that experience can have a favorable impact on attitudes. In particular, as is argued in contact

74. For a similar earlier finding see Tyler, Fagan & Geller, supra note 6.
models experiences with one person who represents a larger social category can change attitudes about that category and its members. Second, it is important to show that experience can have an impact even when people have had prior experience with the group involved or already hold attitudes about them.

How strong are these effects? Legitimacy is composed of three components: trust and confidence; obligation; and normative alignment. The magnitude of the impact of an experience can be estimated by considering these elements. A comparison of those who feel justly and unjustly treated provides a sense of the strength of the impact of an experience. On average, across the items used to index these three dimensions, unjustly treated respondents in the post-experience legitimacy scale were 21% less likely to endorse positive statements about the police.

In terms of behavioral impact, those who expressed injustice in their contact were four times more likely to report having been recently arrested (1.8 vs. 8.4%) and were also more likely to report having recently received summons (19.2% vs. 22.5%). These higher levels of contact reflect the fact that those who felt unfairly treated are more likely to indicate that they have recently carried a gun or knife (14% vs. 22%); stolen things worth over $50 (0% vs. 6%); and sold drugs (3% vs 8%).

Beyond supporting several key premises of contact theory in the arena of policing, this study also has implications for how to address issues of contact in the future. Past studies of contact have focused upon the conditions under which contact occurred, assuming that favorable conditions produced positive contact. Contact researchers, however, have not specified what behaviors within an experience make it a positive contact. They have assumed that different types of behavior occur with contact under varying conditions, but have not directly examined those varying types of behavior. This study draws from the literature on procedural justice to specify the actions that members of the dominant group (in this case the police) need to engage in to produce favorable change. Those actions are those associated with procedural justice. These findings do not contradict the arguments of contact theory but they supplement traditional contact theory based discussions of personal experience by identifying the elements of contact that facilitate positive attitude change.

**Range of Experience**

A further question is how much fairness is needed to produce a favorable change in legitimacy. To address this question, procedural justice was divided into six subgroups. Two reflect unjust experience and four various levels of procedural justice. This unbalanced division reflects the fact that in this sample people were more likely to report fairness (n =

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75. Tyler & Jackson, *supra* note 1.
than unfairness (n = 102) so there were more respondents to sort into levels of fairness.

Figure 1 shows the mean level of post-experience legitimacy for these six groups. The results suggest a generally linear relationship across levels of experienced fairness. In other words, the amount of justice/injustice experienced is reflected in the level of post-experience legitimacy. Hence, it can generally be suggested that more justice is better, less justice is worse. There is no evidence of either a plateau of improvement or an exponential amount of impact at either extreme. Of course, this analysis is more simplified than the regression analysis because it does not consider various controls, including a control for prior legitimacy. But it is consistent with the findings of those more sophisticated analyses. There is both a drop through levels of unfairness and a rise through levels of fairness. In neither case is there any sign of nonlinearity, suggesting that extreme events are especially powerful in their impact.

**POLICY IMPLICATIONS**

In terms of implications for policing, these findings contradict arguments that there is little value in trying to change police culture from a warrior to a guardian approach, or in developing procedural-justice-based police training. The actions of the police can build legitimacy. Reactions to experience are shaped by prior views, but, nonetheless, experience has an impact. This study suggests that both fair and unfair experiences can, and do, have an impact upon general views about police
legitimacy. In fact, this study does not find that negative experiences are more influential than positive experiences. It finds that fairness promotes legitimacy and unfairness undermines legitimacy.

An examination of impact across the range of fairness does not suggest that there is a floor or a ceiling effect. Over the range of natural variation examined here more fairness produces more favorable impact; more unfairness produces more unfavorable impact. Hence, there are two key messages for the police: avoid negative conduct and engage in positive contact. But, the message is not to avoid contact. The police can build legitimacy, and they can do so while engaged in policing activities.

FINAL CONCLUSIONS

On one level, the key point is about policing. The police can build trust by acting fairly when they deal with the public. This finding addresses a key factual question underlying discussions about how to approach police reform. The police can be encouraged to create training programs based upon procedural justice, as well as developing scripts for their contact with the public that reflect the same ideas.

As in any situation of social change, there are those who oppose change. And as is often the case, those who oppose change make factual assertions to support their views. In this case, one key argument has been that trying to build trust is pointless because of negativity effects. Negative experiences either overwhelm positive experiences or, in another version, are the only experiences that have an impact. Either way, change might be desirable, but is not realistically possible and therefore not something to be attempted. This evidence suggests that it is feasible to introduce a strategy leading to change.

More broadly, these findings support the argument of contact theory that personal interactions between people from groups with negative attitudes toward one another can be the basis of a strategy for building more positive attitudes. In this case, the interaction is between a police officer and a member of the public. But in this case, an interaction shapes attitudes about not only that officer but about the police in general. This provides evidence that the range of contact within which contact models can be used is widespread.

Finally, these results suggest the broader value of evidence-informed law. Social science theory postulates that legitimacy shapes behavior and that procedural justice shapes legitimacy. This provides a theoretical basis for legitimacy based policing. Evidence supports this set of arguments. There is an exemplary, different model for policing than the one which has shaped police policies and practices for the last several decades and that new model has been empirically demonstrated to be effective. This is the goal of evidence-informed law: to identify new and more desirable forms of social organization and to demonstrate empirically that they can and do work.
APPENDIX. QUESTIONS AND SCALE CONSTRUCTION

All of the statistics for wave one measures reported here are for the panel respondents (722) at time one. The 268 respondents with one or more personal experiences were also asked

Dependent variables (Wave two).

Legitimacy. Following the conceptual framework outlined by Tyler & Jackson (2014), legitimacy was assessed using four point scales (Strongly agree; somewhat agree; somewhat disagree; strongly disagree) reflecting three elements of legitimacy: trust and confidence; obligation; and normative alignment. High scores are positive. Items were: “Overall the police are honest.”; “People’s basic rights are well protected by the police.”; “The police usually make decisions that are good for everyone in the community.”; “The police treat everyone equally regardless of their race.”; “I am proud of the work the police do in my neighborhood.”; “I feel that people should support the police.”; “People should accept the decisions made by the police.”; “If the police tell you to do something, you should do it.”; “It is your duty to accept the decisions made by the police even when you disagree with them.”; “It is your duty to do what the police tell you, even if you do not understand or agree with their reasons.”; “It is your duty to do what the police tell you to do, even if you do not like the way they treat you.”; “The police usually act in ways that are consistent with your sense of what is right and wrong.” and “You generally agree with the values the police defend.” (W1: alpha = 0.88. Mean = 2.80 (0.59); W2: alpha = 0.89; mean 2.76(0.60)

Cynicism. Cynicism is a generally alienated view of law and legal authority. The items used a four point scale (1-4). High is supportive. The items were: “Laws are meant to be broken.”; “It is ok to do anything you want.”; “There are no right or wrong ways to make money.”; “It is alright to break a law if you think the law is wrong.”; “Sometimes you have to bend the law to get things to come out right.”; “There are times when it is ok to ignore that the police tell you to do.”; “The law represents that values of the people in power, rather than the values of people like me.”; “People in power use the law to try to control people like me.”; “The law does not protect my interests.”; “It is alright to get around the law as long as you don’t actually break it.”; “It is hard to blame someone for breaking the law if they can get away with it.”; “People do not need to obey a law if they had nothing to do with making that law.” (Wave one alpha = 0.78. Mean = 2.80(0.59). Wave 2 alpha = 0.85. Mean = 2.76(0.60)).
Stress. In the past 7 days, how often have you felt the following ways (Frequently, sometimes, seldom, almost never, never). Low scores are high stress. The items ask how often the respondent has “Been jumpy and easily upset.”; “Had trouble concentrating.”; “Felt watchful and on guard.”; “Bothered by nervousness.”; “Suddenly felt scared for no reason.”; “Feel tense or wound up.”; “Have episodes of panic or terror” and “Feel so restless that you could not keep still.” (Wave one alpha = 0.78; Mean = 3.87(0.81); Wave two alpha = 0.88. Mean = 3.92 (0.89)).

Cooperation. Respondents indicated their likelihood of engaging in actions (very likely; somewhat likely; somewhat unlikely; very unlikely). The questions were: “If you knew about someone from your neighborhood who had broken a law and was wanted by the police, how likely would you be to report it to the police.”; “If you witnessed a crime or knew about a crime that took place how likely would you be to report it to the police.”; and “If you were asked to do so, how likely would you be to provide information or help the police in an investigation of a crime?” (Wave one alpha = 0.76; Mean = 2.03(0.82); Wave two alpha = 0.75; Mean = 1.99(0.75)).

Criminal activity. Respondents were asked about frequency of criminal activity. The time frame in wave one was the prior 12 months; in wave two “since we last spoke (around 6 months)”. The question was: “How many times have you…” “Injured someone in a fight.”; “Taken money or goods from someone by force or threat or force.”; “Carried a weapon such as a gun or a knife.”; “Stolen something worth over $50.” and “Sold marijuana or other drugs.”.

Recent arrests. At wave two there were two questions asked: “Since we last spoke have you been arrested (3% yes)” and “Have you received a summons or desk appearance ticket (10% yes)”.

Long-term arrest history. At wave one respondents provided a summary of their prior involvement in criminal justice system (percentage yes). Have you been arrested (29%); received a summons (29%); been in jail (11%); been on probation (10%); been in prison (3%).

Independent variables

Total lifetime number of street contacts. Respondents were asked: “How many times in your life have you been approached by NYPD officers while on the street in a situation in which you have dealt with the officers personally (33.6% never; 1-3 times 37.3%; 4-10 times 23.3%; over 10 times 6.8%).”
Police actions during last contact.

Investigatory actions. Did the officers: “Ask your name (39% yes)”; “Ask for identification (79% yes)”. 

Harassing/threatening actions. Although prior studies distinguish between using harsh language and threatening to use force, in this sample using harsh language and threatening force were found to be related ($r = 0.57$ for threatening to use force; $r = 0.35$ for threatening to use a weapon) so harassment and threat were treated as one dimension. Respondents were asked: Did the officer: “Use harsh/insulting language (21%)”; “threaten to use force (12%)”; and “threaten to use a weapon (6%)”. 

Use of force. Did the officer: “Frisk, pat you down (28%)”; “Search your bags, clothing (22%)”; “Handcuff you (12%)”; “Take you to station (9%)”; and “Arrest you (4%)”. 

Personal procedural justice. Respondents rated officers on a four point scale: Strongly agree; somewhat agree; somewhat disagree and strongly disagree. The items were: “The police used fair procedures when making decisions about what to do.”; “The police let you tell your side of the story.”; “The police explained why they stopped you in a way that was clear to you.”; “The police got the facts they needed to make good decisions.”; “The police made their decisions in a neutral and unbiased way.”; “The police treated you fairly.”; “The police gave consideration to your views when deciding what to do.”; “The police tried to do what was right.”; “The police treated you with dignity and courtesy.”; and “The police respected your rights.”. (Wave one alpha = 0.94; Mean = 2.19(0.93); Wave two alpha = .94. Mean = 2.22(0.93) 

Appropriateness of police contact (four points.). The question asked respondents to agree or disagree (using a four point scale) that: “The police had a legitimate reason to stop you (54% agree)”.
### APPENDIX TABLE 1
**Panel Analysis: Demographics of the Wave 2 Respondents**

<table>
<thead>
<tr>
<th>Education</th>
<th>Wave 1 (n = 1,261)</th>
<th>Wave 2 (n = 722)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than high school graduate</td>
<td>16.7%</td>
<td>10.2%</td>
</tr>
<tr>
<td>High school graduate</td>
<td>31.2</td>
<td>31.6</td>
</tr>
<tr>
<td>Some college</td>
<td>32.7</td>
<td>37.1</td>
</tr>
<tr>
<td>College graduate or more</td>
<td>19.0</td>
<td>21.1</td>
</tr>
<tr>
<td>Don’t know</td>
<td>0.4</td>
<td>0.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Race</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>22.8</td>
<td>27.5%</td>
</tr>
<tr>
<td>African-American</td>
<td>23.4</td>
<td>22.3</td>
</tr>
<tr>
<td>Hispanic</td>
<td>34.3</td>
<td>29.3</td>
</tr>
<tr>
<td>Other</td>
<td>19.5</td>
<td>20.6</td>
</tr>
<tr>
<td>Age (mean)</td>
<td>22.0</td>
<td>22.9</td>
</tr>
<tr>
<td>Public housing resident</td>
<td>13.3</td>
<td>3%</td>
</tr>
</tbody>
</table>

The wave one sample is weighted using the wave one weight. The wave two sample is weighted using the wave two weight.