ABSTRACT

Title of dissertation: POLICE LEGITIMACY IN SUB-SAHARAN AFRICA

Brandon Paul Behlendorf, Doctor of Philosophy, 2016

Dissertation directed by: Professor Gary LaFree
Department of Criminology and Criminal Justice

Is fairness in process and outcome a generalizable driver of police legitimacy? In many industrialized nations, studies have demonstrated that police legitimacy is largely a function of whether citizens perceive treatment as normatively fair and respectful. Questions remain whether this model holds in less-industrialized contexts, where corruption and security challenges favor instrumental preferences for effective crime control and prevention. Support for and against the normative model of legitimacy has been found in less-industrialized countries, yet few have simultaneously compared these models across multiple industrializing countries.

Using a multilevel framework and data from respondents in 27 countries in sub-Saharan Africa (n~43,000), I find evidence for the presence of both instrumental and normative influences in shaping the perceptions of police legitimacy. More importantly, the internal consistency of legitimacy (defined as obligation to obey, moral alignment, and perceived legality of the police) varies considerably from country to country, suggesting that relationships between legality, morality, and obligation operate differently across contexts. Results are robust to a number of different modeling assumptions and alternative explanations. Overall, the results indicate that both fairness and effectiveness matter, not in all places, and in some cases contrary to theoretical expectations.

POLICE LEGITIMACY IN SUB-SAHARAN AFRICA

By

Brandon Paul Behlendorf

Dissertation submitted to the Faculty of the Graduate School of the
University of Maryland, College Park in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
2016

Advisory Committee:
Professor Gary LaFree, Chair
Professor Laura Dugan
Distinguished University Professor Lawrence Sherman
Associate Professor David Cunningham
Associate Professor Brooke Fisher Liu

@Copyright by

Brandon Paul Behlendorf

2016

DEDICATION

To all those that labor for a goal whose due date is long past and completion is sweetly welcomed.

ACKNOWLEDGEMENTS

This dissertation could not have been completed without the love, support, and assistance of many, many individuals. I first want to thank Gary LaFree, whose mentorship, collegiality, and friendship through the last nine years has been invaluable. I am the scholar I am today because of your efforts. I also want to thank Laura Dugan, whose insight and support throughout the years on a number of projects has not only strengthened my methodological capabilities, but also made me a more conscientious social scientist. I would also like to thank Lawrence Sherman, David Cunningham, and John McCauley for serving on my committee and providing relevant and important feedback on this dissertation as it has navigated through the process. Finally I would like to thank Brooke Fisher Liu for her willingness to serve as a last-minute replacement on my dissertation committee when scheduling challenges arose. All of these faculty have proven to be exemplars of the quality of relationships that can be fostered within a PhD program, and I am grateful to have them serve on my committee.

I would also like to thank my colleagues at the National Consortium for the Study of Terrorism and Responses to Terrorism, who have endured endless versions and comments about this dissertation over the years. Their support for this process as well as their insight and critique has been wonderful, and I am so thankful to work at a place where knowledge and its production is so highly valued. I would also like to thank my colleagues from the PhD program, including Sumit Kumar and Steve McGuinn, for their friendship and support over the years not only on this dissertation but also as we traverse the joys and difficulties of academia.

Finally, I would like to thank my family, who has endured all of the negative aspects of pursuing a PhD while I was working full time. To my children Joshua, Elijah, and Samuel, I want to thank them for letting daddy spend nights and weekends working on the dissertation and still welcoming me home with open arms and broad smiles. To my mother-in-law Pam and my parents Robert and Becky, whose support over the years has been incredible, I want to thank you. Finally I want to thank my beautiful and amazing wife Heather, for without you and your consistent encouragement, patience, and love, this dissertation would not be finished. You make me a better scholar and a better man, and I could never begin to repay you for your support throughout this process.

TABLE OF CONTENTS

DEDICATION ii
ACKNOWLEDGEMENTS iii
TABLE OF CONTENTS v
LIST OF TABLES vii
CHAPTER ONE - INTRODUCTION 1
Research Questions 4
Dissertation Outline 6
CHAPTER TWO - THEORETICAL FOUNDATIONS AND REVIEW OF THE LITERATURE 9
Legitimacy's Foundations 10
Descriptive vs. Normative Conceptions 10
The Concept of Authority 11
The Dialogue of Consent 13
The Divisibility of Legitimacy 15
Legal vs. Police Legitimacy 16
Instrumental and Normative Theories of Legitimacy 19
The Reassessment of Police Legitimacy: Two Key Topics 25
RQ1: The Generalizability of Normative Theories of Legitimacy 25
RQ1a. Is this relationship dependent on an individual's fear of crime or national context of conflict or violence? 27
RQ1b. Is the relationship above dependent on the definition of legitimacy? 29
RQ2: Are the normative elements of fairness and effectiveness preconditions to or components of legitimacy? 36
RQ2a: Is obligation to obey a component of or a consequence of police legitimacy? 40
Summary 43
CHAPTER THREE – CONTEXT, DATA AND METHODS 45
Police in Context 46
Data 52
Variables 56
Outcome of Interest: Legitimacy 56
Obligation to Obey 57
Moral Alignment 59
Perceived Legality 62
Independent Variables: Normative Criteria 64
Procedural Fairness 64
Distributive Fairness 66
Perceived Effectiveness 67
Independent Variables: Instrumental Concerns 68
Crime Victimization 68
Fear of Crime 68
Controls 69
National Context 73
Security Challenges 73

Context of Corruption ... 76
Other Controls ... 76
Analytic Plan ... 77
Legitimacy and its Constructs ... 77
Fit for Multilevel Models ... 78
Mean-Centering ... 80
Missing Data ... 81
Model Selection ... 82
Model Construction for Research Questions ... 84
CHAPTER 4: RESULTS ... 89
Is Police Legitimacy Driven by Normative Criteria in SSA? ... 90
Country-to-Country Variation ... 97
Are the normative or instrumental models of legitimacy influenced by instrumental concerns? ... 110
Do the instrumental and normative models of legitimacy depend on the definition of legitimacy? ... 117
Moral Nonalignment - Pooled ... 118
Moral Nonalignment - Country-by-Country Variation ... 124
Perceived Illegality - Pooled ... 128
Perceived Illegality - Country-by-Country Variation ... 136
Summary of Results ... 141
Is obligation to obey a component of or a consequence of police legitimacy? ... 148
Robustness Checks and Sensitivity Analyses ... 152
Different Definition of Moral Nonalignment ... 152
Different Definition of Perceived Illegality ... 156
Inclusion of Regional Ethnic Minority and Ethnic Group Size ... 159
Colonial Legacy ... 162
Regime Type ... 164
Summary of Results across Hypotheses ... 167
CHAPTER 5: DISCUSSION AND CONCLUSIONS ... 170
Implications ... 175
Theoretical ... 175
Research ... 177
Policy ... 178
Future Research ... 181
Limitations ... 184
Conclusion ... 185
APPENDIX A: SURVEY QUESTIONS ... 187
BIBLIOGRAPHY ... 203

LIST OF TABLES

Table 1. Key Research Questions and Hypotheses. 44
Table 2. Initial Sample Descriptives. 55
Table 3. Outcome of Interest: Legitimacy. 57
Table 4. Possible Correlates of Legitimacy. 65
Table 5. Instrumental Concerns. 69
Table 6. Socioeconomic and Social Standing Controls. 71
Table 7. Police Presence and Survey Controls. 73
Table 8. Country-level Measures. 76
Table 9. Intraclass Coefficients for All Dependent Variables. 80
Table 10. Random-Intercept Logistic Models Regressing Obligation to Obey on Procedural Fairness. 93
Table 11. Random-Intercept Logistic Models Regressing Obligation to Obey on Normative Criteria 96
Table 12. Logistic Regression of Obligation to Obey on Procedural Fairness, Distributive Fairness, and Perceived Effectiveness, by Country. 99
Table 13. Country-Specific Instrumental vs. Normative Drivers of Police Legitimacy. 109
Table 14. Random-Intercept Logistic Models Regressing Obligation to Obey on Instrumental Concerns and Normative Criteria. 112
Table 15. Random-Intercept Logistic Models Regressing Obligation to Obey on Instrumental Concerns and Normative Criteria 115
Table 16. Results from Mediation Analysis for Multilevel Logistic Regression of Obligation to Obey 117
Table 17. Random-Intercept Logistic Models Regressing Moral Nonalignment on Normative Criteria. 120
Table 18. Random-Intercept Logistic Models Regressing Moral Nonalignment on Instrumental Concerns and Normative Criteria. 123
Table 19. Logistic Regression of Moral Nonalignment on Procedural Fairness, Distributive Fairness, and Perceived Effectiveness, by Country. 126
Table 20. Random-Intercept Logistic Models Regressing Perceived Illegality on Normative Criteria. 130
Table 21. Random-Intercept Logistic Models Regressing Perceived Illegality on Instrumental and Normative Criteria. 134
Table 22. Random-Intercept Logistic Models Regressing Perceived Illegality on Instrumental Concerns, Instrumental and Normative Criteria. 135
Table 23.Logistic Regression of Perceived Illegality on Procedural Fairness, Distributive Fairness, and Perceived Effectiveness, by Country. 139
Table 24. Relationship Distribution between Key Independent Variables and Definitions of Legitimacy across Countries. 145

Table 25. Odds Ratios of Legitimacy on Procedural and Distributive Fairness, by Country and Definition of Legitimacy. 146
Table 26. Odds Ratios of Legitimacy on Perceived Effectiveness, by Country and Definition of Legitimacy 147
Table 27. Random-Intercept Logistic Models Regressing Obligation to Obey on Legitimacy, Instrumental Concerns and Normative Criteria. 151
Table 28. Sensitivity Analysis for Different Definitions of Moral Nonalignment. 155
Table 29. Sensitivity Analysis for Different Definitions of Perceived Illegality. 158
Table 30. Robustness Check for Regional Minority Status and Size of Ethnic Group. . 161
Table 31. Robustness Check including Former British Colonies and Level of Democracy. 166
Table 32. Summary of Hypotheses. 169

LIST OF FIGURES

Figure 1. Conceptual Model of Determinants of Legitimacy. 42
Figure 2. Percent of Respondents who “Agree” or “Strongly Agree” with Obligation to Obey the Police. 59
Figure 3. Percent of Respondents who are Not Morally Aligned with the Police............ 61
Figure 4. Percent of Respondents who Perceive the Police to be at least Somewhat Corrupt and Respondents who Perceive Severe Corruption in the Police......... 63
Figure 5. Odds Ratios for Logistic Regression of Obligation to Obey on Procedural Fairness, by Country. 102
Figure 6. Odds Ratios for Logistic Regression of Obligation to Obey on Distributive Fairness, by Country. 102
Figure 7. Difference in Odds Ratios for Procedural and Distributive Fairness, by Country. 103
Figure 8. Odds Ratios for Logistic Regression of Obligation to Obey on Perceived Effectiveness, by Country. 106
Figure 9. Difference in Odds Ratios for Procedural Fairness and Perceived Effectiveness, by Country. 107
Figure 10. Odds Ratios for Procedural Fairness on Moral Nonalignment, by Country. 127
Figure 11. Odds Ratios for Distributive Fairness on Moral Nonalignment, by Country.127
Figure 12. Odds Ratios for Perceived Effectiveness on Moral Nonalignment, by Country. 128
Figure 13. Odds Ratios for Procedural Fairness on Perceived Illegality, by Country.... 140
Figure 14. Odds Ratios for Distributive Fairness on Perceived Illegality, by Country. . 140
Figure 15. Odds Ratios for Perceived Effectiveness on Perceived Illegality, by Country 141
Figure 16. Revised Model of Legitimacy 172

CHAPTER ONE - INTRODUCTION

Does the public find the police to be legitimate, and if so, why? The question has garnered a substantial amount of inquiry in the past 20 years. A number of studies have found that compliance with the law and cooperation with the police are primarily influenced by how legitimate the police are viewed (Tyler, 1990; Sunshine and Tyler, 2003; Reisig, Bratton, and Gertz, 2007), creating important norms for the maintenance of order and the use of coercive force by law enforcement. Police perceived to be legitimate are seen as an essential component of well-functioning democracy, evidence of the "public recognition that the social order needs a system of laws that generate compliance and respect above and beyond individual preferences (or disagreements) concerning specific laws" (Jackson, Bradford, Hough, Myhill, Quinton, and Tyler, 2012b: 1053).

More than just theoretical, efforts that base policing strategies on improving perceptions of legitimacy create practical approaches that can lead to greater cooperation from citizens (Tyler, 2001; Jackson, Bradford, Hough, Myhill, Quinton, and Tyler, 2012a), increased compliance with the law (Sunshine and Tyler, 2003; Murphy, Tyler, and Curtis, 2009), and decreased recidivism (Gottfredson, Kearley, Najaka, and Rocha., 2007; McIvor, 2009; Papachristos, Mears, and Fagan 2009). As "the best officers are those who use less, not more, force," (Terrill, 2001; 232), perceptions of legitimacy can serve as a currency whereby citizens increase their deference to authority, reducing the need for coercion. Adopting this approach can directly impact cooperation during an event (Mazerolle, Antrobus, Bennett, and Tyler, 2012) as well as contribute to long-term changes in perception of the police, even by those who have been arrested for a crime (Paternoster, Brame, Bachman, and Sherman, 1997).

The dominant model of police legitimacy argues that citizens will defer to police authority when they view them to act with appropriate, fair, just, and respectful procedures during interactions with the public (Tyler, 1990; Tyler and Huo, 2002; Tyler and Jackson, 2013). Individuals who perceive the police to treat them with fairness and politeness during interactions feel valued by the institution (Tyler, 1989; 1990) and project a sense of moral rightness of the police themselves (Paternoster et al., 1997; Tyler and Lind, 1992). Those who feel included in the decision-making process during interactions with the police, regardless of the actual outcome, will be more likely to trust the motives of the police in handling other situations (Tyler, 2004; Brockner, Ackerman, Greenberg, Gelfand, Francesco, Chen, Leung, Bierbrauer, Gomez, Kirkman, and Shapiro, 2001; Tyler, Rasinski, and McGraw, 1985). Above and beyond the perceived effectiveness of the police, the public's belief in an institution that treats citizens with respect and fairness is a key determinant of their ability to lead without extensive coercive force.

Although strongly supported in the United States (Tyler, 1990, 2001, 2006; Tyler and Fagan, 2008; Taylor, Wyant, and Lockwood, 2015), United Kingdom (Jackson et al., 2012b; Jackson et al., 2013; Jackson et al., 2015), Australia (Hinds and Murphy, 2007; Hinds, 2009; Murphy, Tyler, and Curtis, 2009), and other Western countries (Hough, Jackson, and Bradford, 2013a; Hough, Jackson and Bradford, 2013b; Reisig, Tankebe, and Mesko, 2014), there are a number of questions regarding the validity of the legitimacy model in non-Western contexts. For example, in Ghana respondents were less likely to support private modes of coercion (vigilantism) when they perceived the police to be more trustworthy and act in fair and respectful manner when interacting with the public (Tankebe, 2009b). Although these perceptions can be undermined by experiences with

corruption and perceptions of police ineffectiveness (Bradford, Huq, Jackson, and Roberts, 2014; Jackson, Asif, Bradford, and Zakar, 2014; Tankebe, 2010), they suggest overall that the legitimacy model may have useful extensions for policing in less-industrialized countries.

Yet in many regions, the police are perceived to be coercive instruments of the state (Bayley, 1996), appointed with very little concern for the needs and safety of local populations. Governments continually use police officers to torture citizens (Babovic, 2000; Gilinskiy, 2011), enact repressive actions (Huggins, 1998; Ruteere and Pommerolle, 2003), prevent the assembly of citizens or stifle expressions of protest that challenge the ruling party's narrative (McPhail and McCarthy, 2005; Della Porta and Tarrow, 2012; Earl and Soule, 2006; Earl, Soule, and McCarthy, 2003). In contrast to Western contexts, where legitimacy and trust have been emphasized, the police in many less-industrialized countries are often viewed with contention and fear, leaving little hope for the applicability of the legitimacy model in these contexts.

Nowhere is this more prevalent than in Sub-Saharan Africa (SSA), where generations of authoritarian rulers have used the police to control populations and execute competitors, creating a chasm between the police and the public that some would argue is impossible to bridge (Bruce, 2002; Gordon, 2001) The 1996 testimony of a member of the United Democratic Front (an anti-apartheid group) highlights the often brutal tactics that South African police under apartheid used to coerce false confessions from political enemies:

> "(the officer said) this is your day today, we are going to kill you…One of the policemen came in with a box, they placed this box in this room. They

> opened this box. (The officer) said I must take off my clothes - all of my clothes, I should be naked. I tried to…struggle but I didn't have enough strength; I was assaulted again by (officers). I took off my clothes and I remained naked…They took out a snake from this box (and)…they wrapped it around my neck ….I was assaulted again by (police officer). I was injured in the head, I was full of blood all over the body. They were assaulting me - they assaulted me for the whole night… (Then) they brought me a dog. They locked me up with that dog… he was biting on my thighs, I had some wounds…They wanted me to cry…the police were playing with me," (South Africa Truth and Reconciliation Commission, 1998).

Repeated countless times, this narrative of torture and abuse can cloud perceptions of the police in this region. In addition, the colonial system of policing, primarily built to protect European interests, created many obstacles for positive police-community relations in these countries, including nepotism, ethnocentrism, and corruption (Baker, 2006). The legitimization of coercive force in postcolonial societies often depends on political, historical, and cultural conditions that shape both the institutions and practices of the police (Jauregui, 2013b). Rather than principles of public approval and impartiality (Peel, 1829; Radelet, 1984), in many cases these institutions materialized into the primary channel for local and national elites to provide patronage (Kopecký, 2011) and subdue public dissent (Frankel, 1980).

Research Questions

Thus, the current state of police research and reform in SSA is uncertain: to what extent is the concept of legitimacy relevant to discussions of the police in SSA? Most prior

research in this area has focused on Western democracies (Tyler, 2001; Tyler and Huo, 2002; Tyler and Fagan, 2008; Jackson et al., 2012b; Jackson et al., 2015). Limited research on SSA has suggested that concerns over safety are more important for shaping perceptions of the police than fair or equitable treatment (Tankebe, 2009a; Bradford et al., 2014). Should Western notions of legitimacy and trust, built on empirical research in industrialized nations, shape reform efforts in less-industrialized countries? Is the current model of legitimacy sufficient to capture the pertinent factors influencing public perceptions of the police within SSA?

The purpose of this dissertation is to test the validity of current and evolving models of police legitimacy in this context through an examination of public perception of police by residents within SSA. There has been limited empirical research on police legitimacy in SSA, and those efforts that exist have focused on single-country examinations of the legitimacy of the police in former British colonies (Bradford et al., 2014; Tankebe, 2010). While these efforts have extended the legitimacy model in novel ways, little is known about its comparative value across less-industrialized countries with considerably different policing institutions, colonial legacies, and internal security challenges. Using survey data from multiple countries drawn from the Afrobarometer (2016), I examine whether the hypothesized relationship between perceptions of procedural fairness and perceived legitimacy (otherwise known as the normative model) is present, consistent, and strong across different contexts in different countries. In contrast, the instrumental model, whereby legitimacy is a function of the perceived effectiveness of the police at controlling crime, may be more relevant to citizens within SSA who face considerable national and personal security threats. This is one of only two multi-country tests of police legitimacy

within SSA (see Levi, Tyler, and Sacks, 2009), and addresses the specific research questions below:

RQ1: Is the normative theory of police legitimacy generalizable, or do instrumental preferences transcend normative criteria for legitimacy?

RQ1a: Is this relationship dependent on an individual's victimization, fear of crime or national context of conflict or violence?

RQ1b: Is this relationship dependent on the definition of legitimacy?

RQ2: Are the normative elements of fairness and effectiveness preconditions to or components of legitimacy?

RQ2a: Is obligation to obey a component of or a consequence of police legitimacy?

Dissertation Outline

Overall, this dissertation advances both the theoretical and empirical understanding of police legitimacy, particularly outside of the industrialized world. In Chapter Two I provide an overview of the concepts of police legitimacy, highlighting the evolution of the legitimacy model from Lockean perspectives of authority to the current multi-factor approach (Bradford et al., 2014; Myhill and Bradford, 2012; Tankebe, 2013a). This evolution has seen the concepts, outcomes, and antecedents of legitimacy fluctuate in terms of their relevance, and this chapter will tease out those relative changes important for SSA.

I provide an overview of policing in Africa, as well as the data and methods to address each of the research questions presented in Chapter Three. I draw on data from Round 5 of the Afrobarometer survey, which is a nationally representative survey of individuals living in African countries and administered through a coordinated effort across a number of institutions. Each round develops a core questionnaire that is administered by

all participating countries that provides a unique opportunity to examine the presence of the police legitimacy model across SSA. I argue that it is important to test these perceptual models across multiple countries to ensure that findings are robust across contexts. Additional data are drawn as controls from a number of other sources at the individual- and country-level. In order to test the theories of police legitimacy, I implement a multilevel modeling structure nesting individual respondents at level-1 within 27 countries at level-2.

In Chapter Four, I present initial results testing the police legitimacy model within SSA, examining whether legitimacy is driven by instrumental or normative concerns [RQ1]. Specifically, I focus on whether alternative normative criteria [RQ1a] modify or mediate the relationship among drivers of police legitimacy within SSA. Noting that current policing priorities in many countries focus on internal security challenges [RQ1b], between-country differences in the support for normative or instrumental models of legitimacy are also addressed. Additionally, recent research has introduced alternative definitions of legitimacy (Bottoms and Tankebe, 2012; Tyler and Jackson, 2013), including the perceived legality of and moral alignment with the police, which could influence the normative vs. instrumental criteria for police legitimacy [RQ1c]. This analysis also evaluates whether perceptions of fairness and effectiveness are predictors (Jackson et al., 2012a) or components of legitimacy (Tankebe, 2013a) [RQ2]. Specifically, I focus on whether the core definition of legitimacy in many studies, obligation to obey, is influenced by other definitions of legitimacy (police legality and moral alignment), suggesting that it may be an outcome of legitimacy rather than its component [RQ2a]. I examine results under multiple model specifications, in order to identify whether perceptions of legitimacy are present and which model of legitimacy, if any, is most relevant to the SSA context.

I conclude the dissertation in Chapter Five by reviewing the key findings regarding legitimacy theory within SSA, limitations of the existing study, and overall implications for theory and practice. Where legitimacy of the police in SSA is driven by procedural fairness rather than perceived effectiveness, efforts to develop reform efforts would benefit from an increased focus on process rather than outcomes of security provision. While focused on the nature of police-citizen interactions within SSA, the approach has implications for legitimacy theory within Western contexts. Legitimacy theory for many years was developed in countries with very positive baseline perceptions of the police, and that experiences that undermine this original assumption reduce trust in and cooperation with the police. Violations of fairness, visualization of police beatings communicated through social media, and other reminders of poor police-citizen interactions across racial or ethnic communities have contributed to a declining level of trust and legitimacy in the police in both the United States (Twenge, Campbell, and Carter, 2014; Hetherington, 2005) and the United Kingdom (Bradford, 2010). Understanding the generalizability of the normative criteria for legitimacy, and its heterogeneity across SSA could prompt a review of legitimacy theory relevant for both Western and non-Western countries.

CHAPTER TWO - THEORETICAL FOUNDATIONS AND REVIEW OF THE LITERATURE

What is legitimacy? Weber famously described legitimacy as the process by which citizens hold “beliefs by virtue of which persons exercising authority are lent prestige,” (Weber, 1964: 382). Legitimacy can also be “a psychological property of an authority, institution, or social arrangement that leads those connected to it to believe that it is appropriate, proper, and just," (Tyler, 2006: 375). Legitimacy creates conditions that support "acceptance by the people of the need to bring their behavior into line with the dictates of an external authority," (Tyler, 1990: 25). It is a population-derived ascription that confers authority on an institution or state to balance self-interest and social order, between the rule of law and coercive power (Coicaud, 2002). While deterrence may be the state’s efforts to reduce offending, legitimacy is the countervailing effort to increase compliance. It is a challenge that every state must face, as overwhelming use of coercion to enforce the law often (and some would say ultimately) results in dissention, rebellion, and anarchy.

In this balance between social order and anarchy, what is it that makes the police legitimate? The concept has evolved considerably over the past three decades; a transition whose current status is in flux, leaving many questions only partially answered. In this chapter, I review the conceptual development of police legitimacy, situating the discussion in broader discussions of political philosophy and its more narrow application within the criminological literature. I also examine the current dichotomy between instrumental and normative bases for police legitimacy, as well as key limitations of the current empirical support for the theory. In the end, I highlight two key questions that guide not only emergent research on police legitimacy, but also expansion of the theory into police-citizen

relations within less-industrialized countries. I begin with a brief comparison between descriptive and normative conceptions of legitimacy.

Legitimacy's Foundations

Descriptive vs. Normative Conceptions

Descriptive explanations of legitimacy primarily refer to public opinion and beliefs about the political authority of an institution or state (Hinsch, 2008). Weber noted that "the basis of every system of authority, and correspondingly of every kind of willingness to obey, is a belief, a belief by virtue of which persons exercising authority are lent prestige," (Weber, 1964: 382). This prestige, or legitimacy, is both the acceptance of the authority and the need to obey its dictates (French and Raven, 1959; Merelman, 1966), and this faith in a specific social order creates the basis for routines and norms that place societal stability above self-interest.

In Weber's conceptualization, legitimacy is a descriptive attribute of the state that is given upon consent of the governed. Authorities can be legitimate for three reasons: the history of the institution and its long-standing governance (traditional); faith in specific leaders and rulers who occupy positions within that institution (charismatic); or because it adheres to a rational rule of law in the view of the public (legal-rational). The common criterion of descriptive legitimacy is whether the population obligates to obey the law of the state (Hinsch, 2008). Thus, these accounts of legitimacy are subjective, dependent on the acceptance of the populace and sensitive to their changing standards and demands.

Descriptive explanations of legitimacy, though, support societies where institutions may be simultaneously accepted by the public and perceived to be violent, unfair, or unjust (Hinsch 2010; Bottoms and Tankebe, 2012). For example, Germany prior to World War II

maintained stable social order and instilled nationalistic pride, garnering popular legitimacy in the midst of an unjust campaign of targeted violence towards those not of Aryan descent (Lipset, 1959; Gellately, 2001). In contrast, normative conceptions of legitimacy ascribe a set of criteria to which the justification for authority of a specific state or institution is based. Thus, it is not whether the state is accepted by the populace, but rather whether its justification for a right to rule is accepted (Raz, 1986; Hinsch, 2008).

States can be viewed as legitimate according to a number of criteria, including abstract notions of justice, distributive fairness, and moral alignment between the values of individuals and the state. Some consider states to be legitimate when they engage in practices and behaviors that are oriented around norms of justice and equitable treatment of the citizenry. In this case, a legitimate institution is also a just institution (Rawls, 1993), and when it becomes unjust, it no longer is able to exert an obligation on its citizens to obey its dictates. Therefore, while descriptive conceptions confer legitimacy because a state is accepted by the populace, normative conceptions require the state meet a specific standard before legitimacy is bestowed. It is a debate between "why people obey" and "why people *ought to* obey" (Beetham, 1991; Hinsch, 2010; Simmons, 2001), a fact-value distinction asking whether the study of legitimacy should focus on descriptive or normative concepts (Jackson and Bradford, 2009).

The Concept of Authority

The idea of legitimacy is rooted in a notion of authority and its ability to restrain self-interested individuals. But what kind of authority (or as Weber [1964] puts it, "legitimate domination") is necessary, and what are the implications of that authority for legitimacy theory? The source of that authority, and its relationship to self-interest, forms a key distinction between competing visions of legitimacy.

A considerable amount of criminological theory is built upon a framework in which political authority does not originally exist within a state of nature. First suggested by Thomas Hobbes (1668 [1994]), this perspective argues that authority is created through the social contract to protect a populace against the brutish conditions of nature. This authority can be transferred to a sovereign, whether that is an individual or a collective, in exchange for protection. If no sovereign is present, one can be created through a covenant or through the threatening coercion of an outside sovereign, both of which are viewed as legitimate sources of authority. This authority remains legitimate as long as individuals within society are protected, and the presence of this authority requires that everyone is obligated to obey its dictates. Thus, the obligation upon citizens to obey is rooted in the ability for the authority to protect, and when the state is unable to protect citizens, it is no longer viewed as legitimate. More importantly, the primary mechanism of the state to maintain order is through coercive force (Hobbes, 1668 [1994]).

Maintenance of order in such a society solely through the use of coercive force, though, remains costly and often counterproductive (Morris, 2012). Systems of surveillance to monitor rule violations create dissension between citizens and the state (Alge, 2001; Botan, 1996; Tyler, 2006). Moreover, the ability to deter through perceived sanctions that will be swift, severe and certain is often limited and costly (Pratt and Cullen, 2005; Pratt, Cullen, Blevins, Daigle, and Madensen, 2006). In order to truly protect its citizens and therefore be viewed as legitimate, the government would have to be omnipresent and omniscient, creating a considerable vulnerability when failing to satisfy these requirements. When taken to its logical conclusion, a system built in such way would

quickly unravel during conflictual periods where its ability to protect the public fully and completely is in question.

In contrast, as John Locke argues (1689 [1988]), authority is embedded within every individual; the natural law is unable to rule a society or provide mechanisms for enforcement when violated. Thus, authority must be *transferred* from individuals to an outside entity in order for security to be maintained. Within this vision of the social contract, the political authority embedded in individuals is transferred to states in exchange for the security of the populace. This transfer cannot happen through coercion alone, as obedience does not rest solely with the possession of power (Weber, 1978). Instead, it must be a function of the consent of individuals to transfer this power to the state, thereby legitimating it. When consent is given, the expectation is that individuals are obliged to obey the laws and the dictates of those to whom its consent has been given. Thus, in contrast to the Hobbesian perspective of mandatory obligation towards states that can protect, the Lockean view suggests that protection (and social order) is an outcome of a citizen's transference of authority (or deference) to a state they consent to as legitimate.

The Dialogue of Consent

This transfer of authority is not a singular event; rather, it is a constant dialogue between citizen and state over both the content and justification of consent (Bottoms and Tankebe, 2012; Coicaud, 2002; Zelditch and Walker, 2003). Consent can be given to both initiate political authority (originating consent), as well as continually evaluate a regime's performance (joining consent) (Rawls, 2007). It is the recurrent recognition of the moral exercise of power as much as it is about which institution should wield that power. In this dialogue, the right to consent has to both be claimed by the power-holder and accepted by the populace. Where one falters, situations arise in which either the claim of legitimacy is

rejected by the governed or obedience is motivated by dull compulsion towards status quo institutions (Raz, 1986).

This dialogue is also shaped by the normative expectations that the state itself has regarding its relationship with the citizenry. States that view their primary mission as the provision of security through the threat and use of coercive force see little incentive in justifying that authority beyond metrics of safety. The methods and mechanisms by which they provide that security are of little relevance to the state, as long as security is maintained. Democratic governments, whose authority rests on the consent of the public, are more reliant than authoritarian regimes on their accountability to the citizens concerning these mechanisms of security provision. These states are answerable to the citizens regarding their performance and respond to relevant community opinion, even when that opinion may be viewed as incomplete (Uhr, 2001). In these situations, if the state justifies its authority by its accountability to citizens, then it will seek to implement protocols and procedures that maintain and bolster that accountability. Therefore, "accountability is important to democratic societies in providing opportunities for those who govern and manage our affairs to account for, explain, and justify their use of their offices of power and influence," (Uhr, 2001 as quoted in Goldsmith, 2005:446).

Ultimately, this dialogue of consent is a discussion about the foundations of order within a society. As Tyler (2004) and others note, societies where security depends on self-regulation rather than instrumentally-motivated compliance from the state minimize the need for communal resources to continually maintain order (Tyler, 2001; Tyler and Darley, 2000). States may have the right to use coercive force, but its use provides evidence that consensual authority has weakened or failed. Where citizens consent to an

authority, they place the laws and orders of those institutions (appropriately executed) as superseding their own judgment and obligate to obey them (Bottoms and Tankebe, 2012). This consent is preemptive and changes the normative situation between a subject and an authority from contentious to deferential (Raz, 1986). When widespread, this consent allows authorities to effectively concentrate resources to support the longer term goals of the society (Tyler and Jackson, 2013). Where absent, especially regarding the law and legal authorities, the instrumentation of the state will take "more arbitrary and violent forms, further damaging public trust," (Goldsmith, 2005: 445).

The Divisibility of Legitimacy

Therefore, societies governed by institutions viewed as normatively legitimate continually renegotiate the tradeoff between security and liberty through the dialogic nature of justification, consent and obligation to obey. Situations, experiences, and expressions that jeopardize this dialogue may contribute to the weakening of state legitimacy and social order, especially when repeated. Yet this process between citizen and state occurs not with the state as a whole, but on a number of parallel and hierarchical planes as individuals interact with different institutions. States overall could be viewed as legitimate by citizens (Inglehart, 2000), while specific institutions of the state can suffer from low perceptions of legitimacy and willingness to defer. For example, regimes transitioning from authoritarianism to democratic rule can project strong public support for democratic principles while failing to include those values within the protocols of governing bodies (Finkel, 2005; Kwak, Miguel, and Carreon, 2012).

In this study, the question of legitimacy is less about the state overall and more about the specific institutions that operate as instruments of the state. As key implementers of state power, the enforcement of the law by the police represents one of the most tangible

forms of the state. Taxes may be collected once a year and elections held infrequently, but the police are "street-level bureaucrats" (Lipsky, 1980) who selectively administer the multitude of laws via regular interaction with citizens. Regardless of the type of policing conducted (community policing, focused deterrence, broken windows, or others) the police cannot function without engaging with the public (LaFree, 1998: 154-155). More importantly, those interactions are often in public spaces with audiences viewing (and more recently recording) the behaviors and protocols of the police. Negative perceptions of the police become platforms for larger social and political change, and acceptance of the police as a legitimate authority is essential for the underlying legitimacy of the state overall. Viewed this way, understanding what influences perceptions of police legitimacy now becomes central for assessing the potential for states to maintain social order without the excessive use of coercive force.

Legal vs. Police Legitimacy

Examining the legitimacy of criminal justice institutions has not only been limited to the police. In broader discussions, the legitimacy of the courts (Gibson, Caldeira, and Baird, 1998; Gibson and Caldeira, 2003; Tyler, 2007; Feld, 1990) and correctional systems (Reisig and Mesko, 2009; Sparks, Bottoms, and Hay, 1996) have each been topics of inquiry, with considerable support found for legitimacy-motivated compliance and cooperation among these institutions (Casper, Tyler, and Fisher, 1988; Tyler, 2001; Shapiro and Brett, 1993; Henderson, Wells, Maguire, and Gray, 2010; Tyler, 2010). Yet entry into these systems is first mediated by the police-citizen interaction; an entry that could shape subsequent perceptions of these institutions. Moreover, the likelihood of interaction between citizens and the judicial or correctional system is considerably lower than that with police. Therefore, focusing on the legitimacy of the police first can provide

insights into how these perceptions can shape attitudes and behaviors towards other institutions, and remains the topic of this dissertation.

The study of police legitimacy, though, has been clouded by the conceptual confusion between two distinct perceptions working simultaneously: the duty to obey the police even if a citizen disagrees with their decisions, and the duty to obey the law even if a citizen disagrees with its prescriptions (Jackson et al., 2012b). The duty to obey the police (police legitimacy) refers to the deference that citizens make to the primary institution regarding the enforcement of law and the maintenance of order. Recognizing the authority of the police and obeying their commands signals one's alignment with the decisions, operations, and practices of that particular institution. It is important to maintain distinction here between general perceptions of the police and specific experiences or interactions with the police (Weitzer and Tuch, 2005).

The obligation to obey the law (or legal legitimacy) draws more heavily from discussions regarding the political philosophy of legitimacy (Jackson, Bradford, Hough, and Murray, 2011). Given that the law, separate from police or court action, is a criterion of behavior that embodies the prescription of others, an individual's deference to the law suggests a broader moral or normative alignment between the two (Raz, 1986). In many cases, this difference can be found in laws that may violate religious prescriptions, or laws that may benefit one particular group over another. Concerning the police, individuals may find the particular institution of the police to be legitimate even if they find the laws of the state illegitimate (Nivette, 2013). This flips the normative assessment that just laws or just practices are components of a legitimate police, and assumes instead that the distinction between the two is an important component to evaluate. In fact, criminologists often take

the legitimacy of the state for granted (Jackson and Bradford, 2009). However, these assumptions may not be accurate in many less-industrialized countries, where legal and political systems are transitioning from authoritative powers to democratic constituencies.

In essence, subjugation to the law helps ensure compliance when the state is not physically present, while obedience to the police ensures cooperation when the state is involved. Thus, it is important to keep distinct the legitimacy of the police, measured by one's deference to their authority to enforce the law, from the legitimacy of the law itself, although the two may be interrelated. For example, in a sample of Australians, Murphy and colleagues found that those who perceived lower legitimacy of the law were also less likely to cooperate with the police (Murphy, Tyler, and Curtis, 2009). More importantly, those with low perceptions of the legitimacy of the law, especially ethnic minorities, may respond differently to police efforts to strengthen procedural fairness and justice (Murphy and Cherney, 2011).

In summary, understanding police legitimacy requires that researchers address three foundational assumptions. First, the legitimacy of the police could have separate etiological pathways than legitimacy of the state overall; states can be viewed as legitimate even if the police themselves are viewed as illegitimate. Second, the perceived legitimacy of the police (and whether a citizen ought to obey their orders and cooperate) is distinct from the perceived legitimacy of the law. The two are complimentary but separate perceptions that could both have an impact on cooperation and compliance with the police. Finally, legitimacy can be subjective or normative, and differentiating between the two has considerable relevance for theory development and testing. Police institutions pursuing descriptive legitimacy need only please the general public; those who seek normative

legitimacy must adhere to a standard or criteria of what constitutes legitimate policing. I compare the relevant theoretical and empirical evidence for these contrasting positions in the next section.

Instrumental and Normative Theories of Legitimacy

One of the early explanations of police legitimacy originates in the idea that deference to authority will be granted to those institutions that demonstrate their job-related effectiveness. For the police, instrumental explanations argue that police agencies that are viewed to be effective at controlling crime are also those that will be found legitimate by the populace (Sunshine and Tyler, 2003). Stoutland (2001) argues that those agencies who demonstrate both competence in safety provision and dependability in fulfilling their responsibilities will be trusted by citizens with the ability to use coercive force when necessary. These concerns take precedence during times of considerable security threats, where individuals prioritize safety above all (Sunshine and Tyler, 2003; Bradford et al., 2014).

More important than effectively responding to crime, police agencies must also be viewed as a credible sanction threat, deterring future criminal activity. When viewed as incompetent or unreliable, these same agencies can engender distrust; often reinforced by continual neglect, indifference, and inconsistency on behalf of the officers (Levi, 1998; Goldsmith, 2005). Ultimately, instrumental explanations are heavily dependent on the perceived level of safety within a community and the future-oriented threat of sanction from the police. Both can change rapidly, creating a fragile reservoir of support for the police if this is their only criteria for legitimacy (Easton, 1965).

In contrast, procedural (or normative) theories of legitimacy argue that compliance and cooperation are rooted not in the fear of punishment but in the perception of police as fair and respectful (Tyler, 1990; 2001). Crime levels can fluctuate; thus, procedural theories place the locus of legitimacy in the process of policing rather than its outcome. As Tom Tyler and colleagues have argued over the past 30 years, it is the repeated interaction between citizen and police, conducted with respect towards citizens and a fair hearing of their claims, which creates and sustains deference towards police authority (Tyler, 1990; Tyler, 2001; Sunshine and Tyler, 2003; Tyler, 2006; Tyler and Jackson, 2013). This process-based model of regulation (Tyler and Huo, 2002) suggests two stages: one, the authorities need to activate voluntary feelings of obligation and responsibility that are not linked to perceived sanction threat; and two, these feelings must be linked to justice-based arguments about legal authorities centered around fairness (Beetham, 1991; Tyler, 1990). This approach to policing allows police "to focus on controlling crime without alienating the public," (Sunshine and Tyler, 2003: 520).

Perceptions of fairness are driven by three key elements in the police-citizen interaction: neutrality, social standing, and participation (Tyler and Lind, 2002). First, the extent to which people believe that the police are unbiased in their treatment and consistently impartial in their interactions with the public will support the perception of police *neutrality* (Tyler, 2004). These perceptions are reinforced through repeated public interactions, allowing individual encounters to support or undermine the narrative of neutrality.

Second, police officers who treat individuals with dignity and *respect* communicate (both publicly and privately) their social standing, status, and self-worth, acknowledging

that they are valued members of society (Tyler, 2004). Moreover, this treatment of respect communicates to individuals that they are valued by the institution (Tyler, 1989, 1990) and reinforces a sense of the moral rightness of the police (Lind and Tyler, 1988; Paternoster et al., 1997; Tyler, 1989; Tyler, Degoey, and Smith, 1996; Tyler and Lind, 1992). In a survey of 273 residents of Pittsburgh, PA, respondents' perception of respectful treatment was the most significant correlate of general attitudes towards the police (Scaglion and Condon, 1980). Respondents noted that it was not whether they were questioned by the police, but rather *how* they were questioned that shaped their attitudes.

Finally, procedural theories of legitimacy argue that citizens have to trust in the motives of the decision-maker to find them legitimate (Tyler, 2004). Beyond the quality of treatment, it is the quality and nature of decision-making that is relevant, especially when police provide opportunities for citizens to *participate* in the decision process (Brockner et al., 2001). Officers who explain their decisions to individuals, even if they disagree with the decision-making, will garner greater deference to police authority from those individuals (Tyler, 2004). It is not about controlling the outcome; rather, it is the "value-expressive" function of feeling included and listened to that will make a citizen more likely to consider the procedure as satisfying (Tyler, Rasinski, and McGraw, 1985; Paternoster et al., 1997; Tyler and Lind, 2002). When police engender feelings of exclusion or lack of voice in their interactions with civilians, it can foster distrust, especially when it occurs over repeated episodes (Warren, 1999; Goldsmith, 2005).

Ultimately, these theories argue that perceptions of procedural fairness are based on the police's respectful approach (*quality of treatment*) and transparent, neutral decision-making process (*quality of decision-making*) when interacting with civilians (Tyler and

Lind, 2002; Tyler and Blader, 2000; Tyler and Huo, 2002; Tyler, 2003). When perceived fairness is coupled with trust and perceptions of effectiveness, the theory suggests that police will be viewed as legitimate, promoting cooperative attitudes and compliant behaviors among citizens (Tyler, 1990; 2006).

Over the past 20 years, empirical support for procedural fairness theories of legitimacy has been consistently strong. Across a number of contexts, time periods, and countries, police who are perceived to be fair are also more likely to be viewed as legitimate (Sunshine and Tyler, 2003; Tyler, 2006; Tankebe, 2013a; Tankebe, 2009a; Jackson et al., 2012a; Bradford et al., 2014; Jackson et al., 2014). In one study of 1,500 residents of Chicago, Tyler (2001) found that the quality of police performance and fairness of police treatment towards community residents explained over half of the variation in residents' overall evaluations of the quality of legal authorities in their community. More importantly, deference to the law as a legitimate authority and cooperation with the police were influenced by perceived fairness but not by perceptions of police performance, suggesting support for the normative theory of legitimacy.

Recalling that procedural theories argue that perceived fairness is constituted by the perceived quality of treatment and quality of decision-making, a number of studies have supported this conceptualization of fairness. In a sample of New Yorkers post-9/11, Sunshine and Tyler (2003) found these components to be the only correlates of perceived fairness consistently significant and positive across all models. Whereas perceptions of security and police performance were significant only for a portion of their sample, the nature in which the police communicated respect and inclusion in their interaction with the public was a consistent correlate of perceived fairness across racial and economic strata

(Sunshine and Tyler, 2003). Evidence from a number of other studies (Stoutland, 2001; Paternoster et al., 1997; Coupe and Griffiths, 1999; Tyler and Blader, 2000; Tyler and Lind, 1992; Tyler, 1990; 2003) supports arguments that perceptions of fairness are built on the perceived neutrality, competence, politeness, and respect of the police.

Perceiving the police to act in a fair and respectful manner also strongly influences the perceived legitimacy of the police above the instrumental perceptions of safety and security. Using a number of modeling strategies, Sunshine and Tyler (2003) found that procedural fairness was the primary driver of legitimacy prior to 9/11 in a sample of New Yorkers. Even after the terrorist attacks of 2001, New Yorkers who perceived the police to be procedurally fair were more likely to find them legitimate in spite of concerns about safety and security (Sunshine and Tyler, 2003). Findings from samples in the UK (Hough, Jackson, Bradford, Myhill, and Quinton, 2010) and Australia (Hinds and Murphy, 2007) also support the link between perceived fairness and legitimacy. This effect is not only contemporaneous, but also has a lasting impact on perceptions of legitimacy. Using a panel of New Yorkers, Tyler and Fagan (2008) found that quality of treatment at time 1 had a separate effect on perceived police legitimacy at time 2 above one's perceived police legitimacy at time 1. Beyond perceptions, they also found that when a respondent experiences fair and respectful treatment, they are more likely to find the police legitimate, regardless of outcome (Tyler and Fagan, 2008).

As a consequence of perceived legitimacy built on procedural fairness, citizens are more likely to cooperate with the police and comply with the law (Sunshine and Tyler, 2003; Reisig, Bratton, and Gertz, 2007; Tyler and Fagan, 2008; Lee, Steinberg, and Piquero, 2010; Paternoster et al., 1997; Reisig, Tankebe, and Mesko, 2014). In many cases,

perceptions of legitimacy, not perceptions of sanction risk, were the primary determinants of legal compliance and cooperation. Using survey data from England and Wales, Hough and colleagues found that neither compliance nor cooperation was influenced by perceived risk of sanction, but both were positively influenced by perceived legitimacy (Hough et al., 2010). Moreover, the relationship is directional rather than cyclical. In a panel study of New Yorkers, Tyler and Fagan (2008) found that legitimacy at time 1 can shape cooperation at time 2, but not the reverse. Those who reported higher likelihoods of cooperation at time 1 were no more likely to find the police legitimate at time 2.

Global perceptions of the police, as well as willingness to support vigilantism or private policing alternatives, can also be influenced by their perceived fairness and legitimacy (Tyler and Folger, 1980; Mazerolle et al., 2012; Reisig and Chandek, 2001; Tankebe, 2009b). Using a sample of 2,600 Australian citizens, Hinds and Murphy (2007) find that legitimacy was the strongest correlate of satisfaction with the police, above police performance and distributive fairness (or fairness of the outcome of policing). Following the legitimacy hypothesis, procedural fairness in that sample had a weak direct effect on satisfaction, but was the strongest correlate of perceived legitimacy (see also Sunshine and Tyler, 2003, for similar effects on cooperation). Thus, while important that they are perceived to fairly and respectfully treat citizens, these results suggest it is through one's recognition of and consent to their authority that the foundations of satisfaction with the police are built.

Alongside fair treatment, perceptions of fair outcomes (otherwise known as distributive fairness) have also been influential in shaping perceived police legitimacy. Theoretically, fair treatment by the police cannot be separated easily from a fair distribution

of outcomes within legitimate institutions (Beetham, 1991; Tankebe, 2013a). While perceptions of procedural fairness are often the strongest influence within samples in industrialized countries, perceptions of fair outcomes are also significantly and positively correlated with perceived legitimacy (Sunshine and Tyler, 2003; Gau, Corsaro, Stewart, and Brunson, 2012). Beyond perceived legitimacy, perceptions of fair outcomes also serve to increase one's willingness to cooperate with the police, as the anticipated result of their interaction is not skewed against citizens (Reisig, Bratton, and Gertz, 2007). Perceptions of fair outcomes can also influence one's general satisfaction with the police (Hinds and Murphy, 2007), and can be undone when unjust actions, such as corruption, are perceived within state institutions (Anderson and Tverdova, 2003).

The Reassessment of Police Legitimacy: Two Key Topics

With all of its empirical support, Tyler's link between procedural fairness and perceived legitimacy has come under review in recent years. While perceptions of fairness are important, other relevant factors could either directly influence perceptions of legitimacy or indirectly shape the relationship between fairness and legitimacy. These research advances have changed the nature of legitimacy theory, but several developments mark evolutions in legitimacy theory or key unanswered questions, and are evaluated below.

RQ1: The Generalizability of Normative Theories of Legitimacy

A serious remaining research question is whether the normative model of legitimacy, or the link between procedural fairness and legitimacy, is valid outside of more industrialized countries. Most of the research on this topic has been conducted in what Manning (2010) calls Anglo-American Democratic Policing [AADP] countries, where the

rule of law is present and democracy is mostly stable. In these contexts, such as the United States and United Kingdom, there has been considerable support for the procedural fairness-legitimacy link. For example, surveys in England (Hough et al., 2010; Jackson et al., 2012a), New York (Tyler, 2001; Sunshine and Tyler, 2003; Tyler and Fagan, 2008), and Pennsylvania (Taylor, Wyant, and Lockwood, 2015) find that procedural fairness is the strongest determinant of perceived legitimacy. These studies have been corroborated by experimental research in Australia, which found that experiences with procedurally fair treatment can increase the perceived legitimacy of the police during traffic stops (Mazerolle, Bennett, Davis, Sargeant, and Manning, 2013).

In less-industrialized countries, the results are mixed for the link between procedural fairness and legitimacy. For some cases, the normative basis of legitimacy built on perceptions of procedural fairness was supported. Among Jamaican adolescents, Reisig and Lloyd (2009) found that procedural fairness has a strong and significantly positive effect on cooperation with the police. Reisig's later study with colleagues (Reisig, Tankebe, and Mezko, 2014) looking at young adults in Slovenia similarly found that perceived fairness was a strong correlate of legitimacy and increased public cooperation with the police. Additional research in Israel (Jonathan, 2009) found that procedural fairness is the primary correlate of police legitimacy, although desire for "forceful action and end results" (Jonathan-Zammir and Weisburd, 2013: 20) were also important during times of increased threats of terrorism or security challenges.

In contrast, several studies in less-industrialized countries support the instrumental model of policing, whereby perceptions of police effectiveness were the strongest correlate of perceived legitimacy and public cooperation with the police. For example, among a

sample in South Africa (Bradford et al., 2014), perceived effectiveness was strongly correlated with the felt duty to obey the police and the belief that the police act morally. Similarly, Tankebe's (2009) study in Ghana found that cooperation with the police was largely driven by instrumental criteria rather than perceptions of procedural fairness. These findings have been correlated in studies of respondents in industrialized countries as well, including Australia (Hinds and Murphy, 2007; Murphy and Cherney, 2011), United Kingdom (Bradford, 2014), the Slovak Republic and Poland (Moravcová, 2016). For some contexts, it is both the instrumental and normative models that drive perceptions of police legitimacy and willingness to cooperate with the police (Karakus, 2015), suggesting multiple pathways by which police can be viewed as legitimate. Thus:

H_1: The more respondents perceive the police to be procedurally fair, the more likely they are to find them legitimate (normative model);

H_2: The more respondents perceive the police to be effective at controlling crime, the more likely they are to find them legitimate (instrumental model);

H_3: The more respondents perceive the outcome of police actions (arrest) to be distributively fair, the more likely they are to consent to police authority;

RQ1a. Is this relationship dependent on an individual's fear of crime or national context of conflict or violence?

This tension between instrumental and normative theories of legitimacy, especially in less-industrialized countries, suggests the existence of a potential boundary condition on procedural fairness theory in these contexts: in places where people doubt the basic utility of the police, they may draw more on perceptions of effectiveness rather than fairness when

forming judgments of legitimacy. In their study of 400 adults in Lahore, Pakistan, Jackson and colleagues (Jackson et al., 2014) found that while procedural fairness was the primary correlate of obligation to obey the law, it had only half the impact that perceptions of police effectiveness had on those respondents' ability to trust the police. In sum, their findings suggest "in a context in which minimal effectiveness and integrity is yet to be established, police legitimacy may rest not just on the procedural fairness of officers, but also their demonstrated ability to control crime and avoid corruption," (Jackson et al., 2014: 1).

Thus, there is considerable doubt about whether normative theories of legitimacy are universal across countries and contexts. Thus, there is a need for studies that situate this question within different socio-political environments (Tankebe, 2009b). Different factors that shape public cooperation and compliance with the police or cultural differences in values and beliefs about how power and authority ought to work could shape perceptions differently from country to country. Especially in postcolonial contexts and those transitioning from autocracy to democracy, the legitimate authority of the police to use force or intervene may be undermined by broader cultural, political, legal and institutional forces (Jauregui, 2013a). In sum, legitimacy, and its antecedents, may be contextually relative (Martin, 2013); culturally and historically configured through the values of a population, the history of institutions, and the implementation of said policies and practices (Garriott, 2013). This is especially true in non-Western societies, where the "stability and legitimacy of government and law and the public police as an effective instrument of order and security cannot be assumed…[as policing] appears to be continually negotiated and reconstituted in a changing social and political environment with rapidly shifting policing

requirements and priorities," (Murphy, 2005: 139). Drawing from previous research, I hypothesize that:

> *H_4: For those who feel their personal or communal security threatened, the more that they perceive the police to be effective at handling crime, the more likely they are to find them legitimate; and,*
>
> *H_5: For those living in countries recently transitioning from conflict or facing considerable internal security challenges, the more that respondents perceive the police to be effective at handling crime, the more likely they are to find them legitimate.*

RQ1b. Is the relationship above dependent on the definition of legitimacy?

One of the most important evolutions of legitimacy theory for policing has been the rediscovery and incorporation of theorists outside of psychologists and criminologists. The works of Beetham (1991), Coicaud (2002), and others have informed a new appreciation for police legitimacy that moves beyond procedurally fair actions and capabilities of effectiveness. Introduced by scholars in the UK and elsewhere, these insights have been adopted as core components of the revised legitimacy model for policing. Extending beyond consent, these approaches have capitalized on the normative basis of legitimacy, broadening its inclusion in important and distinct ways.

One advance has argued that authorities are perceived to be legitimate when there is a normative alignment between citizen and state (Jackson, Huq, Bradford, and Tyler, 2013). This alignment is more than just perceived fairness; rather, it is a sense of shared values, both communal and moral, between the police and citizens (Jackson et al., 2011a).

As Beetham (1991, p. 17) argues, “power is legitimate to the extent that the rules of power can be justified in terms of beliefs shared by both dominant and subordinate.” Previous scholars focusing on trust in the police may have captured whether the police share the same priorities that the citizens have (Stoutland, 2001), but this recent development recognizes that the arrangements of police and citizen are right and just according to some normative (or moral) alignment between the two (Jackson and Bradford, 2009).

Importantly, this framework of moral alignment does not supersede questions of effectiveness or fairness; rather it argues that the perception of crime itself is going to be shaped by public diagnoses of local values and moral structures. In essence, as Jackson and Bradford (2009) note, “when people think about the police and their crime-fighting activities, they also think about what ‘crime’ stands for (erosion of norms and social ties that underpin group life) and what ‘policing’ stands for (organized defense of the norms and social ties)” (pg. 499). Ultimately, factors like procedural fairness and perceived effectiveness are formative for perceptions of shared values and moral representation of the police. Thus, it is not just that individuals feel an obligation to obey an authority, but also whether that authority expresses shared morals with citizens (Bradford and Jackson, 2010).

Moral alignment fosters a shared identity between the police and the citizen, whereby the citizen may feel a corresponding need to fill the role of the law-abiding and upstanding citizen (Kelman, 2006; Jackson et al., 2012a). This reciprocal role is the self-maintenance of social order, creating communal and individual moral restraints on deviance above and beyond the coercive and deterrent force of the state. Not only does this suggest that people will restrain themselves, but through the process of identification there

is a potential transformation of goals or motives towards the collective benefit of communal social order (Jackson and Sunshine, 2007; Jackson et al., 2012a; Tyler, 2011; Blader and Tyler, 2009; Tyler and Blader, 2003; Turner, Brown, and Tajfel, 1979).

The incorporation of moral alignment has not been without its challenges, which are noteworthy for any study examining legitimacy across countries. Some have noted that moral alignment, while conceptually valid, is not necessarily automatic in its implementation (Bottoms and Tankebe, 2012). In many cases the law does not automatically mirror the shared values of the particular society, criminalizing actions that may not be viewed as deviant by the broader society. For example, consider marijuana usage within the United States and its definition as deviant behavior. Currently, there is broad public support for the legalization of marijuana (Jones, 2015), yet in many states use is still outlawed for recreational purposes or limited to medicinal cases (National Conference of State Legislatures, 2016). Thus, when police arrest marijuana users, they may be enforcing a law that is not necessarily shared as a value by the community. Subsequent effects on general attitudes towards the police may depend on what priority individuals give to that particular discrepancy within their overall values orientation. If marijuana legalization is important, then individuals living within states where it remains illegal will view the police with skepticism and distrust if they heavily enforce this law.

A second challenge, and one more important for this study, is whether you can have shared moral values in contexts with considerable residential mobility, social heterogeneity, and different historical contingencies (Bottoms and Tankebe, 2012). As Beetham (1991) states, “without a minimum of the appropriate beliefs defined being shared between the dominant and the subordinates, and indeed among the subordinate themselves,

they could be no basis on which justifications for the rules of power can find a purpose," (pg. 17, as quoted in Jackson et al., 2012a). Thus, in places of considerable diversity there may exist a dissonance of values not only with the police, but also between different subpopulations. A number of studies looking at policing of immigrant communities or police actions within areas of considerable ethnic or racial heterogeneity in the United States have found that the police are often viewed as alien or foreign, not representative of the values and ideals of the community they police (Skogan, 2006; Correia, 2010; Menjivar and Bejarano, 2004; Cao, Frank, and Cullen, 1996; Weitzer, Tuch, and Skogan, 2008; Wu, Sun, and Smith, 2011). Outside of the United States, this problem is exacerbated when considering the way in which ethnic relations, religious identity, and migration patterns have reshaped the constitution of communities in cities and countries around the world. Thus, the introduction of moral alignment into the question of legitimacy brings with it a number of challenges regarding its applicability within heterogeneous contexts, countries, and communities. Therefore:

> *H_6: The more respondents perceive the police to be procedurally fair, the more likely they are to share a moral alignment with the police;*
>
> *H_7: The more respondents perceive the police to be effective at crime control, the more likely they are to share a moral alignment with the police;*
>
> *H_8: The more respondents perceives the outcome of police actions (arrest) to be distributively fair, the more likely they are to share a moral alignment with the police;*

A third question that has shaped the normative theory of police legitimacy in recent years is whether the legal compliance of the police themselves influences perceptions of

legitimacy? If the fairness of treatment is relevant for perceived legitimacy, then do the corrupt acts of some officers undermine general perceptions of fairness or legitimacy? As Bayley (1995, p. 92) argues, "nothing is more destructive of the standing of police than corruption." It is a violation of the social contract between police and citizen, directly undermining the democratic nature of legitimacy built on fairness and respectful treatment (Rose-Ackerman, 1999). When corrupt practices are present, individuals question the suitability of the police (Manning, 2005), lowering expectations and respect for both individual officers and the institution itself (Bayley, 1966; Sherman, 1974). In a professional model of policing, perceived corruption can reduce confidence in the police to carry out their own duties rather than seek personal gain (Goldstein, 1977), causing citizens to question whether fair procedures or outcomes are just a myth (Anderson and Tverdova, 2003).

Perceptions of police corruption aren't static; rather, they are developed through repeated interactions with the police (Hardin, 1993). These repeated interactions can create grievances among the population (Gurr, 1970) tied to state-sanctioned inequality, fostering negative sentiment towards the state and possible escalation of delinquent activities (Sherman, 1993) or collective violence (Gurr, 1970; 1986). More importantly, corruption in one institution can poison perceptions of other institutions, creating a cultural view of endemic, systematic corruption across all state institutions (Mishler and Rose, 2008). How the state handles corruption, and whether those efforts are viewed as effective, not only speaks to the ability of the state to restrain itself, but also the ability to inspire confidence in the criminal justice system as a whole (Bayley, 2006; Tankebe, 2010).

Empirical support for corruption's negative relationship with attitudes towards the police is considerable. Across a sample of Korean respondents, perceptions of police corruption had the strongest relationship with satisfaction of the police (Hwang, McGarrell, and Benson, 2005), mediating effects of previous encounters and socio-economic status. In countries perceived to be highly corrupt, individuals reported lower levels of trust in the police, suggesting that corruption can have both an experiential and contextual effect on support for the police (Kaariainen, 2007). In China, Wu and Sun (2009) found that individuals who perceived corruption among those responsible for governing also trusted the police less, supporting the contagious nature of perceived corruption across institution-specific attitudes.

Although corruption can take many forms (Punch, 2000; Kutnjak Ivkovic, 2003; Newburn and Webb, 1999; Barker and Roebuck, 1974; Sherman, 1974), including illegal detention, extrajudicial killings, and large-scale extortion, one of the most common yet pernicious forms of corruption is bribery. In many countries, bribery is customary for a host of public services, from healthcare to schooling to taxation. Informal (and sometimes formal) requirements for bribe-paying in exchange for public services might be viewed as an efficient market-based solution to inefficient public services provision (Méon and Weill, 2010; Blackburn and Forgues-Puccio, 2009). In some post-colonial states, bribery could even be seen as a respectable crime legitimized by indigenous shared norms and customs that value supporting kin at the expense of the vestiges of the colonial state (Ekeh, 1975; Le Vine 1975). While in many situations the bribe is in exchange for some additive good or service, police bribery is an exchange of money or goods to avoid the coercive force of the state domestically, a power that is only entrusted to the police. Therefore, bribery of

the police to avoid the state's use of coercive force directly undermines the social contract between police and citizen, and creates a serious challenge to normative theories of perceived fairness and police legitimacy.

The introduction of perceived legality also raises a question of where it sits in the broader framework of antecedents, constituents and consequences of legitimacy. In a number of studies, perceptions of and experiences with corruption are modeled as antecedents to legitimacy, looking at their influences on moral alignment, obligation to obey the law, and trust in the police (Murphy and Cherney, 2011; Murphy, Tyler, and Curtis, 2009; Levi, Tyler, and Sacks, 2009). These studies have found that this framework best captures the indirect effect that perceived legality can have on legitimacy as it influences perceptions of fairness and effectiveness (Jackson et al., 2014; Bradford et al., 2014). Yet, a study of 300 youth in Nigeria (Akinlabi, 2015) found that the perceived legality of the police (the perception of how corrupt they are) had a small but significant effect on perceptions of police legitimacy, separate from any effect that procedural justice or fairness had on police legitimacy. Other studies have found similar direct effects (Hwang, McGarrell, and Benson, 2005; Jackson, Hough, Bradford, and Kuha, 2015), whereby perceived legality is not mediated through fairness or effectiveness, but has a direct effect on obligation to obey, cooperation or satisfaction with the police. Thus, evidence is mixed whether perceptions of legitimacy are directly or indirectly influenced by the perceived legality of the police. Moreover, in many cases perceived legality is viewed as equivalent to consent and moral alignment, constituting an alternative definition of legitimacy. While in later sections I examine its role as a potential predictor of consent

(see H_{12}), here I hypothesize a direct relationship between perceptions of effectiveness and fairness with perceptions of police illegality:

H_9: The more respondents perceive the police to be procedurally fair, the less likely they are to perceive them as corrupt;

H_{10}: The more respondents perceive the police to be effective at crime control, the less likely they are to perceive them as corrupt; and,

H_{11}: The more respondents perceive the outcome of police actions (arrest) to be distributively fair, the less likely they are to perceive them as corrupt.

RQ2: Are the normative elements of fairness and effectiveness preconditions to or components of legitimacy?

Introducing moral alignment into the study of legitimacy has spurred a redevelopment of the theory itself over the last decade. While empirical support for the link between perceived fairness and obligation to obey, as well as subsequent links with cooperation and compliance with the police, have been well-founded, this redesign of legitimacy theory sparks two key questions that structure debates about what is and is not legitimacy.

First, with the addition of moral alignment and perceived legality, the question of how fairness, legitimacy and cooperation are related remains open for debate. In one argument (Tyler and Jackson, 2013; Jackson et al., 2012a), legitimate police are those who can encourage cooperation by engendering deference from a population whose moral values they share and whose laws they operate within. In this argument, perceptions of effectiveness and fairness are direct antecedents to these shared values and legal actions, and exert an indirect influence on cooperation with the police and compliance with the law. Thus, this model of legitimacy finds that cooperation is a function of police that are

perceived to share the same values as the citizens and conduct their practice in fair and legal ways, while also successfully controlling crime and doing so with a fair distribution of outcomes.

An alternative specification of the legitimacy model, argued by Tankebe and colleagues (Bottoms and Tankebe, 2012; Tankebe, 2013a), finds problems with the question of moral alignment proposed by the previous model. While studies in the UK and other locations conceptualize moral alignment as the police sharing the same values as citizens, Tankebe (2013a) argues that police legitimacy is the justification of authority through some normative criteria underlying those shared values. Rather than having an indirect effect on cooperation with the police, Tankebe argues that legitimacy itself is composed of four key elements structured around shared values and the perceived legality of the police themselves. These shared values include procedural and distributive fairness, as well as perceived effectiveness. Thus, rather than being preconditions of legitimacy, all are components of what scholars from both criminological and philosophical approaches conceptualize as the normative criteria for the legitimization of authority among the police. In essence, this perspective redefines shared values as the preconditions previously mentioned, thereby suggesting that they are not only constituents of legitimacy, but also have *direct* effects on relationships with the police.

More importantly, this alternative specification argues that obligation to obey, or the deference of individuals to an authority, is a consequence of legitimacy rather than constituent. As other studies note (Bottoms and Tankebe, 2012; Tankebe, 2013a), if people can obey the police for other-than-normative reasons, then obligation to obey cannot be a constituent part of legitimacy. These reasons could be instrumental, habitual, or the

outcome of “dull compulsion” (Bottoms and Tankebe, 2012, pg. 149). Dull compulsion is often found in situations of colonial rule and dictatorship where one’s relationship with those in power is acquiescence rather than legitimization (Tankebe, 2013a). In many cases, it can be difficult to separate the other reasons for cooperation and compliance apart from the effects of procedural fairness, but the way in which the direct and indirect effects of fairness and effectiveness operate on trust in the police, obligation to obey, and ultimately compliance and cooperation may suggest that there are alternative pathways that do not go solely through obligation to obey. Again, as Tankebe (2009a) notes, “there is often a tendency to over-emphasize the relationship between procedural fairness and compliance in both the short and long–term, and underestimate the role of deterrence or prudence (instrumental issues) or habit and dull compulsion (social structural issues),” (pg. 13). Thus, within this specification, deference to the police as an authority (feels obligated to obey their commands) is distinct from perceiving them to be legitimate.

Critiquing this position, others (e.g., Tyler and Jackson, 2013) have argued that it is difficult to disentangle the question of legitimate consent, or obligation to obey, from other reasons of voluntary, instrumental, or strategic consent. Value-neutral questions that have been asked about obligation to obey may need to be re-examined, in an effort to identify more positive interpretations of obligation and duty (Raz, 1986). Moreover, the strong and positive relationships between procedural fairness and obligation to obey suggest that the origination of felt duty is not found in intimidation or dull compulsion but rather in perceptions of fair treatment by the police. Ultimately, people never give fully pre-emptive consent to any authority; therefore, it is a question of whether obligation to obey is central to either the composition or consequences of legitimacy.

Empirical support can be found for both of these perspectives, although most studies have modeled the preconditional theory of legitimacy, with support in the United Kingdom (Hough et al., 2010; Jackson et al., 2012a), Europe (Hough et al., 2013a; Hough et al., 2013b; Jackson, Bradford, Hough, Kuha, Stares, Widdop, Fitzgerald, Yoranova, and Galev, 2011; Jackson et al., 2013a), and the United States (Tyler, 2001; Tyler and Wakslak, 2004; Tyler and Fagan, 2008; Sunshine and Tyler, 2003; Reisig, Bratton, and Gertz, 2007; Wolfe, 2011). For example, in a survey of 937 adults in England and Wales, Jackson and colleagues (2012a) found that citizens grant legitimacy to the police for both the recognition of power as well as the justification of that power through moral alignment. Factors such as procedural fairness and perceived effectiveness had strong and positive effects on obligation to obey the law and moral alignment with the police, but rarely had significant direct effects on willingness to cooperate with the police (Jackson et al., 2012a). More importantly, there was no interaction effect between felt obligation and moral alignment, suggesting that these concepts are not only distinct but operating independently in their ability to encourage cooperation with the police (Jackson et al., 2012a).

In contrast, a survey of 5,100 residents of London found that the dimensions of procedural fairness, distributive fairness, lawfulness and effectiveness were distinct and significantly correlated with both cooperation with the police and obligation to obey the law (Tankebe, 2013a). More importantly, this specification fit the data better than a staged model with direct and indirect effects argued by Jackson and colleagues. When obligation to obey the law was introduced into the model, it moderated the effect of legitimacy on cooperation while also increasing the explanatory power of the model considerably (Tankebe, 2013a). This suggests that separate from legitimacy, obligation contains a fair

amount of non-legitimacy influence on cooperation with the police, although more research is needed to understand why.

RQ2a: Is obligation to obey a component of or a consequence of police legitimacy?

Ultimately, it is a question of whether fairness and effectiveness are legitimacy's preconditions or its components. Reverting back to Tyler's (2001; Levi, Tyler, and Sacks, 2009) original model that fairness and trust are two components that influence felt obligation to obey the law, some have argued that effectiveness and fairness are closer to the concept of trust than legitimacy, as trust is believing that the police have the right intentions that are competent, rather than legitimacy's recognition and justification of police power and authority (Jackson et al., 2012a). In a subsequent study by Hough and colleagues (2013a) comparing both specifications of legitimacy, they find that compliance was correlated with instrumental, moral, and legitimate pathways, with procedural fairness the strongest correlate of obligation to obey and moral alignment with the police. They also found that although Tankebe's model of legitimacy directly correlates with felt obligation to obey the law, the shared values of effectiveness and fairness do not directly influence or indirectly work through obligation to obey the law to promote compliance (Hough et al., 2013a). When moral alignment was incorporated, perceived fairness did have an indirect effect on compliance through moral alignment.

To summarize, Figure 1 provides an overall conceptual model of the effects of shared values, moral alignment, and obligation to obey. Unfortunately, the available data do not allow the testing of compliance-related models. Therefore, with only the ability to examine obligation to obey, I use Tankebe's (2013) argument as a starting point to examine relationships between obligation to obey, moral alignment, and perceived legality. As

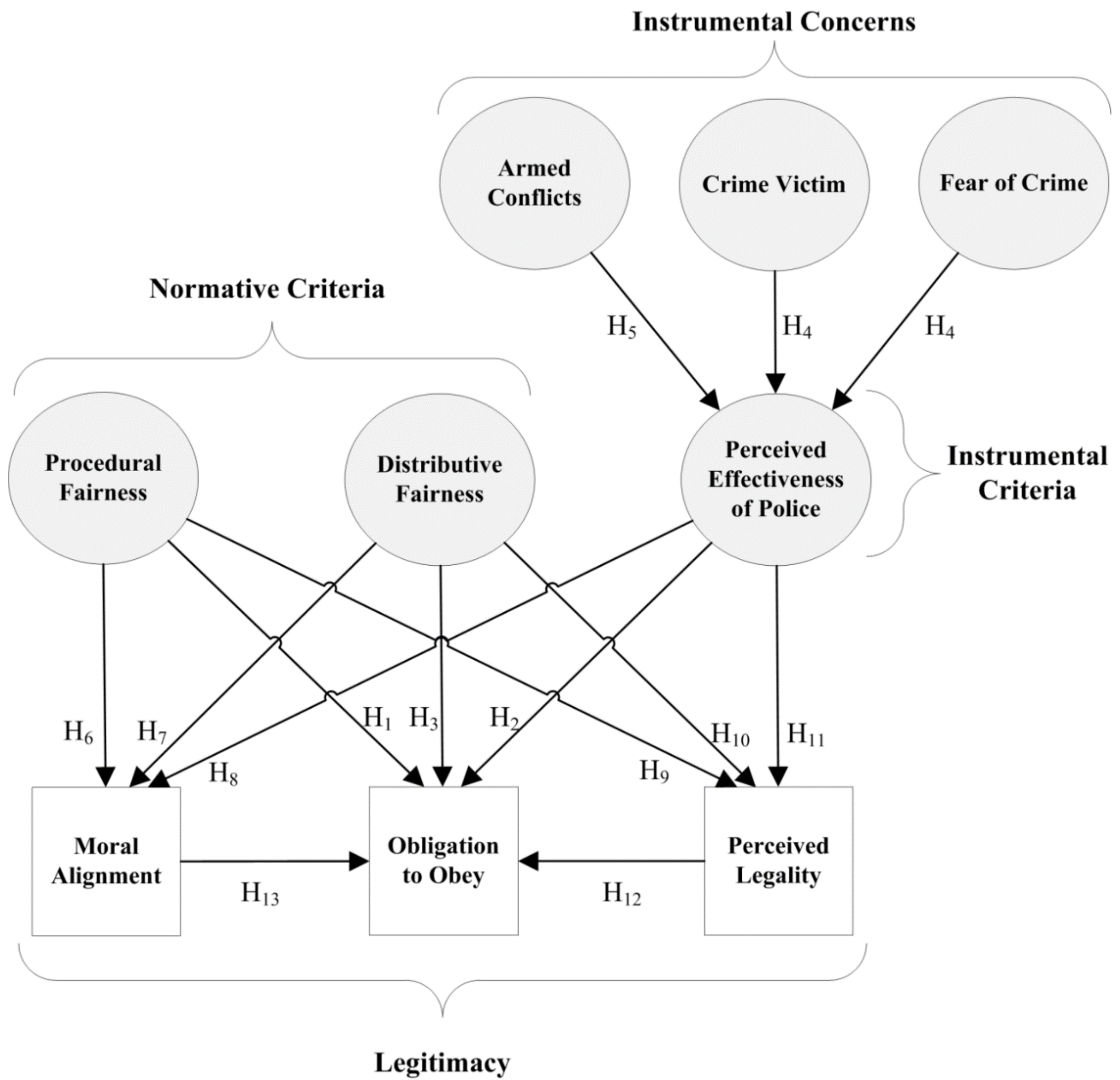
previous hypotheses (H_1-H_3) make clear, Tankebe's first argument is that three shared values (perceived effectiveness, procedural fairness, and distributive fairness) will have direct and distinct effects on obligation to obey. Alongside shared values, it is also hypothesized that:

> *H_{12}: Perceptions of police legality will have a direct, positive and distinct, effect on obligation to obey.*

Contrasting Tankebe (2013a), and drawing on other relevant studies (Hough et al., 2010; Hough et al., 2013a; Hough et al., 2013b; Jackson et al., 2011; Jackson et al., 2013a), moral alignment is viewed as something separate from obligation to obey, whose inclusion provides the key link between shared values and compliance with the law. These studies have also found no significant direct effect from obligation to obey the law on compliance, as well as considerable positive correlation between obligation to obey and moral alignment. Therefore, if moral alignment is strongly correlated with obligation to obey, mediates the direct relationships between shared values and compliance, and moderates the relationship between obligation to obey and compliance, its inclusion as an independent variable should mediate any influence of shared values on obligation to obey the law. Thus:

> *H_{13}: Moral alignment will have a direct and positive effect on obligation to obey; and,*
>
> *H_{14}: The inclusion of moral alignment will mediate the direct relationship between shared values (perceived effectiveness, procedural fairness, and distributive fairness) and obligation to obey.*

Figure 1. Conceptual Model of Determinants of Legitimacy.



Summary

Overall, the strong empirical support for the procedural fairness theory of police legitimacy faces considerable questions (see Table 1) when tested outside stable, democratically-ruled industrialized nations. To address these questions within less-industrialized countries, I use cross-sectional, nationally-representative survey data from 27 countries in SSA. The goal of this dissertation is to examine the empirical validity of the process-based model of police legitimacy in SSA. Although a few studies have used a single round of survey data across multiple industrialized countries (Hough et al., 2013a) or a single country study within SSA (Tankebe, 2009a; Bradford et al., 2014), no study to date has simultaneously examined police legitimacy in multiple less-industrialized countries.

Table 1. Key Research Questions and Hypotheses.

RQ1: Is the normative theory of police legitimacy generalizable, or do instrumental preferences transcend normative criteria for legitimacy?
H_1: The more respondents perceive the police to be procedurally fair, the more likely they are to find them legitimate (normative model)
H_2: The more respondents perceive the police to be effective at controlling crime, the more likely they are to find them legitimate (instrumental model)
H_3: The more respondents perceive the outcome of police actions (arrest) to be distributively fair, the more likely they are to consent to their authority.
RQ1a: Is this dependent on an individual's fear of crime or national context of conflict or violence?
H_4: For those who feel their personal or communal security threatened, the more that they perceive the police to be effective at handling crime, the more likely they are to find them legitimate
H_5: For those living in countries recently transitioning from conflict or facing considerable internal security challenges, the more that they perceive the police to be effective at handling crime, the more likely they are to find them legitimate.
RQ1b: Is this dependent on the definition of legitimacy?
H_6: The more respondents perceive the police to be procedurally fair, the more likely they are to share a moral alignment with the police.
H_7: The more respondents perceive the police to be effective at crime control, the more likely they are share a moral alignment with the police.
H_8: The more respondents perceive the outcome of police actions (arrest) to be distributively fair, the more likely they are to share a moral alignment with the police.
H_9: The more respondents perceive the police to be procedurally fair, the less likely they are to perceive them as corrupt.
H_{10}: The more respondents perceive the police to be effective at crime control, the less likely they are to perceive them as corrupt.
H_{11}: The more respondents perceive the outcome of police actions (arrest) to be distributively fair, the less likely they are to perceive them as corrupt.
RQ2: Are the normative elements of fairness and effectiveness preconditions to or components of legitimacy?
RQ2a: Is obligation to obey a component of or a consequence of police legitimacy?
H_{12}: Perceptions of police legality will have a direct, positive and distinct, effect on obligation to obey.
H_{13}: Moral alignment will have a direct and positive effect on obligation to obey.
H_{14}: The inclusion of moral alignment will mediate the direct relationship between shared values (perceived effectiveness, procedural fairness, and distributive fairness) and obligation to obey.

CHAPTER THREE – CONTEXT, DATA AND METHODS

In this chapter, I provide an overview of the context of policing within Sub-Saharan Africa (SSA), as well as the data and methods used in this dissertation. In many cases, policing across SSA derived from similar origins focused on the use of the police to support elite interests by colonial powers. Many police forces, regardless of colonial history, are associated with the central military unit for the country, or strongly resemble the military in either form or process. Yet there are crucial differences between different colonizers in the way that the police were originally developed and recruited, which could have relevance for current relationships between police and states. More importantly, the history of conflict and political transformations in the SSA region intersects with police protocols to create unique norms that dictate to what extent the public is involved in policing efforts. These variations between countries, even countries that share similar colonial histories, formulate a varied spectrum of policing on the continent partially congruent with Western policing operations, yet distinct enough to represent unique cases for examining the boundary between instrumental and normative criteria for police legitimacy.

Following a contextual discussion of police operations within SSA, I next provide an initial overview of sampling strategies and characteristics. To compare theories of police legitimacy, I use data from Round 5 of the Afrobarometer survey. In the following section, I describe the specific variables that are used in this study. I detail the key outcome of interest, legitimacy, by highlighting different definitions used in previous research. I then discuss the different components that constitute the normative criteria of legitimacy, including procedural and distributive fairness. I join this with a review of both instrumental criteria (perceived effectiveness) and instrumental concerns proposed by the literature as

relevant to shaping police legitimacy, especially in less-industrialized countries. This is coupled with a description of demographic, socioeconomic, and perceptual individual-level controls, as well as contextual influences at the national level that could moderate or mediate relationships within the normative model of legitimacy. The remaining section then provides an analytical plan differentiated by research question for conducting the multilevel analysis of the legitimacy model.

Police in Context

Countries within SSA contain an array of institutions that encompass the broader mission of policing and law enforcement. Emerging primarily from colonial systems of rule, these current manifestations of the policing mission have important similarities and differences with police units in more Western, industrialized nations. In this section, I provide a brief background on policing within this region, as well as highlight those key factors about policing that may influence baseline perceptions of the polices legitimacy, effectiveness, and fairness. I begin by focusing on their shared colonial origins.

Although there were a number of kingdoms that ruled various portions of SSA over the millennia, the emergence of the modern policing function in the continent derived from its colonization by European powers. The rise of modern states within SSA is the product of colonial-era partition and administration strategies that favored in many cases the preferences of the in-country elites or the interests of the colonizer (Memmi, 1965; Ekeh, 1975). Through the processes of indirect rule and ethnic favoritism, the colonial institutions that gave rise to the contemporary police were in many cases used as instruments for coercion and control of the population rather than law enforcement and crime reduction. They were centralized according to the colonial divisions, irrespective of community,

tribal, or ethnic boundaries, resulting in a force that failed to represent the population they were policing. Many police officers during the colonial period in Africa and South Asia were foreigners whose primary goal was the protection of the colonial power's interests (Cole, 1999). For example, on the Gold Coast of Ghana, in 1896 its colonial governor ordered that no police were to be located at places without Europeans (Tankebe, 2013a). Legitimacy of the police in this context was not generated from popular support or a mandate to provide services to all communities; rather, it emanated from the colonial administrators, whose chief end was the orderly and peaceful rule of a particular territory through any means necessary.

This is especially prevalent in former British colonies, where practices favored the elevation of local ethnic differences at the expense of more nationalistic homogenization typical in some French colonies (Robinson, 2014; Mazrui, 1983, Ekeh, 1975).[1] For British colonies, the policing system was a centralized administration modeled on the British criminal code and theory of indirect rule, making them responsive to regional dynamics within a country. In contrast, French colonies implemented a dual policing approach that included both the militarized National Gendarmerie and the civilian National Police. As a member of the armed forces, the National Gendarmerie policed primarily in rural areas where the presence of other government institutions was limited. A civilian agency under the Ministry of Interior, the National Police within French colonies would primarily serve

[1] It is important to note that French nationalistic tendencies had their own challenges during and post-colonialization. As Harkness (2016) notes, the installation of Amadou Ahidjo as leader of Cameroon in 1958 favored the northern Fulani/Peuhl-based political party above the communist Bamiléké and Bassa ethnic groups from the south, and excluded them from the primary governing body during decolonization. Yet similar moves in Sierra Leone prompted a coup attempt in 1971 as well as ongoing conflicts. The key difference, as Harkness states, was the French pursuit of both coethnic homogenization of the officer corps while also devolving local power over the army to Ahidjo and the governing body, something which promoted a more stable (albeit ethnocentric) leadership than British attempts in Sierra Leone.

urban areas and major cities. Unlike the British model of policing, the French version was much more nationalistic and centrally controlled. In both cases, though, the police were primarily a tool of colonial administration rather than a partner with the public in safety and security.

Recognizing that foreign laws would have little context for Africans being colonized, colonial powers also sought to create a legal structure of customary laws in which dispute resolution and many lesser civil actions were negotiated by tribal authorities. In these cases, the local chiefs or elders were responsible for the administration of law in minor disputes, including many misdemeanor offenses (Deflem, 1994). More importantly, it meant that there were two systems of jurisprudence operating in these colonies, often creating difficulties in fostering the shared legitimacy of a single national / colonial legal framework. The police were also used by those in power as tools of repression against the local population and politically-irrelevant subgroups. In a number of cases, during the colonial period, the police would torture, abuse, and even kill individuals under the guise of proper law enforcement (Killingray, 1986).

With the wave of independence that swept through the region in the second half of the twentieth century, the use of law enforcement by governments as implements of power only increased. In many cases, the police were at the center of political instability, carrying out extrajudicial killings and forced disappearances. For example, it was the Sierra Leone Police (SLP), one of the oldest police agencies in West Africa, who were a primary participant in the civil war that engulfed Sierra Leone for decades (Baker, 2006). The continued use of the police as a tool of power distanced them even more from the public; they were to be feared rather than engaged. This was coupled with the 'Africanization' of

police leadership following independence in many countries, whereby positions previously held by white Europeans were replaced by members of the newly independent state (Das and Palmiotto, 2006). Depending upon the stability of transition during independence, these replacements were often used as political payments to empower a particular ethnic group or tribe at the center of a country's political hierarchy. In those cases, no training was provided, nor were there effective systems of monitoring, professional reinforcement of best practices, nor community-focused outreach efforts we find in industrialized nations today (Marenin, 2009). Thus, not only were the police to be feared for their extrajudicial powers, they were also to be despised as tokens of political patronage.

In sum, the colonial period established a framework for policing within the region focused primary on either a single or two-agency approach. These systems were then reinterpreted during independence movements to be the vestiges of political largess and punishment of dissidents, fostering a larger gap between police and citizens than may have existed under colonization. Yet these historical contingences are not fully deterministic of policing today in SSA. Institutional development from colonization through independence to the current has progressed unequally across the continent. Intersections of cultural, historical, social, and political developments have led to what I propose is a tri-partite continuum of policing capabilities within the region, each with their own implications for legitimacy theory.

First, there are many countries in which poverty, poor governance, and instability have created police institutions that are merely shadows of law enforcement agencies (Goldsmith, 2003). In these countries (for example Burundi, Cote d'Ivoire, and Niger, among others), the police operate as nothing more than governmental bystanders, rarely

intervening in the administration of safety and justice. Similar to other less-industrialized countries around the world (such as Bangladesh and Afghanistan), the police in these contexts don't regularly patrol neighborhoods, fail to integrate themselves into the larger community, and are rife with corruption and human rights abuses. For example, during the civil war in Mozambique, the state police agency engaged in brutality and violence against those that they perceived as enemies of the state, often torturing them extensively to gather information on other dissidents (Baker, 2003). In these countries, the enforcement of the law is scant, and the police serve as vessels for bribery, benefaction, and repression.

A second group of countries at the other end of the continuum, such as Botswana, Mauritius, and South Africa, mobilize towards democratic governance, professional policing, and the inclusion of human rights within the administration of the law (Pino and Wiatrowski, 2012). In these countries, mostly stable systems of governance have provided time for professionalization efforts to commence. These countries are also willing to professionalize their police as they are integrated with the larger global community through trade and economic development. They adopt community policing standards, foster responsiveness to different people groups and communities, and share best practices both domestically and international through international exchanges. For example, in Botswana, after years of outreach efforts prizing inclusion of all communities in the police force, females are currently outpacing males as new recruits into the National Police (Das and Palmiotto, 2006). There may still be limited corruption or potential human rights issues in these countries, but transparency initiatives and good governance efforts in these countries often provide channels for addressing these concerns.

A final category includes countries who straddle instability and professionalization, including Nigeria, Kenya, and Senegal, among others. They are characterized by a police force that has professionalized to a limited degree, but also contains elements of corruption, human rights abuses, and other facets that violate the rule of law. For example, the National Police in Nigeria have pursed reform efforts aimed at improving responsiveness to diverse communities, but also remain one of the most corrupt and militarized police agencies on the continent (Onyeozili, 2005). These countries have also experienced political instability, but there may have been some time since their last conflict to allow governance and the rule of law to start operating. In many cases, these countries also have a very diverse set of societal challenges, including ethnic and political tensions, and the police can either exacerbate these tensions and/or help to resolve them. Police forces in these countries fluidly shift between supporting and violating the rule of law, and depending upon the dynamics of political, economic, and social cleavages, could progress or regress in a relatively short amount of time.

Overall, the nature of policing in sub-Saharan Africa is both familiar to and distinct from policing found in more industrialized nations. In many countries on the continent, there is a desire for professional policing, but the historical and cultural legacies brought on by war, poverty, and corruption create tension between the provision of security and the legitimization of authority. Therefore, as a study area to examine the generalizability of legitimacy theory, sub-Saharan Africa represents one of the most important contexts for establishing the applicability of this policing model outside industrialized nations. It provides a vast array of unique cultural, historical, and societal contingencies that could either mediate the model of legitimacy or support its broad applicability. Overall, if

normative perceptions of fairness are relevant in shaping perceptions of police legitimacy in these countries, then its relevance as a tenet of police reform for agencies across the globe is greatly enhanced.

Data

The primary source of data for this study are Afrobarometer surveys collected between 2012 and 2013 (Afrobarometer, 2016). Afrobarometer is a nationally-representative public opinion survey conducted in 36 countries (with some annual gaps) since 2000. Developed to address a number of topics related to democracy, government satisfaction, and perception of institutions, Afrobarometer data have been used in hundreds of peer-reviewed studies to date, including studies on protest mobilization (Hutchinson, 2011; Pilati, 2011), trust in the government (Hutchison and Johnson, 2011; Linke, 2013), support for democracy (Bratton, Mattes, and Gyimah-Boadi, 2005; Fuchs-Schundeln and Schundeln, 2015; Gyimah-Boadi, 2015; Mattes and Bratton, 2007), and ethnic identification (Bhavnani and Miodownik, 2009; Eifert, Miguel, and Posner, 2010; Ichino and Nathan, 2013; Robinson, 2014), among other topics. Incorporating in-country survey partners with a global coordinating council, the Afrobarometer is viewed as the gold-standard for public opinion surveys in Africa, yet its use to study perceptions of the police has been limited (see Levi, Tyler, and Sacks, 2009).

In each country, the Afrobarometer team draws a random probability sample of all citizens of voting age (18 and older). Sampling strategy utilizes a clustered, stratified, multi-stage area probability sample, focused on stratifying by urban/rural location and the first-order subnational administrative unit for the country (Afrobarometer, 2016). Primary Sampling Units (PSUs) are randomly selected for both urban and rural locations, with

secondary sampling units (SSUs) selected for some rural areas to ensure adequate response rates in difficult-to-access locations. Within each PSU, interviewers randomly select starting points, then households, and then one individual respondent within each household. Interviewers alternate each household between a male and female respondent, and a total of eight interviews are clustered within each PSU. To avoid issues of illiteracy among target populations, individuals are interviewed face-to-face and in a number of languages by trained interviewers.

The sample for this study came from Round 5 of the Afrobarometer,[2] which was originally administered in 35 countries. The selection of countries by Afrobarometer is not randomly generated; in each case, the Afrobarometer team works with local, in-country teams to determine which countries can be surveyed given an available budget from funding partners. Therefore, the selection of countries does not represent a comprehensive sample of countries within SSA, and therefore the results should not be considered generalizable for all countries within SSA. In particular, the countries within SSA that were not initially surveyed by Afrobarometer include 9 countries in Central Africa (Central African Republic, Chad, Democratic Republic of Congo, Equatorial Guinea, Gabon, Republic of the Congo, Rwanda, São Tomé and Príncipe, and South Sudan), 3 countries in East Africa (Djibouti, Eritrea, and Somalia), 3 countries in Southern Africa (Angola, Comoros, and Seychelles), and 3 countries in West Africa (Mauritania, the Gambia, and Guinea-Bissau). Therefore, the least generalizable location within SSA for the results of this study is Central Africa.

[2] Earlier rounds of the Afrobarometer survey did not include the questions of interest for this study, and were not included in the sample.

Because the dissertation focuses on SSA, four countries (Algeria, Tunisia, Morocco, and Egypt) were surveyed in Round 5 but fall outside of the study area and were thus removed. Even though surveyed in 2013, data from Ethiopia were not available from Afrobarometer at the time of this study. In addition, I excluded Sudan both because of administrative challenges raised by the ongoing conflict with South Sudan coupled with unreasonably high response rates (>99%), suggesting that the data may be compromised. Response rates for the remaining countries were at least 60% or higher, with many over 75%. Another two countries (Cape Verde and Swaziland) were dropped as they contained no information relevant to ethno-linguistic identification, which is important in this study to address potential survey bias introduced by co-linguistic similarity between interviewer and respondent (Adida, Ferree, Posner, and Robinson, 2016). The overall sample of 27 countries was evenly split between male and female, while most respondents (72.5%) were less than 45 years old (see Table 2). More information regarding Afrobarometer's methodology can be found at http://www.afrobarometer.org.

Table 2. Initial Sample Descriptives.

Measure	Round 5 N=43,190	
Age		
18-24	8,923	*20.7%*
25-34	13,125	*30.4%*
35-44	9,120	*21.1%*
45-54	5,782	*13.4%*
55+	5,833	*13.5%*
Missing/ Don't Know	407	*0.9%*
Sex		
Male	21,585	*50.0%*
Female	21,605	*50.0%*
Country		
Benin	1,200	*2.8%*
Botswana	1,200	*2.8%*
Burkina Faso	1,200	*2.8%*
Burundi	1,200	*2.8%*
Cameroon	1,200	*2.8%*
Cote d'Ivoire	1,200	*2.8%*
Ghana	2,400	*5.6%*
Guinea	1,200	*2.8%*
Kenya	2,399	*5.6%*
Lesotho	1,197	*2.8%*
Liberia	1,199	*2.8%*
Madagascar	1,200	*2.8%*
Malawi	2,407	*5.6%*
Mali	1,200	*2.8%*
Mauritius	1,200	*2.8%*
Mozambique	2,400	*5.6%*
Namibia	1,200	*2.8%*
Niger	1,199	*2.8%*
Nigeria	2,400	*5.6%*
Senegal	1,200	*2.8%*
Sierra Leone	1,190	*2.8%*
South Africa	2,399	*5.6%*
Tanzania	2,400	*5.6%*
Togo	1,200	*2.8%*
Uganda	2,400	*5.6%*
Zambia	1,200	*2.8%*
Zimbabwe	2,400	*5.6%*

Variables

As described in Chapter 2, the purpose of this dissertation is to evaluate the theoretical and empirical fit of the normative model of legitimacy within SSA, focusing on three specific normative criteria (procedural fairness, distributive fairness, and perceived effectiveness). To address this question, I focus on a key outcome of interest: legitimacy. By legitimacy, I refer to the 1) obligation an individual feels to obey the dictates of those to whom they consent, 2) the moral alignment between citizen and police, and 3) the perceived legality (or lack of corruption) within the police. Beyond the normative model, I also hypothesize that legitimacy is affected by individual instrumental concerns, including crime victimization and the fear of crime. I contextualize these analyses at the country-level by identifying the role played by internal security conflicts (armed conflicts and civil wars) and the perceived level of corruption. Details on each of these variable constructions, as well as other individual and national-level controls, are detailed below.

Outcome of Interest: Legitimacy

The main goal of this dissertation is to assess the drivers of police legitimacy within SSA, but operationalizing legitimacy is not straightforward. As shown in Table 3 below, I use three key measures of legitimacy drawn from previous studies conducted in industrialized and non-industrialized countries: (1) obligation to obey, (2) moral alignment, and (3) perceived legality.

Table 3. Outcome of Interest: Legitimacy.

Measure	N	Mean	Std. Dev.	Min	Max	% Missing	% Don't Know
Obligation to Obey – Police	42,064	3.911	1.120	1	5	<0.1%	1.3%
Obligation to Obey – Police (Y/N)	43,170	0.781	--	0	1	<0.1%	0.0%
Moral Nonalignment	43,158	0.305	--	0	1	<0.1%	0.0%
Moral Nonalignment (expanded)	43,158	0.478	--	0	1	<0.1%	0.0%
Police Corruption	39,894	1.626	0.879	0	3	0.2%	7.4%
Police Corruption Any (Y/N)	43,087	0.845	--	0	1	0.2%	0.0%
Police Corruption Severe (Y/N)	43,087	0.487	--	0	1	0.2%	0.0%

Obligation to Obey

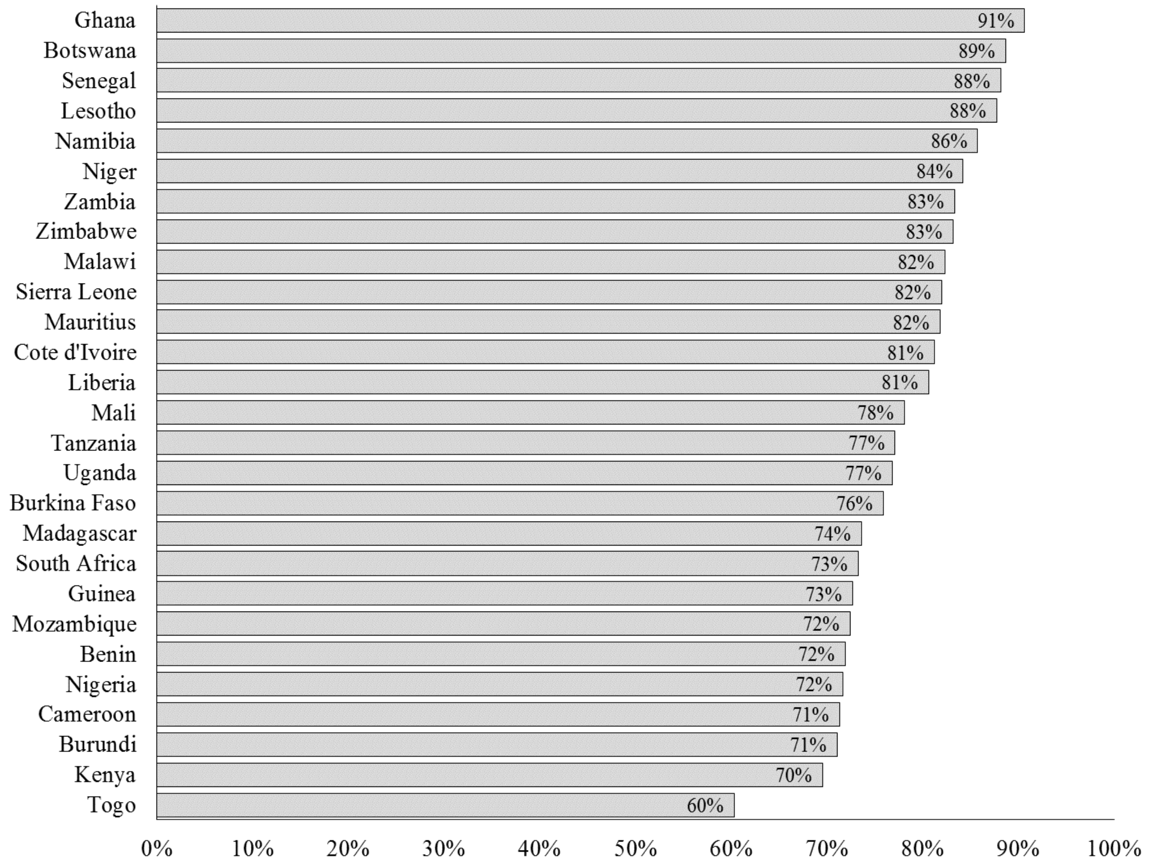
Across a number of prior studies of police legitimacy, the most prominent definition of legitimacy used is consent. In this case, legitimacy is the willingness to consent to an authority or the ability of an authority to carry out or enforce the law. As a result, individuals are obligated to obey the decisions of the authorities to whom they consented (Bradford and Jackson, 2010). Although others use multiple questions to tap this construct, within the African context this study follows Margaret Levi and colleagues (Levi, Tyler, and Sacks, 2009) who frame obligation as support for the police to use coercion to enforce the law. The Afrobarometer asks respondents whether “the police always have the right to make people obey the law.” By inquiring about the “right to make” people obey the law, positive responses suggest not only that the police have this right towards respondents, but more so, they have the right or consent to impinge on another’s own authority to enforce the law. The question does not ask whether respondents find the law worthy of compliance or enforcement; rather, it is specifically about whether respondents believe that the police have this right. Measured on a scale ranging from strongly disagree (1) to strongly agree

(5), respondents consistently agree with the statement across all rounds ($\overline{x} = 3.911; s.d. = 1.120$).[3]

The high mean and relatively narrow standard deviation suggests a non-normal distribution, which is confirmed by over three-quarters of respondents stating that they agree or strongly agree with the question. Figure 2 shows the distribution of consent by country, with only 60% of respondents in Togo reporting that they either "agree" or "strongly agree" that the police have the right to compel others to obey the law, compared with 91% of respondents in Ghana. More importantly, the interpretation of differences between "agree" and "strongly agree" may not be consistent across cultures, suggesting that the key dividing line is between those with negative or neutral perceptions of police authority and those with positive perceptions. Therefore, following previous studies using the Afrobarometer (Levi, Tyler, and Sacks, 2009), obligation to obey is coded as a binary variable with those who "agree" or "strongly agree" with this right coded as "1", and those who are ambiguous or reject this right coded as "0" ($\overline{x} = 0.781$).

[3] Respondents could also answer that they "don't know," which could theoretically be construed as missing data. For purposes of this question though, it could be argued that those who "don't know" would find themselves neither agreeing nor disagreeing with the interviewer (which is coded as "3"). Therefore, in subsequent analyses those responses have been recoded to "neither agrees nor disagrees," or the middle of response spectrum.

Figure 2. Percent of Respondents who “Agree” or “Strongly Agree” with Obligation to Obey the Police.



Moral Alignment

A second component of legitimacy in recent research has been the question of whether respondents share similar moral values with the police (Bradford and Jackson, 2010). Put another way, do the police represent the same value structure as the respondent? Individuals whose perceptions are morally aligned with the police are also more likely to cooperate with the police and comply with the law (Jackson et al., 2012a). The Afrobarometer does not include items that measure moral alignment as originally conceived in other studies, but I draw on a similar question available only in Round 5 to encapsulate the moral alignment between citizen and police:

> Some people say that many crimes are never reported to the police. Based on your experience, what do you think is the main reason that many people do not report crimes like thefts or attacks to the police when they occur? (Afrobarometer, 2016)

Respondents were offered over 30 different choices, many of which concern a victim's fear of retaliation or shame for the crime, as well as obstacles from the community or the victim's family in reporting the crime. There were several responses, though, which echo a moral disjuncture between citizen and police. For example, respondents suggested that people do not report crimes because the police "would have demanded money to accept the report," or the police themselves "may be involved in the particular crime." In addition, respondents could also suggest that crimes are not reported because "police do not listen or care" or that the police would be unable to do anything about the particular crime.

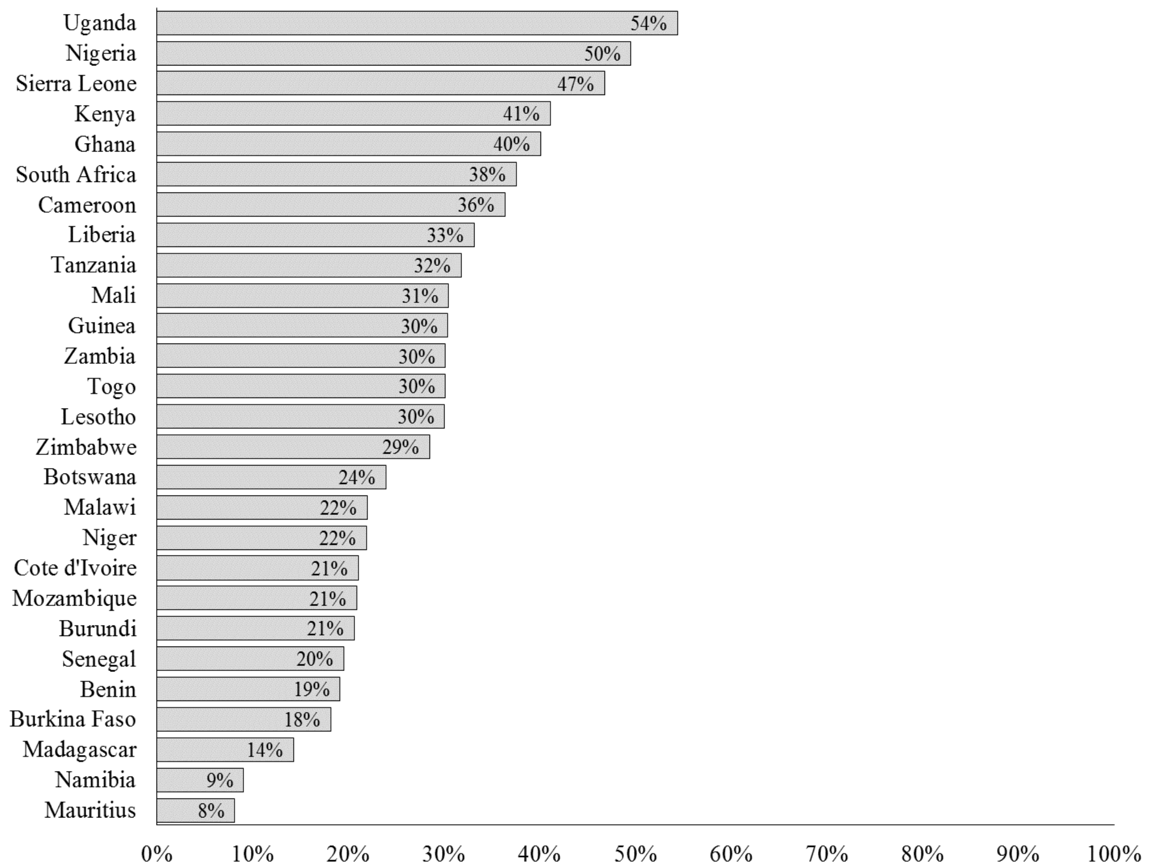
Combining these responses, a new variable that highlights *moral nonalignment* with the police was coded in two ways. First, a conservative measure that tapped specifically into values-oriented judgments of the police[4] as a reason for not reporting crime was binary coded as "1" (with all other reasons coded as "0"). Second, an expanded version that contains any negative assessment of the police,[5] including restrictions on their opportunity to solve a crime, was also binary coded as "1" (with all others coded as "0"). Overall, 30% of the sample for Round 5 reported moral nonalignment with the police under

[4] These include "Police don't care or listen," "Police would have demanded a money or bribe to help," "People fear police / don't trust police," "Police may have been involved in the robbery or assault," "Police may turn the case against you."

[5] The additional responses include "No police or police station in area," "Police wouldn't have been able to do anything about it," "Police delays," "Lack of transport for the police," "Procedure is too slow," "Procedures are too long."

the conservative definition described above, with 47% of respondents reporting one under the expanded definition.[6] Figure 3 provides the distribution of the conservative definition of moral nonalignment by country, where only 8% of respondents in Mauritius reported nonalignment with the police in contrast to 54% of respondents in Uganda.

Figure 3. Percent of Respondents who are Not Morally Aligned with the Police

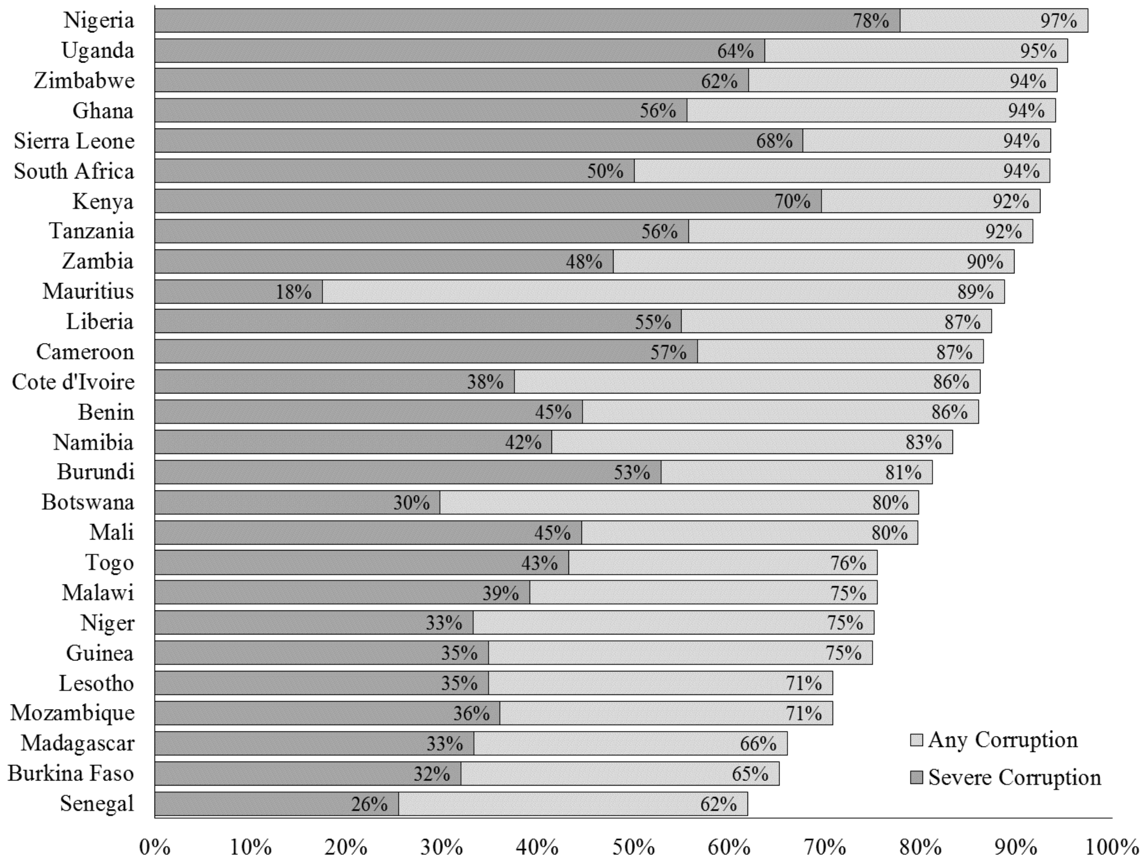


[6] It is important to note that while it would be beneficial to reverse code this variable into moral alignment, the nature of the question wording would not support the ability to reverse code. Reverse coding this particular variable would suggest that people have a moral alignment with the police, even though they may intend or have other reasons why crime would be reported to the police that have nothing to do with moral dimensions or shared values with the police. The absence of any negative assessments of the police for this question does not automatically translate to positive support or moral alignment with the police. Thus, this particular variable is best coded as the nonalignment between citizen and police in a moral dimension, and therefore results should be interpreted as opposite what would be expected from studies which use a positive moral alignment between citizen and police.

Perceived Legality

Finally, a third dimension of police legitimacy evaluated within the literature has been the perceived legality (or corruption) of the police themselves (Bradford et al., 2014; Jackson et al., 2014; Murphy and Cherney, 2011; Murphy, Tyler, and Curtis, 2009). In essence, individuals cannot find the police to be legitimate if they do not obey the same laws that the public is expected to obey. Although the Afrobarometer lacked multiple measures to tap this construct, using existing survey data I follow the guidance of Margaret Levi and colleagues (Levi, Tyler, and Sacks, 2009) who look at the level of corruption of the police as a measure of perceived legality. This question asks "how many police officers do you think are involved in corruption or have not you heard enough about them to say" with responses of "none," "some of them," "most of them," "all of them," as well as "don't know/haven't heard enough." On average respondents perceived that at least some of the police are involved in corruption, the highest level of corruption of any institution in the Afrobarometer ($\overline{x} = 1.626$; $s.d. = 0.879$).

Figure 4. Percent of Respondents who Perceive the Police to be at least Somewhat Corrupt and Respondents who Perceive Severe Corruption in the Police.



Similar to the measure of obligation to obey, the presence of “don’t know” creates a challenge for coding as it represents between 8% and 13% of the total responses between rounds three and five. It is difficult to say whether those who marked “don’t know or haven’t heard enough to say” would fall in the same category as those who affirmed that they believe no police officers are involved in corruption. Other studies using the Afrobarometer survey data have utilized a wide range of strategies when using the corruption perception data from the survey, including listwise deletion (Bailard, 2009), coding it as zero (Chang and Kerr, 2016), or modeling responses as a separate binary variable (Levi, Tyler, and Sacks, 2009). Similar to procedural fairness, a previous study using the Afrobarometer data (Levi, Tyler, and Sacks, 2009) found a significant and

negative correlation between those who "don't know or haven't heard enough" regarding police corruption and obligation to obey, suggesting that a strategy that codes those responses as "0" would be valid. I create two binary variables for perception of police corruption where positive responses for at least some perceived corruption (*any corruption*) or only those who respond that "most" or "all" the police are corrupt (*severe corruption*). "Don't Knows," alongside perceptions of no corruption, serve as the referent category for these two binary variables. Figure 4 shows a comparison between the proportions of respondents in each country reporting "at least some" of the police are corrupt and "most" or "all" of the police are corrupt. In some countries, the gulf between *any* and *severe* corruption is considerable (Mauritius), while in others, most of those who perceive the police to be corrupt perceive most or all of them to be corrupt (Kenya, Nigeria, and Sierra Leone).

Independent Variables: Normative Criteria

Procedural Fairness

Central to normative models of police legitimacy is that those who perceive the police to treat them fairly are more likely to find them legitimate. Studies have measured this concept a number of ways, including specific treatment during a police initiated stop (Mazerolle et al., 2013; MacQueen and Bradford, 2015) as well as survey-based questions about respect and fairness by the police more generally (Sunshine and Tyler, 2003; Hinds and Murphy, 2007; Tyler and Fagan, 2008; Hough et al., 2010). In the context of this study, the question focuses on how individuals are treated "under the law," which is analogous to how individuals are treated by the police as the primary enforcers of the law. In the Afrobarometer, respondents are asked how often in their opinion people are treated

unequally under the law, ranging from "never" (0) to "always" (3) as well as "don't know." Focusing on perceived *fairness*, responses were reverse coded and individuals exhibited a consistent perception that, on average ($\bar{x} = 1.513$; $s.d. = 0.989$), people were periodically (but not often) treated equally under the law (see Table 4).

Table 4. Possible Correlates of Legitimacy.

Measure	**N**	**Mean**	**Std. Dev.**	**Min**	**Max**	**% Missing**	**% Don't Know**
Procedural Fairness	41,240	1.513	0.989	0	3	<0.1%	4.1%
Procedural Fairness (Y/N)	43,155	0.453	--	0	1	<0.1%	0.0%
Distributive Fairness	40,057	0.533	--	0	1	0.4%	6.9%
Distributive Fairness (Expanded)	40,057	0.584	--	0	1	0.4%	6.9%
Perceived Effectiveness	41,369	2.406	0.969	1	4	0.1%	4.1%
Perceived Effectiveness (Y/N)	43,145	0.493	--	0	1	0.1%	0.0%

Similar to other questions within the Afrobarometer, there were a considerable number of respondents who indicated that they "don't know" whether individuals are treated equally or unequally. Previous analysis of the Afrobarometer (Wave 3) focused on procedural fairness (Levi, Tyler, and Sacks, 2009) found a significant and negative relationship between those who "don't know" whether others are treated fairly and their perceived obligation to obey the law, suggesting that they would have the same relationship as those who are coded as "never treated equally" (or "0"). Including those responses in the referent category, and coding the scale into a binary measure for those who perceive equal treatment "often" or "always" as 1, I find that 44% of the overall sample believes that people are generally treated equally or fairly under the law.[7]

[7] In subsequent analyses, models will be run with primarily a binary measure of procedural fairness for ease of interpretation, but will also include the ordinal measure for sensitivity analyses.

Distributive Fairness

A second key correlate suggested by previous research is that those who perceive the outcomes of police treatment to be fairly distributed across individuals also find the police to be legitimate (Sunshine and Tyler, 2003; Hinds and Murphy, 2007). This question of distributive fairness emphasizes that regardless of social status, individuals are equally likely to receive the application of the law if they have committed a crime.[8] Although lacking a specific question focused on distributive fairness, an equivalent measure was constructed based upon responses to two similar questions focused on the likelihood of enforcement of the law if an individual were to commit a crime. The first question asks whether an ordinary individual who breaks the law would likely be punished, while the second asks whether "officials" who commit crimes would likely be punished. Given their increased standing within many social circles in SSA, officials (analogous to government or elected officials) provide a comparative class of individuals who may receive differential treatment based on their status. Thus, a comparison between responses to these two questions highlights whether respondents perceive an equal likelihood of punishment. Those who answered similarly across both questions were binary coded as perceiving the likelihood of punishment to be distributionally equal (1), whereas those whose responses deviated from one another (whether in favor of respondents or in favor of officials) would be coded as distributionally unequal (0). I test for robustness of the measure by coding an

[8] It is important to note that this is different than the threat of sanction common in deterrence theory, which hypothesizes individuals will comply with the law or cooperate with the police if they perceive a high likelihood of punishment should they commit a crime (Sherman, 1993; Nagin and Pogarsky, 2001). Rather, this measure compares the *equivalency* of sanction threat across two different classes of individuals: "ordinary people" and "officials" (which are analogous to government officials). Thus, it is not about a high likelihood of sanction threat, but whether respondents perceive the likelihood equal across these two classes of individuals. Moreover, sanction threat is personalized to the respondent, whereas the question asked in the survey referred to "ordinary people," with whom the respondent may or may not self-identify.

expanded definition of distributive fairness where those who perceive a lower likelihood of themselves receiving punishment than officials are coded as distributionally fair (1), given that a key driver of grievance towards institutions concerns unequal treatment that favors those in power. Regardless of definition, between 53% and 58% of the sample reported that their perceived likelihood of receiving punishment was fairly distributed between themselves and officials (see Table 4).[9]

Perceived Effectiveness

A third component within the normative and instrumental models of legitimacy is the perception that the police would be effective at controlling or reducing crime (Jackson et al., 2012a; Tankebe, 2013a; Bradford, 2014; Bradford et al., 2014). From an instrumental perspective, this construct focuses on the outcome of police activity as a primary driver of legitimacy, rather than a process-based model of regulation. While the Afrobarometer provides no direct measure concerning the police's perceived effectiveness, respondents were asked to evaluate the overall performance of the government at reducing or controlling crime. These actions are handled primarily through the instrumentation of the police; therefore, it can be reasonably assumed evaluating the government's performance at crime control would serve as a viable proxy for the specific effectiveness of the police at the same task. Responses are scaled on a four-point scale ranging from very badly (1) to very well (4), with an option for "don't know or haven't heard enough." Overall, respondents feel that the government is doing an average job ($\overline{x} = 2.406$; $s.d. =$

[9] Similar to other questions, there were a number of respondents who answered that they "don't know" to one or more of the key questions. It is difficult to assume that these individuals would perceive either fairness or unfairness in the distribution or likelihood of treatment; therefore they are treated as missing data in the final analysis.

0.969) at reducing or controlling crime (see Table 4). As with earlier variables, I use a binary measure of effectiveness where responses of "fairly well" or "very well" are coded as "1", and all other responses (including "don't know") are coded as "0".

Independent Variables: Instrumental Concerns

Crime Victimization

Working through the perceived effectiveness of the police, some have suggested that one's consent to the authority of law enforcement is built upon instrumental concerns over fear of crime and/or potential victimization, rather than or in addition to normative criteria (Murphy and Barkworth, 2014). In order to account for the potential instrumental nature in which legitimacy is fashioned, three measures of victimization within the past 12 months are included. Respondents were asked whether they or their family have been victims of a physical attack within the past 12 months, as well as whether they have had anything stolen from their house during the same timeframe. In the sample, 8% of respondents reported that they or their families had been victims of physical attack, while 29% of respondents reported home thefts within the past 12 months (see Table 5). Nearly a third (31%) of respondents reported victimization of any kind, a considerable portion of the overall sample.

Fear of Crime

Another factor that could increase instrumentally-motivated legitimacy is whether respondents fear crime within their own home. Respondents were asked how often in the past year have they or anyone in their family feared crime in their own home, providing an ordinal measure from "never" (0) to "always" (3). Given the difficulty of recalling feelings or emotions over a long time span (Sudman and Bradburn, 1973; Junger-Tas and Marshall,

1999; Roberts, Mulvey, Horney, Lewis and Arter, 2005), responses were recoded into a binary indicator measuring whether the respondent reported that they feared crime at all during the past year (1) and those who have never feared crime (0). Overall, 33% of the sample reported that they feared crime within their own home over the past year (see Table 5). In addition, considering the strong interdependency between victimization and the fear of crime (Garofalo, 1979), I include an interaction term between any victimization and fearing crime within the past year.

Table 5. Instrumental Concerns.

Measure	N	Mean	Std. Dev.	Min	Max	% Missing	% Don't Know	% Not Asked
Victimization w/in past 12 months								
Any Victim	43,152	0.315	--	0	1	0.0%	<0.1%	0.0%
Victim of Physical Attack	40,728	0.082	--	0	1	<0.1%	<0.1%	5.6%[10]
Victim of Theft from Home	43,154	0.288	--	0	1	0.0%	<0.1%	0.0%
Feared Crime within Own Home	43,041	0.325	--	0	1	0.2%	0.2%	0.0%
Victim of Crime X Fear of Crime	43,003	0.172	--	0	1	0.2%	0.2%	0.0%

Controls

A number of demographic and socioeconomic controls were included in order to account for other variables that could influence one's perception of the police and willingness to cooperate. An individual's *age* taken at the time of the interview was included. Respondents who were *female* were also binary-coded as well as those who live in *urban*[11] locations (as identified by the survey enumerator).

[10] Respondents in Tanzania (n=2,400) were not asked about whether they were a victim of a physical attack; only that they were a victim of a theft.
[11] Actual coding is urban and semi-urban locations, in contrast to rural locations (referent category).

Several socioeconomic controls found in other literature related to SSA were also included (see Table 6). The use of income-based variables to capture individual wealth is often misleading within less-industrialized contexts (Rose, 1998). An alternative is to use a *lived poverty index* (Mattes, Bratton, and Davids, 2003), which is a scale of how often individuals have gone without some elements of sustenance within the past 12 months. These elements include food, water, medicine, fuel, and cash, and highlight the erratic instability of poverty that may occur within a given year that could influence perceptions of state institutions, including the police. Using factor analysis, a single-factor scale was constructed from these five variables ranging from 0 to 5 (alpha=0.78), and most respondents have gone without at least one of these elements of sustenance at some point over the past 12 months ($\bar{x} = 1.322$; $s.d. = 0.935$). In addition, *current employment* status is also coded to reflect whether respondents are employed in some capacity at the time of the interview.

Drawing on Black's (1983) concept of inaccessibility of the law to those with low social standing (see also Nivette, 2016), four additional variables that may influence the perception of police legitimacy within SSA are included. Two of these variables capture an individual's perception of how the *country's economy overall* is doing as well as their *own economic situation*. These two variables are scaled from very bad (1) to very good (5), and respondents view both the country's ($\bar{x} = 2.520$; $s.d. = 1.247$) and their own ($\bar{x} = 2.649$; $s.d. = 1.191$) economic situation as fairly bad to average. In addition, an individual's *education level* is captured on an eight-point scale[12] ranging from no formal

[12] Original coding of education level in the surveys ranged from 0 (no formal schooling) to 9 (Post-graduate). To simplify interpretation, several categories were collapsed to capture educational thresholds. For example, No Formal School (0) and Informal Schooling Only (1) were collapsed into a single coding (0), as both are

schooling to at least a college degree completed, with the average respondent reporting at least primary schooling completed ($\overline{x} = 2.327;\ s.d. = 1.831$).

A fourth factor that captures one's low social standing is the extent to which respondents trust others. Although defined in a number of ways, I use a general measure of *social trust* where respondents were asked whether "most people could be trusted or you must be very careful in dealing with people." In Round 5, respondents overwhelmingly reported that people should be very careful when dealing with others, suggesting a low level of generalized trust ($\overline{x} = 0.192$). Overall, social trust remains relatively low within SSA countries compared to other highly industrialized countries (Dinesen and Sønderskov, 2015), which could have important implications for respondents' perceptions of institutions and the willingness to find them legitimate.

Table 6. Socioeconomic and Social Standing Controls.

Measure	N	Mean	Std. Dev.	Min	Max	% Missing	% Don't Know
Lived Poverty Index	42,650	1.322	0.935	0	4	1.3%	0.0%
Employment Status	43,045	0.324	--	0	1	<0.1%	0.3%
Social Standing							
P Country's Economic Sit.	42,487	2.520	1.247	1	5	<0.1%	1.7%
P Individual's Economic Sit.	43,031	2.649	1.191	1	5	0.1%	0.3%
Education Level	43,104	2.327	1.831	0	7	<0.1%	0.1%
Urban Residence	43,190	0.375	--	0	1	0.0%	0.0%
Generalized Social Trust	42,373	0.192	--	0	1	0.7%	1.1%

ABBREVIATIONS: P = Perception; Sit. = Situation.

An individual's perception of the police can also be shaped by their ability to access them during a crime or moment of crisis (Skogan, 2006; Herbert, 2006). Accessibility may not be relevant if individuals don't experience crime and generally perceive that crime

equivalent to no formal schooling. In addition, University completed (8) and Post-graduate degrees (9) were also collapsed, as there was little differentiation between the two on other key indicators.

overall is under control. In contrast, those locations where police are present could reassure citizens of their safety and therefore increase the perception that they are effective at controlling crime and engaging in legitimacy-shaping initiatives. In this study, the presence of the police is based on whether the survey enumerator visibly witnessed a police station or the police on patrol in primary sampling units while administering the survey. Although the interviewer sometimes noted police on patrol and sometimes noted a police station, a variable capturing whether either was viewed is included. Overall, *police were present* for 43% of the survey sample in Round 5 (see Table 7).

Following previous studies of interviewer effects in SSA (Adida, Ferree, Posner, and Robinson, 2016; Asunka, 2015), I also include control variables capturing various aspects of the interview process that could influence or bias respondent's answers to sensitive questions, especially about governmental institutions. I include whether the *interviewer was female* (44% of surveys) and whether *others are present during the interview* (30% of surveys). In addition, when individuals form specific perceptions about who funds or sponsors a particular survey, they may be more likely to bias their responses depending on their perception of that sponsor (Asunka, 2015). To capture this, I include a binary indicator for whether the individual perceives the survey to be *government-sponsored* (55% of respondents). To capture potential relaxation of desirability bias when speaking with an enumerator who shares the same language with the respondent, I include two measures that capture *shared language* (45% of surveys) as well as whether the interview is in the *home language of the respondent* (50% of surveys).

Table 7. Police Presence and Survey Controls.

Measure	N	Mean	Std. Dev.	Min	Max	% Missing	% Don't Know
Presence of Police							
Any Police Presence	43,050	0.429	--	0	1	<0.1%	0.0%
Visible Police Station	42,990	0.351	--	0	1	0.2%	0.0%
Visible Police Patrol	43,190	0.265	--	0	1	0.0%	0.0%
Survey Controls							
Others Present	43,111	0.304	--	0	1	0.2%	0.0%
Female Interviewer	43,190	0.436	--	0	1	0.0%	0.0%
Perceived Government Sponsor	42,960	0.553	--	0	1	0.1%	0.0%
Shares Language with Interviewer	43,147	0.446	--	0	1	0.1%	0.0%
Interview in Home Language	43,003	0.495	--	0	1	0.2%	0.0%

National Context

The perception of police legitimacy in SSA is not only built on individual experiences and social norms, but also contextualized by the country-level dynamics within regions. Often collapsed into a single region, SSA exhibits as much diversity between countries as it does within. The ability for institutions to be responsive to the public can be shaped by economic limitations, ongoing armed conflicts, and repressive regimes that pursue policies of coercive control rather than encouraging process-based models of fair and equitable policing. Although the range of country-level covariates that could influence individual perceptions of legitimacy is large, given the small number of countries (27) this study includes three key variables: security challenges, country population, and Gross Domestic Product per Capita.

Security Challenges

Compared to normative models of legitimacy, instrumental concerns over safety and security can prioritize effective crime control over equitable treatment. Mentioned

previously, concerns over individual victimization and fear of crime can moderate the relationship between normative criteria and perceived legitimacy. At the national level, ongoing security concerns focused on internal conflicts create an urgency to secure safety, often at the expense of fair policing procedures. Evidence from South Africa (Bradford et al., 2014) and Pakistan (Jackson et al., 2014) suggest that the instrumental model of effectiveness is even more prominent than the normative model of fairness in less-industrialized countries facing internal security challenges similar to contexts throughout SSA. During these conflicts, police operations can turn from cooperative to coercive, heightening tensions between citizens and the police and undermining any pursuit of normative-based legitimacy.

To capture these national-level influences, this study includes data drawn from the Uppsala Conflict Data Program – Peace Research Institute of Oslo (UCDP-PRIO) dataset on Armed Conflicts (Pettersson and Wallensteen, 2015). Cited over 3,000 times since its introduction (Gleditsch, Wallensteen, Eriksson, Sollenberg, and Strand, 2002), this dataset has become the standard reference for cross-country analyses of armed conflict, and two key types of internal conflict are initially considered: *armed conflicts* and *civil wars*. Armed conflicts are internal conflicts between the state and a non-state actor or between two non-state actors, and that result in at least 25 battle-related deaths in a given year. Unlike armed conflicts, civil wars are major internal conflicts whereby at least 1,000 battle-related deaths are attributed to the conflict in a given year.[13] An armed conflict can become

[13] Although an intermediate categorization would be for those internal conflicts whose total battle deaths across the dyadic relationship between state and non-state exceeds 1,000 but not necessarily in a given year, these could be considered cumulative civil wars. The long-standing nature of some conflicts, though, make this inclusion less than ideal, as a 20-year conflict with 50 deaths per year would create a civil war condition in year 20, during a relatively small-scale armed conflict. Therefore, this study only includes those conflicts which were internal civil wars exceeding 1,000 battle-related deaths in a given year.

a civil war once it crosses the 1,000 battle death threshold, but both present challenges to normal policing operations by increasing the opportunity for coercive use of force to maintain order during instability.

I code two binary variables for states that had either 1) a civil war or 2) an armed conflict in the current or prior year. This suggests an immediate disruption of routine policing operations and a potential decrease the perceived legitimacy of the police. As states move away from armed conflicts and periods of instability, there is a greater likelihood that they establish routine policing operations that favor normative models of legitimacy (although the evidence supporting or contradicting this is extremely limited; see Zvekic, 1998; Bayley, 2006).

Overall, there were no civil wars in the countries included during the study period; the most recent civil war prior to the study period was the Ugandan government against the Lord's Resistance Army, which last occurred in 2005 and in total has amassed more than 1,000 battle-related deaths. More importantly, countries that have faced civil wars since 1960 in the sample on average have not faced those same conditions for at least 17 years, suggesting a long duration of relative (although not always peaceful) stability from civil war for countries in the sample. In comparison, the presence of armed conflict in the current or prior year was considerably higher, with at least 10% of the sample reporting these conflicts recently ($\overline{x} = 0.111$) (see Table 8). These armed conflicts, though, are driven by three countries that repeatedly experience internal security challenges, especially from insurgents and terrorist organizations: Mali, Nigeria, and Uganda.

Context of Corruption

It is also important to capture whether corruption overall is a normal process of ineffective governance within the country. Experiences with bribery that occur in countries where corruption is pervasive may not individually shape one's perception of the legality of the police nor their legitimacy. In other countries where corruption is less prevalent, the act or experience of paying a bribe could dramatically influence not only one's perception of police corruption but also the overall legitimacy of the police. Therefore, I include a country-level measure drawn from the Corruption Perception Index (Transparency International, 2016), which is a composite index capturing expert perceptions of a *country's level of corruption* across a number of institutions. Scoring is on a 0-100 scale, with higher scores reflecting less perceived corruption ($\bar{x} = 35.517$; $s.d. = 11.243$).

Table 8. Country-level Measures.

Measure	N	Mean	Std. Dev.	Min	Max
Security Challenges					
Armed Conflict or Civil War in Current or Prior Year	27	0.111	--	0	1
Corruption Perception Index	27	35.517	11.243	19	65
Controls					
Country Population (ln)	27	16.409	1.112	14.043	18.941
Country GDP Per Capita (ln)	27	6.961	0.992	5.498	9.118

Other Controls

In addition, several other country-level controls were included based on previous cross-national studies of trust in the police and other institutions. Two measures from the World Bank were drawn to capture the country's overall *population* and the *GDP per capita*, both representing potential pressures that could influence how the police have the

resources or the capacity to interact with the public. Both variables were logged in order to address distributional concerns of normality (see Table 8).

Analytic Plan

To evaluate the research questions and their associated hypotheses requires a multi-step research design incorporating variables that are correlated with legitimacy[14] and the proposed study uses methods to capture both direct and indirect effects on legitimacy. Before turning to the research design for each question, I consider five methodological implications with relevance across questions: the construct of legitimacy; the hierarchical nature of Afrobarometer; the choice of centering key individual-level variables; missing data; and the model selection for direct and indirect effects on legitimacy.

Legitimacy and its Constructs

A key question many studies have asked is whether the three proposed components of legitimacy (obligation to obey, moral nonalignment, and perceived illegality) empirically constitute the same latent construct. As an initial test, I calculate Pearson product-moment correlations by country between obligation to obey and perceived illegality to determine the presence of a linear relationship between these two variables. I omit the table of results for brevity, but among 27 different country combinations, only three were above 0.20 (Guinea, Sierra Leone, and Togo). I also conduct two-sample *t*-tests for both obligation to obey and perceived illegality, differentiated by moral nonalignment, to determine whether there is a statistical difference in means between those who are morally non-aligned with police and the referent category. Among the pooled sample for

[14] Given the cross-sectional nature of the data, causal inferences are untenable. It is hoped that strong correlations between relevant variables in this analysis will help shape future longitudinal or experimental research which would address issues of causality on the topic of police legitimacy.

Round 5, there is a statistically significant difference in means for both obligation to obey (t=9.34, p<0.001) and perceived illegality (t=-30.11, p<0.001). In contrast, country-level differences between means were not significant in 16 countries for obligation to obey (Benin, Burkina Faso, Ghana, Lesotho, Liberia, Madagascar, Malawi, Mozambique, Namibia, Niger, Nigeria, Senegal, Sierra Leone, South Africa, Uganda, and Zambia) and six countries for perceived illegality (Cameroon, Madagascar, Mauritius, Namibia, Nigeria, and Zambia).

The results together suggest that Western concepts of police legitimacy that assume equivalency between these three variables may not be appropriate for measuring police legitimacy in SSA. Based on this assessment, rather than a full measurement model, which would specify legitimacy as a latent construct of these three components, regression models with single dependent variables are used to initially confirm proposed hypotheses. While models capturing both direct and indirect effects are utilized here as well, the weight of the evidence suggests that regression models testing only for direct effects suffice for most of the research questions at hand. Where indirect effects are needed, mediation analyses modeled in a multilevel configuration are incorporated (see below).

Fit for Multilevel Models

The nature of the Afrobarometer data requires the use of hierarchical or multilevel models that capture variation at both the individual and aggregate levels. As explained in Chapter 2, I hypothesize that several relevant national-level variables explain part of the individual variance in legitimacy in the 27 countries surveyed by Afrobarometer. Hierarchical models allow us not only to partition variance within and between countries (Raudenbush and Bryk, 2002), but also to identify the presence of any significant cross-

level interactions, such as the national context of corruption influencing the relationship between procedural fairness and obligation to obey. Therefore, I use the country as a level-2 unit of analysis within a hierarchical framework.

Prior to assuming that the dependent variables of interest in this dissertation fit within a hierarchical framework, for scaled variables I evaluate their intra-class correlation coefficient,[15] and for binary variables their median odds ratio (Merlo, Chaix, Ohlsson, Beckman, Johnell, Hjerpe, Råstam, and Larsen, 2006) to determine the presence of between-country (level-2) variation. Intraclass correlation coefficients (ICC) calculate the proportion of variance in the outcome variable explained by the grouping structure in the multilevel models, and most range between 0.05 and 0.25 within the social sciences (Snijders and Bosker, 2012). The median odds ratio (MOR) calculates variance between Level-2 units by comparing two randomly chosen Level-1 units with the same covariates from two randomly chosen Level-2 units. If the MOR is equal to 1, there is no Level-2 variation; the further away from 1, the more Level-2 variation is present.

Although the MOR and ICC are not directly comparable, in Table 9 there is considerable Level-2 variation for two of the three dependent variables of interest (moral nonalignment and perceived illegality). Both moral nonalignment and perceived illegality exhibited moderate variation between countries, while obligation to obey shows limited Level-2 variation (ICC = 0.041). Overall, this suggests that the need for multilevel models

[15] Ultimately, the continuous nature of these dependent variables is questioned, and for modeling purposes a ordered logistic approach will be used. For the purposes of identifying the presence of variance explained between Level-2 units for decisions regarding whether to model hierarchically, the use of the Intraclass Correlation Coefficients in this analysis is reasonable.

for at least two of the three dependent variables is supported; for consistency and to test contextual hypotheses, I run all models as multilevel in subsequent analyses.

Table 9. Intraclass Coefficients for All Dependent Variables.

Measure	**ICC**	**Median Odds Ratio**
Obligation to Obey	0.041	
Moral Nonalignment		1.767
Perceived Illegality	0.094	

Note: All intraclass coefficients were significant at $p<0.001$.

Mean-Centering

Because country contexts vary considerably within SSA, I group-mean center key individual-level variables (Enders and Tofighi, 2007; Kreft and de Leeuw, 1998; Raudenbush and Bryk, 2002). As others point out (Kreft, De Leeuw, and Aiken, 1995), group-mean centering uses the mean value for each level-2 group to center the level-1 explanatory variables. At level-1, group-mean centered effects are interpreted compared to the average respondent *within* one's country, rather than the average respondent across all 27 countries in the sample if they were grand-mean centered. Key explanatory variables (procedural fairness, distributive fairness, perceived effectiveness, crime victimization, fear of crime, and police presence) are all group-mean centered, while survey and socioeconomic control variables are grand-mean centered.

In all cases, centering is done to provide an interpretable zero value for those variables where none exists; yet for binary-coded variables, there is considerable discussion regarding its appropriateness (Kirk and Matsuda, 2011). In the case of this dissertation, I center all binary variables, as I am interested in comparison to the average individual within a country rather than discrete differences between two sub-groups. In

addition, I grand-mean center all country-level variables (Bauer and Curran, 2005; Enders and Tofighi, 2007), and to provide an unbiased estimate of level-1 slopes, I reintroduce at level-2 the country-specific means of all group-mean centered level-1 variables.

Missing Data

As mentioned previously, there is a considerable challenge with survey data regarding the absence of values for some variables and for some respondents. Although a number of strategies are available to address this challenge, non-response to a number of survey questions cannot be assumed to be missing completely at random (Little and Rubin, 2014). Therefore I employ multiple imputation, which is a statistical technique for missing data that uses the distribution of observed values to estimate values for the missing data (Rubin, 2004; Kenward and Carpenter, 2007). The process creates a number of datasets (*m*) that incorporate random components to reflect uncertainty. Each dataset is analyzed separately, and the set of parameter estimates from each dataset are then combined to provide the overall estimates, confidence intervals and variances (White, Royston and Wood, 2011).

With some variables containing nearly 10% missing data, and considering the non-normal distribution of dependent variables, I utilize Multiple Imputation through Chained Equations (White, Royston, and Wood, 2011; Gruenewald and Pridemore, 2012) to estimate values for those observations with missing data. One benefit over other imputation strategies is that this approach does not assume data are multivariate normal (Royston, 2009). I center variables pre-imputation (von Hippel, 2009), and estimate datasets using the *mi* feature within STATA. Earlier studies have suggested researchers create five to ten datasets, but more recent scholarship suggests a higher number dependent

on the fraction of missing information (Graham, Olchowski, and Gilreath, 2007; Gruenewald and Pridemore, 2012). To ensure enough power across all 27 countries, I set the number of datasets (or *m*) at 40.

Model Selection

Considering the hierarchical nature of the data, I turn next to concerns of model selection for the three binary dependent variables of interest. I employ logistic regression for all initial models (Long, 1997), with logit coefficients and t-values used to determine the significance of predictor variables. Logistic regression is a class of generalized linear models in which the conditional distribution of the dependent variable is assumed to be Bernoulli distributed rather than Gaussian. Using the logit link function within generalized linear models (see below), I can exponentiate β coefficients to identify the change in odds (or odds ratio) of a successful case (or 1) resulting from a change in a specific predictor.

$$ln\left(\frac{\pi}{1-\pi}\right)$$

The multilevel nature of the survey data requires that logistic models be run in a two-level hierarchical configuration. Fully-specified models estimating the impact of primary predictors on primary dependent variables are run using random-intercepts:

$$\log\left[\frac{p_i}{1-p_i}\right] = x'_{ij}\beta + \sigma_v\theta_i$$

where X's represent the covariate vector for individual-level variables (level-1), β represents the vector of unknown regression parameters, and $\sigma_v\theta_i$ represents the level-2 random intercept. Although the slopes of level-1 variables could vary across countries (within a random coefficient model), the current inclusion of other key contextual variables

as well as the limited sample of 27 level-2 units argues against the use of random coefficient models (see Maas and Hox [2005] and Gelman [2006] for further discussion). The final multilevel logistic regression models are run with the *xtlogit* command within STATA, using adaptive Gaussian quadrature rather than penalized quasi-likelihood maximization to provide more accurate estimates (Rodriguez and Goldman, 2001; Austin, 2010). Robust standard errors are used to provide more reliable standard errors than those based on maximum likelihood, especially given the small number of countries (Borjas and Sueyoshi, 1994; Bryan and Jenkins, 2016; Maas and Hox, 2004).[16]

Within the multilevel framework, I address direct and indirect effects using mediation analysis for dichotomous dependent variables.[17] Common methods for conducting mediation analysis by comparing two equations of the outcome variable (one with and without the mediator) produces biased estimates for non-linear models (MacKinnon and Dwyer, 1993). More importantly, mediation analysis with multilevel models, especially whose key variables are group-mean centered, requires the inclusion of the group-means at level-2 within the mediation analysis. To account for both the within- and between-country indirect relationships between instrumental concerns and instrumental perceptions, I apply a method of model rescaling (Breen, Karlson, and Holm, 2013; Karlson and Holm, 2011; Maroto, 2015) to non-imputed data to facilitate calculation

---

[16] Using Monte Carlo simulation, Bryan and Jenkins (2016) find that as long as the number of level-2 units is greater than or equal to 25, and the number of level-1 responses within each level-2 unit is large, the downward bias of robust standard errors of the fixed level-2 parameters is minimized.

[17] In other research on police legitimacy, the standard modeling strategy is to use a Structural Equation Model (SEM) Path Analysis to confirm the presence of statistically significant direct and indirect relationships. While considered for this dissertation, most of those studies use multiple survey indicators to create continuous indices, which fit the normality assumptions within most SEM frameworks. While options exist for path analysis using discrete dependent variables (Winship and Mare, 1983), the interpretational and mathematical challenges for modeling multiple discrete dependent variables which contain different latent distributions (logistic vs. ordered logistic), the choice was made to utilize mediation analysis in a direct effects model framework.

of standard errors and significance tests (Sobel, 1982).[18] Overall, the proposed methodology is sensitive to the distributional assumptions of the dependent variables and allows for the testing of multilevel models for direct and indirect effects with random intercept frameworks, where needed.[19]

Model Construction for Research Questions

The first research question asks whether the model of police legitimacy within Western societies, where normative constructions of fair and equitable treatment are central, is also relevant for influencing perceptions of police legitimacy in SSA. In this case, it is about testing whether the individual components of normative criteria have direct influence on the individual components of police legitimacy across both the pooled sample and within country-by-country results.

The primary pathway within the normative model argues that a respondent's perceived fairness of treatment at the hands of the police, or "under the law" in the case of SSA, increases their likelihood to consent to that authority and be obligated to obey its directives [H_1]. Given the binary nature of obligation to obey (0, 1), I use multilevel logistic regression to test this relationship holding constant socioeconomic, demographic, and country-level controls. In addition, alternative ordered logistic regression models are run using the scale of perceived fairness (1-5) to determine if results change the relationship

---

[18] Comparisons between results for both imputed and non-imputed data on obligation to obey show no substantive difference, suggesting that mediation analysis on the non-imputed data will be little-affected under the assumption of a complete case analysis.

[19] Due to the use of missing data imputation strategies within a multilevel logistic regression framework, standard model selection criteria such as Akaike Information Criterion (AIC) and Bayesian Information Criterion (BIC) are unavailable to compare model fit. Alternative strategies (such as finite mixture models) are available but are beyond the scope of this initial examination, providing an opportunity for future research.

with obligation to obey. To address the second hypothesis, I conduct additional logistic regressions of obligation to obey on the perceived effectiveness of the police [H_2], holding the previous model constant. I also incorporate an alternative criteria, distributive fairness, to highlight whether norms regarding fair outcomes, rather than fair process, may drive consent to the police as an authority [H_3]. Sensitivity tests regarding the expanded definition of distributive fairness are also evaluated and compared for fit.

Potential confounding effects from instrumental concerns are also incorporated. I run a set of logistic regression models evaluating the direct effects of crime victimization and fear of crime on obligation to obey. Additional Level-2 variables are included that draw from the UCDP-PRIO dataset focusing on internal security challenges from armed conflicts and civil wars. I hypothesize that the fear of crime and experience with victimization at the individual level [H_4], coupled with internal security challenges at the national level [H_5], moderates any influence of procedural fairness on legitimacy. I then conduct a mediation analysis to determine whether the introduction of individual or country-level instrumental concerns influences the relationship between instrumental criteria and legitimacy in a statistically significant manner. It is hypothesized that the primary mechanism by which instrumental concerns will influence legitimacy is through the perceived effectiveness of the police. Thus, I expect little to no direct effect of these variables on legitimacy, but rather a direct effect would be mediated through perceive effectiveness as an influence on police legitimacy.

Incorporating recent research that provides different definitions of legitimacy alongside obligation to obey, I run a series of logistic regression models similar to those above on both moral nonalignment and perceived police legality as dependent variables

(H_6-H_{11}). I test whether moral nonalignment is driven by the same constellation of instrumental and normative criteria as obligation to obey: procedural fairness [H_6], perceived effectiveness [H_7], and distributive fairness [H_8]. I repeat the same models with perceived police illegality (or corruption) as the dependent variable [H_9-H_{11}], and evaluate both pooled and country-specific models for both dependent variables.

As recently suggested by Tankebe (2013a) and others (Bottoms and Tankebe, 2012), one's consent to the police as an authority (often the key definition of legitimacy) may be influenced by reasons outside of the instrumental and normative criteria proposed earlier. Fear, coercion, and dull compulsion could each drive consent to the police without finding them fair or effective. Thus, obligation to obey may be an outcome of legitimacy, rather than its definition. It is argued that obligation to obey, as a consequence of legitimacy, will then be shaped by the shared values of both instrumental and normative criteria, alongside the perceived illegality of the police [H_{12}]. Incorporating perceived illegality as an independent variable, I run a series of logistic regression models to test this hypothesis and compare them to earlier results without perceived illegality.

In contrast, consent, while important, may be less relevant for shaping compliance and cooperation than moral nonalignment (Jackson et al., 2012a). Thus, shared values of fairness and effectiveness work through moral nonalignment to indirectly influence outcomes of legitimacy (compliance and cooperation), and this moral dimension should therefore have a direct relationship with obligation to obey [H_{13}]. Although this study doesn't include measures of cooperation, as the key conduit for shared values to influence cooperation, the inclusion of moral nonalignment in a logistic regression model of obligation to obey should moderate any direct influence of shared values on consent [H_{14}].

It is important to note that, given the cross-section nature of the survey data used in this study, the ability to identify direct and indirect influences between independent and dependent variables is limited. As proposed above, it is hypothesized that the inclusion of moral nonalignment would moderate direct influence between shared values on consent, yet the framework provided can only provide notional evidence that these effects may exist. Moreover, although not addressed in the extant literature, the sequencing between criteria (normative or instrumental), moral nonalignment, and obligation to obey is muddied at best. Whether perceptions of fairness precede ones broader moral alignment to the police, or whether one's moral alignment precedes specific perceptions remains untested in this study. At best, the evidence provided here to specifically address H_{13} and H_{14} (and more importantly the preconditional nature of legitimacy) should be considered preliminary, and future research will be needed to fully address the process of perceptions and attachment embedded within these questions.

Overall, the proposed modeling strategy provides a vigorous and thorough examination of the configuration of perceived police legitimacy within SSA. To evaluate the robustness of the instrumental and normative models, I include several sensitivity analyses and robustness checks of alternative explanations. Different configurations of moral nonalignment and perceived illegality are initially included to evaluate the sensitivity of these key influences to coding decisions in the creation of these variables. I also postulate that rather than instrumental or normative criteria, the role of ethnic politics within the region suggests that perceptions of police legitimacy may be a function of one's status as an ethnic minority. The previous colonial history (specifically, British colonies) and regime type (level of democratic governance) could also mediate the relationships

between effectiveness and fairness with perceived police legitimacy, and is included as a final robustness check on the original models.

CHAPTER 4: RESULTS

Implementing the methodology described in the previous chapter, I present the results from a number of different modeling approaches below. The results are organized by research question and hypothesis to compare the strength of the instrumental and normative models of police legitimacy within Sub-Saharan Africa (SSA). Within each section, introductions to each table, figure, and model are initially provided, followed by a summary of results across models relevant to the specific hypothesis.

In the first section, I examine whether normative criteria influence the obligation to obey the police in the pooled sample of countries, running different model configurations to isolate the individual influence of procedural and distributive fairness. Alongside these comparisons, I evaluate the relative strength of perceived effectiveness in shaping police legitimacy. This section completes with a country-by-country analysis of both instrumental and normative models to identify any heterogeneity in these models between countries.

Extending the instrumental model, in a subsequent section I test whether instrumental concerns of victimization and fear of crime influence perceptions of police legitimacy. The relationships between instrumental concerns, instrumental criteria and normative criteria can also vary by the definition of legitimacy, and I examine how these variations occur across two additional definitions: moral nonalignment and perceived illegality. Replicating the approach with obligation to obey, I conduct country-specific models of both additional definitions, assessing whether similar heterogeneity between countries can be found. I then turn to a reassessment of legitimacy as proposed by Tankebe (2013a), and test whether moral nonalignment and perceived illegality influence a

respondent's consent to the police as an authority (or obligation to obey). I end the results section by conducting a series of robustness checks and sensitivity analyses to examine whether the findings vary across different coding decisions for key dependent variables and the introduction of alternative influences of police legitimacy. I begin with the initial tests of the normative model of police legitimacy.

Is Police Legitimacy Driven by Normative Criteria in SSA?

Recall that my primary research question is whether the instrumental or normative model of police legitimacy is generalizable to the SSA context. In essence, is consent in the sample of countries here influenced by normative assessments of fair procedures and outcomes, or driven by instrumental perceptions of effective crime control [RQ1]? Following Tyler (2001; 2004) and colleagues (Jackson et al, 2012a; Hough et al, 2013a), I hypothesize that consent (or obligation to obey) will be more likely if a respondent perceives the police to treat others in a procedurally fair way [H_1]. Recall that in this study, I follow Levi, Tyler and Sacks's (2009) classification of perceptions of 'equal treatment under the law' as synonymous with perceptions of procedural fairness by the police, as they are the agency primarily responsible for treating individuals under the law. To test H_1, in Table 10, I show the results of several multilevel logistic models regressing obligation to obey on perceptions of procedural fairness with various configurations of control variables described in Chapter 3. In Model 1, I include perceptions of procedural fairness alongside various socioeconomic control variables, including poverty, educational attainment, and level of social trust. I replace those controls in Model 2 with survey-specific controls, which could operate separately from socioeconomic variables in influencing the relationship between perceptions of procedural fairness and obligation to

obey. In Model 3, I include only country-level correlates to examine whether key differences between countries influence the relationship between procedural fairness and obligation to obey. Model 4 contains the fully-specified model of obligation to obey with socioeconomic, survey-specific, and country-level controls to examine the resulting correlation between procedural fairness and consent.

Overall, regardless of the type of individual- or country-level controls included in the pooled sample, results in Table 10 suggest that perceptions of procedural fairness are consistently significant and positively correlated with the odds of obligation to obey the police. Depending on the model, those who perceive the police to be fair "often" or "always" had a 24% to 25% increase in the odds of perceiving the police to be legitimate, providing initial support for H_1.

More importantly, the inclusion of different demographic, socioeconomic, or country-level controls it did not mediate the effect of procedural fairness on legitimacy. Interestingly enough, in both Models 2 and 4, no socio-economic controls were significant, suggesting that given within-country social stratification, there is little heterogeneity of consent across demographic variables that are traditionally associated with differing perceptions of the police.[20] Whereas differences in residential location, poverty, or education level are associated with varying perceptions of confidence or trust in the police (Bradford, Huq, Jackson, and Roberts, 2014; Taylor, Wyant, and Lockwood, 2015), a

[20] One survey control (female interviewer) was significant and negatively related to obligation to obey; interviewing with a female resulted in a 27% reduction in the odds of perceiving the police to be legitimate; roughly equivalent to the increase in odds that perceiving them to be fair had on legitimacy. One possible explanation is that given the sensitive subject of whether the police have the authority or right to compel others, individuals were more willing to share their true feelings about the police with female interviewers than with male interviewers.

simpler story emerges in these 27 countries: encouraging positive perceptions of procedural fairness among *all* residents is important for police agencies within SSA. This resonates with original work on legitimacy in the United States, which found little differences across ethnic or racial stratifications regarding the influence of procedural fairness on police legitimacy (Tyler, 2001; Sunshine and Tyler, 2003; Tyler and Fagan, 2008).

At the country-level, aggregate perceptions of procedural fairness can also contextually-influence individual perceptions of police legitimacy. In order to encourage unbiased estimates of individual-level group-mean centered parameters, group means of those variables are "re-introduced" at Level-2, which provides an opportunity to consider between-country variance in perceptions of procedural fairness. In Model 1, the mean perception of procedural fairness for a country was a significant contextual effect on individual-level perceptions of police legitimacy, while controlling for socioeconomic differences between respondents within a country. Switching to survey-specific controls in Model 2, the contextual relationship of procedural fairness between countries remained significant and positive. When other variables (such as population, GDP per capita, and the Corruption Perception Index [CPI]) were included in Model 3, the country-level relationship between procedural fairness and consent was no longer significant. In the full model of controls (Model 4), the previously significant relationship in earlier models was moderated. Moreover, in contrast to theoretical expectations, the context of corruption at the country-level was significant and positively related to perceptions of police legitimacy in both Models 3 and 4. It is possible that these early models do not account for the individual's own perception of police corruption, which theory suggests should have a considerable effect on police legitimacy.

Table 10. Random-Intercept Logistic Models Regressing Obligation to Obey on Procedural Fairness.

	Model 1			Model 2			Model 3			Model 4		
VARIABLES	*B*	SE	OR	*b*	SE	OR	*b*	SE	OR	*b*	SE	OR
Individual-Level												
Perc. Procedural Fairness	.218***	.063	1.244	.221***	.064	1.247	.222***	.064	1.249	.217***	.062	1.242
Socioeconomic Controls												
Age	-.001	.001	.999							-.001	.001	.999
Female	-.037	.043	.964							-.033	.039	.968
Education Level	.015	.019	1.015							.015	.019	1.015
Urban	-.006	.034	.994							-.001	.035	.999
Poverty Index	-.000	.027	1.000							-.004	.027	.996
Employed	-.066	.073	.936							-.065	.070	.937
Present Country Conditions	.035	.022	1.036							.032	.022	1.033
Present Living Conditions	-.022	.019	.978							-.019	.019	.981
Generalized Social Trust	-.015	.053	.985							-.017	.053	.983
Survey Controls												
Others Present				.022	.049	1.022				.024	.050	1.024
Female Interviewer				-.245*	.095	.783				-.244**	.089	.783
Perceived Gov. Sponsor				.023	.051	1.023				.026	.051	1.026
Shares Language with Int.				.029	.080	1.029				.029	.079	1.029
In home language				.001	.084	1.001				.008	.077	1.008
Intercept	.782**	.302	2.186	.740*	.308	2.096	1.344***	.282	3.834	1.312***	.283	3.714
Country-Level												
Perc. Procedural Fairness GM	1.256*	.606	3.511	1.352*	.629	3.865	-.066	.580	.936	.021	.581	1.021
Country Population (ln)							.001	.087	1.001	.012	.085	1.012
Country Per-Capita GDP (ln)							-.081	.079	.922	-.073	.080	.930
Corruption Perception Index							.031*	.013	1.031	.030*	.013	1.030
Random Intercept	-1.838***	.262		-1.832***	.247	.160	-2.234***	.302	.107	-2.244***	.302	.106
N of Respondents	42,353			42,353			42,353			42,353		
N of Countries	27			27			27			27		

ABBREVIATIONS: SE = Standard Error; OR = Odds Ratio; GM = Group-Mean; Perc. = Perceived; Int. = Interviewer.
Notes: Odds Ratio = exp(*b*); Perceived Procedural Fairness is group-mean centered; all other individual-level variables are grand-mean centered.
*** p<0.001, ** p<0.01, * p<0.05 (two-tailed)

How well do these relationships hold when including instrumental perceptions of police? Drawing on previous literature highlighted in Chapter 2, I hypothesize that the instrumental criteria of perceived effectiveness will be significantly and positively related to the odds of consent to the police [H_2]. To address H_2, in Table 11 I run a multilevel logistic model regressing obligation to obey on perceptions of procedural fairness and perceived effectiveness. Results in Model 5 suggest that perceptions of governmental effectiveness at controlling crime were positively and significantly related to perceptions of police legitimacy. For those who perceive the government to be fairly or very effective at controlling crime, their odds of perceiving the police to be legitimate are 41% higher than those of the average individual within that country. More importantly, the more that the country as a whole finds the government to be effective at controlling crime, the greater the individual-level perception of police legitimacy. This suggests that personal perceptions of effectiveness, combined with an aggregate shared value of effective crime control, work together to increase the odds that the average individual will perceive the police to be legitimate.

Another hypothesis drawn from the literature argues that procedural fairness is not the only normative criteria that could influence perceptions of police legitimacy. A perception that criminal justice outcomes are distributed fairly is also hypothesized to be positively and significantly related to consent [H_3]. To address H_3, in Table 11 run additional multilevel logistic models regressing obligation to obey on procedural *and* distributive fairness. Model 6 includes the conservative definition of distributive fairness, which defines perception of fair outcomes if an individual would be as likely to receive punishment as an official if they committed a crime. Model 7 includes a more expanded

definition that argues that distributional inequality (coded as "0" in this variable) only matters if an official is less likely to be punished than an individual. Thus, individuals who perceive that officials will be punished but they will not are coded as perceiving distributional fairness in punishment outcomes. Results from Table 11 suggest that inclusion of both conservative and expanded measures of distributive fairness were not significantly related to the perception of police legitimacy, failing to support H_3.

In Model 8, both perceived effectiveness and the conservative definition of distributive fairness are included alongside procedural fairness. Results suggest that obligation to obey the police and consent to their authority is driven by both perceptions of their effectiveness at controlling crime and fairness while executing that mission. Relative to the average individual within each country, in Model 8 those who perceive an equality of treatment under the law (procedural fairness) and those who perceive an effective crime-control capability among the government (perceived effectiveness) have greater odds of perceiving the police as legitimate. Additionally, these two are independent of one another, as the introduction of perceived effectiveness only slightly mediates the effect of procedural fairness on legitimacy (reduction in odds increase from 24% to 21%). The influence of perception of effectiveness was stronger than perception of procedural fairness, which correlates with a number of studies from less-industrialized countries (Bradford et al., 2014; Tankebe, 2009a). Results in Model 8 also fail to reject the null hypothesis for H_3, suggesting that perceptions of distributive fairness in the pooled sample are not relevant to legitimacy as consent within SSA. Overall, the pooled analysis in Tables 10 and 11 support the hypotheses that perceptions of procedural fairness [H_1] and perceived effectiveness [H_2] are positively and significantly correlated with obligation to obey.

Table 11. Random-Intercept Logistic Models Regressing Obligation to Obey on Normative Criteria

	Model 5			Model 6			Model 7			Model 8		
VARIABLES	*b*	SE	OR	*B*	SE	OR	*b*	SE	OR	*b*	SE	OR
Individual-Level												
Perc. Procedural Fairness	.197**	.062	1.218	.210***	.061	1.234	.224***	.061	1.251	.190**	.060	1.209
Perc. Effectiveness	.346***	.045	1.413							.345***	.046	1.412
Distrib. Fairness				.050	.064	1.051				.043	.064	1.044
Distrib. Fairness (Exp)							-.049	.059	.952			
Intercept	.997**	.330	2.710	1.326*	.575	3.766	1.282*	.592	3.604	1.023	.606	2.782
Country-Level												
Country Population (ln)	.012	.079	1.012	.011	.089	1.011	.013	.089	1.013	.011	.083	1.011
Country Per-Capita GDP (ln)	-.035	.073	.966	-.073	.083	.930	-.074	.086	.929	-.034	.076	.967
Corruption Perception Index	.028*	.013	1.028	.030*	.013	1.030	.030*	.012	1.030	.028*	.013	1.028
Perc. Procedural Fairness GM	-.271	.589	.763	.026	.560	1.026	.017	.575	1.017	-.264	.573	.768
Perc. Effectiveness GM	.913*	.425	2.492							.913*	.423	2.492
Distrib. Fairness GM				-.029	.786	.971				-.052	.784	.949
Distrib. Fairness GM (Exp)							.050	.728	1.051			
Random Intercept	-2.309***	.315	.099	-2.243***	.303	.106	-2.244***	.302	.106	-2.308***	.315	.099
N of Respondents	42,353			42,353			42,353			42,353		
N of Countries	27			27			27			27		

ABBREVIATIONS: SE = Standard Error; OR = Odds Ratio; GM = Group-Mean; Perc. = Perceived; Distrib. = Distributive; Int. = Interviewer; Exp = Expanded.
Notes: Odds Ratio = exp(*b*); Perceived Procedural Fairness, Perceived Effectiveness, and Distributive Fairness are all group-mean centered; all other individual-level variables are grand-mean centered. Socioeconomic and survey controls are also included, but save for Female Interviewer, were not significant in any model.
*** $p<0.001$, ** $p<0.01$, * $p<0.05$ (two-tailed)
Source: Afrobarometer Round 5

Country-to-Country Variation

A corollary vantage point for examining the instrumental vs. normative debate is to compare the results of the previous models in a country-specific framework rather than a pooled sample. Although multi-level modeling in this analysis accounts for both within- and between-country variance, previous analyses (Tankebe, 2009a; Bradford et al., 2010) have been conducted on single-country samples. Therefore, to compare to previous research as well as to evaluate the consistency of effects across countries, I next split the sample into 27 different country-specific logistic regression models.[21] Focusing specifically on the three key correlates of procedural fairness, distributive fairness, and perceived effectiveness, I report the coefficients, standard errors, and odds ratios for these three variables for each country-specific model in Table 12.

Evaluating country-specific models, a respondent's perception of procedural fairness is positively and significantly related to police legitimacy, but not in a majority of countries. In 11 out of 27 countries in Table 12, respondents who perceive fair treatment under the law were more likely to perceive the police to be legitimate. The increase in odds of perceived legitimacy ranged from a 27% increase in Nigeria to a 94% increase in

[21] Another method for addressing variation in effect between countries is to run a random-coefficient multilevel model allowing the slope of key correlates to vary across countries. Given that the referent individual used in this dissertation is the average individual within their specific country (group-mean centered), it is highly advisable to not run random-slope models on group-mean centered data unless there is clear theory that the effect of the relative difference of one's key correlates from their country-mean is what varies across countries rather than the absolute value of those correlates (Snijders and Bosker, 2012). Since the data were group-mean centered in order to place the referent as the average individual within a country, neither the instrumental nor normative theories of police legitimacy suggest that countries vary in the differences of people's perceptions of fairness and effectiveness from their country mean. An alternative is to grand-mean center the key correlates and then run random-slope models, but that would assume that there is an average "African" respondent for the sample, which is untenable. Therefore, I use the less robust and more descriptive assessment of variation of coefficients across countries by running country-specific models, but I also highlight this as a limitation in the conclusion.

Botswana. In 14 countries though, the relationship between procedural fairness and police legitimacy was not statistically significant, and therefore I am unable to reject the null hypothesis of no relationship between these two perceptions in those countries. In contrast to H_1, for two countries (Mali and Sierra Leone), those who perceived fair treatment under the law were *less* likely to find the police legitimate. For these countries, other criteria (such as distributive fairness and perceived effectiveness) had positive relationships with perceptions of police legitimacy, countering to some degree the negative association between fair treatment and police legitimacy. In sum, the country-specific models provide moderate support for a positive and significant relationship between procedural fairness and obligation to obey [H_1], with some important heterogeneity across the countries.

Alongside fair treatment, others have argued that distributive fairness, or the fairness of outcomes of police actions, is significantly correlated with police legitimacy (Sunshine and Tyler, 2003; Hinds and Murphy, 2007). Although not significantly related to police legitimacy in the pooled analysis presented earlier, I find considerable heterogeneity in the country-specific analyses. In Table 12, we find that similar to procedural fairness, respondents in a majority of countries (16 of 27 countries) were not significantly influenced by the fairness in outcomes when assessing perceptions of police legitimacy. In those countries where distributive fairness was significant, it was often positively related to police legitimacy, supporting H_3. Only three countries (Benin, Kenya, and Liberia) had a negative and significant relationship between distributive fairness and police legitimacy.

Table 12. Logistic Regression of Obligation to Obey on Procedural Fairness, Distributive Fairness, and Perceived Effectiveness, by Country.

	Procedural Fairness			Distributive Fairness			Perceived Effectiveness		
Countries	*b*	SE	OR	*b*	SE	OR	*b*	SE	OR
Benin	.376**	.141	1.456	-.560***	.148	.571	.837***	.145	2.309
Botswana	.664**	.202	1.943	.006	.242	1.006	.239	.209	1.270
Burkina Faso	.386*	.154	1.471	.196	.161	1.217	.076	.141	1.079
Burundi	.482**	.148	1.619	.252	.152	1.287	.567***	.142	1.763
Cameroon	.250	.157	1.284	-.251	.149	.778	.279*	.141	1.322
Cote d'Ivoire	.215	.192	1.240	-.084	.160	.919	.373*	.166	1.452
Ghana	-.018	.150	.982	.115	.165	1.122	.334*	.153	1.397
Guinea	-.123	.156	.884	.655***	.164	1.925	.783***	.170	2.188
Kenya	-.052	.096	.949	-.273**	.097	.761	.140	.093	1.150
Lesotho	.209	.183	1.232	.053	.238	1.054	.245	.184	1.278
Liberia	-.069	.171	.933	-.492**	.187	.611	.892***	.169	2.440
Madagascar	.179	.143	1.196	-.221	.159	.802	-.089	.160	.915
Malawi	.139	.116	1.149	.328**	.118	1.388	.121	.110	1.129
Mali	-.330*	.160	.719	.329*	.156	1.390	-.011	.156	.989
Mauritius	-.212	.172	.809	.228	.189	1.256	.196	.175	1.217
Mozambique	.464***	.103	1.590	-.025	.135	.975	.345***	.099	1.412
Namibia	.485*	.189	1.624	.161	.201	1.175	.241	.174	1.273
Niger	-.196	.179	.822	-.317	.200	.728	.763***	.175	2.145
Nigeria	.238*	.108	1.269	-.187	.103	.829	.477***	.114	1.611
Senegal	.379	.227	1.461	.098	.199	1.103	.324	.197	1.383
Sierra Leone	-.643***	.171	.526	.270	.180	1.310	.361*	.167	1.435
South Africa	.208*	.098	1.231	.282**	.105	1.326	.241*	.106	1.273
Tanzania	.582***	.104	1.790	.273**	.104	1.314	.363***	.104	1.438
Togo	.428**	.137	1.534	-.198	.140	.820	.479***	.130	1.614
Uganda	-.124	.105	.883	.000	.105	1.000	.588***	.102	1.800
Zambia	.093	.170	1.097	.645***	.172	1.906	.145	.170	1.156
Zimbabwe	.250*	.128	1.284	.321**	.121	1.379	.247*	.124	1.280

ABBREVIATIONS: SE = Standard Error; OR = Odds Ratio.
Notes: Odds Ratio = exp(*b*); Models include controls for socioeconomic controls (Age, Female, Education Level, Urban, Poverty Index, Employed, Present Country Conditions, Present Living Conditions, and Generalized Social Trust) as well as survey controls (Others Present, Female Interviewer, Perceived Government Sponsor, Shares Language with Interviewer, and In home language), which are not shown here.
*** p<0.001, ** p<0.01, * p<0.05 (two-tailed)
Source: Afrobarometer Round 5

The heterogeneous patterns found among procedural and distributive fairness in Table 12 can also been seen in Figures 5 and 6. In Figure 5, I present a graphical view of the odds ratios and associated confidence intervals for the correlation between procedural fairness and obligation to obey within each country. Although only 11 countries had a significant and positive relationship between procedural fairness and obligation to obey, the range between confidence intervals for a majority of countries were above 1, suggesting a more positive association than solely significance testing can identify. In contrast, Figure 6 presents a graphical view of the odds ratios and associated confidence intervals for the correlation between distributive fairness and obligation to obey within each country. There is considerably more heterogeneity above and below an odds ratio of 1 for those relationships than the pooled analysis revealed, suggesting that distributive fairness may be less generalizable than procedural fairness for police legitimacy across countries.

In Figure 7, I provide a comparison of the odds ratios between perceptions of procedural and distributive fairness within each country-specific model. Bars that are colored dark gray are those countries where the odds ratio for procedural fairness (whether significant or not) was larger than distributive fairness. Those bars that are colored light gray represent countries where the odds ratio for distributive fairness was larger than procedural fairness. Numbers at each end of the range are the specific odds ratios for procedural and distributive fairness, depending on which one was larger. For example, in Sierra Leone, the odds ratio for distributive fairness was larger than the odds ratio for procedural fairness (1.31 vs. 0.53), represented by a light gray bar. If a number is bold, then that specific odds ratio is significant at $p<0.05$ (two-tailed) within that country-specific model. Thus, for Sierra Leone, even though the odds ratio for distributive fairness was

larger than procedural fairness, only the relationship between procedural fairness and obligation to obey was statistically significant.

Overall, rather than converging to a common normative framework for perceived legitimacy, I find that the separate influence of distributive and procedural fairness on the perception of legitimacy is divergent within country-specific models. Across the 27 countries in this sample, although not significant, the directionality for procedural and distributive fairness was opposing in 13 countries, and this divergence was not consistent across key correlates (six countries positively favored distributive fairness, and seven positively favored procedural fairness). For those countries where the directionality of both coefficients were positive (11 of 27 countries), legitimacy was significantly related with both perceptions in only three (South Africa, Zimbabwe, and Tanzania). Overall, it preliminarily suggests that normative criteria of fairness in treatment and outcomes are not synchronous in shaping individual perceptions of legitimacy, which has important implications for policing and criminal justice systems on the continent. In some countries, it is about treatment, while others are outcome-oriented; rarely is it both.

Figure 5. Odds Ratios for Logistic Regression of Obligation to Obey on Procedural Fairness, by Country.

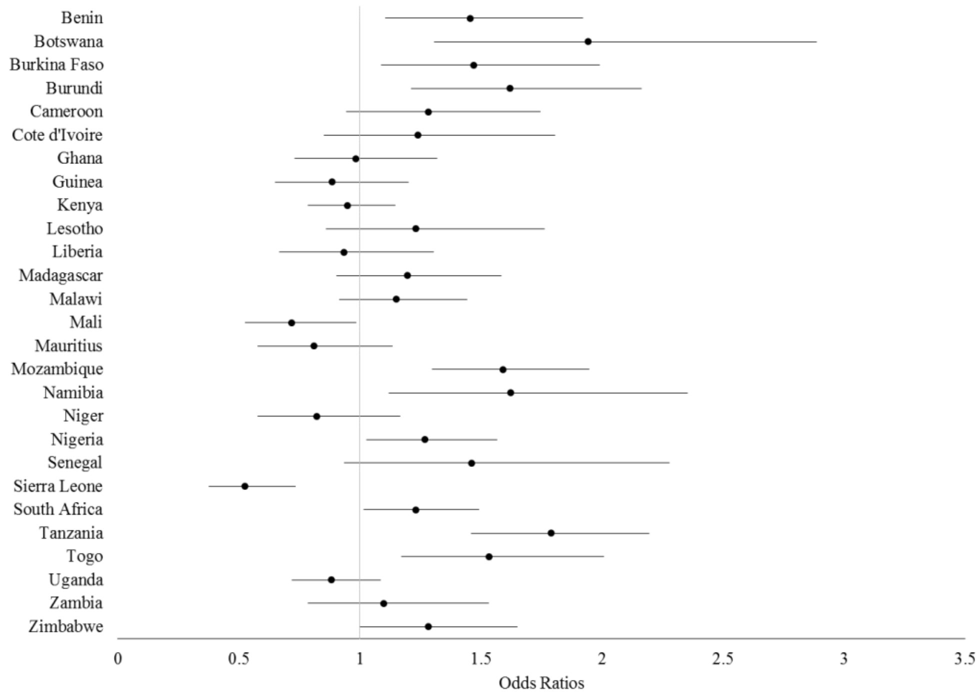


Figure 6. Odds Ratios for Logistic Regression of Obligation to Obey on Distributive Fairness, by Country.

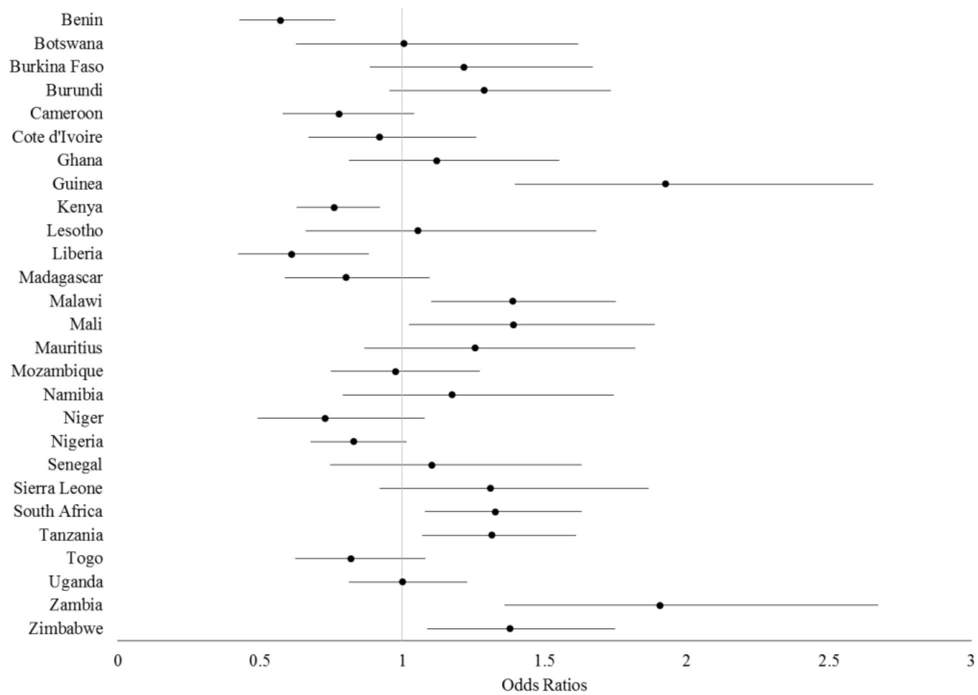
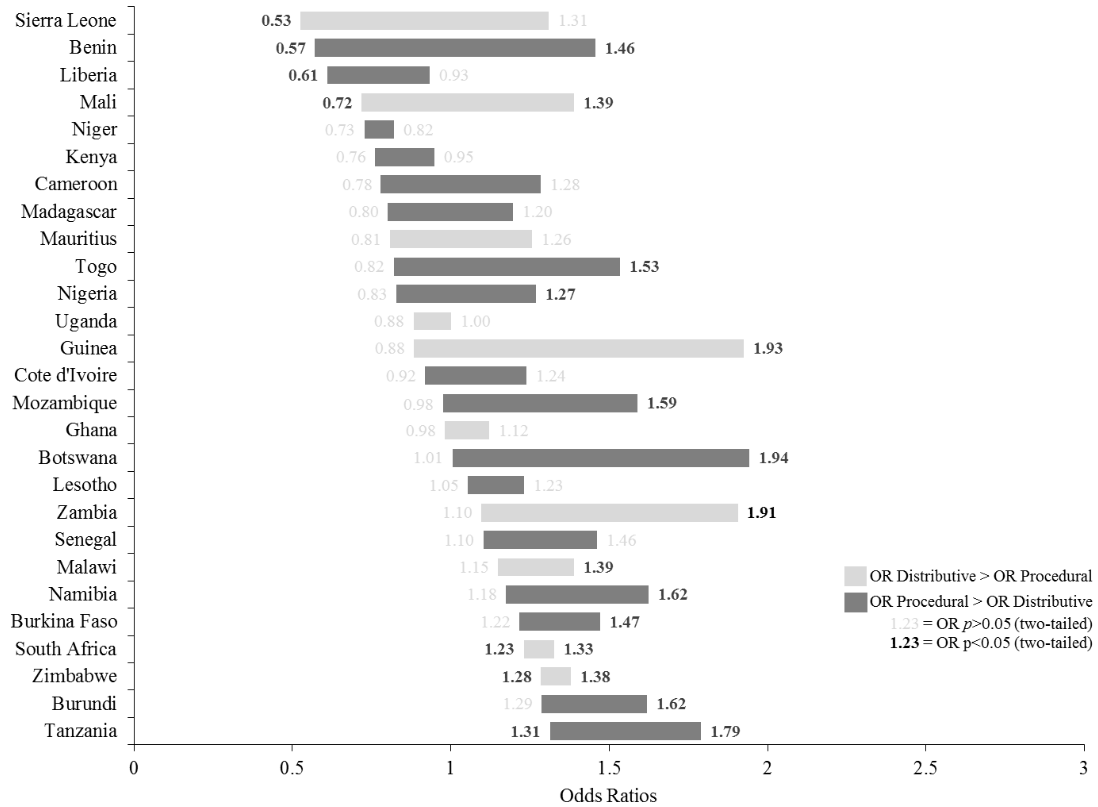


Figure 7. Difference in Odds Ratios for Procedural and Distributive Fairness, by Country.



Although perceptions of fairness (procedural or distributive) have a weak to moderate positive relationship with police legitimacy, for the majority of countries, the perceived effectiveness of the government at crime control was significant and positively associated with police legitimacy. In 16 countries, respondents who felt the government was doing "fairly well" or "very well" at controlling crime were also more likely to perceive the police to be a legitimate authority, strongly supporting H_2 (see Table 12) The increase in odds of obligation to obey ranged from 27% in South Africa to 140% in Liberia. For the remainder of countries, the relationship between perceived effectiveness and police legitimacy was not statistically significant; yet only in two (Madagascar and Mali) was the effect negative (only slightly negative), and in neither country were those effects statistically significant. Reporting the odds ratios and confidence intervals in Figure 8, the

results strongly support a consistent relationship between perceived effectiveness and obligation to obey for most countries. The large number of countries where the relationship was statistically significant and positive, as well as the consistency in directionality from country to country, suggests stronger support for H_2 (perceived effectiveness) as compared to H_1 (procedural fairness) and H_3 (distributive fairness).

Moreover, comparing odds ratios between perceptions of effectiveness and perceptions of procedural fairness within countries, I find a number of key differences. Figure 9 provides a country-by-country comparison of odds ratios for both effectiveness and fairness, with non-significant odds ratios shaded light grey. For many countries, perceptions of effectiveness were not only significantly and positively related to police legitimacy, their influence was much stronger than perceptions of fairness. For example, in Benin, although perceptions of procedural fairness increased the odds of police legitimacy by 46% for respondents, this was much weaker than the 131% increase in odds that a positive perception of crime control effectiveness exerted. In Sierra Leone, Niger, Uganda, Guinea, Liberia, and Benin, the differences between perceived effectiveness and procedural fairness were substantial, suggesting that instrumental perceptions are key drivers of legitimatization. In a number of these countries, perceptions of procedural fairness were not significantly correlated with obligation to obey, giving further credence to the instrumental model of legitimacy.

Alternatively, these comparisons suggest that in some countries, instrumental and normative perceptions may work in tandem to influence police legitimacy. For South Africa, Togo, and Zimbabwe, both perceptions of effectiveness and procedural fairness were positive and significantly related to police legitimacy. In other contexts where one

or the other perception was not significantly related to legitimacy, the directionality of the coefficients still suggest that respondents in those countries require legitimate authority to be both effective and fair. Overall, in 17 out of the 27 countries in this sample, the coefficients for both instrumental and normative perceptions were positive, and in over half of those countries, both perceptions were significantly-related to police legitimacy.

Although only a minority of countries, there were several where the normative model of legitimacy exerted greater influence among respondents than the instrumental model. For Burkina Faso, Botswana, Namibia, Mozambique, and Tanzania, perceptions of procedural fairness were significant and positively-correlated with police legitimacy, and were larger in magnitude than perceptions of effectiveness. Although the difference in magnitude is not as great as some of the countries where effectiveness substantially influenced legitimacy, their partial confirmation of the normative hypothesis of legitimacy indicates that less-industrialized countries are not always driven primarily by instrumental criteria for police legitimacy.

Figure 8. Odds Ratios for Logistic Regression of Obligation to Obey on Perceived Effectiveness, by Country.

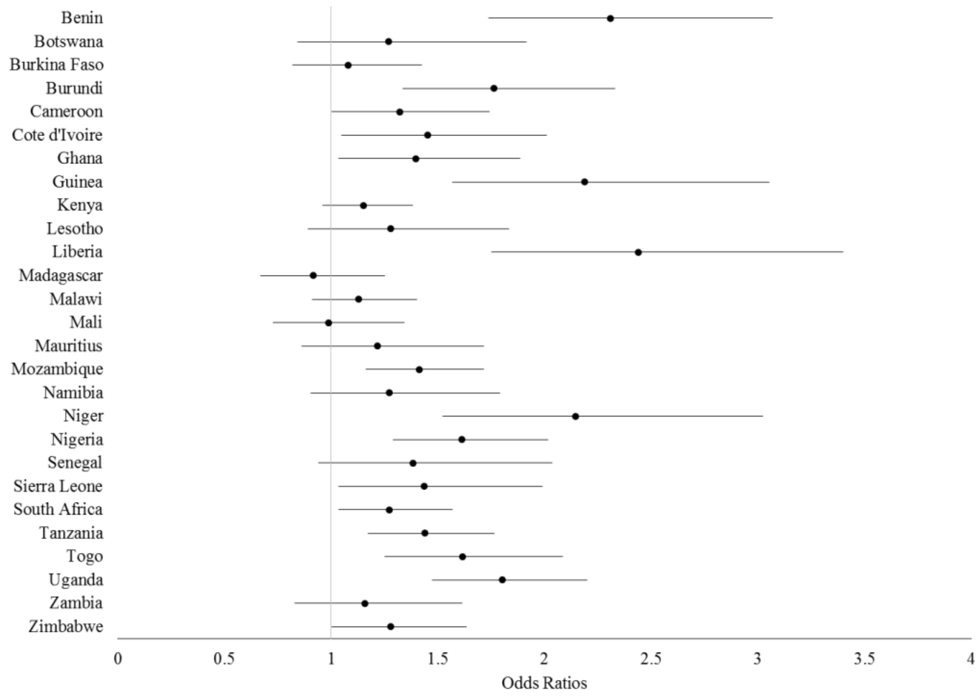
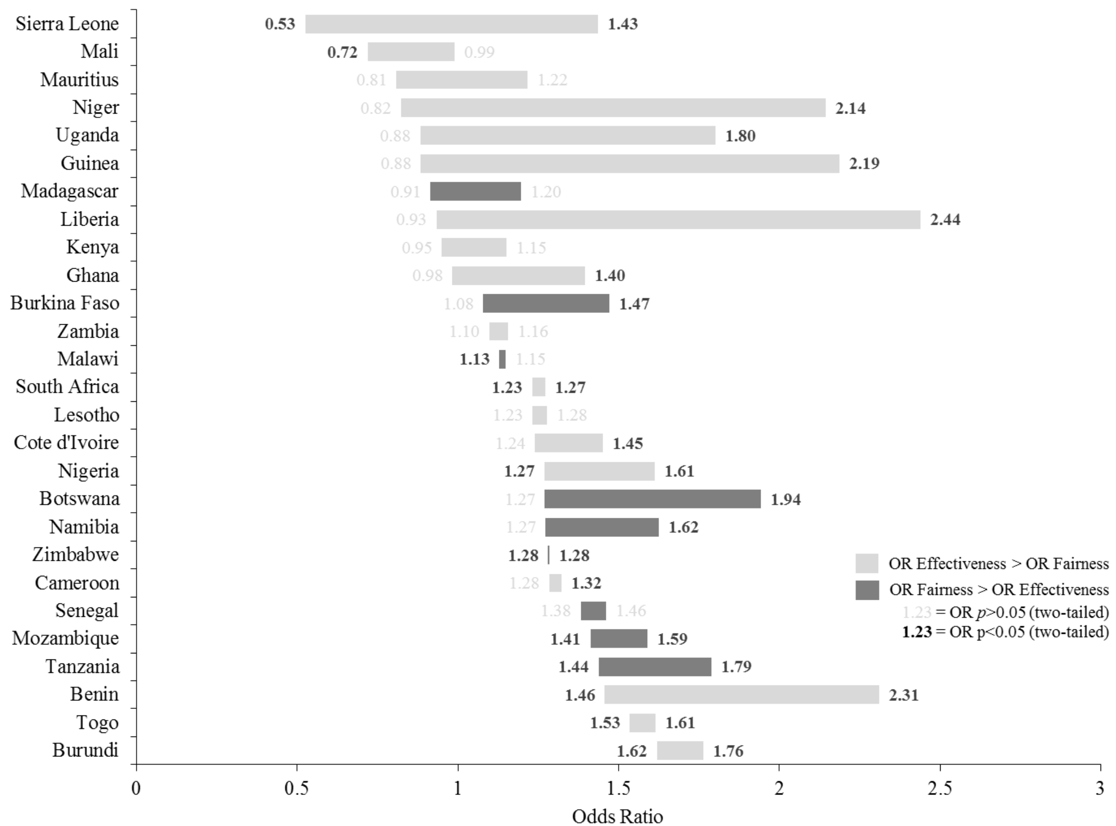


Figure 9. Difference in Odds Ratios for Procedural Fairness and Perceived Effectiveness, by Country.



Summarizing the influence on police legitimacy directly exerted by perceptions of procedural fairness, distributive fairness, and effectiveness, I categorize three different groups of countries emerging within SSA from this analysis in Table 13. First, there are those countries whose primary driver of police legitimacy is instrumental in nature, according to this sample. Six countries had only significant effects for perceived effectiveness of the government at crime control, (Cameroon, Cote d'Ivorie, Ghana, Liberia, Niger, and Uganda). Interesting to note is that except for Uganda, the remaining countries are in West Africa, and have experienced internal security challenges coupled with considerable ethnic heterogeneity that could influence the inability for "fairness" to drive perceptions of the police.

A second group of countries is found where the normative model is the primary driver of police legitimacy. This could be perceptions of fair treatment (Botswana, Burkina Faso, and Namibia) or perceptions of fair outcomes (Kenya, Malawi, Mali, and Zambia), but in all cases perceptions of effectiveness were not significant. Both Namibia and Botswana have enjoyed decades of economic growth and stability since their independence, along with favorable democratic rule, all of which could account for the influence of procedural fairness rather than effectiveness in shaping obligation to obey. Similarly, the long presidency of Blaise Compaoré provided some level of stability within Burkina Faso prior to the administration of this survey, although protests in 2011 and subsequent instability in periods since prompt more questions than answers about the salience of procedural fairness as a driver of consent within the country.

A third group contains countries where instrumental and normative perceptions are jointly correlated with perceptions of police legitimacy. For eight countries (Benin, Burundi, Mozambique, Nigeria, South Africa, Tanzania, Togo, and Zimbabwe), both perceptions of procedural fairness and effectiveness were positively and significantly related to police legitimacy. Perceptions of fair outcomes in place of (Guinea) or alongside (South Africa, Tanzania, and Zimbabwe) fair treatment were also jointly correlated with perceived effectiveness. Overall, the pooled and country-specific analysis suggests that the normative model of police legitimacy is operational in SSA; in many cases alongside the instrumental model. Therefore, H_1 and H_2 are supported at both the pooled and country-specific analyses. The country-specific results also indicate that generalizability to other contexts within the continent (or even other less-industrialized countries) may be limited,

as these two models neither worked consistently in every country nor always in the hypothesized direction.

Lastly, the non-significant result for distributive fairness (H_3) in the pooled analysis is both confirmed and challenged by country-specific results. Although distributive fairness is not generally a key correlate of consent, in some countries it is relevant to shaping perceptions of the police as legitimate. Therefore, process and outcomes are important for influencing perceptions of police legitimacy in countries within the sample, but in ways more complex than previous theoretical conceptualizations have allowed.

Table 13. Country-Specific Instrumental vs. Normative Drivers of Police Legitimacy.[22]

<table>
<tr><th>Instrumental Only</th><th>Instrumental and Normative</th><th>Normative</th></tr>
<tr><td rowspan="6">Cameroon
Cote d'Ivorie
Ghana
Liberia
Niger
Sierra Leone[23]
Uganda</td><td>Procedural and Instrumental</td><td>Procedural</td></tr>
<tr><td>Benin
Burundi
Mozambique
Nigeria
Togo</td><td>Botswana
Burkina Faso
Namibia</td></tr>
<tr><td>Distributive and Instrumental</td><td>Distributive</td></tr>
<tr><td>Guinea</td><td rowspan="3">Kenya[24]
Malawi
Mali[25]
Zambia</td></tr>
<tr><td>Procedural, Distributive, and Instrumental</td></tr>
<tr><td>South Africa
Tanzania
Zimbabwe</td></tr>
</table>

[22] For Lesotho, Madagascar, Mauritius, and Senegal, none of the three correlates were significant for these countries; therefore, it is inconclusive from this sample whether instrumental or normative perceptions are correlated with police legitimacy in those countries.

[23] Significant effect for procedural fairness was in direction opposite of theoretical expectation. Those who perceived equal treatment under the law were only 53% as likely to find the police legitimate as those who do not perceive fair treatment.

[24] Significant effect for distributive fairness was in direction opposite from theoretical expectation. Those who perceive a fair distribution in the likelihood of punishment between ordinary people and those in power were 76% as likely to find the police legitimate as those who do not perceive fair outcomes.

[25] The effect of distributive fairness on perceived legitimacy of the police was significant and positive (39% increase in odds of perceiving the police to be legitimate), while the relationship between procedural fairness and perceived legitimacy was significant and negative (respondents who perceive fair treatment only 72% as likely to find the police legitimate as those who do not).

Are the normative or instrumental models of legitimacy influenced by instrumental concerns?

As results from the previous section shows, the instrumental perception of police effectiveness is one of the strongest correlates of police legitimacy within the sample. It may stand that these perceptions are driven by feelings of security and low crime exposure on behalf of the respondents, rather than a specific relationship between effectiveness and legitimacy. Effectiveness may be conditioned by lack of victimization or minimal concerns about crime, and once controlling for this relationship, perceptions of fairness could be more relevant for police legitimacy, especially for those who have been victimized. In contrast, the relationship between effectiveness and legitimacy could be driven by victimization, such that it is victimization's relationship with legitimacy that is more important for police reform to focus on, rather than a general perception of effectiveness. H_4 posits that instrumental concerns over safety and security drawn from victimization at the individual-level could influence perceptions of legitimacy indirectly through perceptions of effectiveness.

In Table 14, I run a series of multilevel logistic models regressing obligation to obey on various instrumental concerns as well as instrumental and normative criteria. Overall, results from a number of analyses suggest that instrumental concerns have a direct, rather than indirect, relationship with legitimacy, separate from perceptions of effectiveness. As Model 9 demonstrates, an individual who personally or whose family is victim of an assault or theft in the previous year is less likely to find the police legitimate (OR = 0.878). In contrast, Model 10 highlights that those who have generally feared crime within their own home within the past year at least once were not significantly different in their perception of police legitimacy from those who have not feared crime. When both

are included, the results again confirm the relationship between victimization and legitimacy but not fear of crime (Model 11). In all three models, the direct relationships with legitimacy among procedural fairness and perceived effectiveness are not mediated, suggesting that victimization may influence legitimacy separately from effectiveness. As posited earlier, separating victimization from fear of crime may be difficult; those who have been victimized recently are also much more likely to fear crime (Garofalo, 1979). Inclusion of an interaction term in Model 12 between crime victimization and fear of crime shows that the relationship between individual instrumental concerns is driven by their product, rather than separate direct effects. Thus, those who have both been victimized *and* feared crime in their home within the past year are less likely to find the police legitimate (OR==0.872), although the cross-sectional study design limits the ability to determine causal ordering between the two.

Table 14. Random-Intercept Logistic Models Regressing Obligation to Obey on Instrumental Concerns and Normative Criteria.

	Model 9			Model 10			Model 11			Model 12		
VARIABLES	*b*	SE	OR	*b*	SE	OR	*b*	SE	OR	*b*	SE	OR
Individual-Level												
Perc. Procedural Fairness	.190**	.060	1.209	.188**	.060	1.207	.189**	.060	1.208	.189**	.060	1.208
Distrib. Fairness	.041	.064	1.042	.041	.064	1.042	.040	.064	1.041	.040	.064	1.041
Perc. Effectiveness	.337***	.045	1.401	.339***	.044	1.404	.334***	.045	1.397	.335***	.045	1.398
Instrumental Concerns												
Victim of Crime (VC)	-.130***	.038	.878				-.110**	.036	.896	-.049	.049	.952
Fear of Crime (FC)				-.101	.060	.904	-.068	.060	.934	-.014	.061	.986
VC X FC										-.137*	.065	.872
Intercept	1.063	.547	2.895	1.316*	.547	3.728	1.274*	.525	3.575	1.273*	.524	3.572
Country-Level												
Perc. Procedural Fairness GM	-.293	.618	.746	-.340	.593	.712	-.219	.635	.803	-.220	.635	.803
Distrib. Fairness GM	-.054	.779	.947	.013	.770	1.013	.050	.738	1.051	.051	.738	1.052
Perc. Effectiveness GM	.952	.593	2.591	.806*	.378	2.239	.615	.589	1.850	.616	.589	1.852
Victim of Crime GM	-.149	.785	.862				.451	.840	1.570	.454	.840	1.575
Fear of Crime GM				-.775	.630	.461	-1.013	.581	.363	-1.011	.581	.364
Country Population (ln)	.013	.090	1.013	.040	.096	1.041	.044	.092	1.045	.044	.092	1.045
Country Per-Capita GDP (ln)	-.035	.076	.966	-.046	.080	.955	-.049	.081	.952	-.048	.081	.953
Corruption Perception Index	.028*	.013	1.028	.030*	.014	1.030	.030*	.013	1.030	.030*	.013	1.030
Random Intercept	-2.305***	.318	.100	-2.358***	.346	.095	-2.367***	.341	.094	-2.367***	.341	.094
N of Respondents	42,353			42,353			42,353			42,353		
N of Countries	27			27			27			27		

ABBREVIATIONS: SE = Standard Error; OR = Odds Ratio; GM = Group-Mean; Perc. = Perceived; Distrib. = Distributive; Int. = Interviewer.
Notes: Odds Ratio = exp(*b*); Perceived Procedural Fairness, Perceived Effectiveness, Distributive Fairness, Victim of Crime, Fear of Crime, and the interaction term are all group-mean centered; all other individual-level variables are grand-mean centered. Socioeconomic and survey controls from previous models are also included but not shown.
*** $p<0.001$, ** $p<0.01$, * $p<0.05$ (two-tailed)
Source: Afrobarometer Round 5

The relationship between victimization and legitimacy could also be a function of accessibility to the police (Zhao, Schneider, and Thurman, 2002). In many locations in SSA, police have a limited presence in villages and towns, either due to a lack of infrastructure (no police station) or a lack of execution (no street patrols). When conducting the Afrobarometer surveys, enumerators were asked in each survey to assess whether they had either seen a police station within the primary sampling unit (PSU), or whether they had seen the police patrol within the PSU during the survey administration. While an imprecise estimate of the true figure of resource availability, it provides an opportunity to identify potential alternative explanations between victimization, effectiveness, and legitimacy. In Table 15, I include a measure of police presence within a PSU to the full multilevel logistic regression model of instrumental concerns analyzed above. Results from Model 13 find that the presence of police within a PSU was not significantly related to perceptions of police legitimacy, nor did it mediate any direct effects among procedural fairness, perceived effectiveness, or the victimization-fear interaction term.

Beyond the potential influence of individual instrumental concerns posited by H_4, H_5 argues that contextual effects of insecurity drawn from ongoing or recently-completed conflicts could also affect perceptions of police legitimacy. In Model 14 of Table 15, I include a binary measure of conflict experience within a multilevel logistic regression model of obligation to obey, while also controlling for individual-level instrumental concerns. Overall, I find no significant contextual effect of conflict on legitimacy above or beyond individual instrumental concerns, nor does it mediate any direct relationships between obligation to obey and instrument concerns, instrumental and normative criteria.

Table 15. Random-Intercept Logistic Models Regressing Obligation to Obey on Instrumental Concerns and Normative Criteria

	Model 13			Model 14		
VARIABLES	*b*	SE	OR	*b*	SE	OR
Individual-Level						
Perc. Procedural Fairness	0.189**	0.060	1.208	0.189**	0.060	1.208
Distrib. Fairness	0.040	0.064	1.041	0.040	0.064	1.041
Perc. Effectiveness	0.334***	0.044	1.397	0.334***	0.044	1.397
Instrumental Concerns						
Victim of Crime (VC)	-0.048	0.049	0.953	-0.048	0.049	0.953
Fear of Crime (FC)	-0.012	0.060	0.988	-0.012	0.060	0.988
VC X FC	-0.137*	0.065	0.872	-0.137*	0.065	0.872
Visible Police Presence	-0.059	0.043	0.943	-0.059	0.043	0.943
Socioeconomic Controls						
Age	-0.001	0.001	0.999	-0.001	0.001	0.999
Female	-0.027	0.039	0.974	-0.027	0.039	0.974
Education Level	0.019	0.019	1.019	0.019	0.019	1.019
Urban	0.044	0.045	1.045	0.044	0.045	1.045
Poverty Index	0.020	0.028	1.020	0.020	0.028	1.020
Employed	-0.061	0.070	0.941	-0.061	0.070	0.941
Present Country Conditions	0.017	0.021	1.017	0.017	0.021	1.017
Present Living Conditions	-0.025	0.019	0.975	-0.025	0.019	0.975
Generalized Social Trust	-0.038	0.050	0.963	-0.038	0.050	0.963
Survey Controls						
Others Present	0.021	0.051	1.021	0.021	0.051	1.021
Female Interviewer	-0.235**	0.091	0.790	-0.235**	0.091	0.790
Perc. Government Sponsor	0.021	0.050	1.022	0.021	0.050	1.022
Shares Language with Int.	0.025	0.081	1.025	0.025	0.081	1.025
In home language	0.000	0.078	1.000	0.000	0.077	1.000
Intercept	1.285**	0.512	3.614	1.327*	0.571	3.770
Country-Level						
Perc. Procedural Fairness GM	-0.224	0.614	0.799	-0.249	0.626	0.780
Distrib. Fairness GM	0.235	0.698	1.265	0.237	0.695	1.267
Perc. Effectiveness GM	0.547	0.624	1.729	0.511	0.658	1.667
Victim of Crime GM	0.463	0.855	1.588	0.489	0.885	1.631
Fear of Crime GM	-0.891	0.661	0.410	-0.939	0.665	0.391
Visible Police Presence GM	-0.287	0.509	0.750	-0.305	0.532	0.737
Country Population (ln)	0.031	0.108	1.031	0.037	0.105	1.038
Country Per-Capita GDP (ln)	-0.024	0.100	0.976	-0.022	0.101	0.978
Corruption Perception Index	0.028	0.016	1.028	0.028	0.015	1.028
Armed Conflict prior/current year				-0.053	0.144	0.948
Random Intercept	-2.372***	0.353	0.093	-2.374***	0.353	0.093
N of Respondents		42,353			42,353	
N of Countries		27			27	

ABBREVIATIONS: SE = Standard Error; OR = Odds Ratio; GM = Group-Mean; Perc. = Perceived; Distrib. = Distributive; Int. = Interviewer.

Notes: Odds Ratio = exp(*b*); Perceived Procedural Fairness, Perceived Effectiveness, Distributive Fairness, Victim of Crime, Fear of Crime, their interaction term, and Visible Police Presence within PSU are all group-mean centered; all other individual-level variables are grand-mean centered.

*** p<0.001, ** p<0.01, * p<0.05 (two-tailed)

Source: Afrobarometer Round 5

Recall that both H_4 and H_5 state that instrumental concerns will have an effect on perceptions of legitimacy primarily *through* instrumental perceptions of the police. Thus, expectations of an indirect effect of instrumental concerns requires the use of mediation analysis (as mentioned in Chapter 3). Given the potential for biased estimates from traditional mediation analyses when applied to non-linear models (MacKinnon and Dwyer, 1993), I apply a method of model rescaling (Breen, Karlson, and Holm, 2013; Karlson and Holm, 2011; Maroto, 2015) to non-imputed data to facilitate calculation of standard errors and significance tests (Sobel, 1982).

Including socioeconomic, survey, and country-level controls found in Model 14, mediation analysis was run for the two individual-level instrumental concerns (victimization and fear of crime) as well as the country-level contextual concern of recent armed conflict. Table 16 displays the results from the mediation analysis, which confirms that although instrumental concerns have a significant relationship with perceptions of police legitimacy, that relationship is direct and separate from instrumental perceptions of effectiveness. Contrary to H_4, instrumental concerns are not mediated through instrumental perceptions.

In a subsequent model, I examined whether perceived effectiveness at the country-level mediated the instrumental concerns of insecurity elicited as a country is currently engaged in or transitioning from an internal armed conflict. Results fail to support H_5, as the indirect effect for internal armed conflict was not significant within the mediation analysis. While the indirect nature of both H_4 and H_5 were not supported by the analysis, the direct effect of the victimization-fear interaction remains significant and unmediated across models.

Table 16. Results from Mediation Analysis for Multilevel Logistic Regression of Obligation to Obey

Model	Variable		Total Effect	Direct Effect	Indirect Effect
Individual Concerns	***Victimization***				
	Within Country	*b*	-0.128***	-0.109***	-0.018
		SE	(0.030)	(0.030)	(0.027)
	Between Country	*b*	0.809	0.359	0.450
		SE	(0.759)	(0.872)	(0.448)
	Fear of Crime				
	Within Country	*b*	-0.095**	-0.075*	-0.020
		SE	(0.030)	(0.030)	(0.027)
	Between Country	*b*	-1.058	-0.821	-0.237
		SE	(0.816)	(0.850)	(0.266)
Contextual Concerns	***Armed Conflict prior/curr year***				
	Between Country	*b*	-0.024	-0.005	-0.018
		SE	(0.231)	(0.232)	(0.027)

Note: Results were run holding covariates from Model 14, including socioeconomic, survey, and country-level controls. For all group-mean centered variables, group means were included at Level-2 according to Zhang, Zyphur, and Preacher (2009). Standard errors and significance tests were calculated using Sobel (1982).
Source: Afrobarometer Round 5

Do the instrumental and normative models of legitimacy depend on the definition of legitimacy?

Overall, the previous results support the notion that police legitimacy in SSA, as measured by obligation to obey, is driven by perceptions of both the fair treatment of individuals and their ability to control crime and prevent victimization. Perceived effectiveness of the police is a more influential correlate of police legitimacy in the sample, but perceptions of fairness are also associated with at least a 20% increase in the odds of consenting to the authority of the police. Instrumental concerns, although not mediated by instrumental perceptions, also have a direct influence on police legitimacy alongside procedural fairness and perceived effectiveness. One conclusion of the above analyses is that police legitimacy in SSA is shaped by both instrumental and normative perceptions.

Questions remain, though, whether this relationship holds under an expanded definition of legitimacy. As Tyler and Jackson (2013), among others, have postulated, legitimacy is more than just consent; it is also a shared moral alignment between citizens and state whereby individuals perceive that the police obey the same rules required of them. Thus, legitimacy is the confluence of moral alignment, perceived legality of the police, and obligation to obey. Although others contest this definition (Bottoms and Tankebe, 2012; Tankebe, 2013a), in this section I evaluate whether instrumental and normative criteria found influential in the previous analysis is also significantly correlated with perceptions of moral alignment and perceived legality of the police. At the end of this section I return to the criticism levied by Bottoms and Tankebe (2012) and evaluate its relevance for police legitimacy within SSA.

Moral Nonalignment - Pooled

For the first extended definition of legitimacy, I examine the influence of perceptions of fairness and effectiveness on the shared moral alignment between police and citizen. Although the measure utilized in this study is not ideal for capturing the dimensions of moral alignment used elsewhere, it can provide a preliminary examination of those criteria that shape police-citizen relations. Recall that the dependent variable used here is moral *nonalignment* drawn from values-oriented judgments of the police as a reason that individuals do not report crime to the police. These could include "Police don't care or listen," "Police would have demanded a money or bribe to help," "People fear police / don't trust police," "Police may have been involved in the robbery or assault," or "Police may turn the case against you." The key is the respondent draws upon these moral disjunctures between police and citizen as the primary reason in their opinion that people

do not report crime to the police, a key assumption of the moral alignment argument in other studies. Since it is coded as "nonalignment," perceptions of procedural [H_6] and distributive fairness [H_8], as well as effectiveness [H_7], are hypothesized to have a negative effect on the odds of nonalignment.

In Table 17, I present results from four multilevel logistic regression models testing these hypotheses separately and in a combined model. Results in Table 17 provide initial confirmation that the same criteria driving obligation to obey also drive a sense of shared morality between citizens and the police. Regressing moral nonalignment separately on individual perceptions of procedural fairness (Model 15), distributive fairness (Model 16), and effectiveness (Model 17), I consistently find negative and significant correlations with moral nonalignment while controlling for a number of other relevant survey-specific variables. Combining these influences together in Model 18, I find that each criteria has a significant and distinctly negative influence on moral nonalignment. Unlike obligation to obey, the strongest correlation in the full model was found among those who perceived fair treatment under the law (OR = 0.796), followed by perceptions of effectiveness (OR = 0.824) and fair outcomes (OR = 0.883). Aggregate perceptions of procedural fairness at the country-level also strongly influence moral alignment (OR = 0.110). Moving from the country with the lowest mean perception of fair treatment (Zimbabwe at 21.6% of respondents) to the country with the highest mean (Botswana, with 76.8% reporting fair treatment) reduces the odds of moral nonalignment with the police by roughly half.

Table 17. Random-Intercept Logistic Models Regressing Moral Nonalignment on Normative Criteria.

	Model 15			Model 16			Model 17			Model 18		
VARIABLES	*B*	SE	OR	*b*	SE	OR	*b*	SE	OR	*b*	SE	OR
Individual-Level												
Perc. Procedural Fairness	-.262***	.041	.770							-.228***	.038	.796
Perc. Effectiveness				-.216***	.043	.806				-.194***	.039	.824
Distrib. Fairness							-.167***	.030	.846	-.124***	.028	.883
Survey Controls												
Others Present	-.055	.038	.946	-.051	.039	.950	-.050	.038	.951	-.051	.038	.950
Female Interviewer	.005	.066	1.005	-.001	.066	.999	.010	.066	1.010	.002	.067	1.002
Perc. Government Sponsor	-.095*	.044	.909	-.095*	.043	.909	-.095*	.043	.909	-.090*	.042	.914
Shares Language with Int.	-.015	.035	.985	-.013	.036	.987	-.014	.035	.986	-.012	.035	.988
In home language	.031	.050	1.031	.029	.049	1.029	.031	.051	1.031	.033	.049	1.034
Intercept	-.163	.449	.850	-1.153	.622	.316	-.355	.640	.701	-.475	.698	.622
Country-Level												
Perc. Procedural Fairness GM	-1.862	.985	.155							-2.206*	1.046	.110
Perc. Effectiveness GM				.311	1.186	1.365				1.255	1.158	3.508
Distrib. Fairness GM							-1.114	1.146	.328	-.274	.991	.760
Random Intercept	-1.124***	.214	.325	-.981***	.272	.375	-1.021***	.234	.360	-1.177***	.190	.308
N of Respondents	43,158			43,158			43,158			43,158		
N of Countries	27			27			27			27		

ABBREVIATIONS: SE = Standard Error; OR = Odds Ratio; GM = Group-Mean; Perc. = Perceived; Distrib. = Distributive; Int. = Interviewer.
Notes: Odds Ratio = exp(*b*); Perceived Procedural Fairness, Perceived Effectiveness, and Distributive Fairness are all group-mean centered; all other individual-level variables are grand-mean centered.
*** p<0.001, ** p<0.01, * p<0.05 (two-tailed)
Source: Afrobarometer Round 5

In Table 18, I incorporate demographic and country-level controls when regressing moral nonalignment on instrumental and normative criteria. Model 19 takes the full model from above and includes additional socioeconomic controls within the regression, while Model 20 builds this analysis by incorporating country-level contextual influences. Model 21 provides an additional extension by including instrumental concerns alongside instrumental and normative criteria. Taken together the results in Table 18 show that the inclusion of these additional controls partially mediated the influence of instrumental and normative criteria on moral alignment. Compared with Model 18 (which only has survey-specific controls), the inclusion of socioeconomic controls in Model 19 slightly mediated the relationships between procedural fairness (OR = 0.796 in Model 18 vs. 0.833 in Model 19), distributive fairness (OR = 0.883 vs. 0.936), and perceived effectiveness (OR = 0.824 vs. 0.854) with moral nonalignment. Additional country-level controls in Model 20 had no significant effect on these three relationships, while the inclusion of instrumental concerns in Model 21 slightly mediated the correlation between perceived effectiveness and moral nonalignment (OR = 0.854 in Model 20 vs. 0.871 in Model 21). In sum, although the relationships were partially mediated by the inclusion of these control variables, support for H_6, H_7, and H_8 remain strong in the pooled analysis.

Unlike obligation to obey, there is considerable heterogeneity across demographic variables in shaping moral alignment within SSA. In Model 19, those who perceive their country's economic position positively (OR = 0.934), who trust others (OR = 0.833), and who are female (OR = 0.854) all reported less moral disjuncture with the police. Those who reside in urban locations (OR = 1.556) and are employed (OR = 1.090) were more likely to report that they are morally not aligned with the police. Across the sample, the

average educational level completed was between primary school and some secondary school. Compared to those who completed primary school, those who completed university were 42% more likely to report that they were not morally aligned with the police (OR = 1.084 per level; five levels of education difference). Young respondents also reported greater levels of moral disjuncture with the police (age OR = 0.998); a 20 year-old respondent would be seven percent more likely to report nonalignment with the police than a 40-year old ((20*-0.002)/1-(20*-0.002)). Overall, these demographic variations were consistent across all three models and little changed regardless of additional controls.

The inclusion of instrumental concerns also exerted an effect on moral nonalignment similar to its relationship with obligation to obey. In Model 21, victims of crime (OR = 1.215) and those who have feared crime in their home (OR = 1.237) were both more likely to report moral disjuncture with the police. In contrast to obligation to obey, the interaction effect was not significant, although victimization did exert a contextual effect on moral nonalignment (OR = 12.437). Moving from the country with the lowest mean victimization (Mauritius at 11% of respondents) to the country with the highest mean (Liberia with 51% reporting victimization) increases the odds of moral nonalignment with the police by roughly 500%. Additionally, those in countries currently engaged in an internal armed conflict or recently transitioning from one reported higher odds of moral disjuncture with the police (OR = 1.962). The inclusion of country-level controls also moderated the significant contextual effect for perceptions of procedural fairness in previous models. Overall, moral alignment and obligation to obey are correlated in the same direction with both instrumental and normative criteria, although the relative magnitude of these influences differ depending on the dependent variable.

Table 18. Random-Intercept Logistic Models Regressing Moral Nonalignment on Instrumental Concerns and Normative Criteria.

	Model 19			Model 20			Model 21		
VARIABLES	*b*	SE	OR	*b*	SE	OR	*b*	SE	OR
Individual-Level									
Procedural Fairness	-.183***	.035	.833	-.183***	.035	.833	-.179***	.035	.836
Effectiveness	-.158***	.035	.854	-.158***	.035	.854	-.138***	.035	.871
Distributive Fairness	-.066*	.028	.936	-.066*	.028	.936	-.060*	.028	.942
Instrumental Concerns									
Victim of Crime (VC)							.195**	.060	1.215
Fear of Crime (FC)							.213***	.058	1.237
VC X FC							-.076	.077	.927
Visible Police Presence							.130**	.049	1.139
Socioeconomic Controls									
Age	-.003**	.001	.997	-.002**	.001	.998	-.002**	.001	.998
Female	-.158***	.030	.854	-.158***	.030	.854	-.163***	.031	.850
Education Level	.081***	.013	1.084	.081***	.013	1.084	.076***	.013	1.079
Urban	.442***	.055	1.556	.442***	.055	1.556	.374***	.046	1.454
Poverty Index	.105***	.028	1.111	.105***	.028	1.111	.077**	.027	1.08
Employed	.086*	.039	1.090	.086*	.039	1.090	.081*	.039	1.084
Country Conditions	-.068***	.015	.934	-.068***	.015	.934	-.070***	.015	.932
Living Conditions	-.018	.015	.982	-.018	.015	.982	-.018	.014	.982
Social Trust	-.183***	.040	.833	-.183***	.040	.833	-.177***	.041	.838
Survey Controls									
Others Present	.007	.033	1.007	.007	.033	1.007	-.001	.033	.999
Female Interviewer	.009	.064	1.009	.009	.064	1.009	.011	.065	1.011
Government Sponsor	.002	.035	1.002	.001	.035	1.001	.003	.035	1.003
Shares Lang w/ Int	-.041	.035	.960	-.040	.035	.961	-.040	.036	.961
In home language	.093*	.036	1.097	.093*	.036	1.097	.107**	.037	1.113
Intercept	-.467	.638	.627	-1.553	.882	.212	-2.466***	.811	.085
Country-Level									
Procedural Fairness GM	-2.125*	1.076	.119	-1.358	1.044	.257	-.375	.797	.687
Effectiveness GM	1.309	1.052	3.702	1.449	.901	4.259	.776	.534	2.173
Distributive Fair. GM	-.414	.902	.661	.786	1.457	2.195	1.091	1.446	2.977
Victim of Crime GM							2.598***	.592	13.437
Fear of Crime GM							-.520	.795	.595
Visible Police GM							.023	.799	1.023
Conflict prev/curr year							.674***	.145	1.962
Population (ln)				.266**	.098	1.305	.184	.121	1.202
GDP Per Cap (ln)				-.040	.129	.961	-.044	.168	.957
Corruption Perc Index				-.005	.014	.995	-.009	.017	.991
Random Intercept	-1.296***	.208	.274	-1.596***	.214	.203	-2.064***	.301	.127
N of Respondents	42,343			42,343			42,343		
N of Countries	27			27			27		

ABBREVIATIONS: SE = Standard Error; OR = Odds Ratio; GM = Group-Mean; Int. = Interviewer.
Notes: Odds Ratio = exp(*b*); Perceived Procedural Fairness, Perceived Effectiveness, Distributive Fairness, Victim of Crime, Fear of Crime, their interaction term, and Visible Police Presence within PSU are all group-mean centered; all other individual-level variables are grand-mean centered.
*** $p<0.001$, ** $p<0.01$, * $p<0.05$ (two-tailed)
Source: Afrobarometer Round 5

Moral Nonalignment - Country-by-Country Variation

Similar to obligation to obey, I anticipate considerable heterogeneity by country in the hypothesized role that perceptions of fairness and effectiveness play in shaping moral nonalignment. Following the same strategy above, I ran country-specific logistic regressions of moral nonalignment, and present the coefficients, standard errors, and odds ratios for each country in Table 19. From these results (as well as earlier results in Models 15-21), there is consistency in the directionality of procedural fairness on moral alignment across countries, even in those locations where the relationship was not significant. In nine countries, the relationship was negative and significant, and for another 15 countries, the relationship was negative but not significant. In only four countries (Cameroon, Namibia, Sierra Leone, and Zambia) were the effects positive, and in none of those countries were the relationships statistically significant at $p<0.05$. These results are also confirmed by Figure 10, which reports the odds ratios and respective confidence intervals for procedural fairness on moral nonalignment from country-specific models. The preponderance of odds ratios, and the majority of their confidence intervals, are below an odds ratio of 1, suggesting that even when not significant, the pattern trended towards a negative correlation.

The relationship between distributive fairness and moral nonalignment was not as consistent in the country-specific models. In Table 19, there were only three countries (Botswana, Ghana, and Malawi) where distributive fairness was significantly and negatively correlated with moral nonalignment. Figure 11, which reports the odds ratios and respective confidence intervals for distributive fairness on moral nonalignment from country-specific models, also shows a number of countries whose odds ratios are slightly

lower or higher than 1. Thus, contrary to H_8 and the results from the pooled analysis, we find only weak support that perceptions of distributive fairness decrease the odds of moral nonalignment in the country-specific models.

In contrast, perceived effectiveness exhibits a consistently negative and significant relationship with moral nonalignment, as H_7 posits (see Table 19). In 12 out of 27 countries, perceived effectiveness is negatively and significantly related to moral nonalignment; in another 10 countries, the relationship is negative but not significant. Figure 12, which reports the odds ratios and respective confidence intervals for perceived effectiveness on moral nonalignment from country-specific models, also shows a consistent pattern of negative correlations across countries. Only one country had a positive and significant relationship between perceived effectiveness and moral nonalignment (Cameroon; OR = 1.474).

Overall, replacing obligation to obey for moral nonalignment as the definition of legitimacy finds similar criteria driving both definitions. Moderate support for procedural fairness (H_6) and perceived effectiveness (H_7) was not only in the hypothesized direction, but was also relatively consistent across countries, even when non-significant. Although significant in the pooled analysis, the weak effect of distributive fairness on moral nonalignment across the sample, as well as the inconsistent directionality and small number of significant relationships in the country-specific analysis, suggests only limited support for H_7. Thus, I find that similar to obligation to obey, moral nonalignment is influenced by perceptions of procedural fairness and police effectiveness. The relative magnitude between the two effects, though, is reverse from obligation to obey: procedural fairness was *more* influential in shaping moral nonalignment than perceived effectiveness.

Table 19. Logistic Regression of Moral Nonalignment on Procedural Fairness, Distributive Fairness, and Perceived Effectiveness, by Country.

	Procedural Fairness			Distributive Fairness			Perceived Effectiveness		
Countries	*b*	SE	OR	*b*	SE	OR	*b*	SE	OR
Benin	-.428**	.161	.652	-.001	.163	.999	.063	.153	1.065
Botswana	-.142	.150	.868	-.346*	.169	.708	-.396*	.157	.673
Burkina Faso	-.181	.175	.834	-.073	.176	.930	-.217	.161	.805
Burundi	-.669***	.170	.512	-.007	.168	.993	-.470**	.157	.625
Cameroon	.120	.140	1.127	.045	.131	1.046	.388**	.134	1.474
Cote d'Ivoire	-.185	.184	.831	.030	.154	1.030	-.410*	.159	.664
Ghana	-.108	.088	.898	-.223*	.098	.800	-.066	.092	.936
Guinea	-.050	.146	.951	.086	.153	1.090	-.448**	.156	.639
Kenya	-.310***	.090	.733	-.122	.090	.885	-.052	.087	.949
Lesotho	-.233	.133	.792	.001	.160	1.001	-.263	.135	.769
Liberia	-.435**	.147	.647	.073	.152	1.076	-.131	.141	.877
Madagascar	-.161	.182	.851	-.165	.192	.848	-.629**	.230	.533
Malawi	-.042	.106	.959	-.379***	.106	.685	-.133	.103	.875
Mali	-.006	.149	.994	.018	.135	1.018	.021	.140	1.021
Mauritius	-.048	.230	.953	-.004	.266	.996	-.110	.236	.896
Mozambique	-.131	.110	.877	-.064	.141	.938	.092	.107	1.096
Namibia	.228	.232	1.256	.224	.258	1.251	.050	.222	1.051
Niger	-.328*	.155	.720	.023	.159	1.023	-.158	.164	.854
Nigeria	-.165	.091	.848	-.064	.090	.938	-.297**	.097	.743
Senegal	-.632***	.189	.532	.048	.157	1.049	-.339*	.159	.712
Sierra Leone	.013	.142	1.013	-.056	.138	.946	-.276*	.132	.759
South Africa	-.011	.089	.989	.081	.099	1.084	-.238*	.094	.788
Tanzania	-.385***	.093	.680	-.160	.093	.852	-.237*	.094	.789
Togo	-.376*	.147	.687	.033	.145	1.034	-.308*	.140	.735
Uganda	-.079	.087	.924	.024	.087	1.024	-.084	.088	.919
Zambia	.194	.137	1.214	.193	.139	1.213	-.124	.136	.883
Zimbabwe	-.276*	.108	.759	-.098	.103	.907	-.224*	.105	.799

ABBREVIATIONS: SE = Standard Error; OR = Odds Ratio.
Notes: Odds Ratio = exp(*b*); Models include controls for socioeconomic controls (Age, Female, Education Level, Urban, Poverty Index, Employed, Present Country Conditions, Present Living Conditions, and Generalized Social Trust) as well as survey controls (Others Present, Female Interviewer, Perceived Government Sponsor, Shares Language with Interviewer, and In home language), which are not shown here.
*** $p<0.001$, ** $p<0.01$, * $p<0.05$ (two-tailed)
Source: Afrobarometer Round 5

Figure 10. Odds Ratios for Procedural Fairness on Moral Nonalignment, by Country.

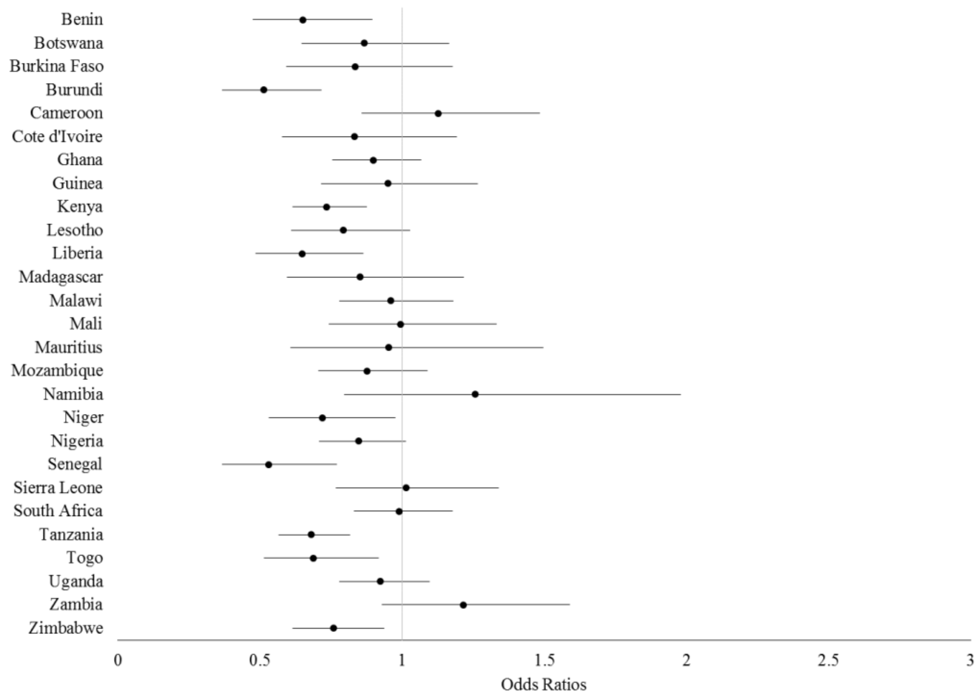


Figure 11. Odds Ratios for Distributive Fairness on Moral Nonalignment, by Country.

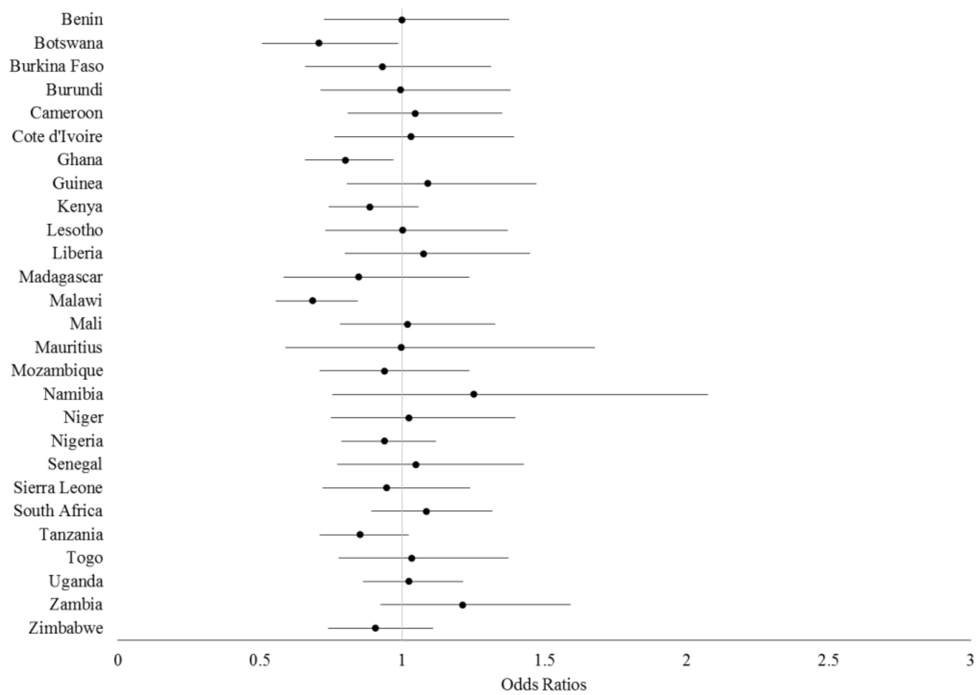
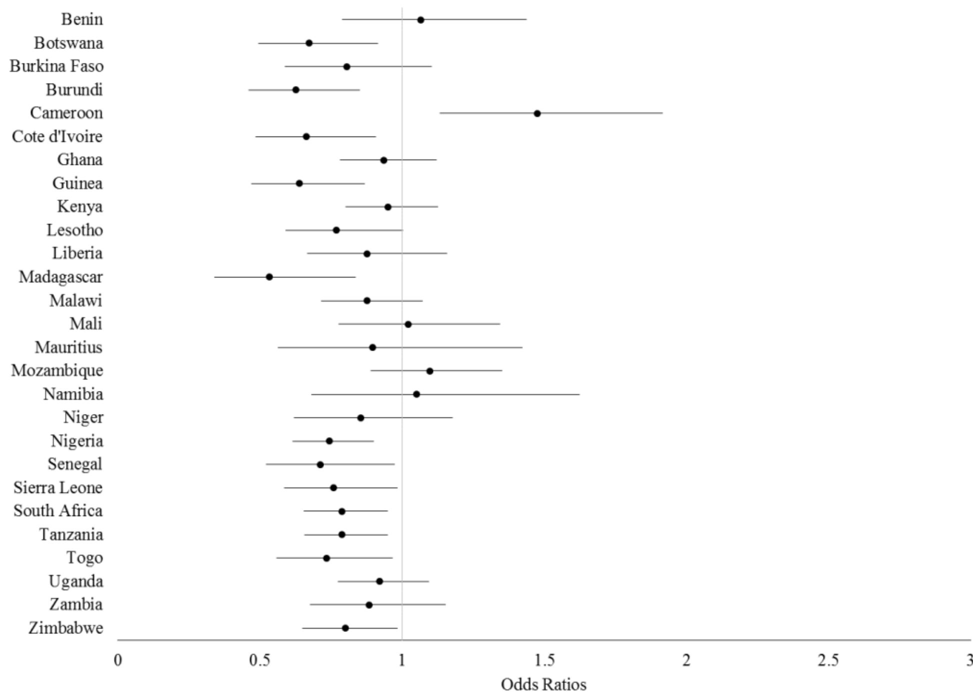


Figure 12. Odds Ratios for Perceived Effectiveness on Moral Nonalignment, by Country.



Perceived Illegality - Pooled

Extending definitions of legitimacy further, I examine the influence of perceptions of procedural [H_9] and distributive fairness [H_{11}], as well as effectiveness [H_{10}] on the perception of police illegality or corruption. Recall that the dependent variable used here is a binary measure of whether the respondent perceives "any" corruption within the police. The original measure was ordinal, capturing whether the respondent perceives that "none," "some," "most" or "all" police in their country are corrupt. I simplify the measure to a binary variable to ease interpretation of country-specific models (which may have different cut-points in the distribution of the ordinal categories that could confound interpretation across models), but also run a series of alternative models as sensitivity analyses using perceptions of severe corruption ("most" or "all" police are corrupt). Also, since this

measure taps into perceptions of police illegality, perceptions of fairness and effectiveness are hypothesized to have a negative effect on the odds of perceived illegality.

In Table 20, I present results from four multilevel logistic regression models testing these hypotheses separately and in a combined model. Results in Table 20 provide initial confirmation that the same criteria driving obligation to obey also drive the perception of police illegality. Regressing police illegality on perceptions of procedural fairness (Model 22), distributive fairness (Model 23), and effectiveness (Model 24), I find consistently negative and significant correlations with police illegality while controlling for a number of other relevant survey-specific variables. Combining these influences together in Model 25, I find that each criteria has a significant and distinctly negative influence on police illegality.

Unlike obligation to obey, the strongest correlation in the full model was found among those who perceived fair outcomes (OR = 0.623), followed by perceptions of fair treatment (OR = 0.795) and effectiveness (OR = 0.825). Interestingly and as expected, respondents were less likely to report the police as corrupt when others were present during the administration of the survey (OR = 0.778), a female was interviewing (OR = 0.811), and if they perceived the sponsor of the survey was the government (OR = 0.880).

Table 20. Random-Intercept Logistic Models Regressing Perceived Illegality on Normative Criteria.

	Model 22			Model 23			Model 24			Model 25		
VARIABLES	*b*	SE	OR	*B*	SE	OR	*b*	SE	OR	*b*	SE	OR
Individual-Level												
Perc. Procedural Fairness	-.319***	.042	.727							-.230***	.044	.795
Perc. Effectiveness				-.226***	.067	.798				-.192**	.063	.825
Distrib. Fairness							-.519***	.054	.595	-.473***	.057	.623
Survey Controls												
Others Present	-.262***	.049	.770	-.258***	.050	.773	-.251***	.049	.778	-.251***	.048	.778
Female Interviewer	-.204***	.053	.815	-.213***	.054	.808	-.201***	.053	.818	-.210***	.054	.811
Perc. Government Sponsor	-.143**	.046	.867	-.145**	.045	.865	-.136**	.046	.873	-.128**	.044	.880
Shares Language with Int.	-.018	.055	.982	-.016	.055	.984	-.011	.053	.989	-.006	.054	.994
In home language	-.087	.065	.917	-.086	.065	.918	-.085	.063	.919	-.088	.062	.916
Intercept	1.671**	.569	5.317	1.882*	.837	6.567	2.045*	.908	7.729	2.065	1.192	7.885
Country-Level												
Perc. Procedural Fairness GM	.306	1.076	1.358							.678	1.207	1.970
Perc. Effectiveness GM				-.157	1.535	.855				-.317	1.648	.728
Distrib. Fairness GM							-.388	1.474	.678	-.665	1.479	.514
Random Intercept	-.407	.221	.666	-.407	.216	.666	-.398	.216	.672	-.401	.215	.670
N of Respondents	43,087			43,087			43,087			43,087		
N of Countries	27			27			27			27		

ABBREVIATIONS: SE = Standard Error; OR = Odds Ratio; GM = Group-Mean; Perc. = Perceived; Distrib. = Distributive; Int. = Interviewer.
Notes: Odds Ratio = exp(*b*); Perceived Procedural Fairness, Perceived Effectiveness, and Distributive Fairness are all group-mean centered; all other individual-level variables are grand-mean centered.
*** p<0.001, ** p<0.01, * p<0.05 (two-tailed)
Source: Afrobarometer Round 5

In Table 21, I incorporate demographic and country-level controls when regressing perceived illegality on instrumental and normative criteria. Model 26 takes the full model from above and includes additional socioeconomic controls, while Model 27 builds this analysis by incorporating country-level contextual influences. In Table 22, I provide an additional extension by including instrumental concerns alongside instrumental and normative criteria (see Model 28). Taken together the results in Tables 21 and 22 show that the inclusion of these additional controls partially mediate the influence of instrumental and normative criteria on perceived illegality. Compared with Model 25 (which only has survey-specific controls), the inclusion of socioeconomic controls in Model 26 slightly mediate the relationships between procedural fairness (OR 0.795 in Model 25 vs. 0.807 in Model 26) and distributive fairness (OR 0.623 vs. 0.661) with police illegality. Additional country-level controls in Model 27 had no significant effect on these three relationships, while the inclusion of instrumental concerns in Model 28 (Table 22) slightly mediated the correlation between perceived effectiveness and police illegality (OR 0.820 in Model 27 vs. 0.838 in Model 28). In sum, although the relationships were partially mediated by the inclusion of these control variables, support for H_9, H_{10}, and H_{11} remain strong in the pooled analysis.

Similar to moral nonalignment, and unlike obligation to obey, there is considerable heterogeneity across demographic variables in shaping perceived illegality within SSA. In Model 26, those who perceive their country's economic position positively (OR = 0.920), who trust others (OR = 0.748), and who are female (OR = 0.783) all reported lower odds of perceived illegality among the police. Those who reside in urban locations (OR = 1.270) and are employed (OR = 1.162) were more likely to report perceived illegality among the

police. Compared to those who completed primary school, those who completed university were 120% more likely to report that that the police were at least somewhat corrupt (OR = 1.247 per level; five levels of education difference). Finally, the young were more likely to perceive the police as corrupt (age OR = 0.994); a 20 year-old respondent would be 14% more likely to perceive police illegality than a 40-year old ((20*-0.006)/1-(20*-0.006)). Overall, these effects were consistent across the models and were little changed with the introduction of additional controls.

In addition, the inclusion of instrumental concerns directly decreased the perception of legitimacy (in this case, increased the perception of perceived illegality) of the police (see Table 22). Victims of crime (OR = 1.188) and those who have feared crime in their home (OR = 1.109) were both more likely to report the police were at least somewhat corrupt. In contrast to obligation to obey and similar to moral nonalignment, the interaction effect was not significant, although victimization did exert a contextual effect on perceived illegality (OR = 26.598). Moving from the country with the lowest mean victimization (Mauritius at 11% of respondents) to the country with the highest mean (Liberia with 51% reporting victimization) increases the odds of perceived police illegality by roughly 1,063%. This was countered by the aggregate effect of the fear of crime, which reduced perceptions of police illegality the more crime was feared in a country (OR = 0.070). Returning to Mauritius (12% of respondents stated that they feared crime within past year) and Liberia (35% of respondents feared crime), respondents in Liberia would be 78% as likely to perceive police illegality as those in Mauritius. Additionally, similar to moral alignment, those in countries currently engaged in an internal armed conflict or recently transitioning from one were more likely to perceived at least some of the police as corrupt

(OR=1.958). Overall, alongside moral nonalignment and obligation to obey, perceived illegality is correlated in the same direction with both instrumental and normative criteria, although the relative magnitude of these influences differs between the criteria depending on the dependent variable.

Table 21. Random-Intercept Logistic Models Regressing Perceived Illegality on Instrumental and Normative Criteria.

	Model 26			Model 27		
VARIABLES	*b*	SE	OR	*b*	SE	OR
Individual-Level						
Perc. Procedural Fairness	-.214***	.047	.807	-.214***	.047	.807
Perc. Effectiveness	-.198***	.054	.820	-.198***	.054	.820
Distrib. Fairness	-.414***	.055	.661	-.414***	.055	.661
Socioeconomic Controls						
Age	-.006***	.001	.994	-.006***	.001	.994
Female	-.244***	.031	.783	-.244***	.031	.783
Education Level	.221***	.024	1.247	.220***	.024	1.246
Urban	.239***	.042	1.270	.238***	.042	1.269
Poverty Index	-.002	.028	.998	-.002	.028	.998
Employed	.150**	.053	1.162	.150**	.053	1.162
Present Country Conditions	-.083***	.023	.920	-.083***	.023	.920
Present Living Conditions	-.001	.023	.999	-.000	.023	1.000
Generalized Social Trust	-.290***	.041	.748	-.290***	.041	.748
Survey Controls						
Others Present	-.136*	.054	.873	-.136*	.054	.873
Female Interviewer	-.218***	.055	.804	-.218***	.054	.804
Perc. Government Sponsor	.015	.048	1.015	.014	.048	1.014
Shares Language with Int.	-.062	.059	.940	-.060	.059	.942
In home language	.054	.059	1.055	.053	.059	1.054
Intercept	2.443*	1.092	11.508	1.054	1.086	2.869
Country-Level						
Perc. Procedural Fairness GM	.347	1.154	1.415	1.149	1.271	3.155
Perc. Effectiveness GM	.100	1.444	1.105	1.169	1.134	3.219
Distrib. Fairness GM	-1.195	1.326	.303	-.332	1.683	.717
Country Population (ln)				.195	.135	1.215
Country Per-Capita GDP (ln)				.438**	.165	1.550
Corruption Perception Index				-.040*	.020	.961
Random Intercept	-.639**	.240	.528	-1.088***	.246	.337
N of Respondents		42,275			42,275	
N of Countries		27			27	

ABBREVIATIONS: SE = Standard Error; OR = Odds Ratio; GM = Group-Mean; Perc. = Perceived; Distrib. = Distributive; Int. = Interviewer.

Notes: Odds Ratio = exp(*b*); Perceived Procedural Fairness, Perceived Effectiveness, Distributive Fairness, Victim of Crime, Fear of Crime, their interaction term, and Visible Police Presence within PSU are all group-mean centered; all other individual-level variables are grand-mean centered.

*** $p<0.001$, ** $p<0.01$, * $p<0.05$ (two-tailed)

Source: Afrobarometer Round 5

Table 22. Random-Intercept Logistic Models Regressing Perceived Illegality on Instrumental Concerns, Instrumental and Normative Criteria.

	Model 28		
VARIABLES	*b*	SE	OR
Individual-Level			
Perc. Procedural Fairness	-.209***	.046	.812
Perc. Effectiveness	-.177**	.055	.838
Distrib. Fairness	-.408***	.055	.665
Instrumental Concerns			
Victim of Crime (VC)	.172**	.055	1.188
Fear of Crime (FC)	.103*	.046	1.109
VC X FC	.086	.077	1.090
Visible Police Present	.050	.045	1.051
Socioeconomic Controls			
Age	-.006***	.001	.994
Female	-.247***	.031	.781
Education Level	.215***	.024	1.240
Urban	.200***	.036	1.221
Poverty Index	-.027	.029	.974
Employed	.146**	.052	1.157
Present Country Conditions	-.083***	.023	.920
Present Living Conditions	.000	.022	1.000
Generalized Social Trust	-.284***	.041	.753
Survey Controls			
Others Present	-.145**	.054	.865
Female Interviewer	-.220***	.055	.802
Perc. Government Sponsor	.014	.047	1.014
Shares Language with Int.	-.066	.059	.937
In home language	.057	.058	1.059
Intercept	.881	.945	2.414
Country-Level			
Perc. Procedural Fairness GM	2.077	1.079	7.979
Perc. Effectiveness GM	-.148	.656	.863
Distrib. Fairness GM	.470	1.604	1.600
Victim of Crime GM	3.281**	1.143	26.598
Fear of Crime GM	-2.653**	.916	.070
Visible Police Present GM	-.470	.950	.625
Armed Conflict prior/curr year	.672**	.195	1.958
Country Population (ln)	.174	.144	1.191
Country Per-Capita GDP (ln)	.442**	.175	1.556
Corruption Perception Index	-.043	.022	.958
Random Intercept	-1.579	.346	.206
N of Respondents		42,275	
N of Countries		27	

ABBREVIATIONS: SE = Standard Error; OR = Odds Ratio; GM = Group-Mean; Perc. = Perceived; Distrib. = Distributive; Int. = Interviewer.

Notes: Odds Ratio = exp(*b*); Perceived Procedural Fairness, Perceived Effectiveness, Distributive Fairness, Victim of Crime, Fear of Crime, their interaction term, and Visible Police Presence within PSU are all group-mean centered; all other individual-level variables are grand-mean centered.

*** p<0.001, ** p<0.01, * p<0.05 (two-tailed)

Source: Afrobarometer Round 5

Perceived Illegality - Country-by-Country Variation

Similar to obligation to obey and moral alignment, I anticipate considerable heterogeneity by country in the role that perceptions of fairness and effectiveness play in shaping perceived illegality. Following the same strategy as above, I ran country-specific logistic regressions of perceived illegality, and present the coefficients, standard errors, and odds ratios for each country in Table 23. Results indicate consistent yet weak support for a negative correlation between procedural fairness and perceived illegality [H_9] across countries. In seven countries, the relationship was negative and significant, and for another 15 countries, the relationship was negative but not significant. For only four countries (Cameroon, Ghana, Niger, and Uganda) were the effects positive but not significant, and in only one country (Liberia) was it positive and significant. These results are also confirmed by Figure 13, which reports the odds ratios and respective confidence intervals for procedural fairness on perceived illegality from country-specific models. The preponderance of odds ratios, and the majority of their confidence intervals, are below an odds ratio of 1, suggesting that even when not significant, the pattern trended towards a negative relationship.

Examining the generalizability of H_{10} across countries, I find for perceived police illegality some support for the instrumental model of legitimacy. For a majority of countries, the relationship between perceived effectiveness and police illegality was in the hypothesized negative direction (20 countries), yet less than half of those countries had a statistically significant relationship (8 countries). In only one country was perceived effectiveness positively and significantly correlated with perceived illegality (Cameroon), while another six countries exhibited positive but non-significant relationships. Figure 15,

which reports the odds ratios and respective confidence intervals for perceived effectiveness on police illegality from country-specific models, also shows a number of countries whose odds ratios inconsistently hover on either side of 1. Altogether, while H_{10} was supported in the pooled analysis, it is only weakly confirmed in the country-to-country analysis, where reasons other than perceived effectiveness could influence perceptions of police illegality.

In contrast to both obligation to obey and moral nonalignment, the relationship between distributive fairness and perceived illegality was the most consistent from country to country (see Table 23). In 14 countries, the relationship was significant and negative, confirming H_{11}. For another 10 countries, the relationship was negative yet non-significant, providing some support that distributive fairness influences perceived illegality in a similar manner, although the non-significant results prohibit us from rejecting the null hypothesis. In only three countries (Ghana, Namibia, and Uganda) was distributive fairness positively related with perceived police illegality, but in no country was that relationship statistically significant at $p<0.05$. Figure 14, which reports the odds ratios and respective confidence intervals for distributive fairness on police illegality from country-specific models, also shows a consistent pattern of negative correlations across countries. Overall, the country-specific results strongly support the generalizability of H_{11} across different countries within the sample; specifically that those who perceive a fair distribution in likelihood of punishment between ordinary people and government officials are less likely to perceive the police to be corrupt.

Overall, substituting police illegality for obligation to obey as the definition of legitimacy finds similar criteria driving both definitions, although somewhat weaker

support from the country-specific analyses. Unlike the other two definitions of legitimacy, only weak support for procedural fairness (H_6) and perceived effectiveness (H_8) in the hypothesized direction was found, with some consistency across countries. In contrast, the weak effect of distributive fairness with other definitions of legitimacy was not replicated here. Rather, distributive fairness exerted the strongest effect of the three criteria in the pooled sample, and the most consistently significant and negative relationship in the country-specific results, strongly supporting H_{11}. For perceptions of police corruption within SSA, moral disjunctures and appraisals of unfair procedures are secondary to a respondent's overarching evaluation of the equality of punishment likelihood between the powerful and the ordinary.

Table 23.Logistic Regression of Perceived Illegality on Procedural Fairness, Distributive Fairness, and Perceived Effectiveness, by Country.

	Procedural Fairness			Distributive Fairness			Perceived Effectiveness		
Countries	*b*	SE	OR	*b*	SE	OR	*b*	SE	OR
Benin	-.240	.188	.787	-.835***	.198	.434	.007	.185	1.007
Botswana	-.353*	.178	.703	-.491*	.221	.612	-.048	.185	.953
Burkina Faso	-.304*	.140	.738	-.604***	.158	.547	.069	.134	1.071
Burundi	-.165	.172	.848	-.527**	.175	.590	-.780***	.184	.458
Cameroon	.175	.218	1.191	-.381	.234	.683	.426*	.196	1.531
Cote d'Ivoire	-.608**	.195	.544	-.572**	.199	.564	-.614**	.194	.541
Ghana	.094	.177	1.099	.005	.205	1.005	-.271	.193	.763
Guinea	-.404**	.141	.668	-.241	.161	.786	-.391**	.149	.676
Kenya	-.033	.177	.968	-.599**	.189	.549	.030	.168	1.030
Lesotho	-.228	.135	.796	-.256	.171	.774	.127	.139	1.135
Liberia	.447*	.218	1.564	-.582*	.241	.559	.184	.207	1.202
Madagascar	-.223	.135	.800	-.493***	.148	.611	-.284	.151	.753
Malawi	-.087	.112	.917	-.531***	.112	.588	-.088	.105	.916
Mali	-.303	.165	.739	-.330*	.168	.719	-.444**	.155	.641
Mauritius	-.077	.211	.926	-.347	.266	.707	-.883***	.192	.414
Mozambique	-.500***	.101	.607	-.108	.154	.898	-.187	.101	.829
Namibia	-.374*	.190	.688	.031	.201	1.031	-.252	.175	.777
Niger	.015	.153	1.015	-.441**	.170	.643	.063	.176	1.065
Nigeria	-.176	.295	.839	-.565	.319	.568	-.172	.322	.842
Senegal	-.582***	.141	.559	-.104	.139	.901	-.146	.132	.864
Sierra Leone	-.403	.278	.668	-.682	.355	.506	-.180	.269	.835
South Africa	-.217	.180	.805	-.581*	.226	.559	-.464**	.175	.629
Tanzania	-.284	.166	.753	-.735***	.179	.480	-.699***	.168	.497
Togo	-.198	.150	.820	-.266	.172	.766	-.018	.150	.982
Uganda	.241	.217	1.273	.178	.231	1.195	-.033	.214	.968
Zambia	-.224	.214	.799	-.637**	.222	.529	-.211	.217	.810
Zimbabwe	-.046	.192	.955	-.350	.210	.705	-.798***	.194	.450

ABBREVIATIONS: SE = Standard Error; OR = Odds Ratio.
Notes: Odds Ratio = exp(*b*); Models include controls for socioeconomic controls (Age, Female, Education Level, Urban, Poverty Index, Employed, Present Country Conditions, Present Living Conditions, and Generalized Social Trust) as well as survey controls (Others Present, Female Interviewer, Perceived Government Sponsor, Shares Language with Interviewer, and In home language), which are not shown here.
*** p<0.001, ** p<0.01, * p<0.05 (two-tailed)
Source: Afrobarometer Round 5

Figure 13. Odds Ratios for Procedural Fairness on Perceived Illegality, by Country.

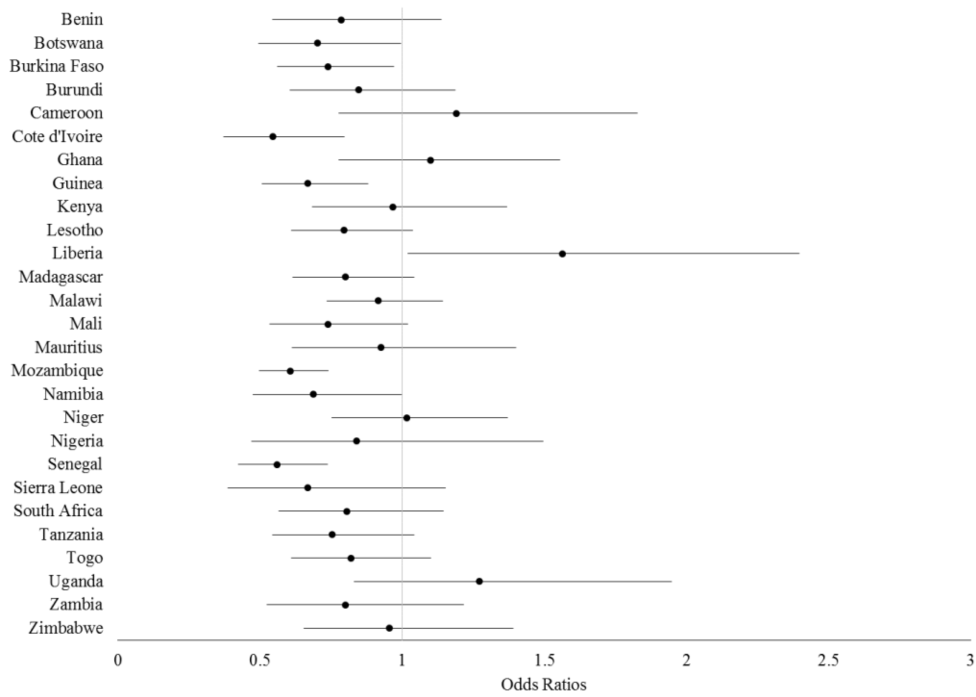


Figure 14. Odds Ratios for Distributive Fairness on Perceived Illegality, by Country.

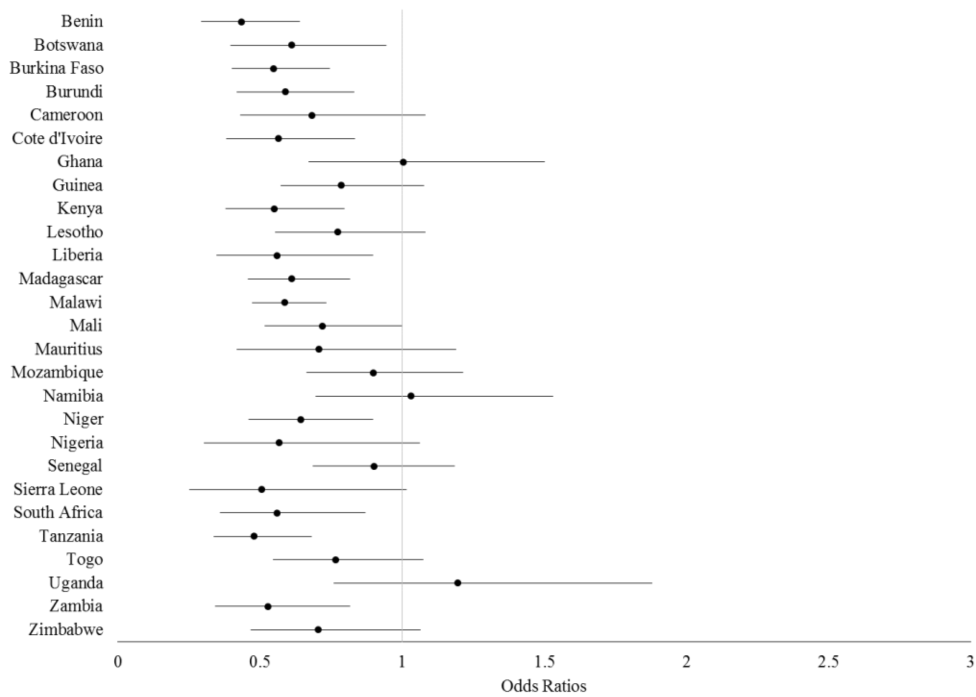
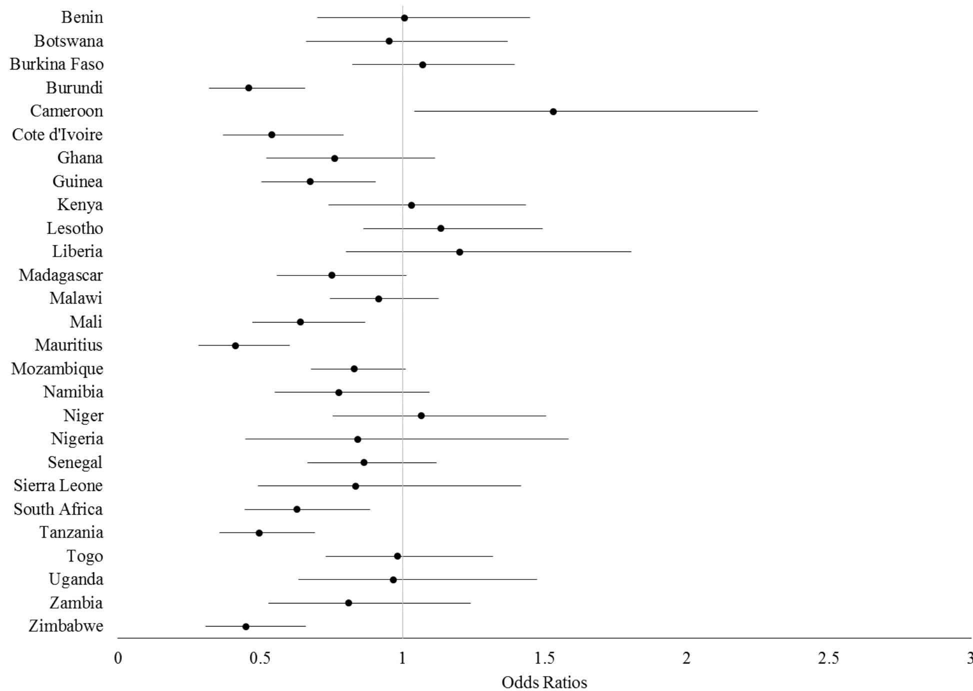


Figure 15. Odds Ratios for Perceived Effectiveness on Perceived Illegality, by Country



Summary of Results

Considering three different potential definitions of legitimacy (obligation to obey, moral alignment, and perceived legality), I find support for the conclusion that they are all driven to some extent by the same perceptions of fairness and effectiveness, regardless of definition (see Table 24). Consistently across the pooled samples, and regardless of the inclusion of various controls or other explanations of legitimacy, the perceptions of fair treatment, fair outcomes, and effective crime control were all significantly related to increasing perceptions of legitimacy (or decreasing perceptions of illegitimacy, depending on the measure). Similar to western models of legitimacy, normative criteria do play an important role in shaping perceptions of police legitimacy alongside more instrumental perceptions such as effectiveness. Moreover, concerns raised from previous victimization,

which could manifest in an elevated fear of crime, were also related to decreasing perceptions of legitimacy in the pooled sample.

Replicating previous work in less-industrialized countries that focused on country-specific samples, the results suggest considerable heterogeneity regarding the effects of these perceptions across the individual countries. To examine the country-by-country relationships between these three key correlates (procedural fairness, distributive fairness, and perceived effectiveness) with the three definitions of legitimacy, Tables 25 and 26 contains the odds ratios and significance for each correlate-definition combination for each country in the sample. Comparing across correlates and countries, a number of findings emerge.

Overall, I find that the normative model works consistently, if not significantly, in a number countries across all three correlates. The normative model of police legitimacy, whether based on fair treatment or fair outcomes, was significantly correlated with at least one of the definitions of legitimacy in the expected direction in all but five countries (Cameroon, Lesotho, Mauritius, Sierra Leone, and Uganda), providing strong support that police legitimacy in SSA is driven in part by perceptions of fairness. In seven countries (Benin, Botswana, Burkina Faso, Burundi, Malawi, Tanzania, and Zimbabwe), both procedural fairness and distributive fairness were correlated with all three dependent variables in the expected direction, although not each relationship was statistically significant. For another six countries (Cote D'Ivoire, Mozambique, Nigeria, Senegal, South Africa, and Togo), procedural fairness but not distributive fairness was correlated with all three dependent variables in the expected direction and at least one of those relationships was statistically significant. Two additional countries (Lesotho and

Madagascar) have correlated relationships between procedural fairness and all three dependent variables in the expected direction, but no relationship was statistically significant. Finally, in two countries (Mauritius and Sierra Leone), relationships between distributive fairness and all three dependent variables correlated in the expected direction but none of the relationships were statistically significant.

Complementing the normative model, the instrumental model of police legitimacy also finds consistent and strong support across the sample (see Table 26). In fifteen countries,[26] the relationship between perceived effectiveness and all three dependent variables was correlated in the expected direction, although not always statistically significant. Two additional countries (Malawi and Zambia) had correlated relationships in the expected direction, but none were statistically significant.

As Figure 9 previously demonstrates, there is a considerable gap in many countries between the odds ratios for perceived effectiveness and procedural fairness on obligation to obey. We find a similar gap between these two when examining cases where relationships were contrary to the hypothesized direction. Only one country had significant relationships between perceived effectiveness and any dependent variable that was contrary to the expected direction. For Cameroon, perceptions of effective crime control lead to a greater likelihood of consenting to the police *as well as* greater likelihoods of feeling morally distant from them (OR = 1.474) and perceiving them to be corrupt (OR = 1.531). Significant relationships for perceived effectiveness in all other countries were in the expected direction.

[26] Botswana, Burkina Faso, Burundi, Cote d'Ivoire, Ghana, Guinea, Mauritius, Nigeria, Senegal, Sierra Leone, South Africa, Tanzania, Togo, Uganda, and Zimbabwe.

For procedural fairness, three countries had at least one relationship with legitimacy that was significant and contrary to the expected direction. In Mali (OR = 0.719) and Sierra Leone (OR = 0.526), the more respondents perceived the police to treat people fairly, the less likely they were to consent to their authority. Among respondents in Liberia, the more you perceived the police to treat people fairly, the more likely you were to find them corrupt (OR = 1.564). Although not a large difference compared with perceived effectiveness (one country in a contrary direction vs. three countries), it is widened when considering that in no country was procedural fairness significantly related to each definition of legitimacy, regardless of direction; for perceived effectiveness, relationships in six countries were significant *and* in the expected direction for each definition of legitimacy (Burundi, Cote d'Ivoire, Guinea, South Africa, Tanzania and Zimbabwe).[27]

Overall, the evidence consistently suggests that both normative and instrumental perceptions of police are relevant for shaping perceptions of police legitimacy. For both normative and instrumental perceptions, they were correlated in the expected direction with each definition of legitimacy in a majority of countries (see Table 24). When weighting significant relationships in the expected direction, perceptions of effectiveness were significantly correlated with definitions of legitimacy more frequently (16 countries for obligation to obey; 12 countries for moral nonalignment; and 8 countries for perceived illegality) than perceptions of procedural fairness (11, 9, and 7 countries, respectively). Placing weight on expected directions, perceptions of procedural fairness (18 countries for obligation to obey; 23 countries for moral nonalignment; and 22 countries for perceived

[27] It should be noted that one country (Cameroon) had significant relationships between perceived effectiveness and all three dependent variables, but two of those relationships were contrary to the expected direction, as mentioned earlier. Also, one country (Malawi) had significant relationships between distributive fairness and all three dependent variables and each relationship was in the expected direction.

illegality) were as consistently related to the hypothesized relationship with definitions of legitimacy as perceived effectiveness (25, 22, and 20 countries, respectively). In sum, the results from this sample indicate that for many, but not all, countries, perceptions of effectiveness exerted a stronger, but not absolute, influence on perceived legitimacy than perceptions of fairness.

Table 24. Relationship Distribution between Key Independent Variables and Definitions of Legitimacy across Countries.

	Supporting			Countering		
Definition of Legitimacy	**# p<0.05**	**# p>0.05**	**Total**	**# p<0.05**	**# p>0.05**	**Total**
Obligation to Obey						
Procedural Fairness	11	7	**18**	2	7	**9**
Distributive Fairness	7	10	**17**	3	7	**10**
Perceived Effectiveness	16	9	**25**	1	1	**2**
Moral Nonalignment						
Procedural Fairness	9	14	**23**	0	4	**4**
Distributive Fairness	3	11	**14**	0	13	**13**
Perceived Effectiveness	12	10	**22**	1	4	**5**
Perceived Illegality						
Procedural Fairness	7	15	**22**	1	4	**5**
Distributive Fairness	14	10	**24**	0	3	**3**
Perceived Effectiveness	8	12	**20**	1	6	**7**

Table 25. Odds Ratios of Legitimacy on Procedural and Distributive Fairness, by Country and Definition of Legitimacy.

	Procedural Fairness			Distributive Fairness		
DV	OB	MN	PI	OB	MN	PI
Expected OR	>1	<1	<1	>1	<1	<1
Benin	1.456**	.652**	.787	.571***	.999	.434***
Botswana	1.943**	.868	.703*	1.006	.708*	.612*
Burkina Faso	1.471*	.834	.738*	1.217	.930	.547***
Burundi	1.619**	.512***	.848	1.287	.993	.590**
Cameroon	1.284	1.127	1.191	.778	1.046	.683
Cote d'Ivoire	1.240	.831	.544**	.919	1.030	.564**
Ghana	.982	.898	1.099	1.122	.800*	1.005
Guinea	.884	.951	.668**	1.925***	1.090	.786
Kenya	.949	.733***	.968	.761**	.885	.549**
Lesotho	1.232	.792	.796	1.054	1.001	.774
Liberia	.933	.647**	1.564*	.611**	1.076	.559*
Madagascar	1.196	.851	.800	.802	.848	.611***
Malawi	1.149	.959	.917	1.388**	.685***	.588***
Mali	.719*	.994	.739	1.390*	1.018	.719*
Mauritius	.809	.953	.926	1.256	.996	.707
Mozambique	1.590***	.877	.607***	.975	.938	.898
Namibia	1.624*	1.256	.688*	1.175	1.251	1.031
Niger	.822	.720*	1.015	.728	1.023	.643**
Nigeria	1.269*	.848	.839	.829	.938	.568
Senegal	1.461	.532***	.559***	1.103	1.049	.901
Sierra Leone	.526***	1.013	.668	1.310	.946	.506
South Africa	1.231*	.989	.805	1.326**	1.084	.559*
Tanzania	1.790***	.680***	.753	1.314**	.852	.480***
Togo	1.534**	.687*	.820	.820	1.034	.766
Uganda	.883	.924	1.273	1.000	1.024	1.195
Zambia	1.097	1.214	.799	1.906***	1.213	.529**
Zimbabwe	1.284*	.759*	.955	1.379**	.907	.705

ABBREVIATIONS: DV: Dependent Variable; OB = Obligation to Obey; MN = Moral Nonalignment; PL = Perceived Illegality; OR = Odds Ratio.
Notes: Odds Ratio = exp(*b*); Models include controls for socioeconomic controls (Age, Female, Education Level, Urban, Poverty Index, Employed, Present Country Conditions, Present Living Conditions, and Generalized Social Trust), survey controls (Others Present, Female Interviewer, Perceived Government Sponsor, Shares Language with Interviewer, and In home language) and instrumental concerns (Victimizations, Fear of Crime, and Interaction Term), which are not shown here.
*** $p<0.001$, ** $p<0.01$, * $p<0.05$ (two-tailed)
Source: Afrobarometer Round 5

Table 26. Odds Ratios of Legitimacy on Perceived Effectiveness, by Country and Definition of Legitimacy.

	Perceived Effectiveness		
DV	OB	MN	PI
Expected OR	>1	<1	<1
Benin	2.309***	1.065	1.007
Botswana	1.270	.673*	.953
Burkina Faso	1.079	.805	1.071
Burundi	1.763***	.625**	.458***
Cameroon	1.322*	1.474**	1.531*
Cote d'Ivoire	1.452*	.664*	.541**
Ghana	1.397*	.936	.763
Guinea	2.188***	.639**	.676**
Kenya	1.150	.949	1.030
Lesotho	1.278	.769	1.135
Liberia	2.440***	.877	1.202
Madagascar	.915	.533**	.753
Malawi	1.129	.875	.916
Mali	.989	1.021	.641**
Mauritius	1.217	.896	.414***
Mozambique	1.412***	1.096	.829
Namibia	1.273	1.051	.777
Niger	2.145***	.854	1.065
Nigeria	1.611***	.743**	.842
Senegal	1.383	.712*	.864
Sierra Leone	1.435*	.759*	.835
South Africa	1.273*	.788*	.629**
Tanzania	1.438***	.789*	.497***
Togo	1.614***	.735*	.982
Uganda	1.800***	.919	.968
Zambia	1.156	.883	.810
Zimbabwe	1.280*	.799*	.450***

ABBREVIATIONS: DV: Dependent Variable; OB = Obligation to Obey; MN = Moral Nonalignment; PL = Perceived Illegality; OR = Odds Ratio.
Notes: Odds Ratio = exp(*b*); Models include controls for socioeconomic controls (Age, Female, Education Level, Urban, Poverty Index, Employed, Present Country Conditions, Present Living Conditions, and Generalized Social Trust), survey controls (Others Present, Female Interviewer, Perceived Government Sponsor, Shares Language with Interviewer, and In home language) and instrumental concerns (Victimizations, Fear of Crime, and Interaction Term), which are not shown here.
*** $p<0.001$, ** $p<0.01$, * $p<0.05$ (two-tailed)
Source: Afrobarometer Round 5

Is obligation to obey a component of or a consequence of police legitimacy?

As Tankebe (2013a) notes, obligation to obey could occur for a number of reasons outside of the legitimacy hypothesis. Dull compulsion and coercion from the state could increase willingness to consent to authorities and be unrelated to perceptions of legitimacy. Thus, considering obligation to obey as an outcome of legitimacy rather than a component is in alignment with theoretical frameworks from political philosophy that focus on the shared values of procedural fairness, perceived effectiveness and distributive fairness alongside perceived legality [H_{12}].

In addition, others argue that moral alignment, rather than obligation to obey, is the key link between shared values and compliance (Hough et al., 2013a). Coupled with previous studies highlighting the non-significant relationship between obligation to obey and compliance when moral alignment is included, it is suggested that moral alignment is the primary conduit for how perceptions shape legitimacy and ultimately shape compliance. Thus, not only should moral alignment have a significant direct effect on obligation to obey [H_{13}], but once included as a predictor, it should completely mediate the influence of other shared values (fairness, effectiveness, and legality) on obligation to obey [H_{14}].

To test whether these assertions are relevant to police legitimacy in SSA, I run a series of additional models highlighted in Table 27 that include all previous controls, instrumental and normative criteria alongside perceptions of moral nonalignment and perceived illegality. In essence, these models estimate obligation to obey as an outcome of shared values of legitimacy, which include moral nonalignment and perceived illegality. Model 29 provides a baseline comparison of the full model of obligation to obey used in

previous analyses. Model 30 adds police illegality (both its individual-level variable and country-level group mean) into the model to test whether perceived illegality has a direct effect on obligation to obey [H_{12}]. Model 31 adds moral nonalignment (both its individual-level variable and country-level group mean) into the model to test whether moral nonalignment has a direct effect on obligation to obey [H_{13}]. Finally, both perceived illegality and moral nonalignment are included in a new full model of obligation to obey to test both hypothesis as well as identify any mediation of shared values that may occur from the inclusion of moral nonalignment [H_{14}].

Overall, the results partially support the hypotheses. Counter to Tankebe's (2013a) assertion, perceived illegality was not significantly correlated with obligation to obey in any of the models [H_{12}]. Whether individuals perceive the police to be corrupt or not did not influence their willingness to consent to their authority. The inability to reject the null hypothesis here runs counter to typologies of legitimate authorities that include perceptions of their legality (Beetham, 1991). It is important to note, though, that the contextual effect of corruption does influence obligation to obey, even with individual-level perceptions of corruption as well as other relevant variables included. Thus, it may be that the aggregate perception of corruption is more important for consent than individual deviations from the country-mean in corruption perception (as assumed under the group-mean centered model).

Moral nonalignment was also significantly correlated with obligation to obey and in the expected direction (negative) [H_{13}]. Whether perceived illegality was or was not included, this result held, and the statistically insignificant relationship between the group-mean of moral nonalignment and obligation to obey suggests that the strength of this

relationship lies within countries rather than between. Most importantly, the inclusion of both moral nonalignment and perceived illegality did little to mediate the direct relationship between perceptions of fairness and effectiveness with obligation to obey [H_{14}]. In contrast to the argument that moral alignment is the pathway by which shared values work to influence cooperation and other outcomes of legitimacy, for obligation to obey this hypothesis is not supported in this sample. Coupled with previous results suggesting significant relationships between instrumental/normative criteria and moral nonalignment / perceived illegality, the analysis here suggests that future inquiry outside this dissertation using path analysis within a multi-level framework, as well as measures of compliance/cooperation, is needed to fully confirm whether the original hypothesis can be tested within SSA.

Table 27. Random-Intercept Logistic Models Regressing Obligation to Obey on Legitimacy, Instrumental Concerns and Normative Criteria.

	Model 29			Model 30			Model 31			Model 32		
VARIABLES	*b*	SE	OR	*b*	SE	OR	*b*	SE	OR	*b*	SE	OR
Legitimacy Expanded												
Perceived Illegality				-.074	.071	.929				-.064	.071	.938
Perceived Illegality GM				.831	.676	2.296				1.456	.980	4.289
Moral Nonalignment							-.138**	.043	.871	-.134**	.043	.875
Moral Nonalignment GM							-.147	.927	.863	-1.649	1.599	.192
Legitimacy												
Perc. Procedural Fairness	.189**	.060	1.208	.186**	.060	1.204	.184**	.060	1.202	.181**	.060	1.198
Perc. Effectiveness	.334***	.044	1.397	.332***	.045	1.394	.332***	.044	1.394	.330***	.044	1.391
Distrib. Fairness	.040	.064	1.041	.036	.062	1.037	.039	.063	1.040	.035	.062	1.036
Instrumental Concerns												
Victim of Crime (VC)	-.048	.049	.953	-.050	.049	.951	-.044	.050	.957	-.046	.049	.955
Fear of Crime (FC)	-.012	.060	.988	-.014	.060	.986	-.008	.060	.992	-.011	.060	.989
VC X FC	-.137*	.065	.872	-.132*	.065	.876	-.137*	.065	.872	-.131*	.065	.877
Visible Police Present	-.059	.043	.943	-.059	.043	.943	-.055	.044	.946	-.055	.043	.946
Contextual												
Corruption Perception Index	.028	.015	1.028	.036*	.017	1.037	.028	.016	1.028	.037*	.015	1.038
N of Respondents	42,353			42,256			42,323			42,226		
N of Countries	27			27			27			27		

ABBREVIATIONS: SE = Standard Error; OR = Odds Ratio; GM = Group-Mean; Perc. = Perceived; Distrib. = Distributive; Int. = Interviewer.
Notes: Odds Ratio = exp(*b*); Models include controls for socioeconomic controls (Age, Female, Education Level, Urban, Poverty Index, Employed, Present Country Conditions, Present Living Conditions, and Generalized Social Trust), survey controls (Others Present, Female Interviewer, Perceived Government Sponsor, Shares Language with Interviewer, and In home language), Country-level group means (Perceived Procedural Fairness, Perceived Effectiveness, Distributive Fairness, Victim of Crime, Fear of Crime, their interaction term, and Visible Police Presence within PSU), and Country-level Controls (Armed Conflict, Country Population (ln), Country Per-Capita GDP (ln)), which are not shown here and not significantly different than Model 14.
*** p<0.001, ** p<0.01, * p<0.05 (two-tailed)
Source: Afrobarometer Round 5

Robustness Checks and Sensitivity Analyses

While the results across key correlates and definitions of legitimacy have been consistently supported both the instrumental and normative models of police legitimacy, these results could be sensitive to a number of methodological modifications and theoretical variations. In order to confirm the robustness of the previous results, I ran a number of additional models focusing on different definitions of key dependent variables, different modeling strategies, and alternative explanations of police legitimacy. The justification for each sensitivity check and robustness test, along with the results, are detailed below.

Different Definition of Moral Nonalignment

As mentioned in Chapter 3, the construction of the variable for moral nonalignment included both a conservative and expanded definition. The conservative definition focused on those reasons for not reporting crime to the police that were aligned solely with a moral disjuncture between citizen and state. In contrast, the expanded version included aspects of nonalignment that are tied to perceptions of poor police capacity, including that the police "won't respond in time" or "can't do anything" about the crime, among others. If this different definition does influence the relationships between instrumental and normative models of police legitimacy, it is assumed that it will increase the relative influence of the instrumental criteria (perceived effectiveness), due to the inclusion of capabilities-based items into the expanded definition. To test this potential sensitivity, I run two multilevel logistic regression models for the pooled sample of countries, using both the previous and expanded definitions of moral nonalignment. Using this expanded version, in Table 28, I find that the relationships between perceptions of fairness and

effectiveness with moral nonalignment are in the same configuration for both the conservative and expanded definitions. Not only were all three criteria significantly correlated with moral nonalignment, but the magnitude of their effects in relation to one another also held a similar pattern between the two models (see Table 28). Regarding instrumental concerns, the relationship between fear of crime and moral nonalignment was stronger than recent victimization with the conservative definition, but was weaker than recent victimization with the expanded definition. One possibility is that a definition of moral nonalignment that includes capabilities-based assessments of police performance would be more strongly correlated with those who have been victimized rather than just fear crime, as victimization relates to a direct experience with the failures of police capabilities to protect the individual.

In addition, when modeling an expanded definition that includes police capabilities, the presence of police was significantly and negatively correlated with moral nonalignment. Thus, for those who live in areas where the police were visibly present, they were less likely to perceive a moral nonalignment with the police compared to those areas where the police were not visibly present. The direction of this relationship is also contrary to the relationship with the conservative definition, suggesting that police presence in a local area can reduce perceptions of poor response capabilities while also increasing the salience of moral values in shaping perceptions of legitimacy. Additionally, no substantial differences were found between any of the controls or country-level effects between the two models. Overall, the expanded definition of moral nonalignment did not modify the underlying conclusion that both normative and instrumental models of police performance influence perceptions of police legitimacy. More importantly, normative criteria

(specifically procedural fairness) exerted a stronger influence on moral nonalignment in both models, replicating earlier findings and in contrast to expectations derived from models that use obligation to obey as the dependent variable.

Table 28. Sensitivity Analysis for Different Definitions of Moral Nonalignment.

VARIABLES	Moral Nonalignment *b*	SE	OR	Expanded Moral Nonalignment *b*	SE	OR
Individual-Level						
Perc. Procedural Fairness	-.179***	.035	.836	-.156***	.032	.856
Perc. Effectiveness	-.138***	.035	.871	-.137***	.032	.872
Distrib. Fairness	-.060*	.028	.942	-.100***	.028	.905
Instrumental Concerns						
Victim of Crime (VC)	.195**	.06	1.215	.284***	.049	1.328
Fear of Crime (FC)	.213***	.058	1.237	.190***	.050	1.209
VC X FC	-.076	.077	.927	-.019	.070	.981
Visible Police Presence	.130**	.049	1.139	-.099*	.049	.906
Socioeconomic Controls						
Age	-.002**	.001	.998	-.002*	.001	.998
Female	-.163***	.031	.850	-.191***	.022	.826
Education Level	.076***	.013	1.079	.075***	.014	1.078
Urban	.374***	.046	1.454	.175***	.042	1.191
Poverty Index	.077**	.027	1.080	.140***	.015	1.150
Employed	.081*	.039	1.084	.056	.037	1.058
Present Country Conditions	-.070***	.015	.932	-.075***	.017	.928
Present Living Conditions	-.018	.014	.982	-.010	.014	.990
Generalized Social Trust	-.177***	.041	.838	-.133*	.053	.875
Survey Controls						
Others Present	-.001	.033	.999	-.029	.038	.971
Female Interviewer	.011	.065	1.011	-.099	.055	.906
Perc. Government Sponsor	.003	.035	1.003	.046	.030	1.047
Shares Language with Int.	-.040	.036	.961	-.072	.049	.931
In home language	.107**	.037	1.113	.058	.034	1.060
Intercept	-2.466***	.811	.085	-1.386*	.632	.250
Country-Level						
Perc. Procedural Fairness GM	-.375	.797	.687	-.037	.759	.964
Perc. Effectiveness GM	.776	.534	2.173	.661	.587	1.937
Distrib. Fairness GM	1.091	1.446	2.977	1.128	.984	3.089
Victim of Crime GM	2.598***	.592	13.437	2.709***	.740	15.014
Fear of Crime GM	-.520	.795	.595	-.443	.691	.642
Visible Police Presence GM	.023	.799	1.023	-.957	.520	.384
Armed Conflict prior/curr. year	.674***	.145	1.962	.627***	.182	1.872
Country Population (ln)	.184	.121	1.202	.074	.081	1.077
Country Per-Capita GDP (ln)	-.044	.168	.957	.187	.101	1.206
Corruption Perception Index	-.009	.017	.991	-.020	.012	.980
Random Intercept	-2.064***	.301	.127	-2.429***	.294	.088
N of Respondents		42,343			42,343	
N of Countries		27			27	

ABBREVIATIONS: SE = Standard Error; OR = Odds Ratio; GM = Group-Mean; Perc. = Perceived; Distrib. = Distributive; Int. = Interviewer.

Notes: Odds Ratio = exp(*b*); Perceived Procedural Fairness, Perceived Effectiveness, Distributive Fairness, Victim of Crime, Fear of Crime, their interaction term, and Visible Police Presence within PSU are all group-mean centered; all other individual-level variables are grand-mean centered.

*** $p<0.001$, ** $p<0.01$, * $p<0.05$ (two-tailed)

Source: Afrobarometer Round 5

Different Definition of Perceived Illegality

The relationship between instrumental and normative criteria with perceived illegality can also be sensitive to definitional configurations. Highlighted in Chapter 3, the primary survey question that underlies perceptions of police illegality focuses on the proportion of the police a respondent perceives to be corrupt. Responses could include "none," "some," "most," or "all," and it was proposed that the key differentiation was between those who perceive no corruption in the police and those who perceived at least some corruption. An alternative configuration would look only at severe corruption, coding as "1" only those who perceive that "most" or "all" of the police are corrupt; a substantial violation of the social contract between police and citizens. In one sense, individuals who perceive severe corruption have given up on the legitimacy of the police altogether.

To test the sensitivity of results to definitional differences in perceived illegality, I run multilevel logistic regression models across the pooled sample for both any corruption and severe corruption. In Table 29, the two configurations show few differences in the key correlates of perceived illegality. Distributive fairness was the strongest correlate of perceived illegality among normative and instrumental criteria, yet all three were significantly correlated in each model. Similar to moral nonalignment, the relative magnitude of the relationships between perceived illegality, victims of crime and fear of crime switched between different definitions of illegality. For perception of any corruption within the police, crime victimization was the strongest influence of the instrumental concerns, while in the context of perceptions of severe corruption, it is fear of crime within the last year that was the stronger effect. In addition, although the directionality of each of the control variables were consistent between the two models, suggesting little sensitivity

to definition, there were some key differences. For example, unlike the null relationship between poverty and any corruption, the greater the level of poverty the more likely to find the police severely corrupted. In addition, the significant correlations between two survey controls (others present and female interviewer) and any corruption were no longer significant for models of severe corruption. Table 29 also shows that for the model of any corruption, the relationship with the country-level Corruption Perception Index was negative but not significant, while in the model of severe corruption it was negative and significant. In both cases, one's perception of police corruption is less likely in countries who are perceived to be less corrupt (higher on the CPI). Thus, the contextual level of corruption matters for individual-level perceptions of police corruption, but additional research outside this dissertation is needed to understand why.

Table 29. Sensitivity Analysis for Different Definitions of Perceived Illegality.

VARIABLES	Any Corruption *b*	SE	OR	Severe Corruption *b*	SE	OR
Individual-Level						
Perc. Procedural Fairness	-.209***	.046	.812	-.252***	.054	.777
Perc. Effectiveness	-.177**	.055	.838	-.245***	.045	.783
Distrib. Fairness	-.408***	.055	.665	-.322***	.044	.725
Instrumental Concerns						
Victim of Crime (VC)	.172**	.055	1.188	.095*	.040	1.100
Fear of Crime (FC)	.103*	.046	1.109	.131**	.041	1.140
VC X FC	.086	.077	1.090	.068	.057	1.070
Visible Police Presence	.050	.045	1.051	.065	.035	1.067
Socioeconomic Controls						
Age	-.006***	.001	.994	-.004***	.001	.996
Female	-.247***	.031	.781	-.139***	.031	.870
Education Level	.215***	.024	1.240	.086***	.015	1.090
Urban	.200***	.036	1.221	.106*	.043	1.112
Poverty Index	-.027	.029	.974	.068**	.023	1.070
Employed	.146**	.052	1.157	.073*	.036	1.076
Present Country Conditions	-.083***	.023	.920	-.074***	.020	.929
Present Living Conditions	.000	.022	1.000	-.033	.018	.968
Generalized Social Trust	-.284***	.041	.753	-.114*	.049	.892
Survey Controls						
Others Present	-.145**	.054	.865	.013	.033	1.013
Female Interviewer	-.220***	.055	.802	-.035	.058	.966
Perc. Government Sponsor	.014	.047	1.014	-.048	.045	.953
Shares Language with Int.	-.066	.059	.937	.056	.045	1.058
In home language	.057	.058	1.059	.063	.047	1.065
Intercept	.881	.945	2.414	-1.482	.806	.227
Country-Level						
Perc. Procedural Fairness GM	2.077	1.079	7.979	1.146	.885	3.146
Perc. Effectiveness GM	-.148	.656	.863	.238	.676	1.269
Distrib. Fairness GM	.470	1.604	1.600	.748	1.132	2.113
Victim of Crime GM	3.281**	1.143	26.598	2.866**	.872	17.567
Fear of Crime GM	-2.653**	.916	.070	-.817	.758	.442
Visible Police Presence GM	-.470	.950	.625	-.735	.394	.480
Armed Conflict prior/curr. year	.672**	.195	1.958	.470	.318	1.600
Country Population (ln)	.174	.144	1.191	.111	.098	1.117
Country Per-Capita GDP (ln)	.442**	.175	1.556	.217**	.081	1.242
Corruption Perception Index	-.043	.022	.958	-.044***	.013	.957
Random Intercept	-1.579	.346	.206	-2.078***	.355	.125
N of Respondents		42,275			42,275	
N of Countries		27			27	

ABBREVIATIONS: SE = Standard Error; OR = Odds Ratio; GM = Group-Mean; Perc. = Perceived; Distrib. = Distributive; Int. = Interviewer.

Notes: Odds Ratio = exp(*b*); Perceived Procedural Fairness, Perceived Effectiveness, Distributive Fairness, Victim of Crime, Fear of Crime, their interaction term, and Visible Police Presence within PSU are all group-mean centered; all other individual-level variables are grand-mean centered.

*** p<0.001, ** p<0.01, * p<0.05 (two-tailed)

Source: Afrobarometer Round 5

Inclusion of Regional Ethnic Minority and Ethnic Group Size

Focusing on alternative explanations of police legitimacy, it could be argued that one's perception of state institutions is not based solely on their interactions with these institutions, but also on their status as a minority within their country or region. Consistent with research in industrialized countries, where police mistreatment of ethnic or racial minorities evokes a cynical view towards state and legal legitimacy (Kirk and Papachristos, 2011), one's ethnic minority status within the country may have similar effects. In SSA, the police as an institution are often used in a coercive way (Tankebe, 2008; Tankebe, 2013b), especially in repressive regimes and towards ethnic minorities within a country. Thus, it could be hypothesized that the perception of police legitimacy is not solely a function of interaction with criminal justice institution, but also the relative size of one's ethnic group as well as its status as a minority within the country.

In order to test this alternative explanation, I include two additional variables across all three definitions of legitimacy to examine the relationships between ethnic minority status and police legitimacy. Following other studies using the Afrobarometer data (Robinson, 2014; Adida et al., 2016), I calculated the relative size of an ethnic group within a country based on the ethnic self-identification of respondents to the survey. Using this measure of ethnic group size, I also calculated whether that ethnic group constituted a minority of respondents from the respondent's first-order administrative division of their country (usually state or province). Although this is a less-than-ideal way to identify minority status of individuals, since the Afrobarometer was not created to be population and ethnically proportionate at the first-order administrative areas, this proxy could provide

at least some suggestion that ethnic status matters in shaping perceptions of police legitimacy, and has been used in previously-published studies.

In Table 30, I run multilevel logistic regression models for each definition of legitimacy, including both the respondent's status as a regional ethnic minority as well as the size of their ethnic group. Results from these analyses suggest that across all three definitions, the size of one's ethnic group as well as its status as a regional ethnic minority had no significant statistical influence on perceptions of legitimacy. More importantly, the relative importance of instrumental and normative criteria with each definition of legitimacy also remains unchanged with the inclusion of these two variables. While only an initial test, requiring further exploration in future research, this robustness check does suggest that ethnicity as a structural or demographic factor may not shape one's perception of police legitimacy in SSA. What remains unexplained is whether one's perception of ethnic status, the group's political relevance, or direct treatment of one's ethnic group is significantly relevant to shaping perceptions of police legitimacy.

Table 30. Robustness Check for Regional Minority Status and Size of Ethnic Group.

	Obligation to Obey		Moral Nonalignment		Perceived Illegality	
VARIABLES	*b*	SE	*b*	SE	*b*	SE
Variables of Interest						
Regional Ethnic Minority	-.015	.045	-.031	.037	-.001	.050
Size of Ethnic Group	-.204	.217	.068	.145	.072	.204
Individual-Level						
Perc. Procedural Fairness	.192**	.060	-.180***	.033	-.201***	.045
Perc. Effectiveness	.333***	.046	-.138***	.036	-.170**	.053
Distrib. Fairness	.039	.062	-.063*	.028	-.410***	.054
Instrumental Concerns						
Victim of Crime (VC)	-.061	.051	.190***	.058	.177***	.053
Fear of Crime (FC)	.005	.058	.217***	.058	.093	.051
VC X FC	-.137*	.066	-.071	.073	.098	.077
Visible Police Present	-.067	.047	.134**	.049	.055	.047
Socioeconomic Controls						
Age	-.001	.001	-.002**	.001	-.006***	.001
Female	-.030	.040	-.159***	.029	-.248***	.031
Education Level	.018	.019	.074***	.013	.211***	.024
Urban	.038	.043	.383***	.048	.200***	.037
Poverty Index	.014	.027	.076**	.027	-.030	.028
Employed	-.049	.072	.079*	.039	.143**	.051
Present Country Conditions	.019	.019	-.071***	.017	-.084***	.023
Present Living Conditions	-.024	.017	-.016	.015	.003	.023
Generalized Social Trust	-.054	.048	-.174***	.038	-.287***	.041
Survey Controls						
Others Present	.017	.051	.005	.034	-.140*	.055
Female Interviewer	-.238**	.091	.003	.068	-.212***	.057
Perc. Government Sponsor	.027	.048	.004	.036	.016	.047
Shares Language with Int.	.021	.085	-.057	.033	-.072	.063
In home language	.010	.075	.098**	.038	.057	.053
Intercept	1.401*	.586	-2.522**	.841	.846	.963
Country-Level						
Perc. Procedural Fairness GM	-.255	.634	-.326	.819	2.220*	1.094
Perc. Effectiveness GM	.551	.666	.775	.540	-.211	.665
Distrib. Fairness GM	.187	.704	1.081	1.486	.396	1.622
Victim of Crime GM	.350	.894	2.605***	.575	3.406**	1.133
Fear of Crime GM	-1.003	.715	-.421	.842	-2.712**	.943
Visible Police Present GM	-.292	.540	.048	.807	-.391	.954
Armed Conflict prior/curr year	-.069	.153	.689***	.149	.699***	.202
Country Population (ln)	.031	.106	.183	.123	.178	.143
Country Per-Capita GDP (ln)	-.029	.101	-.034	.173	.439*	.176
Corruption Perception Index	.028	.016	-.009	.017	-.043*	.022
Random Intercept	-2.352***	.350	-2.032***	.302	-1.577***	.348
N of Respondents	41,046		41,036		40,969	
N of Countries	27		27		27	

ABBREVIATIONS: SE = Standard Error; GM = Group-Mean; Perc. = Perceived; Distrib. = Distributive; Int. = Interviewer. Notes: Odds Ratio = exp(*b*); Perceived Procedural Fairness, Perceived Effectiveness, Distributive Fairness, Victim of Crime, Fear of Crime, their interaction term, and Visible Police Presence within PSU are all group-mean centered; all other individual-level variables are grand-mean centered.
*** p<0.001, ** p<0.01, * p<0.05 (two-tailed)
Source: Afrobarometer Round 5

Colonial Legacy

Countries in SSA are not only shaped by present crises, but also by manifestation of colonial legacies within current institutions. As Chapter 3 highlights, former British colonies could have more widespread consent to authority resulting from the use of local representatives within those agencies; in contrast, the elevation of minority group members could strain the perceived legitimacy between citizen and police. Not only could the perception of legitimacy be influenced by the colonial legacy of a country, but also the relationship between normative criteria with legitimacy. Therefore, I include a measure identifying those countries that were former British colonies immediately prior to their independence, including: Botswana, Ghana, Kenya, Lesotho, Malawi, Mauritius, Namibia, Nigeria, Sierra Leone, South Africa, Tanzania, Uganda, Zambia, and Zimbabwe.

In Table 31, I run one multilevel logistic regression model that includes the country-level variable for British colony for each definition of legitimacy. Examining the relationship across all three definitions of legitimacy, I find some key similarities and differences with previous models. The inclusion of colonial legacy did not mediate the relationships between perceived fairness, distributive fairness, and perceived effectiveness with each definition of legitimacy (see Table 31). For all three definitions, these three relationships were in the hypothesized direction and were correlated with the dependent variables in roughly the same magnitude as those models without colonial legacy. An initial conclusion is that regardless of colonial history, both instrumental and normative criteria are relevant for shaping perceptions of police legitimacy across the continent.

The inclusion of colonial legacy, though, does influence overall perceptions of police legitimacy, apart from instrumental and normative criteria. Those residing in former

British colonies are more likely to consent to their authority as legitimate (or obligate to obey). For the pooled analysis, this effect was larger than perceived effectiveness or fairness, suggesting that individual perceptions of the police are not only shaped by perceptions of police performance, but also by the contextual legacy of colonial history between countries that shapes the nature of police institutions themselves. These results are consistent with expectations that indirect rule and the inclusion of local populations within British colonial police forces (Deflem, 1994) increased the legitimacy of the police among those colonized. More importantly, in contrast to the armed *Gendarmerie* forces that constituted French colonial policing, the British model of policing (unarmed civilian police) fostered within their colonies in SSA could have encouraged more pro-social contact between police and citizen, thereby legitimizing their authority in the country. A number of possible reasons could explain the difference in consenting authority between former British colonies and other colonies in SSA, but these results do suggest that perceptions of the police are a function of both current criteria and historical contingencies.

In contrast to the higher likelihood of consent, those residing in former British colonies are also *more* likely to perceive a moral disjuncture between themselves and the police. This relationship is one of the most influential in shaping overall perceptions of the police, above and beyond instrumental and normative criteria. Recall that this variable captures individuals who state the main reason people do not report crime to the police because the police don't care or listen, are to be feared, may be involved in the crime itself, or may turn the case against the person reporting the crime. These fears or concerns reflect a view that police do not share the same values as the community; in essence, the police and the community are separate in the view of the respondent. The practice of "policing

strangers by strangers" (Deflem, 1994), or using locals who are from a similar-but-not-same ethnic group to police an administrative area within former British colonies created conditions where the community could simultaneously respect the institution but find that they do not share their values. Thus, the process of British colonization and subsequent African independence fostered a culture of police-citizen relations that finds them institutionally legitimate yet representatively illegitimate, although additional research is needed to explore this relationship in more depth.

Regime Type

As mentioned previously, the normative model of police legitimacy is inherently intertwined with democratic notions of fairness, equity, and justice (Tankebe, 2010; Bottoms and Tankebe, 2012). Often tested in industrialized countries with stable democracies, the normative model has rarely been examined outside these contexts. To address questions in which the context of a country's regime type could influence the strength or salience of the normative model of legitimacy, I run an additional model that includes one interval measure drawn from the Polity2 score from the PolityIV Database (Marshal, Gurr, and Jaggers, 2014; Polity IV Project, 2016). This score ranges between -10 and 10, representing an index based upon the level of political competition, constraints on executive authority, and executive recruitment within the country. Although there are other measures of democracy that could be utilized in this study (McHenry Jr., 2000; Vanhanen, 2000; Lindberg, Coppedge, Gerring, and Teorell, 2014), and no measures of democracy is perfect, the broad coverage of nations within SSA as well as the scaled measure of autocracy to democracy within the PolityIV data provide the ability to capture a range of regime types that could be relevant to shaping the strength of the normative

model. In Table 31, for the same models that include the variable of former British colonies, I also include the variable for level of democracy in that country. Overall, across all three definitions of legitimacy, the level of democracy in a country measured by the PolityIV data was non-significant in shaping perceptions of police legitimacy (see Table 31).

Table 31. Robustness Check including Former British Colonies and Level of Democracy.

VARIABLES	Obligation to Obey		Moral Nonalignment		Perceived Illegality	
	B	SE	*b*	SE	*b*	SE
Variables of Interest						
Former British Colony	.441*	.174	.595**	.198	.697	.372
Level of Democracy (Polity2)	.020	.021	.010	.019	.027	.029
Individual-Level						
Perc. Procedural Fairness	.192**	.060	-.180***	.033	-.201***	.045
Perc. Effectiveness	.333***	.046	-.138***	.036	-.170**	.053
Distrib. Fairness	.039	.062	-.063*	.028	-.410***	.054
Instrumental Concerns						
Victim of Crime (VC)	-.061	.051	.190***	.058	.177***	.053
Fear of Crime (FC)	.005	.058	.217***	.058	.093	.051
VC X FC	-.137*	.066	-.071	.073	.097	.077
Visible Police Present	-.067	.047	.133**	.049	.055	.047
Socioeconomic Controls						
Age	-.001	.001	-.002**	.001	-.006***	.001
Female	-.031	.040	-.160***	.029	-.248***	.031
Education Level	.018	.019	.074***	.013	.211***	.024
Urban	.040	.043	.385***	.048	.203***	.037
Poverty Index	.015	.028	.077**	.027	-.029	.028
Employed	-.050	.072	.077*	.039	.142**	.051
Present Country Conditions	.019	.019	-.071***	.017	-.084***	.023
Present Living Conditions	-.023	.017	-.015	.015	.003	.023
Generalized Social Trust	-.053	.048	-.173***	.038	-.285***	.041
Survey Controls						
Others Present	.017	.051	.005	.034	-.140*	.055
Female Interviewer	-.237**	.091	.003	.068	-.212***	.057
Perc. Government Sponsor	.027	.048	.004	.036	.015	.047
Shares Language with Int.	.018	.085	-.059	.033	-.075	.063
In home language	.012	.075	.098**	.038	.055	.053
Regional Ethnic Minority	-.015	.045	-.032	.037	-.003	.049
Size of Ethnic Group	-.200	.216	.066	.144	.071	.201
Intercept	2.194***	.532	-1.421	.893	2.110*	1.012
Country-Level						
Perc. Procedural Fairness GM	-1.509*	.708	-2.000*	.915	.242	1.441
Perc. Effectiveness GM	.811	.599	1.138	.655	.226	.776
Distrib. Fairness GM	-.155	.649	.644	1.123	-.153	1.144
Victim of Crime GM	-.319	.768	1.520	.879	2.273	1.946
Fear of Crime GM	-.949	.653	-.394	.769	-2.624***	.790
Visible Police Present GM	-.115	.490	.289	.696	-.116	.672
Armed Conflict prior/curr year	-.204	.153	.498***	.148	.483*	.212
Country Population (ln)	.016	.080	.166	.091	.154	.105
Country Per-Capita GDP (ln)	-.152	.096	-.197	.165	.249	.163
Corruption Perception Index	.031*	.013	-.002	.015	-.037*	.016
N of Respondents	41,046		41,036		40,969	
N of Countries	27		27		27	

ABBREVIATIONS: SE = Standard Error; GM = Group-Mean; Perc. = Perceived; Distrib. = Distributive; Int. = Interviewer. Notes: Odds Ratio = exp(*b*); Perceived Procedural Fairness, Perceived Effectiveness, Distributive Fairness, Victim of Crime, Fear of Crime, their interaction term, and Visible Police Presence within PSU are all group-mean centered; all other individual-level variables are grand-mean centered.
*** p<0.001, ** p<0.01, * p<0.05 (two-tailed)

Summary of Results across Hypotheses

To summarize the results from this dissertation, Table 32 provides an overall assessment of the 14 hypotheses and the resulting level of support the each received within the analysis. Those hypotheses that receive support in the hypothesized direction in the pooled analysis are noted by a checkmark in that column, while those hypotheses that received support contrary to the hypothesized direction, or were non-significant and therefore unable to reject the null hypothesis of no effect, are denoted by a series of dashes.

For the country-by-country analysis, where tested, two dimensions of support were reported. The first dimension is relationships that were in the hypothesized direction and statistically significant at $p<0.05$ level. Those hypotheses where at least half of the sample (14 countries) exhibiting significant relationships were noted as "strong," while those between one-third to one-half of the sample (9-13 countries) recorded as "moderate" and those with less than one-third of the sample noted as "weak." As a second dimension, the consistency of directionality for those hypothesized relationships, whether significantly supported or not, is reported to highlight the general pattern of potential relationships.[28] Dividing the number of countries into thirds, those relationships that were consistently in the hypothesized direction (whether significant or not) for at least two-thirds of the sample (18 countries) were noted as "consistent," while those between one-third and two-thirds of the sample (9-17 countries) were noted as "neutral." Those where less than nine countries were in the hypothesized direction were noted as "inconsistent."

---

[28] An alternative method would be to calculate Bayes factors for each relationship within each country. Bayes factors allow the examination of the relative strength of evidence for relationships which don't meet the specific threshold of significance (two-tailed, $p<0.05$). The use of Bayes factors under conditions of multiple imputation remains underdeveloped, which precludes its use here, but remains a possible topic for future research in this area.

Overall, the results support the conclusion that the instrumental and normative criteria were consistent and significant drivers of police legitimacy across countries of Sub-Saharan Africa. This is true for both obligation to obey as well as moral nonalignment, with weaker support for the perceived illegality of the police. For perceived illegality, distributive fairness was the perception that strongly and consistently shaped police legitimacy from country to country. In addition, although individual instrumental concerns such as crime victimization and fear of crime decreased the likelihood of obligation to obey the police, these concerns did not influence legitimacy through perceptions of effectiveness. Rather, both instrumental criteria and instrumental concerns had direct effects on obligation to obey, controlling for normative criteria and other relevant variables.

Recent revisions of legitimacy theory (Bottoms and Tankebe, 2012; Tankebe, 2013a), which place obligation to obey as an outcome of legitimacy rather than a component, were partially supported in this dissertation. Although moral alignment had a significant and positive effect on obligation to obey, it did not mediate the direct relationships between shared values and obligation to obey as hypothesized elsewhere. Moreover, perception of police illegality, while driven by some of the same instrumental and normative criteria as other definitions of legitimacy, was not significantly correlated with obligation to obey in the pooled sample.

Table 32. Summary of Hypotheses.

Hypothesis	Pooled Analysis	Country-by-Country	
		Significance	Consistency
H_1: The more respondents perceive the police to be procedurally fair, the more likely they are to find them legitimate.	√	Moderate	Consistent
H_2: The more respondents perceive the police to be effective at controlling crime, the more likely they are to find them legitimate.	√	Strong	Consistent
H_3: The more respondents perceive the outcome of police actions (arrest) to be distributively fair, the more likely they are to consent to their authority.	-----	Weak	Neutral
H_4: For those who feel their personal or communal security threatened, the more that they perceive the police to be effective at handling crime, the more likely they are to find them legitimate	------		
H_5: For those living in countries recently transitioning from conflict or facing considerable internal security challenges, the more that they perceive the police to be effective at handling crime, the more likely they are to find them legitimate.	------		
H_6: The more respondents perceive the police to be procedurally fair, the more likely they are to share a moral alignment with the police.	√	Moderate	Consistent
H_7: The more respondents perceive the police to be effective at crime control, the more likely they are share a moral alignment with the police.	√	Moderate	Consistent
H_8: The more respondents perceive the outcome of police actions (arrest) to be distributively fair, the more likely they are to share a moral alignment with the police.	√	Weak	Neutral
H_9: The more respondents perceive the police to be procedurally fair, the less likely they are to perceive them as corrupt.	√	Weak	Consistent
H_{10}: The more respondents perceive the police to be effective at crime control, the less likely they are to perceive them as corrupt.	√	Weak	Consistent
H_{11}: The more respondents perceive the outcome of police actions (arrest) to be distributively fair, the less likely they are to perceive them as corrupt.	√	Strong	Consistent
H_{12}: Perceptions of police legality will have a direct, positive and distinct, effect on obligation to obey.	----		
H_{13}: Moral alignment will have a direct and positive effect on obligation to obey.	√		
H_{14}: The inclusion of moral alignment will mediate the direct relationship between shared values (perceived effectiveness, procedural fairness, and distributive fairness) and obligation to obey.	----		

Significance: *weak* = < 9 countries w/ statistically significant support for hypothesis ($p<0.05$ two-tailed); *moderate* = 9-13 countries; *strong* = 14 or more

Consistency: *inconsistent* = < 9 countries with result in hypothesized direction (significant or note); *neutral* = 9-17 countries; *consistent* = 18 or more

√ = Support found in the hypothesized direction

---- = Fail to reject the null hypothesis or support contrary to hypothesized direction

CHAPTER 5: DISCUSSION AND CONCLUSIONS

This dissertation examined whether a central tenet of the Western model of police legitimacy, the idea that perceptions of legitimacy are shaped by the normative criteria of fairness, holds in less-industrialized countries like those found in SSA. Limited research from previous studies suggest that an instrumental model, which prioritizes perceived effectiveness rather than fairness, is more relevant in shaping perceptions of police legitimacy in less-industrialized countries (Bradford et al., 2014; Tankebe, 2009a; Jackson et al., 2014). What we find is that both fairness and effectiveness matter, not in all places, and contrary to expectations for some countries. Using a panel of nationally-representative samples across 27 countries in SSA, regardless of definition of legitimacy, results indicate that police who are perceived to treat individuals fairly during the administration of law enforcement are more likely to be found legitimate by their constituents. In both the pooled sample and in country-specific models, I found considerable support for the normative model of policing. This held even with the introduction of a number of alternative explanations at both the individual- and country-level, including survey controls, demographic variables, and country-level contextual influences.

Although the normative model was significant in shaping perceptions of police legitimacy in many countries, it often exerted less influence on legitimacy than the instrumental criteria of perceived effectiveness. In the pooled sample, perceiving the police to be effective at crime control was associated with an increase in the odds of consent nearly twice the increase generated from perceptions of fair treatment. Additionally, the relationship held consistently across different country contexts, confirming previous research from other less-industrialized countries (Bradford et al., 2014; Jackson et al, 2014;

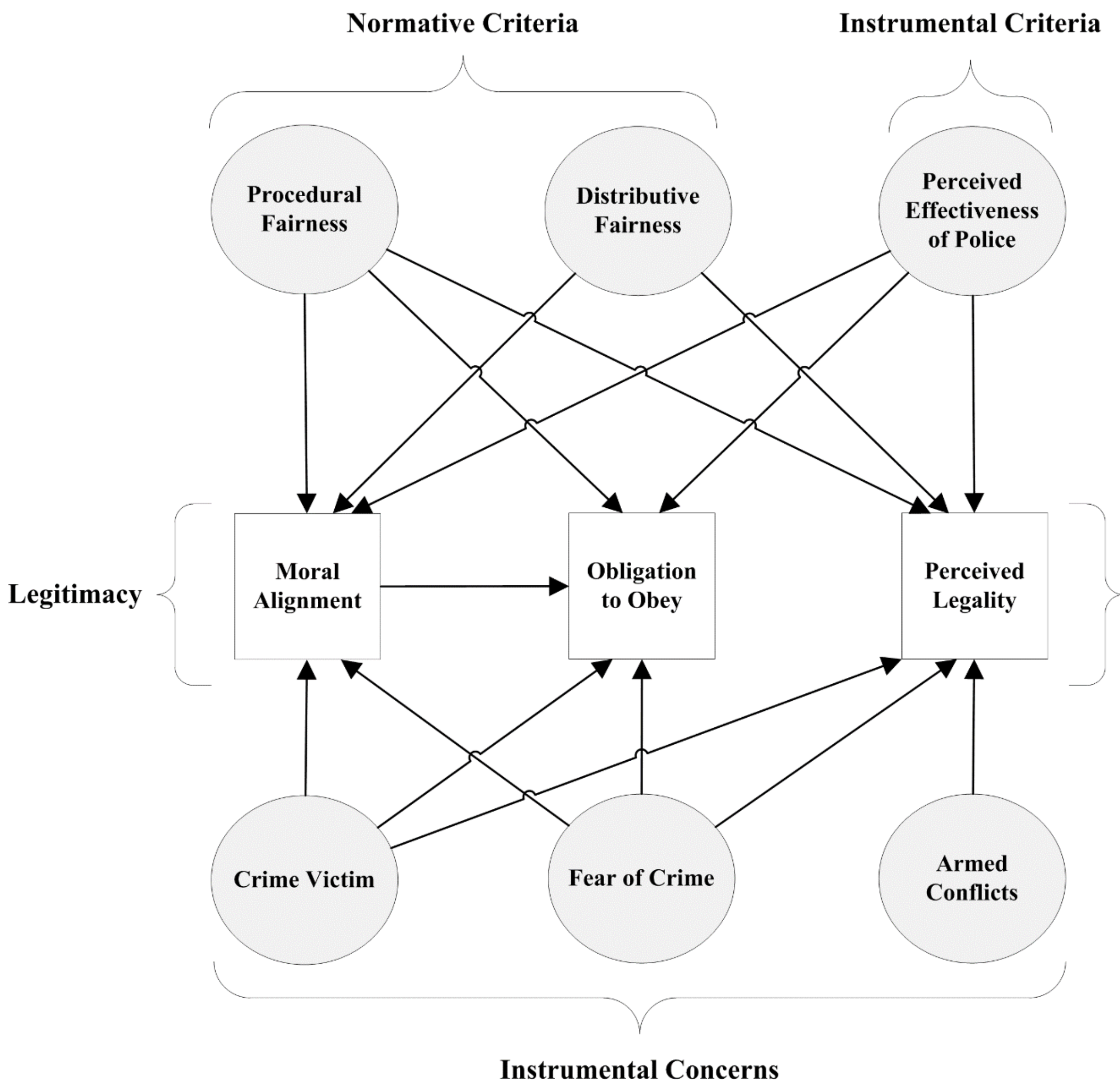
Tankebe, 2009). Overall, perceptions of effectiveness are more strongly linked to a respondent's consent to an authority in the region than perceptions of fairness.

Instrumental criteria of effectiveness also exerted an influence on police legitimacy separate from instrumental concerns generated by victimization and fear of crime. In the pooled sample and across a number of definitions of legitimacy, those who were victimized by either assault or theft from their home in the previous year and/or those who feared crime in their home in the previous year were less likely to find the police legitimate than those who were not victimized. Further analysis demonstrates that this relationship was only slightly mediated by perceptions of effectiveness. Thus, both one's personal and vicarious experience with victimization as well as their perception of effectiveness separately shape their overall perception of police legitimacy, and in particular one's consent to an authority. Moreover, it suggests a revision to the previous conceptual model that instrumental concerns influence legitimacy through instrumental criteria; rather, they work in parallel to shape perceptions of police legitimacy (see Figure 16).

This relationship between instrumental concerns and perceptions of legitimacy also did not moderate the relationship between perceptions of fairness and legitimacy. In the pooled sample, this relationship was not affected by the inclusion of instrumental concerns. An earlier study in South Africa (Bradford et al, 2014) found in a model of obligation to obey, perceptions of fairness were non-significant when including both perceptions of effectiveness and instrumental concerns of victimization and crime. In contrast, results using the Afrobarometer data across 27 countries in the same region indicate that one's duty to obey police is shaped by both normative and instrumental perceptions, controlling for recent experiences of victimization and fear of crime. Not only were both criteria

significant in the pooled sample, but also within a country-specific model for South Africa, contrary to the results in the previous study (Bradford et al, 2014. It is not just instrumental concerns that drive the narrative of legitimacy; it is the constellation of perceptions and experiences that shape an individual's duty to obey the police within the sample.

Figure 16. Revised Model of Legitimacy



Concerning different definitions of legitimacy, both perceptions of fairness (whether procedural or distributive) as well as effectiveness were consistently significant

and in the hypothesized direction for shaping perceptions of police legitimacy. What varies across definitions of legitimacy is the relative ordering of influence by instrumental and normative perceptions. In regards to consent, it was *effectiveness* that exerted a stronger influence rather than fairness; for moral nonalignment, perceptions of *fair treatment* rather than effectiveness wielded the strongest influence. For perceived illegality of the police, it was the perception of *fair outcomes*, rather than fair treatment or effectiveness, which strongly influenced perceptions of police legitimacy. This variation across definitions of legitimacy suggests that there are unique contingencies in the relationships between perceptions of fairness, effectiveness, and legitimacy that highlight important nuances for both legitimacy theory as well as police reform.

Although consistent in the pooled sample, there still exists a good deal of heterogeneity in relationships country-to-country for all three definitions of legitimacy. In some cases, the relationship between the instrumental or normative criteria with definitions of legitimacy was non-significant. In other countries, these relationships were in a direction counter to my hypotheses. For example, in Sierra Leone, the more a respondent perceives the police to treat individuals fairly, the *lower* their likelihood of consenting to them as an authority. Sometimes these relationships were not consistently countervailing across definitions of legitimacy *within* a particular country. For example, in Cameroon, the more effective at crime control a government is perceived to be, the more likely respondents will consent to the police as an authority *and* the more likely they are to view the police as morally dissonant. A number of reasons could explain this variation, including the country's colonial legacy or its focus on aggressive crime control policies, but the findings

suggest that instrumental and normative criteria operate within the nuanced context of each country's institutional and historical contingencies.

Alongside contrary support for legitimacy theory in some countries, the relationships between some of the control variables and legitimacy were surprising given recent research on police legitimacy. The multilevel modeling strategy with group-mean centered key independent variables used the average respondent within the country of interest as the referent individual for interpretation. Results are interpreted as "compared to the average individual in the country…" and allow for a clearer examination separating between- and within-country heterogeneity in the analysis. Thus, the demographic complexity of a particular country (for example, its ethnic distribution or age structure), which may directly influence the perception of fairness or effectiveness in unique ways, was simultaneously controlled for and incorporated into the analysis through the group-mean centering approach. Focusing on different definitions of legitimacy, the results find demographic complexity for some and simplicity for others, both of which have specific relevance for theory testing and future research. For example, both moral nonalignment and perceived illegality varied considerably across demographic variables (as previously noted), suggesting that these appraisals are potentially a confluence of police-specific perceptions as well as structural influences including social stratification, residential location, and educational experience. Regarding duty or obligation to obey, though, there was no demographic differentiation among the pooled sample that exerted a significant effect. Consent was primarily a product of perceptions of fairness and effectiveness, suggesting that efforts to improve consent to the police in the region may not require as much demographic tailoring as efforts to reduce perceptions of police illegality or

immorality. It is important to note that these relationships still varied considerably from country to country, and it cannot be assumed that a blanket application of consent-building efforts this across the region without the consideration of country-specific variation would be valuable.

Implications

Theoretical

The theory of police legitimacy, and central concern with instrumental verses normative origins, has rarely been tested out of the outside of the industrialized world (see Tankebe, 2009a; Bradford et al., 2014). Expanding this test into SSA and finding support across the continent, as well as country-by-country, reinforces the generalizability of legitimacy theory to less-industrialized countries. Moreover, instrumental concerns drawn from victimization and fear of crime, colonial legacies, demographic variations, and varying levels of security challenges all fail to mediate the relationships proposed by legitimacy theory within this sample. The instrumental and normative drivers of police legitimacy are robust to a number of alternative specifications, providing stronger support for these frameworks as potential models for police reform within SSA.

Yet the results of this study are far from conclusive in support of the generalizability of these theories across contexts. In several cases, countries exhibited relationships that were both significant and contrary to the hypothesized direction of either normative or instrumental models of police legitimacy. Current theoretical frameworks for police legitimacy are limited to either confirming the normative model of fairness or finding greater support for the instrumental model of effectiveness. In countries like Sierra Leone

and Cameroon, where perceptions of fairness and effectiveness operated in unanticipated ways, existing theory within criminology is incomplete in providing sufficient explanations. Why would respondents who perceive the police to fairly treat others feel that they don't have the right to compel others to obey the law (as in Sierra Leone)? For what purpose would individuals who perceive the police to be effective give them the authority to compel others to obey the law and find that they are morally dissonant from themselves (like in Cameroon)? Results from this study, while generally supportive of the normative and instrumental models of legitimacy, also create new theoretical paradoxes for Western-oriented legitimacy theory to address.

Moreover, the findings from this study indicate that history is not always a deterministic force for shaping police legitimacy. Hobbes and others would suggest that perceptions of fairness could not legitimate the police in countries with episodes of brutal police violence and political instability; a baseline provision of security would be required first. Contrary to these conjectures, in Mozambique, with its history of state-sanctioned violence at the hands of police (Baker, 2002), perceptions of procedural fairness exerted a greater influence on police legitimacy than perceptions of effectiveness. For countries transitioning from conflict, the provision of stability through the police may reignite previous memories of police brutality within the populace. In these cases, perceptions of effectiveness may correlate with an image of a strong-armed police, countering the perceived legitimacy of the police at a time when it is greatly needed. Perceptions of fairness could be a marker in these contexts by which the population identifies that the police have 'turned the corner,' and are more democratic than previous administrations.

Finally, results from this study provide an alternate voice into discussions about the configuration of legitimacy and obligation to obey. The results indicate that while obligation to obey and moral nonalignment are influenced by both procedural fairness and perceived effectiveness, the relative magnitude of influence is different depending on the definition of legitimacy. In addition, the study finds that counter to Tankebe (2013a) and others theories about perceived legality of the police, there was no relationship across the 27 countries between those two variables in the pooled analysis. Taken together, they suggest that police legitimacy is both Hobbesian and Lockean in nature; essentially police who provide security and meet the normative criteria of fair treatment will not only elicit shared moral values from the public, but also receive the transfer of their consent to enforce the law. Additionally, that transfer is not dependent on whether they perceive the police to be corrupt; only that they are fair and effective.

Research

In this dissertation I sought to improve our empirical understanding of legitimacy in new contexts and countries. Specifically, the use of multiple countries of survey data to examine the stability of relationships across multiple contexts is a novel contribution to the study of legitimacy theory. In most cases, survey data from one country is used to test these theories, but only in a small number of studies (Kaariainen, 2007; Levi, Tyler, and Sacks, 2009; Jackson et al., 2011) have multiple countries of cross-sectional survey data been utilized to study legitimacy theory, especially in non-industrialized milieus. Beyond the general support for the normative and instrumental models of legitimacy, this study contends that legitimacy theory, and in particular normative models of legitimacy, is not universal. The effects of procedural fairness on police legitimacy, regardless of definition,

varied considerably from country to country. Depending on the particular sample of countries selected, legitimacy theory may or may not have been supported, suggesting that sample selection for studying legitimacy of the police is essential for addressing a potential bias that single-country samples could introduce, especially for comparative criminology.

The challenges of sample selection highlighted by the results in this dissertation also suggest that multi-country studies of legitimacy using survey data should consider splitting their results country-by-country. Although strongly supported within the pooled analysis, the strength of fairness and effectiveness in shaping legitimacy was only somewhat consistent from country to country. Mentioned earlier, the disaggregated approach also allowed for evidence to emerge which contradicted theoretical expectations, providing an opportunity for new theoretical development as criminologists attempt to explain why fairness is negatively correlated with consent in some contexts. As others look to extend the study of legitimacy beyond single-country samples, the inclusion of aggregated and disaggregated results can add both generalizability and complexity to theoretical frameworks, helping to provide avenues for future comparative research.

Policy

Regarding policy, this dissertation informs our understanding of whether and how the police are viewed to be legitimate within a dynamic context such as SSA. The United States and other countries spend hundreds of millions of dollars to affect police reform efforts within the context of SSA (Bayley, 2006), attempting to improve relationships between the police and citizen while increasing its capabilities for crime control. Yet the policy community wrangles with the question of whether it should focus on the end of policing (such as crime control and sanction threats) or the process of policing (fair practices and community engagement) as a way to improve policing in the region.

Overall, the results suggest that police reform efforts within the region should focus on improving *both* procedure and outcome through administrative reform, training, research and evaluation. In some cases, improved police training administered through cooperative programs that focus on amplifying respectfulness and fairness could have a substantive impact on overall perceptions of legitimacy within the region. A stronger avenue may be reform efforts that focus on improving fair outcomes of policing. Although results from this study do not support the idea that perceptions of police illegality influence one's consent to an authority, those perceptions are driven by underlying assumptions about the likelihood of punishment for ordinary people versus government officials (distributive fairness). The operative model for formal police agencies within many of the countries in the sample prioritizes criminal investigations rather than community policing (Davis, Henderson, and Merrick, 2003; Ruteere and Pommerolle, 2003; Baker, 2004b). In many contexts, the police are working alongside a number of other institutions that aid in the administration of security and the resolution of civil disputes (Baker, 2004a; Baker, 2005). Reform efforts focused on improving the fairness of these outcomes within the broader criminal justice system could have a significant ancillary effect of improving public perception of the police.

The findings also indicate that a tailored approach to police reform is necessary, as the constellation of relationships between shared values and definitions of legitimacy varied considerably across the country samples. This is especially important for international development efforts focused on police reform using democratic or community policing methods. Using a framework that orients reformers and development programs to the notion of different combinations of shared values influencing consent could help

inform subsequent development efforts with national police forces. As some countries prioritize effectiveness as a key driver of legitimacy, it may be important in those contexts to work on the provision of crime control and security as a primary outcome for police reform and development. In other contexts where procedural fairness is the key driver of consent, and may be important to emphasize quality of treatment and decision-making efforts within training and reform programs in that country. Perceptions matter for police in sub-Saharan Africa, especially those perceptions in which the police communicates to the public of their capability to address crime and their valuation of a citizen as a cooperative and necessary member of society. Training programs along these efforts, coupled with systems of review and monitoring, may provide a pathway forward within the region to improve policing writ large.

Moreover, the results from this study advocate that changing perceptions could change individual orientation towards state institutions, especially during important transitional or post-conflict periods. The key measures of fairness and effectiveness used in this study were perceptual, and their strong correlation with legitimacy, even when accounting for fear of crime and victimization, suggests that communication efforts to improve perceptions of respectful treatment and safer communities could increase overall consent to the police as an authority. These communication strategies could involve public awareness campaigns, community-based outreach efforts, or training programs within agencies that encourage fair and respectful policing practices. They (and others) are vehicles by which the police can directly communicate to the public in ways to build trust and confidence in their capabilities. This represents a shift for many agencies within SSA, who focus on reactive criminal investigations rather than proactive policing efforts; yet it

is a shift that some police forces are already making (Davis, Henderson, and Merrick, 2003). The adoption of these community-oriented approaches, though, have been implemented poorly in a number of African states (Brogden, 2005), and extensions of those efforts via new communication strategies should be cautiously pursued.

Future Research

Utilizing a comprehensive sample of 27 countries within SSA, the results from this study support the generalizability of normative and instrumental theories of police legitimacy, as well as leave much room for future research in this area. Although briefly touched on in this dissertation, the role that colonial history and democratization within the region can play in shaping the contextual nature of police legitimacy also remains underdeveloped. In one robustness check, I find that those countries that are former British colonies are more likely in the aggregate to perceive the police as legitimate via consent, but also more likely to perceive a moral nonalignment between citizen and state. Why this is the case, and to what extent this differentiates from those that were colonized by the French or Belgians, remains undertheorized.

Alongside the colonial nature of a country's history, its trajectory of democratization and the birth pains of institutional building that result from those processes may also influence perceptions of police legitimacy. In many cases, the police in authoritarian states are viewed as both repressive and effective. Countries that democratize incur greater participation from citizens in state affairs, which could simultaneously reduce perceptions of repression while also antagonizing them. In essence, the effective yet repressive police of an authoritarian regime could, in more democratic countries, become the distrusted and ineffective police and a source of potential grievance. Although fairness-

related legitimacy could be low in authoritarian states, the shift to democracy may increase one's recognition of both its importance and absence, reducing multiple sources of police legitimacy along the way.

The nature of ethnic politics in the region also suggests that one's status as an ethnic minority may be less important compared to one's status as a *politically-irrelevant* ethnic minority. A number of other studies (Eifert, Miguel, and Posner, 2010; Robinson, 2014) have highlighted that political relevance for ethnic minorities is an important component in shaping their relationship with the state and its institutions. Thus, identifying the political relevance of a respondent's ethnic group rather than just their demographic status may unravel important relationships in shaping police legitimacy. In addition, for many cases when the police are used in a repressive manner to treat individuals unfairly, they are often used within the context of ethnic politics to target particular ethnic minorities at the command of the ruling elite (often ethnic themselves) (Frankel, 1980; Hills, 2007; Jackson and Lyon, 2001). Thus, the survey question concerning perceived fairness, "are *people generally* treated fairly under the law," may not tap into as strong a relationship as when asked "are *people from their own ethnic group* treated fairly under the law." This would only be theoretically relevant for those who self-identify more with their ethnic group than with a national identity derived from their citizenship (Robinson, 2014). Therefore, it may be the interaction between political relevance, ethnic self-identification, and particular treatment of one's ethnic group that may link the strongest relationship between fair treatment and perceptions of legitimacy.

The use of one wave of cross-sectional survey data in this dissertation only provides an initial correlational test of legitimacy theory within the region. The Afrobarometer

surveys are done every three years from a number of countries, and it would be important to see whether the relationship between fairness, effectiveness, and police legitimacy would hold across multiple time periods within these countries. As security conditions change, new leaders are elected, and the context for policing shifts over time, the relationship between fairness, effectiveness, legitimacy may strengthen or wane within the region. Although not available for every question included within this dissertation, using data from multiple waves of the Afrobarometer to examine relationships with both obligation to obey as well as perceived illegality would help unpack the temporal stability of legitimacy theory.

Cross-sectional surveys also limit the ability to test for causal relationships between normative criteria and legitimacy, and the lack of experimental methods prevents the ability to randomize police interaction across respondents to truly examine the role of fair and unfair treatment in shaping legitimacy. Further efforts to decipher causal inference through the use of more stringent identification strategies to link fairness, effectiveness, and legitimacy could require the use of experimental methods within the region. The use of experiments has been growing within criminology and the study of policing, yet only recently has it been extended to policing in SSA (Blair, Karim, Gilligan, and Beardsley, 2016). An expanded use of experimental methods would not only causally test the generalizability of Western theories of policing within this region, but also to equip police agencies and researchers from the region with new methods for understanding relative impacts of the policies implemented within police reform efforts. Thus, while informative, the results are only suggestive of correlational relationships between variables rather than causal pathways, which need additional exploration and testing.

Limitations

This dissertation suffers from a number of key limitations which, without addressing, could restrict its comparability to previous studies of police legitimacy and hinder its generalizability outside of the region. One methodological limitation is the use of single indicator questions for what are often measured as latent constructs with multiple indicators. In most studies, researchers have administered their own survey when looking at direct and indirect relationships within the normative model of legitimacy (Bradford et al. 2014; Jackson et al., 2014; Tankebe, 2009; 2013a). This has allowed the use of three or four questions for each construct, increasing the ability to capture the correlate of interest and addressing concerns over variable responses to survey questions. Using existing survey data, this study was unable to replicate those measures exactly, leaving the reader with questions concerning the validity of the specific survey instrument in measuring police legitimacy.

The selection of SSA also presents a particular challenge to the use of Western models of police legitimacy. It is plausible to consider that the police in these industrializing countries may operate in similar ways as those in Western countries. Yet the centralized and national nature of many of these police forces limits the relationship building between citizen and police that are common among more community-oriented police forces. Although police-citizen interactions can be confrontational in Western countries, the greater social distance between police and citizen in SSA could emphasize a combative relationship focused on maintaining social order rather than fair and equitable treatment. As the results indicated, the question of legitimacy, and its core question of consent, is something that is not consistently influenced by the same components across

different contexts. There could also be a situational element alongside the latent characteristics of fairness and effectiveness that shape whether somebody finds the police legitimate. As evidenced by research from Australia (Mazerolle et al., 2013), fair treatment, even from one traffic-stop, can situationally change perceptions of the police, but this similar function is unknown within SSA. Considering the national nature of many police forces in the region, combined with only the limited examples of community engagement and patrolling by police, it is possible that the police could engender greater and lasting changes in perceptions of their legitimacy by not only treating individuals fairly during the interaction, but also by interacting more in positive ways with the public. Thus, a remaining question is to what extent one's perception of the police in SSA is situationally-defined, and to what extent this is built on the basis of previous interactions rather than general assumptions.

Conclusion

Overall, the results indicate that Western theories of police legitimacy are both generalizable to countries within Sub-Saharan Africa and shaped by historical, political, and cultural contingencies unique to those contexts. Respondents from 27 countries confirm that normative and instrumental criteria for legitimacy are both relevant for shaping perceptions of the police and influential regardless of other factors. Even with key limitations, this study provides new insights into the dynamics that sway police legitimacy within less-industrialized nations, and proposes the generation of new lines of inquiry relevant for contextual discussions of its application across the region. Moreover, the results provide an initial framework from which police reform efforts within the region can work to tailor strategies based on the unique requirements proposed by each country's

constituents. It represents an important yet initial advance of legitimacy theory into the comparative context of less-industrialized nations, and challenges our current assumptions about how and when normative and instrumental criteria should influence perceptions of the police.

APPENDIX A: SURVEY QUESTIONS

Drawn from the Merged Codebook for Round 5 of the Afrobarometer

Obligation to Obey – Police

Question #: Q48B
Question: For each of the following statements, please tell me whether you disagree or agree: The police always have the right to make people obey the law.
Variable Label: People must obey the law
Values: 1-5, 9, 998, -1
Value Labels: 1=Strongly disagree
2=Disagree
3=Neither agree nor disagree
4=Agree
5=Strongly agree
9=Don't know
998=Refused to answer
-1=Missing
Source: Afrobarometer Round 2
Note: The interviewer probed for strength of opinion.

Moral Nonalignment

Question #: Q11
Question: Some people say that many crimes are never reported to the police. Based on your experience, what do you think is the main reason that many people do not report crimes like thefts or attacks to the police when they occur?
Variable Label: Main reason for not reporting crimes to the police
Values: 0-21, 142-145, 340, 421-422, 461-466, 620, 662, 900, 1623, 9995, 9998, 9999, -1
Value Labels: 0=Most people do report crimes to the police
1=People don't have enough time to report crimes
2=No police or police station in the area/too far
3=Police don't listen or care
4=Police would have demanded money or a bribe to help
5=Police wouldn't have been able to do anything
6=Police may be involved in the robbery or assault
7=Victim feared reprisal from attacker
8=Victim too ashamed or embarrassed
9=Crime was reported to other authority
10=Lack of evidence or witnesses
11=Criminal unknown / lack of suspect
12=People fear police / don't trust police
13=Crime was minor
14=Criminals were relatives or friends
15=Don't know how to report / ignorance
16=People forgive the criminals

17=Prefer settling issues amicably/at home
18=Victim will revenge
19=Police delays
20=Victim relies on God
21=Victim relies on black magic
142=Fear of becoming a witness
143=Victim is part of criminal activities
144=Lack of transport for police
145=People too lazy to report
340=Victim/People around them have also committed crimes
421=Lack of funds
422=Complain to the Presidents of Fokontany
461=To protect suspect
462=Trust in traditional medicine
464=Victim not serious/foolish
466=Victim discouraged to report
620=Police turn the case against you
662=Procedure is too slow
900=Procedures too long
1623=Victims are also guilty/criminals
9995=Other
9998=Refused
9999=Don't know
-1=Missing

Source: Afrobarometer Round5

Police Corruption

Question #: Q60E
Question: How many of the following people do you think are involved in corruption, or haven't you heard enough about them to say: Police?
Variable Label: Corruption: police
Values: 0-3, 9, 998, -1
Value Labels: 0=None
1=Some of them
2=Most of them
3=All of them
9=Don't know
998=Refused to answer
-1=Missing
Source: SAB

Procedural Fairness

Question #: Q56B
Question: In your opinion, how often, in this country: Are people treated unequally under the law?
Variable Label: How often people treated unequally

Values: 0-3, 9, 998, -1
Value Labels: 0=Never
1=Rarely
2=Often
3=Always
9=Don't know
998=Refused to answer
-1=Missing
Source: Afrobarometer Round 2

Distributive Fairness

Question #: Q56F
Question: In your opinion, how often, in this country: Do officials who commit crimes go unpunished?
Variable Label: How often officials unpunished
Values: 0-3, 9, 998, -1
Value Labels: 0=Never
1=Rarely
2=Often
3=Always
9=Don't know
998=Refused to answer
-1=Missing
Source: Afrobarometer Round 4

Question #: Q56G
Question: In your opinion, how often, in this country: Do ordinary people who break the law go unpunished?
Variable Label: How often ordinary people unpunished
Values: 0-3, 9, 998, -1
Value Labels: 0=Never
1=Rarely
2=Often
3=Always
9=Don't know
998=Refused to answer
-1=Missing
Source: Afrobarometer Round 4

Perceived Effectiveness

Question #: Q65F
Question: How well or badly would you say the current government is handling the following matters, or haven't you heard enough to say: Reducing crime?
Variable Label: Handling reducing crime
Values: 1-4, 9, 998, -1

Value Labels: 1=Very Badly
2=Fairly badly
3=Fairly well
4=Very well
9=Don't know/Haven't heard enough
998=Refused to answer
-1=Missing
Source: NDB
Note: Interviewer probed for strength of opinion.

Victim of Physical Attack
Question #: Q10B
Question: During the past year, have you or anyone in your family: Been physically attacked?
Variable Label: Have been physically attacked
Values: 0-3, 9, 998, -1
Value Labels: 0=No
1=Once
2=Twice
3=Three or more times
9=Don't know
998=Refused to answer
1=Missing
Source: Adapted from NDB
Note: If respondent answered "Yes", interviewer was instructed to follow up by asking "Did this happen once, twice or three or more times?"

Victim of Theft from Home
Question #: Q10A
Question: During the past year, have you or anyone in your family: Had something stolen from your house?
Variable Label: Had something stolen from house
Values: 0-3, 9, 998, -1
Value Labels: 0=No
1=Once
2=Twice
3=Three or more times
9=Don't know
998=Refused to answer
1=Missing
Source: Adapted from NDB
Note: If respondent answered « Yes », interviewer was instructed to follow up by asking « Did this happen once, twice or three or more times ? "

Feared Crime within Own Home
Question #: Q9B

Question: Over the past year, how often, if ever, have you or anyone in your family: Feared crime in your own home?
Variable Label: How often feared crime in home
Values: 0-4, 9, 998, -1
Value Labels: 0=Never
1=Just once or twice
2=Several times
3=Many times
4=Always
9=Don't know
998=Refused to answer
-1=Missing
Source: Adapted from NDB

Age
Question #: Q1
Question: How old are you?
Variable Label: Age
Values: 18-100, 105, 998-999, -1
Value Labels: 998=Refused to answer
999=Don't know
-1=Missing

Gender
Question #: Q101
Question: Respondent's gender
Variable Label: Gender of respondent
Values: 1, 2
Value Labels: 1=Male
2=Female
Source: SAB
Note: Answered by interviewer

Lived Poverty Index
Question #: Q8A
Question: Over the past year, how often, if ever, have you or anyone in your family gone without: Enough food to eat?
Variable Label: How often gone without food
Values: 0-4, 9, 998, -1
Value Labels: 0=Never
1=Just once or twice
2=Several times
3=Many times
4=Always
9=Don't know
998=Refused to answer

-1=Missing
Source: NDB

Question #: Q8B
Question: Over the past year, how often, if ever, have you or anyone in your family gone without: Enough clean water for home use?
Variable Label: How often gone without water
Values: 0-4, 9, 998, -1
Value Labels: 0=Never
1=Just once or twice
2=Several times
3=Many times
4=Always
9=Don't know
998=Refused to answer
-1=Missing
Source: NDB

Question #: Q8C
Question: Over the past year, how often, if ever, have you or anyone in your family gone without: Medicines or medical treatment?
Variable Label: How often gone without medical care
Values: 0-4, 9, 998, -1
Value Labels: 0=Never
1=Just once or twice
2=Several times
3=Many times
4=Always
9=Don't know
998=Refused to answer
-1=Missing
Source: NDB

Question #: Q8D
Question: Over the past year, how often, if ever, have you or anyone in your family gone without: Enough fuel to cook your food?
Variable Label: How often gone without cooking fuel
Values: 0-4, 9, 998, -1
Value Labels: 0=Never
1=Just once or twice
2=Several times
3=Many times
4=Always
9=Don't know
998=Refused to answer
-1=Missing

Source: SAB

Question #: Q8E
Question: Over the past year, how often, if ever, have you or anyone in your family gone without: A cash income?
Variable Label: How often gone without a cash income
Values: 0-4, 9, 998, -1
Value Labels: 0=Never
1=Just once or twice
2=Several times
3=Many times
4=Always
9=Don't know
998=Refused to answer
-1=Missing
Source: SAB

Employment Status

Question #: Q96
Question: Do you have a job that pays a cash income? If yes, is it full-time or part-time? If no, are you presently looking for a job?
Variable Label: Employment status
Values: 0-3, 9, 998, -1
Value Labels: 0=No (not looking)
1=No (looking)
2=Yes, part time
3= Yes, full time
9=Don't know
998=Refused to answer
-1=Missing
Source: SAB

Perception of Country's Current Economic Situation

Question #: Q3A
Question: In general, how would you describe: The present economic condition of this country?
Variable Label: Country's present economic condition
Values: 1-5, 9, 998, -1
Value Labels: 1=Very bad
2=Fairly bad
3=Neither good nor bad
4=Fairly good
5=Very good
9=Don't know
998=Refused to answer
-1=Missing

Source: NDB, Zambia96

Perception of Individual's Current Economic Situation

Question #: Q3B
Question: In general, how would you describe: Your own present living conditions?
Variable Label: Your present living conditions
Values: 1-5, 9, 998, -1
Value Labels: 1=Very bad
2=Fairly bad
3=Neither good nor bad
4=Fairly good
5=Very good
9=Don't know
998=Refused to answer
-1=Missing
Source: NDB, Zambia96

Education Level

Question #: Q97
Question: What is the highest level of education you have completed?
Variable Label: Education of respondent
Values: 0-9, 99, 998 -1
Value Labels: 0=No formal schooling
1=Informal schooling only (including Koranic schooling)
2=Some primary schooling
3=Primary school completed
4=Some secondary school/ high school
5=Secondary school completed/high school completed
6=Post-secondary qualifications other than university e.g. a diploma or degree from polytechnic or college
7=Some university
8=University completed
9=Postgraduate
99=Don't know
998=Refused to answer
-1=Missing
Source: SAB

Urban Residence

Question #: URBRUR
Question: PSU/EA
Variable Label: Urban or Rural Primary Sampling Unit
Values: 1-2
Value Labels: 1=urban
2=rural

Note: Answered by interviewer

Generalized Social Trust

Question #: Q87
Question: Let's turn to your views on your fellow citizens. Generally speaking, would you say that most people can be trusted or that you must be very careful in dealing with people?
Variable Label: Most people can be trusted
Values: 0, 1, 9, 998, -1
Value Labels: 0= Must be very careful
1= Most people can be trusted
9=Don't know
998=Refused to answer
-1=Missing
Source: Afrobarometer Round 5

Visible Police Station

Question #: EA_FAC_C
Question: Are the following facilities present in the primary sampling unit/enumeration area, or within easy walking distance: Police station?
Variable Label: Police station in the PSU/EA
Values: 0, 1, 9, -1
Value Labels: 0=No
1=Yes
9=Can't determine
-1=Missing
Source: SAB
Note: Question was filled in conjunction with field supervisor

Visible Police Patrol

Question #: EA_SEC_A
Question: In the PSU/EA, did you (or any of your colleagues) see: Any policemen or police vehicles?
Variable Label: Police in the PSU/EA
Values: 0, 1, 9, -1
Value Labels: 0=No
1=Yes
9=Don't know
-1 Missing
Source: SAB
Note: Question was filled in conjunction with field supervisor

Others Present

Question #: Q106
Question: Were there any other people immediately present who might be listening during the interview?

Variable Label: Others present
Values: 1-5, -1
Value Labels: 1=No one
2=Spouse only
3=Children only
4=A few others
5=Small crowd
-1=Missing
Source: Nigeria00
Note: Answered by interviewer

Female Interviewer

Question #: Q114
Question: Interviewer's gender
Variable Label: Interviewer's gender
Values: 1, 2, -1
Value Labels: 1=Male
2=Female
-1=Missing
Source: SAB
Note: Answered by interviewer

Perceived Government Sponsor

Question #: Q100
Question: Just one more question: Who do you think sent us to do this interview?
Variable Label: Perceived survey sponsor
Values: 0-24, 995, 998-999, -1
Value Labels: 0=No one
1=Government (General)
2=National/Union government
3=Provincial/Regional government
4=Local Government
5=President/Prime Minister's Office
6=Parliament/National Assembly
7=Government Census/Statistics Office
8=National Intelligence/ Secret Service
9=Education or Social Affairs Department/ Ministry
10=Tax or Finance Department/ Ministry
11=Health Department/ Ministry
12=Other Government Department/Ministry
13=Constitutional Commission
14=National Electoral Commission
15=National Planning Commission
16=Public Utility Company
17=NGO

18=Political Party/Politicians
19=Research company/ organization/programme (including the Afrobarometer National Partner)
20=Newspapers/Media
21=University/ school/ college
22=Private company
23=International organization
24=God or a religious organization
995=Other
998=Refused to answer
999=Don't know
1=Missing

Source: Afrobarometer Round 2
Note: Interviewer entered verbatim response

Language of Respondent

Question #: Q2
Question: Which language is your home language?
Variable Label: Language of respondent
Values: 1-39, 100-108, 140-152, 180-200, 220-221, 260-283, 300-322, 340-342, 380-397, 420-424, 460-473, 500519, 540-562, 580-590, 620-658, 660-668, 700-710, 740-816, 820-852, 860-875, 900-901, 930-944, 1100-1107, 1140-1159, 1180, 1220-1247, 1249-1271, 1273-1289, 1300-1315, 1420, 1500-1501, 1580, 1620-1622, 2220-2222, 2740-2754, 9995, 9998-9999
Value Labels: 1=English, 2=French, 3=Portuguese, 4=Kiswahili, 5=Arabic, 6=Adja, 7=Afrikaans, 8=Amazigh, 9=Bambara, 10=Bassa, 11=Bobo, 12=Chichewa, 13=Dioula, 14=Fon, 15=Fulfuldé, 16=Haoussa, 17=Hausa, 18=Kiha, 19=Kihangaza, 20=Kissi, 21=Konkomba, 22=Kono, 23=Kru, 24=Lamba, 25=Lobi, 26=Luo, 27=Mano, 28=Mende, 29=Ndau, 30=Ndebele, 31=Nyanja, 32=Sénoufo, 33=Setswana, 34=Shangaan, 35=siSwati, 36=Tonga, 37=Vai, 38=Venda, 39=Yoruba, 102=Bariba, 103=Dendi, 105=Otamari, 106=Peulh, 107=Yoa, 108=Boo, 141=Sesarwa, 142=Sekgalagadi, 143=Sesubia, 144=Ikalanga/Sekala, 145=Seherero, 146=Sembukushu, 147=Sebirwa, 148=Sengologa, 149=Seyeyi, 151=Sekgothu, 152=Setswapong, 180=Mooré, 183=Gulmacema, 184=Gourounsi, 185=Bissa, 186=Birifor, 187=Bwamu, 188=Dagari, 189=Fulse, 190=Goin, 191=Karaboro, 192=Kassena, 194=Marka, 195=Samo, 197=Sonrai, 198=Toussian, 199=Dafing, 220=Crioulo, 260=Akan, 261=Ewe, 262=Ga/Dangbe, 263=Dagbani, 265=Dagaree, 266=Waala, 267=Moshie, 268=Sissala, 269=Kotonkoli, 270=Talensi, 271=Kasina, 272=Frafra, 273=Gruni, 274=Bimoba, 275=Bulsa, 276=Nabdam, 277=Kusasi, 278=Mampruli, 280=Guan, 281=Gonja, 282=Nzema, 283=Other Northern Languages, 300=Kikuyu, 302=Luhya, 303=Kamba, 304=Kalenjin, 305=Kisii, 306=Meru/Embu,

307=Maasai/Samburu, 308=Mijikenda, 309=Taita, 310=Somali, 311=Pokot, 312=Turkana, 313=Tharaka, 314=Teso, 315=Sabaot, 316=Rendile, 317=Pokomo, 318=Mbeere, 319=Kuria, 320=Borana, 322=Oroma, 340=Sesotho, 341=Sephuthi, 342=Sethepu, 381=Belle, 382=Dei, 383=Gbandi, 384=Gio, 385=Gola, 386=Grebo, 388=Kpelle, 389=Krahn, 391=Lorma, 392=Mandingo, 396=Simple Liberian English, 420=”Official” Malagasy, 421=Malagasy dialect, 460=Chitumbuka, 461=Chinkhonde, 462=Chilambya, 464=Chiyao, 465=Chingoni, 466=Chilomwe, 467=Chimang’anja, 468=Chisena, 469=Chisukwa, 470=Chisenga, 472=Chindali, 473=Chinyakyusa, 502=Bella, 504=Bozo, 505=Dogon, 507=Kakolo, 508=Khassonké, 509=Malinké, 510=Maure, 511=Mianka, 513=Peulh/Fulfude, 514=Samogo, 515=Senufo, 516=Soninké/Sarakollé, 517=Sonrhaï, 518=Tamasheq, 540=Makua, 541=Sena, 544=Changana, 545=Chope, 546=Bitonga, 547=Makonde, 548=Chuabo, 549=Ajaua, 551=Chibarue, 552=Chimarenge, 553=Chinhungue, 554=Chitewe, 555=Chitswa, 556=Chitawala, 557=Kimuani, 558=Lomwe, 559=Manhawa, 560=Ronga, 561=Tacuane, 562=Chimanica, 581=German, 582=Nama/Damara, 583=Oshiwambo(Oshindonga/Oshikwanyama), 584=Otjiherero, 585=Rukwangali, 586=Rugririku/Rumanyo, 587=Thimbukushu, 588=Silozi, 590=Masubia, 621=Igbo, 623=Pidgin=English, 624=Efik, 625=Ebira, 626=Fulani, 627=Isoko, 628=Ibibio, 629=Kanuri, 630=Tiv, 631=Nupe, 632=Ijaw, 633=Edo, 634=Igala, 635=Urhobo, 636=Ogoni, 637=Anang, 638=Ikwere, 639=Idoma, 640=Esan, 641=Nembe, 642=Jukun, 643=Okrika, 644=Yakhor, 645=Ika, 646=Okpe, 647=Tarok, 648=Ibaji, 649=Migili, 650=Gbagyi, 651=Gwoza, 652=Bajju, 653=Ekpeye, 654=Kataf, 655=Mada, 656=Kalabari, 657=Sayawa, 658=Ohafia, 660=Wolof, 661=Pulaar/Toucouleur, 662=Serer, 664=Soninke, 665=Diola, 666=Manjack, 667=Bainouk, 668=Bassari, 702=Xhosa, 703=Pedi/Spedi/North=Sotho, 704=Sesotho/Sotho/South=Sotho, 709=Zulu, 710=Asian/Other, 740=Kinyakyusa, 741=Kichaga, 742=Kihaya, 743=Kingoni, 744=Kikwere, 745=Kipare, 746=Kihehe, 747=Kimakonde, 748=Kinyamwezi, 749=Kisukuma, 750=Kimasai, 751=Kimeru, 752=Kikurya, 753=Kigogo, 754=Kiluguru, 755=Kifipa, 756=Kimanyema, 757=Kinyiramba, 758=Kinyaturu, 759=Kibena, 762=Kiiraqi, 763=Kijaluo, 764=Kijita, 765=Kikinga, 766=Kitongwe, 767=Kimwera, 768=Kindali, 769=Kindendeule, 770=Kinyambo, 771=Kipogoro, 772=Kisambaa, 773=Kiyao, 774=Kizaramo, 775=Kizigua, 776=Kizinza, 779=Kiiraq, 780=Luganda, 781=Runyankole, 782=Runyoro, 783=Lusoga, 784=Lumasaba, 785=Lukhonjo, 786=Lunyoro, 787=Ateso, 789=Alur, 790=Lugbara, 791=Madi, 792=Japadhola, 793=Lusamia, 794=Lugwere, 795=Rukiga, 796=Rutooro, 797=Langi, 798=Kupsabinyi, 799=Ngakarimajong, 800=Rutagwenda, 801=Rufumbira, 802=Runyarwanda, 803=Rululi, 804=Aringa, 805=Kumam, 806=Kakwa, 820=Bemba, 823=Lozi,

824=Chewa, 825=Nsenga, 826=Tumbuka, 827=Kaonde, 828=Luvale, 829=Namwanga, 830=Lunda, 831=Bisa, 832=Nkoya, 833=Mambwe, 834=Lenje, 835=Ngoni, 836=Soli, 837=Ila, 838=Ushi, 840=Mbunda, 841=Kunda, 842=Lala, 844=Lungu, 846=Senga, 847=Tokaleya, 848=Bwile, 849=Ngumbo, 851=Tabwa, 852=Goba, 861=Shona, 862=Zezuru, 863=Korekore, 864=Karanga, 865=Manyika, 868=Kalanga, 870=Vhitori, 872=Nambya, 873=Maungwe, 874=Buja, 875=Bocha, 900=Creole, 901=Bhojpuri, 930=Krio, 932=Temne, 933=Limba, 934=Loko, 935=Sherbro, 936=Fulla, 938=Kuranko, 939=Madingo, 941=Susu, 943=Yalunka, 1101=Zarrma/Songhaï, 1103=Touareg, 1104=Béri=béri, 1106=Arabe, 1107=Toubou, 1140=Ewé, 1141=Mina(Guen), 1142=Kabyè, 1143=Tem(Kotokoli), 1144=Ben(Moba), 1145=Nawdem(Losso), 1147=Ana, 1148=Akposso, 1149=Bassar, 1152=Ouatchi, 1153=Akébou, 1154=Gourma, 1156=Ngam-Gam, 1157=Tchamba, 1159=Aklobo, 1180=Kirundi, 1220=Foufoulde, 1221=Pidgin, 1222=Ewondo, 1223=Bafang, 1224=Douala, 1225=Bafia, 1226=Bafut, 1227=Bagangte, 1228=Bakundu, 1229=Bamileke, 1230=Bamoun, 1231=Bandjoun, 1232=Bangwa, 1233=Banso, 1235=Batanga, 1236=Bayangi, 1237=Bulu, 1238=Dschang, 1239=Eton, 1240=Fali, 1241=Fong, 1242=Gbaya, 1243=Guidar, 1244=Guiziga, 1246=Kapsiki, 1247=Kotoko, 1249=Mafa, 1250=Maka, 1251=Mankon, 1252=Massa, 1253=Mbouda, 1254=Mboum, 1255=Mobakoh, 1256=Moudang, 1257=Ngueba, 1258=Njikwa, 1259=Lamnso, 1260=Abbey, 1261=Abron, 1262=Adjoukrou, 1263=Agni, 1264=Attié, 1265=Avikam, 1267=Baoulé, 1268=Bété, 1269=Dida, 1270=Godié, 1271=Gouro, 1273=Guéré, 1274=Koulango, 1275=Kroumen, 1279=Yacouba, 1280=Wobe, 1281=Ebrie, 1282=Djimini, 1283=Bakwe, 1284=Ahizi, 1285=Gniaboua, 1286=Kouzie, 1287=Koyaka, 1288=Mbatto, 1289=Mahouka, 1300=Soussou, 1301=Baga, 1302=Poular, 1303=Djalounké, 1304=Diakanké, 1305=Maninka, 1306=konianké, 1307=Kpelé, 1310=Loma, 1311=Manian, 1312=Kissié, 1313=Landouma, 1314=Kouranko, 1315=Kakabhe, 1501=Hassaniya, 1622=Isizulu, 2220=Tikari, 2221=Toupouri, 2222=Yamba, 2740=Kisubi, 2741=Kisimbiti, 2742=Kikerewe, 2743=Kimbulu, 2744=Kisangu, 2745=Kimakua, 2746=Kikwaya, 2747=Kisafwa, 2748=Kirangi, 2749=Kipangwa, 2750=Kindengereko, 2751=Kingindo, 2752=Kinguu, 2753=Kinyiha, 2754=Kinyamwanga, 9995=Others, 9999=Don't know, -1=Missing

Source: SAB

Note: Interviewer was instructed to prompt if necessary with “That is, the language of your group of origin.”

<u>Shares Language with Interviewer</u>

Question #: Q116

Question: Interviewer’s home language

Variable Label: Interviewer's home language

Values: 1-5, 10, 15, 17, 29-30, 39, 100-103, 106, 108, 140, 144, 147, 180-181, 184-185, 189, 192, 196-197, 220, 260-266, 272, 300-312, 340, 384-391, 393, 395, 420-421, 460, 463, 466, 471, 501-518, 540-541, 543, 548, 554-555, 582-588, 621, 628-630, 632-634, 639, 642, 652, 660-665, 700-709, 740-742, 745-746, 749, 751-752, 764, 780-785, 787-800, 820-829, 833, 845-846, 861-865, 900-901, 930-933, 1100-1103, 1140-1148, 1160, 1180, 1220-1234, 12621263, 1267-1269, 1273, 1277-1284, 1300-1312, 1500, 1620, 2620-2630, 2761, 9995, 9998-9999, -1

**Value Labels: 1=English, 2=French, 3=Portuguese, 4=Kiswahili, 5=Arabic, 10=Bassa, 15=Fulfuldé, 17=Hausa, 29=Ndau, 30=Ndebele, 39=Yoruba, 100=Fon, 101=Adja, 102=Bariba, 103=Dendi, 106=Peulh, 108=Boo, 140=Setswana, 144=Ikalanga/Sekalaka, 147=Sebirwa, 180=Mooré, 181=Dioula, 184=Gourounsi, 185=Bissa, 189=Lobi, 192=Bwamu, 196=Kassena, 197=Fulsé, 220=Crioulo, 260=Akan, 261=Ewe, 262=Ga/Dangbe, 263=Dagbani, 265=Dagare, 266=Waale, 272=Frafra, 300=Kikuyu, 301=Luo, 302=Luhya, 303=Kamba, 304=Kalenjin, 305=Kisii, 306=Meru/Embu, 310=Somali, 312=Turkana, 340=Sesotho, 384=Gio, 385=Gola, 386=Grebo, 387=Kissi, 388=Kpelle, 390=Kru, 391=Lorma, 393=Mano, 395=Vai, 420="Official" Malagasy, 421=Malagasy dialect, 460=Chitumbuka, 463=Chichewa, 466=Chilomwe, 471=Chitonga, 501=Bambara, 503=Bobo, 505=Dogon, 509=Malinké, 513=Peulh/Fulfude, 516=Soninké/Sarakollé, 517=Sonrhaï, 518=Tamasheq, 540=Makua, 541=Sena, 543=Changana, 548=Chuabo, 554=Chitewe, 555=Chitswa, 582=Nama/Damara, 583=Oshiwambo (Oshindonga/Oshikwanyama), 584=Otjiherero, 585=Rukwangali, 586=Rugririku/Rumanyo, 588=Silozi, 621=Igbo, 628=Ibibio, 629=Kanuri, 630=Tiv, 632=Ijaw, 633=Edo, 634=Igala, 639=Idoma, 642=Jukun, 652=Bajju, 660=Wolof, 661=Pulaar/Toucouleur, 662=Serer, 663=Mandinka/Bambara, 664=Soninke, 665=Diola, 700=Afrikaans, 702=Xhosa, 703=Pedi/Spedi/North Sotho, 704=Sesotho/Sotho/South Sotho, 705=Setswana/Tswana, 706=Shangaan, 707=Swazi, 708=Venda, 709=Zulu, 740=Kinyakyusa, 741=Kichaga, 742=Kihaya, 745=Kipare, 746=Kihehe, 749=Kisukuma, 751=Kimeru, 752=Kikurya, 764=Kijita, 780=Luganda, 781=Runyankole, 782=Runyoro, 783=Lusoga, 784=Lumasaba, 785=Lukhonjo, 787=Ateso, 788=Acholi, 789=Alur, 790=Lugbara, 791=Madi, 792=Japadhola, 793=Lusamia, 794=Lugwere, 795=Rukiga, 796=Rutooro, 797=Langi, 798=Kupsabinyi, 799=Ngakarimajong, 800=Rufumbira, 820=Bemba, 821=Nyanja, 822=Tonga, 823=Lozi, 825=Nsenga, 826=Tumbuka, 827=Kaonde, 828=Luvale, 829=Lala, 833=Senga, 845=Ila, 846=Nyika, 861=Shona, 862=Zezuru, 863=Korekore, 864=Karanga, 865=Manyika, 900=Creole, 901=Bhojpuri, 930=Krio, 931=Mende, 932=Temne, 933=Limba, 1100=Haoussa, 1101=Zarrma/Songhaï, 1103=Touareg, 1140=Ewé, 1141=Mina (Guen), 1142=Kabyè, 1143=Tem (Kotokoli),

1144=Ben (Moba), 1145=Nawdem Losso), 1148=Ikposso (Akposso), 1160=Anyanga, 1180=Kirundi, 1220=Foufoulde, 1222=Ewondo, 1225=Babjoun, 1226=Banen, 1228=Bayangam, 1229=Eton, 1230=Kotoko, 1231=Mafa, 1232=Mbo, 1233=Ntoumou, 1234=Nyem Nyem, 1262=Adjoukrou, 1263=Agni, 1267=Baoulé, 1268=Bété, 1269=Dida, 1273=Guéré, 1277=Malinké/Dioula, 1278=Sénoufo, 1280=WOBE, 1281=TOURA, 1282=DAHOMEY, 1283=ABOURE, 1284=AHIZI, 1300=Soussou, 1302=Poular, 1304=Diakanké, 1305=Maninka, 1307=Kpelé, 1310=Loma, 1312=Kissié, 1500=Tamazight, 1620=siSwati, 2620=Jaba, 2621=Koro, 2622=Babur, 2623=Izere, 2624=Ngas, 2625=Zuru, 2626=Sayawa, 2627=Burah, 2628=Bachama, 2629=Jarawa, 2630=Ron, 2761=Kiluri, 9995=Other, 9998=Refused to answer, 9999=Don't know, -1=Missing

Source: SAB

Note: Answered by interviewer

Interview in Home Language

Question #: Q103

Question: What was the primary language used in the interview?

Variable Label: Language of interview

Values: -7, 13-15, 17, 26, 29, 35, 39, 100-103, 140, 180, 220, 260-263, 300, 302-4, 340, 396, 420-421, 460-461, 501, 513, 516, 518, 540-543, 583-585, 621-623, 660-661, 665, 702-709, 711-712, 780-784, 787-792, 798-799, 809, 820-824, 860-861, 900, 930-933, 1100-1103, 1140, 1142-1145, 1180, 1220-1223, 1301-1305, 9995, -1

Value Labels: 1=English, 2=French, 3=Portuguese, 4=Kiswahili, 5=Arabic, 7=Afrikaans, 13=Dioula, 15=Fulfuldé, 17=Hausa, 26=Luo, 29=Ndau, 35=siSwati, 39=Yoruba, 100=Fon, 101=Adja, 102=Bariba, 103=Dendi, 140=Setswana, 180=Mooré, 220=Crioulo, 260=Akan, 261=Ewe, 262=Ga/Dangbe, 263=Dagbani, 300=Kikuyu, 302=Luhya, 303=Kamba, 304=Kalenjin, 340=Sesotho, 396=Liberian Simple English, 420="Official" Malagasy, 421=Malagasy dialect, 460=Chitumbuka, 461=Chichewa, 501=Bambara, 513=Peulh/Fulfude, 516=Soninke, 518=Tamasheq, 540=Makua, 541=Sena, 543=Changana, 583=Oshiwambo, 584=Otjiherero, 585=Rukwangali, 621=Igbo, 623=Pidgin English, 660=Wolof, 661=Pulaar/Toucouleur, 665=Diola, 702=Xhosa, 703=Pedi/Spedi/North Sotho, 704=Sesotho/Sotho/South Sotho, 705=Setswana/Tswana, 706=Shangaan, 707=Swazi, 708=Venda, 709=Zulu, 711=Mixed=-=English/Afrikaans, 712=Tsonga, 780=Luganda, 781=Runyankole-Rukiga, 782=Runyoro-Rutooro, 783=Lusoga, 784=Lumasaba, 787=Ateso, 789=Alur, 790=Lugbara, 791=Madi, 792=Japadhola, 798=Kupsabinyi, 799=Ngakarimajong, 809=Lugwere, 820=Chewa/nyanja, 821=Ichibemba, 822=Tonga, 823=Kikaonde, 824=Silozi, 860=Ndebele, 861=Shona, 900=Creole, 930=Krio, 931=Mende, 932=Temne, 933=Limba, 1100=Haoussa, 1101=Zarrma/Songhaï, 1103=Touareg, 1140=Ewé, 1142=Kabyè,

1143=Tem (Kotokoli), 1144=Ben (Moba), 1145=Nawdem (Losso), 1180=Kirundi, 1220=Foufoulde, 1221=Pidgin, 1222=Ewondo, 1223=Bafang, 1300=Soussou, 1301=Poular, 1302=Maninka, 1303=Kpélé, 1304=Toma, 1305=Kissié, 9995=Other, -1=Missing

Source: SAB

Note: Answered by interviewer

BIBLIOGRAPHY

Adida, Claire, Karen Ferree, Daniel Posner, and Amanda Lea Robinson. 2016. Who's asking? Interview coethnicity effects in African survey data. Comparative Political Studies. doi: 10.1177/0010414016633487.

Afrobarometer. 2016. Afrobarometer data, 2011–2013, Round 5. URL: http://www.afrobarometer.org/.

Akinlabi, Oluwagbenga Michael. 2015. Young people, procedural justice, and police legitimacy in Nigeria. Policing and Society. doi:10.1080/10439463.2015.1077836

Alge, Bradley J. 2001. Effects of computer surveillance on perceptions of privacy and procedural justice. Journal of Applied Psychology 86: 797-804.

Anderson, Christopher J., and Yuliya V. Tverdova. 2003. Corruption, political allegiances, and attitudes toward government in contemporary democracies. American Journal of Political Science 47:91-109.

Asunka, Joseph. 2015. Beyond ethnicity: Exploring other drivers of response bias in African survey data. Paper presented at the African Studies Association Conference, San Diego, CA, November 19-21.

Austin, Peter C. 2010. Estimating multilevel logistic regression models when the number of clusters is low: a comparison of different statistical software procedures. The International Journal of Biostatistics 6 (Online). DOI: 10.2202/1557-4679.1195

Babovic, Budimir. 2000. Police brutality or police torture. Policing: An International Journal of Police Strategies & Management 23: 374-380.

Bailard, Catie Snow. 2009. Mobile phone diffusion and corruption in Africa. Political ommunication 26: 333-353.

Baker, Bruce. 2003. Policing and the rule of law in Mozambique. Policing & Society 13: 139-158.

Baker, Bruce. 2004a. Multi-choice policing in Africa: is the continent following the South African pattern? Society in Transition 35: 204-223.

Baker, Bruce. 2004b. Protection from crime: What is on offer for Africans? Journal of Contemporary African Studies 22: 165-188.

Baker, Bruce. 2005. Multi-choice policing in Uganda. Policing and Society 15: 19-41.

Baker, Bruce. 2006. Beyond the state: Police in urban Uganda and Sierra Leone. Africa Spectrum 41: 55-76.

Barker, Thomas, and Julian B. Roebuck. 1974. A typology of police corruption. Social Problems 21: 423-479.

Bauer, Daniel J., and Patrick J. Curran. 2005. Probing interactions in fixed and multilevel regression: Inferential and graphical techniques. Multivariate Behavioral Research 40: 373-400.

Bayley, David H. 1966. The effects of corruption in a developing nation. The Western Political Quarterly 19: 719-732.

Bayley, David H. 1995. A foreign policy for democratic policing. Policing and Society: An International Journal 5: 79-93.

Bayley, David H. 1996. Police for the Future. Oxford, UK: Oxford University Press.

Bayley, David H. 2006. Changing the guard: Developing democratic police abroad. Oxford, UK: Oxford University Press.

Bayley, David H., and Harold Mendelsohn. 1969. Minorities and the police: Confrontation in America. New York: Free Press.

Beetham, David. 1991. The legitimation of power. New York, NY: Palgrave Macmillan.

Bhavnani, Ravi, and Dan Miodownik. 2009. Ethnic polarization, ethnic salience, and civil war. Journal of Conflict Resolution 53: 30-49.

Black, Donald. 1983. Crime as social control. American Sociological Review 48: 34-45.

Blackburn, Keith, and Gonzalo F. Forgues-Puccio. 2009. Why is corruption less harmful in some countries than in others? Journal of Economic Behavior & Organization 72: 797-810.

Blader, Steven L., and Tom R. Tyler. 2009. Testing and extending the group engagement model: linkages between social identity, procedural justice, economic outcomes, and extrarole behavior. Journal of Applied Psychology 94: 445-464.

Blair, Robert A., Sabrina Karim, Michael J. Gilligan, and Kyle C. Beardsley. 2016. Policing ethnicity: Lab-in-the-field evidence on discrimination, cooperation and ethnic balancing in the Liberian National Police. Social Science Research Network: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2772634

Borjas, George J., and Glenn T. Sueyoshi. 1994. A two-stage estimator for probit models with structural group effects. Journal of Econometrics 64: 165-182.

Botan, Carl. 1996. Communication work and electronic surveillance: A model for predicting panoptic effects. Communications Monographs 63: 293-313.

Bottoms, Anthony, and Justice Tankebe. 2012. Beyond procedural justice: A dialogic approach to legitimacy in criminal justice. Journal of Criminal Law & Criminology 102: 119–70.

Bradford, Benjamin. 2010. Convergence, not divergence?: Trends and trajectories in public contact and confidence in the police. British Journal of Criminology 51: 179–200.

Bradford, Benjamin. 2014. Policing and social identity: Procedural justice, inclusion and cooperation between police and public. Policing and society 24: 22-43.

Bradford, Benjamin, Aziz Huq, Jonathan Jackson, and Benjamin Roberts. 2014. What price fairness when security is at stake? Police legitimacy in South Africa. Regulation & Governance 8: 246–68.

Bradford, Benjamin, and Jonathan Jackson. 2010. Different things to different people? The meaning and measurement of trust and confidence in policing across diverse social groups in London. SSRN Working Paper: http://ssrn.com/abstract=1628546

Bratton, Michael, Robert B. Mattes, and Emmanuel Gyimah-Boadi. 2005. Public opinion, democracy, and market reform in Africa. Cambridge, UK: Cambridge University Press.

Breen, Richard, Kristian Bernt Karlson, and Anders Holm. 2013. Total, direct, and indirect effects in logit and probit models. Sociological Methods & Research 42: 164-191.

Brockner, Joel, Grant Ackerman, Jerald Greenberg, Michele J. Gelfand, Anne Marie Francesco, Zhen Xiong Chen, Kwok Leung, Gunter Bierbrauer, Carolina Gomez, Bradley L. Kirkman, and Debra Shapiro. 2001. Culture and procedural justice: The

influence of power distance on reactions to voice. Journal of Experimental Social Psychology 37: 300–315.

Brogden, Mike. 2005. “Horses for courses” and “thin blue lines”: community policing in transitional society. Police Quarterly 8: 64-98.

Bruce, David. 2002. Police brutality in South Africa. In Mwanajiti, N., Mhlanga, P., Sifuniso, M. Nachali-Kambikambi, Y., Muuba, M and Mwananyanda, M (eds.) Police brutality in Southern Africa: a human rights perspective. Lusaka: Inter-African Network for Human Rights and Development.

Bryan, Mark L. and Stephen P. Jenkins. 2016. Multilevel modelling of country effects: A cautionary tale. European Sociological Review 32:3-22.

Cao, Liqun, James Frank, and Francis T. Cullen. 1996. Race, community context and confidence in the police. American Journal of Police 15: 3-22.

Casper, Jonathan D., Tom Tyler, and Bonnie Fisher. 1988. Procedural justice in felony cases. Law and Society Review 22: 483-508.

Chang, Eric CC, and Nicholas N. Kerr. 2016. An insider–outsider theory of popular tolerance for corrupt politicians. Governance. DOI: 10.1111/gove.12193.

Coicaud, Jean-Marc. 2002. Legitimacy and politics: a contribution to the study of political right and political responsibility. Cambridge, UK: Cambridge University Press.

Cole, Bankole. 1999. Post-colonial systems. In Mawby, R.I (ed). Policing across the world: Issues for the twenty-first century. London, UK: Routledge.

Correia, Mark E. 2010. Determinants of attitudes toward police of Latino immigrants and non-immigrants. Journal of Criminal Justice 38: 99-107.

Coupe, Tim, and Max Griffiths. 1999. The influence of police actions on victim satisfaction in burglary investigations. International Journal of the Sociology of Law 27: 413-431.

Das, Dilip K., and Michael Palmiotto. 2006. World police encyclopedia: Volumes 1-4. New York: Taylor & Francis US.

Davis, Robert, Nicole Henderson, and Cybele Merrick. 2003. Community policing: Variations on the western model in the developing world. Police Practice and Research 4: 285-300.

Deflem, Mathieu. 1994. Law enforcement in British colonial Africa: A comparative analysis of imperial policing in Nyasaland, the Gold Coast and Kenya. Police Studies: The International Review of Police Development 17: 45-68.

Della Porta, Donatella, and Sidney Tarrow. 2012. Interactive diffusion: The coevolution of police and protest behavior with an application to transnational contention. Comparative Political Studies 45: 119-152.

Dinesen, Peter Thisted, and Kim Mannemar Sønderskov. 2015. Ethnic diversity and social trust: Evidence from the micro-context. American Sociological Review 80: 550-573.

Earl, Jennifer, and Sarah Soule. 2006. Seeing blue: A police-centered explanation of protest policing. Mobilization: An International Quarterly 11: 145-164.

Earl, Jennifer, Sarah A. Soule, and John D. McCarthy. 2003. Protest under fire? Explaining the policing of protest. American Sociological Review 68: 581-606.

Easton, David. 1965. A framework for political analysis. Ennglewood Cliffs, NJ: Prentice-Hall.

Eifert, Benn, Edward Miguel, and Daniel N. Posner. 2010. Political competition and ethnic identification in Africa. American Journal of Political Science 54: 494-510.

Ekeh, Peter P. 1975. Colonialism and the two publics in Africa: A theoretical statement. Comparative Studies in Society and History 17: 91-112.

Enders, Craig K., and Davood Tofighi. 2007. Centering predictor variables in cross-sectional multilevel models: a new look at an old issue. Psychological methods 12: 121-138.

Feld, Barry C. 1990. The punitive juvenile court and the quality of procedural justice: Disjunctions between rhetoric and reality. Crime & Delinquency 36: 443-466.

Finkel, Jodi. 2005. Judicial reform as insurance policy: Mexico in the 1990s. Latin American Politics and Society 47: 87-113.

Frankel, Philip H. 1980. South Africa: The politics of police control. Comparative Politics 12: 481-499.

French, John R.P. Jr., and Bertram Raven. 1959. The bases of social power. In Cartwright, Dorwin (ed). Studies in Social Power. Oxford, UK: Oxford University Press.

Fuchs-Schündeln, Nicola, and Matthias Schündeln. 2015. On the endogeneity of political preferences: Evidence from individual experience with democracy. Science 347: 1145-1148.

Garofalo, James. 1979. Victimization and the fear of crime. Journal of Research in Crime and Delinquency 16: 80-97.

Garriott, William (ed.). 2013. Policing and contemporary governance: The anthropology of police in practice. New York, NY: Palgrave Macmillan.

Gau, Jacinta M., Nicholas Corsaro, Eric A. Stewart, and Rod K. Brunson. 2012. Examining macro-level impacts on procedural justice and police legitimacy. Journal of Criminal Justice 40: 333–43.

Gellately, Robert. 2001. Backing hitler: Consent and coercion in Nazi Germany. Oxford, UK: Oxford Paperbacks.

Gelman, Andrew, and Jennifer Hill. 2006. Data analysis using regression and multilevel/hierarchical models. Cambridge, UK: Cambridge University Press.

Gibson, James L., and Gregory A. Caldeira. 2003. Defenders of democracy? Legitimacy, popular acceptance, and the South African Constitutional Court. Journal of Politics 65: 1-30.

Gibson, James L., Gregory A. Caldeira, and Vanessa A. Baird. 1998. On the legitimacy of national high courts. American Political Science Review 92: 343-358.

Gilinskiy, Yakov. 2011. Torture by the Russian police: an empirical study. Police Practice and Research: An International Journal 12: 163-171.

Gleditsch, Nils Petter, Peter Wallensteen, Mikael Eriksson, Margareta Sollenberg, and Håvard Strand. 2002. Armed conflict 1946-2001: A new dataset. Journal of Peace Research 39: 615-637.

Goldsmith, Andrew. 2002. Policing weak states: Citizen safety and state responsibility. Policing & Society 13: 3-21.

Goldsmith, Andrew. 2005. Police reform and the problem of trust. Theoretical Criminology 9: 443–70.

Goldstein, Herman. 1977. Policing a free society. Cambridge, Mass: Ballinger Pub. Co.

Gordon, Diana R. 2001. Democratic consolidation and community policing: Conflicting imperatives in South Africa. Policing and Society: An International Journal 11: 121-150.

Gottfredson, Denise C., Brook W. Kearley, Stacy S. Najaka, and Carlos M. Rocha. 2007. How drug treatment courts work: An analysis of mediators. Journal of Research in Crime and Delinquency 44: 3-35.

Graham, John W., Allison E. Olchowski, and Tamika D. Gilreath. 2007. How many imputations are really needed? Some practical clarifications of multiple imputation theory. Prevention Science 8: 206-213.

Gruenewald, Jeff, and William Alex Pridemore. 2012. A comparison of ideologically-motivated homicides from the new extremist crime database and homicides from the supplementary homicide reports using multiple imputation by chained equations to handle missing values. Journal of Quantitative Criminology 28: 141-162.

Gurr, Ted Robert. 1970. Why men rebel. Princeton, NJ: Princeton University Press.

Gurr, Ted Robert. 1986. The political origins of state violence and terror: A theoretical analysis. In Michael Stohl and George A. Lopez (eds.) Government Violence and Repression: An Agenda for Research. Westport, CT: Greenwood Press.

Gyimah-Boadi, Emmanuel. 2015. Africa's waning democratic commitment. Journal of Democracy 26: 101-113.

Hardin, Russel. 1993. The street-level epistemology of trust. Politics & Society 21: 505-529.

Harkness, Kristen A. 2016. The ethnic army and the state: Explaining coup traps and the difficulties of democratization in Africa. Journal of Conflict Resolution 60:587-616.

Henderson, Howard, William Wells, Edward R. Maguire, and Jameel Gray. 2010. Evaluating the measurement properties of procedural justice in a correctional setting. Criminal Justice and Behavior 37: 384-399.

Herbert, Steve. 2006. Tangled up in blue: Conflicting paths to police legitimacy. Theoretical Criminology 10: 481-504.

Hetherington, Marc J. 2005. Why trust matters: Declining political trust and the demise of American liberalism. Princeton, NJ: Princeton University Press.

Hills, Alice. 2007. Police commissioners, presidents and the governance of security. The Journal of Modern African Studies 45: 403-423.

Hinds, Lyn. 2009. Public satisfaction with police: The influence of general attitudes and police–citizen encounters. International Journal of Police Science & Management 11: 54–66.

Hinds, Lyn, and Kristina Murphy. 2007. Public satisfaction with police: Using procedural justice to improve police legitimacy. Australian & New Zealand Journal of Criminology 40: 27–42.

Hinsch, Wilfried. 2008. Legitimacy and justice. In Jörg Kühnelt (ed.) Political Legitimization without Morality? Amsterdam: Springer Netherlands.

Hinsch, Wilfried. 2010. Justice, legitimacy, and constitutional rights. Critical Review of International Social and Political Philosophy 13: 39-54.

Hobbes, Thomas. [1668] 1994. Leviathan: with selected variants from the Latin edition of 1668. Edited by Edwin Curley. Indianapolis: Hackett Publishing Company, Inc.

Hough, Michael, Jonathan Jackson, and Benjamin Bradford. 2013a. Legitimacy, trust, and compliance: An empirical test of procedural justice theory using the European Social Survey. In Justice Tankebe and A Liebling (eds.), Legitimacy and Criminal Justice: An International Exploration. Oxford, UK: Oxford University Press.

Hough, Michael, Jonathan Jackson, and Benjamin Bradford. 2013b. Trust in justice and the legitimacy of legal authorities: topline findings from a European comparative study. In Body-Gendrot, Sophie, Michael Hough, Klara Kerezsi, René Lévy, and Sonja Snacken (eds.) The Routledge Handbook of European Criminology. Abingdon, UK: Routledge.

Hough, Michael, Jonathan Jackson, Benjamin Bradford, Andy Myhill, and Paul Quinton. 2010. Procedural justice, trust, and institutional legitimacy. Policing 4: 203–10.

Huggins, Martha Knisely. 1998. Political policing: The United States and Latin America. Durham: Duke University Press.

Hutchison, Marc L. 2011. Territorial threat, mobilization, and political participation in Africa. Conflict Management and Peace Science 28: 183-208.

Hutchison, Marc L., and Kristin Johnson. 2011. Capacity to trust? Institutional capacity, conflict, and political trust in Africa, 2000–2005. Journal of Peace Research 48: 737-752.

Hwang, Eui-Gab, Edmund F. McGarrell, and Bruce L. Benson. 2005. Public satisfaction with the South Korean police: The effect of residential location in a rapidly industrializing nation. Journal of Criminal Justice 33: 585–99.

Ichino, Nahomi, and Noah L. Nathan. 2013. Crossing the line: Local ethnic geography and voting in Ghana. American Political Science Review 107: 344-361.

Inglehart, Ronald. 2000. Globalization and postmodern values. Washington Quarterly 23: 215-228.

Ivković, Sanja Kutnjak. 2003. To serve and collect: Measuring police corruption. The Journal of Criminal Law and Criminology 93: 593-650.

Jackson, Arrick, and Alynna Lyon. 2001. Policing after ethnic conflict: Culture, democratic policing, politics, and the public. Policing: An International Journal of Police Strategies & Management 24: 563-585.

Jackson, Jonathan, Muhammad Asif, Benjamin Bradford, and Muhammad Zakria Zakar. 2014. Corruption and police legitimacy in Lahore, Pakistan. British Journal of Criminology 54: 1067-1088.

Jackson, Jonathan and Benjamin Bradford. 2009. Crime, policing and social order: On the expressive nature of public confidence in policing. British Journal of Sociology 60: 493-521.

Jackson, Jonathan, Benjamin Bradford, Michael Hough, and K. H. Murray. 2011. Policing by consent and public compliance with the law: Notes on legal legitimacy and cynicism. In Adam Crawford and Anthea Hucklesby (eds) Legitimacy and Compliance in Criminal Justice. London: Routledge.

Jackson, Jonathan, Benjamin Bradford, Michael Hough, Jouni Kuha, Sally Stares, Sally Widdop, Rory Fitzgerald, Maria Yoranova, and Todor Galev. 2011. Developing European indicators of trust in justice. European Journal of Criminology 8: 267–85.

Jackson, Jonathan, Benjamin Bradford, Michael Hough, Andy Myhill, Paul Quinton, and Tom R Tyler. 2012a. On the justification and recognition of police power: Broadening the concept of police legitimacy. Yale Law School, Public Law Working Paper No. 251; Oxford Legal Studies Research Paper No. 32/2012. http://ssrn.com/abstract=2084428.

Jackson, Jonathan, Benjamin Bradford, Michael Hough, Andy Myhill, Paul Quinton, and Tom R. Tyler. 2012b. Why do people comply with the law?: Legitimacy and the influence of legal institutions. British Journal of Criminology 52: 1051–71.

Jackson, Jonathan, Michael Hough, Benjamin Bradford, and Jouni Kuha. 2015. Empirical legitimacy as two connected psychological states. In Gorazd Meško and Justice Tankebe (eds.). Trust and Legitimacy in Criminal Justice. New York: Springer International Publishing.

Jackson, Jonathan, Aziz Z. Huq, Benjamin Bradford, and Tom R. Tyler. 2013. Monopolizing force? Police legitimacy and public attitudes toward the acceptability of violence. Psychology, Public Policy, and Law 19: 479–97.

Jackson, Jonathan, and Jason Sunshine. 2007. Public confidence in policing: A neo-Durkheimian perspective. British Journal of Criminology 47: 214–33.

Jauregui, Beatrice. 2013a. Cultures of legitimacy and postcolonial policing: Guest editor introduction. Law & Social Inquiry 38: 547–52.

Jauregui, Beatrice. 2013b. Beatings, beacons, and big men: Police disempowerment and delegitimation in India. Law & Social Inquiry 38: 643–69.

Jonathan, Tal. 2009. Police involvement in counter-terrorism and public attitudes towards the police in Israel--1998-2007. British Journal of Criminology 50: 748–71.

Jonathan-Zamir, Tal, and David Weisburd. 2013. The effects of security threats on antecedents of police legitimacy findings from a quasi-experiment in Israel. Journal of Research in Crime and Delinquency 50: 3-32.

Jones, Jeffrey M. 2015. In U.S., 58% Back Legal Marijuana Use. http://www.gallup.com/poll/186260/back-legal-marijuana.aspx

Junger-Tas, Josine, and Ineke Haen Marshall. 1999. The self-report methodology in crime research. Crime and Justice 25: 291-367.

Kaariainen, Juha Tapio. 2007. Trust in the police in 16 European Countries. European Journal of Criminology 4: 409–35.

Karakus, Onder. 2015. Instrumental and normative pathways to legitimacy and public cooperation with the police in Turkey: Considering perceived neighborhood characteristics and local government performance. Justice Quarterly - Online First. DOI:10.1080/07418825.2015.1095346

Karlson, Kristian Bernt, and Anders Holm. 2011. Decomposing primary and secondary effects: a new decomposition method. Research in Social Stratification and Mobility 29: 221-237.

Kelman, Herbert C. 2006. Interests, relationships, identities: Three central issues for individuals and groups in negotiating their social environment. Annual Review of Psychology 57: 1-26.

Kenward, Michael G., and James Carpenter. 2007. Multiple imputation: current perspectives. Statistical Methods in Medical Research 16: 199-218.

Killingray, David. 1986. The maintenance of law and order in British colonial Africa. African Affairs 85: 411-437.

Kirk, David S., and Mauri Matsuda. 2011. Legal cynicism, collective efficacy, and the ecology of arrest. Criminology 49: 443-472.

Kirk, David S., and Andrew V. Papachristos. 2011. Cultural mechanisms and the persistence of neighborhood violence. American Journal of Sociology 116: 1190-1233.

Kopecký, Petr. 2011. Political competition and party patronage: Public appointments in Ghana and South Africa. Political Studies 59: 713-732.

Kreft, Ita GG, Ita Kreft, and Jan de Leeuw. 1998. Introducing multilevel modeling. Thousand Oaks, CA: Sage.

Kreft, Ita GG, Jan De Leeuw, and Leona S. Aiken. 1995. The effect of different forms of centering in hierarchical linear models. Multivariate Behavioral Research 30: 1-21.

Kwak, Dae-Hoon, Claudia E. San Miguel, and Diana L. Carreon. 2012. Political legitimacy and public confidence in police: An analysis of attitudes toward Mexican police. Policing: An International Journal of Police Strategies & Management 35: 124–46.

LaFree, Gary. 1998. Losing legitimacy: Street crime and the decline of social institutions in America. Boulder, CO: Westview Press.

Lee, Joanna M., Laurence Steinberg, and Alex R. Piquero. 2010. Ethnic identity and attitudes toward the police among African-American juvenile offenders. Journal of Criminal Justice 38: 781-789.

Levi, Margaret. 1998. A state of trust. Trust and Governance 1: 77-101.

Levi, Margaret, Tom Tyler and Audrey Sacks. 2009. Conceptualizing legitimacy, measuring legitimating beliefs. American Behavioral Scientist 53: 354-375.

Le Vine, Victor. 1975. Corruption in Ghana. Transition 47: 48-61.

Lind, E. Allan, and Tom R. Tyler. 1988. The social psychology of procedural justice. New York, NY: Plenum Press.

Lindberg, Staffan I., Michael Coppedge, John Gerring, and Jan Teorell. 2014. V-Dem: A new way to measure democracy. Journal of Democracy 25: 159-169.

Linke, Andrew M. 2013. The aftermath of an election crisis: Kenyan attitudes and the influence of individual-level and locality violence. Political Geography 37: 5-17.

Lipset, Seymour Martin. 1959. Some social requisites of democracy: Economic development and political legitimacy. American Political Science Review 53: 69-105.

Lipsky, Michael. 2010. Street-level bureaucracy: Dilemmas of the individual in public service. New York, NY: Russell Sage Foundation.

Little, Roderick JA, and Donald B. Rubin. 2014. Statistical analysis with missing data. Hoboken, NJ: John Wiley & Sons.

Locke, John [1689] 1988. Two treatises of government. Cambridge: Cambridge University Press.

Long, J. Scott. 1997. Regression models for categorical and limited dependent variables. Thousand Oaks, CA: Sage Publications.

Maas, Cora J. M., and Joop J. Hox. 2004. Robustness issues in multilevel regression analysis. Statistica Neerlandica 58: 127–37.

Maas, Cora J. M., and Joop J. Hox. 2005. Sufficient sample sizes for multilevel modeling. Methodology 1: 85–91.

MacKinnon, David P., and James H. Dwyer. 1993. Estimating mediated effects in prevention studies. Evaluation review 17: 144-158.

MacQueen, Sarah, and Benjamin Bradford. 2015. Enhancing public trust and police legitimacy during road traffic encounters: Results from a randomised controlled trial in Scotland. Journal of Experimental Criminology 11: 419-443.

Manning, Peter K. 2005. The study of policing. Police Quarterly 8: 23-43.

Manning, Peter K. 2010. Policing contingencies. Chicago: University of Chicago Press.

Marenin, Otwin. 2009. The futures of policing African states. Police Practice and Research: An International Journal 10: 349-363.

Maroto, Michelle Lee. 2015. The absorbing status of incarceration and its relationship with wealth accumulation. Journal of Quantitative Criminology 31: 207-236.

Marshall, M. G., K. Jaggers, and Ted R. Gurr. 2014. Polity IV Project: Political Regime Characteristics and Transitions, 1800–2013. INSCR.

Martin, Jeffrey T. 2013. Legitimate force in a particularistic democracy : Street police and outlaw legislators in the Republic of China on Taiwan. Law & Social Inquiry 38: 615–42.

Mattes, Robert, and Michael Bratton. 2007. Learning about democracy in Africa: Awareness, performance, and experience. American Journal of Political Science 51: 192-217.

Mattes, Robert B., Michael Bratton, and Yul Derek Davids. 2003. Poverty, survival, and democracy in Southern Africa. No. 23. Institute for Democracy in South Africa (IDASA).

Mazerolle, Lorraine, Emma Antrobus, Sarah Bennett, and Tom R Tyler. 2012. Shaping citizen perceptions of police legitimacy: A randomized field trial of procedural justice. Criminology 51: 1–31.

Mazerolle, Lorraine, Sarah Bennett, Jacqueline Davis, Elise Sargeant, and Matthew Manning. 2013. Procedural justice and police legitimacy: A systematic review of the research evidence. Journal of Experimental Criminology 9: 245–74.

Mazrui, Ali A. 1983. Francophone nations and English-speaking states: imperial ethnicity and African political formations. In Donald S. Rothschild and Victor A. Olorunsula (eds.), State versus ethnic claim: African policy dilemma. Boulder, Co: Westview Press.

McHenry Jr, Dean E. 2000. Quantitative measures of democracy in Africa: an assessment. Democratization 7: 168-185.

McIvor, Gill. 2009. Therapeutic jurisprudence and procedural justice in Scottish Drug Courts. Criminology and Criminal Justice 9: 29-49.

McPhail, Clark, and John D. McCarthy. 2005. Protest mobilization, protest repression, and their interaction. In Christian Davenport, Hank Johnston, and Carol McClurg Mueller (eds.) Repression and mobilization. Minneapolis, MN: University of Minnesota Press.

Memmi, Albert. 1965. The colonizer and the colonized. Boston: Beacon Press.

Menjívar, Cecilia, and Cynthia Bejarano. 2004. Latino immigrants' perceptions of crime and police authorities in the United States: A case study from the Phoenix metropolitan area. Ethnic and Racial Studies 27: 120-148.

Méon, Pierre-Guillaume, and Laurent Weill. 2010. Is corruption an efficient grease? World Development 38: 244-259.

Merelman, Richard M. 1966. Learning and legitimacy. American Political Science Review 60: 548-561.

Merlo, Juan, Basile Chaix, Henrik Ohlsson, Anders Beckman, Kristina Johnell, Per Hjerpe, Lennart Råstam, and Klaus Larsen. 2006. A brief conceptual tutorial of multilevel analysis in social epidemiology: Using measures of clustering in multilevel logistic regression to investigate contextual phenomena. Journal of Epidemiology and Community Health 60: 290-297.

Mishler, William, and Richard Rose. 2008. Seeing is not always believing: Measuring corruption perceptions and experiences. Paper prepared for the Elections, Public Opinion and Parties 2008 Annual Conference, 12-14 September, 2008, University of Manchester, United Kingdom.

Moravcová, Eva. 2015. Willingness to cooperate with the police in four central European countries. European Journal on Criminal Policy and Research 22: 171-187.

Morris, Christopher W. 2012. State coercion and force. Social Philosophy and Policy 29: 28-49.

Murphy, Christopher. 2005. Police Studies Go Global: In Eastern Kentucky? Police Quarterly 8: 137-145.

Murphy, Kristina, and Julie Barkworth. 2014. Victim willingness to report crime to police: Does procedural justice or outcome matter most? Victims & Offenders 9: 178-204.

Murphy, Kristina, and Adrian Cherney. 2011. Understanding cooperation with police in a diverse society. British Journal of Criminology 52: 181–201.

Murphy, Kristina, Tom R. Tyler, and Amy Curtis. 2009. Nurturing regulatory compliance: Is procedural justice effective when people question the legitimacy of the law? Regulation & Governance 3: 1–26.

Myhill, Andy, and Benjamin Bradford. 2012. Can police enhance public confidence by improving quality of service? Results from two surveys in England and Wales. Policing and Society 22: 397–425.

Nagin, Daniel S., and Greg Pogarsky. 2001. Integrating celerity, impulsivity, and extralegal sanction threats into a model of general deterrence: theory and evidence. Criminology 39: 865-892.

National Conference of State Legislatures. 2016. State Medical Marijuana Laws, accessed on May 30, 2016. http://www.ncsl.org/research/health/state-medical-marijuana-laws.aspx.

Newburn, Tim, and Barry Webb. 1999. Understanding and preventing police corruption: lessons from the literature. London: Home Office.

Nivette, Amy E. 2013. Legitimacy and crime: Theorizing the role of the state in cross-national criminological theory. Theoretical Criminology 18: 93-111.

Nivette, Amy E. 2016. Institutional ineffectiveness, illegitimacy, and public support for vigilantism in Latin America. Criminology 54: 142-175.

Onyeozili, Emmanuel C. 2005. Obstacles to effective policing in Nigeria. African Journal of Criminology and Justice Studies 1:32-54.

Papachristos, Andrew V., Tracey L. Meares, and Jeffrey Fagan. 2009. Why do criminals obey the law? The influence of legitimacy and social networks on active gun offenders. Yale Law & Economics Research Paper 373 09-199.

Paternoster, Raymond, Robert Brame, Ronet Bachman, and Lawrence W. Sherman. 1997. Do fair procedures matter? The effect of procedural justice on spouse assault. Law and Society Review 31: 163-204.

Peel, Sir Robert. 1829. Principles of law enforcement. The Metropolitan Police Act of 1829.

Pettersson, Therése, and Peter Wallensteen. 2015. Armed conflicts, 1946–2014. Journal of Peace Research 52: 536-550.

Pilati, Katia. 2011. Political context, organizational engagement, and protest in African countries. Mobilization: An International Quarterly 16: 351-368.

Pino, Nathan and Michael D. Wiatrowski (eds.) 2012. Democratic policing in transitional and developing countries. Burlington, VT: Ashgate Publishing, Ltd.

Polity IV Project. 2016. Polity IV Project: Political Regime Characteristics and Transitions, 1800–2014. Vienna, VA: Center for Systemic Peace.

Pratt, Travis C., and Francis T. Cullen. 2005. Assessing macro-level predictors and theories of crime: A meta-analysis. Crime and justice 32: 373-450.

Pratt, Travis C., Francis T. Cullen, Kristie R. Blevins, Leah E. Daigle, and Tamara D. Madensen. 2006. The empirical status of deterrence theory: A meta-analysis. In Pratt, Travis C., Francis T. Cullen, and Kristie R. Blevins (eds), Taking stock: The status of criminological theory. New Brunswick: Transaction Publishers.

Punch, Maurice. 2000. Police corruption and its prevention. European Journal on Criminal Policy and Research 8: 301-324.

Radelet, Michael L. 1984. Rejecting the jury: The imposition of the death penalty in Florida. UC Davis Law Review 18: 1409-1432.

Raudenbush, Stephen W., and Anthony S. Bryk. 2002. Hierarchical linear models: Applications and data analysis methods. Vol. 1. Thousand Oaks, CA: Sage.

Rawls, John. 1993. The law of peoples. Critical Inquiry 20: 36-68.

Rawls, John. 2007. A theory of justice. Cambridge: Harvard University Press.

Raz, Joseph. 1986. The morality of freedom. New York, NY: Clarendon Press.

Reisig, Michael D., and Meghan Stroshine Chandek. 2001. The effects of expectancy disconfirmation on outcome satisfaction in police-citizen encounters. Policing: An International Journal of Police Strategies & Management 24: 88-99.

Reisig, Michael D., and Camille Lloyd. 2009. Procedural justice, police legitimacy, and helping the police fight crime results from a survey of Jamaican adolescents. Police Quarterly 12: 42-62.

Reisig, Michael D., and Gorazd Mesko. 2009. Procedural justice, legitimacy, and prisoner misconduct. Psychology, Crime & Law 15: 41-59.

Reisig, Michael D., Jason Bratton, and Marc G. Gertz. 2007. The construct validity and refinement of process-based policing measures. Criminal Justice and Behavior 34: 1005–28.

Reisig, Michael D, Justice Tankebe, and Gorazd Meško. 2014. Procedural justice, police legitimacy, and public cooperation with the police among young Slovene adults. Journal of Criminal Justice and Security 14: 147–64.

Roberts, Jennifer, Edward P. Mulvey, Julie Horney, John Lewis, and Michael L. Arter. 2005. A test of two methods of recall for violent events. Journal of Quantitative Criminology 21: 175-193.

Robinson, Amanda Lea. 2014. National versus ethnic identification in Africa: Modernization, colonial legacy, and the origins of territorial nationalism. World Politics 66: 709-746.

Rodriguez, German, and Noreen Goldman. 2001. Improved estimation procedures for multilevel models with binary response: a case-study. Journal of the Royal Statistical Society: Series A (Statistics in Society) 164: 339-355

Rose, Richard. 1998. Getting things done with social capital: New Russia Barometer VII studies Glasgow: University of Strathclyde Studies in Public Policy No. 303.

Rose-Ackerman, Susan. 1999. Corruption and government: Causes, consequences, and reform. Cambridge: Cambridge University Press.

Royston, Patrick. 2009. Multiple imputation of missing values: Further update of ice, with an emphasis on categorical variables. Stata Journal 9: 466-477.

Rubin, Donald B. 2004. Multiple imputation for nonresponse in surveys. Hoboken, NJ: John Wiley & Sons.

Ruteere, Mutuma, and Marie-Emmanuelle Pommerolle. 2003. Democratizing security or decentralizing repression? The ambiguities of community policing in Kenya. African Affairs 102: 587-604.

Scaglion, Richard, and Richard G. Condon. 1980. Determinants of attitudes toward city police. Criminology 17: 485–94.

Shapiro, Debra L., and Jeanne M. Brett. 1993. Comparing three processes underlying judgments of procedural justice: A field study of mediation and arbitration. Journal of Personality and Social Psychology 65: 1167-1177.

Sherman, Lawrence W. 1974. Police corruption: A sociological perspective. Garden City, NY: Anchor Press.

Sherman, Lawrence W. 1993. Defiance, deterrence, and irrelevance: A theory of the criminal sanction. Journal of Research in Crime and Delinquency 30: 445-473.

Simmons, A. John. 2001. Justification and legitimacy: Essays on rights and obligations. Cambridge, UK: Cambridge University Press.

Skogan, Wesley G. 2006. Asymmetry in the impact of encounters with police. Policing and Society 16: 99–126.

Snijders, Tom and Roel Bosker. 2012. Multilevel analysis: An introduction to basic and applied multilevel analysis, 2nd Edition. Thousand Oaks, CA: Sage.

Sobel, Michael E. 1982. Asymptotic confidence intervals for indirect effects in structural equation models. Sociological Methodology 13: 290-312.

South Africa Truth and Reconciliation Commission. 1998. Truth and Reconciliation Commission of South Africa Report. Cape Town: Juta & Co. Ltd.

Sparks, Richard, Anthony E. Bottoms, and Will Hay. 1996. Prisons and the problem of order. Oxford: Clarendon Press.

Stoutland, Sara E. 2001. The multiple dimensions of trust in resident/police relations in Boston. Journal of Research in Crime and Delinquency 38: 226–56.

Sudman, Seymour, and Norman M. Bradburn. 1973. Effects of time and memory factors on response in surveys. Journal of the American Statistical Association 68: 805-815.

Sunshine, Jason, and Tom R Tyler. 2003. The role of procedural justice and legitimacy in shaping public support for policing. Law & Society Review 37: 513–48.

Tankebe, Justice. 2008. Police effectiveness and police trustworthiness in Ghana: An empirical appraisal. Criminology and Criminal Justice 8: 185-202.

Tankebe, Justice. 2009a. Public cooperation with the police in Ghana: Does procedural fairness matter? Criminology 47: 1265-1293.

Tankebe, Justice. 2009b. Self-help, policing, and procedural justice: Ghanaian vigilantism and the rule of law. Law & Society Review 43: 245–70.

Tankebe, Justice. 2010. Public confidence in the police: Testing the effects of public experiences of police corruption in Ghana. British Journal of Criminology 50: 296–319.

Tankebe, Justice. 2013a. Viewing things differently: The dimensions of public perceptions of police legitimacy. Criminology 51: 103–35.

Tankebe, Justice. 2013b. In search of moral recognition? Policing and eudaemonic legitimacy in Ghana. Law & Social Inquiry 38: 576–97.

Taylor, Ralph B., Brian R. Wyant, and Brian Lockwood. 2015. Variable links within perceived police legitimacy?: Fairness and effectiveness across races and places. Social Science Research 49: 234–48.

Terrill, William. 2001. Police coercion: Application of the force continuum. New York, NY: LFB Scholarly Publishing.

Turner, John C., Rupert J. Brown, and Henri Tajfel. 1979. Social comparison and group interest in in-group favouritism. European Journal of Social Psychology 9: 187-204.

Twenge, Jean M., W. Keith Campbell, and Nathan T. Carter. 2014. Declines in trust in others and confidence in institutions among American adults and late adolescents, 1972–2012. Psychological Science 25:1914-1923.

Tyler, Tom R. 1989. The psychology of procedural justice: A test of the group-value model. Journal of Personality and Social Psychology 57: 830-838.

Tyler, Tom R. 1990. Why people obey the law. Princeton, NJ: Princeton University Press.

Tyler, Tom R. 2001. Public trust and confidence in legal authorities : What do majority and minority group members want from the law and legal institutions? Behavioral Sciences & the Law 19: 215–35.

Tyler, Tom R. 2003. Procedural justice, legitimacy, and the effective rule of law. Crime and Justice 31: 283-357.

Tyler, Tom R. 2004. Enhancing police legitimacy. The Annals of the American Academy of Political and Social Science 593: 84–99.

Tyler, Tom R. 2006. Psychological perspectives on legitimacy and legitimation. Annual Review of Psychology 57: 375–400.

Tyler, Tom R. (ed.). 2007. Legitimacy and criminal justice: An international perspective. New York, NY: Russell Sage Foundation.

Tyler, Tom R. 2010. Why people cooperate: The role of social motivations. Princeton, NJ: Princeton University Press.

Tyler, Tom R. 2011. Trust and legitimacy: Policing in the USA and Europe. European Journal of Criminology 8: 254-266.

Tyler, Tom R., and Steven L. Blader. 2000. Cooperation in groups: Procedural justice, social identity, and behavioral engagement. Philadelphia, PA: Psychology Press.

Tyler, Tom R., and Steven L. Blader. 2003. The group engagement model: Procedural justice, social identity, and cooperative behavior. Personality and Social Psychology Review 7: 349-361.

Tyler, Tom R., and John Darley. 2000. Building a law abiding society: Taking public views about morality and the legitimacy of legal authorities into account when formulating substantive law. Hofstra Law Review 28:707-39.

Tyler, Tom, Peter Degoey, and Heather Smith. 1996. Understanding why the justice of group procedures matters: A test of the psychological dynamics of the group-value model. Journal of Personality and Social Psychology 70: 913-930.

Tyler, Tom R, and Jeffrey Fagan. 2008. Legitimacy and cooperation: Why do people help the police fight crime in their communities? Ohio State Journal of Criminal Law 6: 231–75.

Tyler, Tom R., and Robert Folger. 1980. Distributional and procedural aspects of satisfaction with citizen-police encounters. Basic and Applied Social Psychology 1: 281-292.

Tyler, Tom and Yuen J. Huo. 2002. Trust in the law: Encouraging public cooperation with the police and courts. New York, NY: Russell Sage Foundation.

Tyler, Tom R, and Jonathan Jackson. 2013. Future Challenges in the Study of Legitimacy and Criminal Justice. In Justice Tankebe and A Liebling (eds.), Legitimacy and Criminal Justice: An International Exploration. Oxford, UK: Oxford University Press.

Tyler, Tom R., and E. Allan Lind. 1982. A relational model of authority in groups. Advances in Experimental Social Psychology 25: 115–192.

Tyler, Tom R., and E. Allan Lind. Procedural justice. In Joseph Sanders and V. Lee Hamilton (eds.), Handbook of Justice Research in Law. New York: Springer.

Tyler, Tom R., Kenneth A. Rasinski, and Kathleen M. McGraw. 1985. The influence of perceived injustice on the endorsement of political leaders. Journal of Applied Social Psychology 15: 700-725.

Tyler, Tom R., and Cheryl J. Wakslak. 2004. Profiling and police legitimacy: Procedural justice, attributions of motive, and acceptance of police authority. Criminology 42: 253-282.

Uhr, John. 2001. Accountability, scrutiny and oversight. Background paper prepared for the Commonwealth Secretariat Canberra Workshop.

Vanhanen, Tatu. 2000. A new dataset for measuring democracy, 1810-1998. Journal of Peace Research 37: 251-265.

Von Hippel, Paul T. 2009. How to impute interactions, squares, and other transformed variables. Sociological Methodology 39: 265-291

Warren, Mark E. 1999. Democracy and trust. Cambridge: Cambridge University Press

Weber, Max. 1964. The theory of social and economic organization. New York: Simon and Schuster.

Weber, Max. 1978. Economy and society: An outline of interpretive sociology. Berkeley: University of California Press.

Weitzer, Ronald, and Steven A. Tuch. 2005. Racially biased policing: Determinants of citizen perceptions. Social Forces 83: 1009-1030.

Weitzer, Ronald, Steven A. Tuch, and Wesley G. Skogan. 2008. Police–community relations in a majority-Black city. Journal of Research in Crime and Delinquency 45: 398-428.

White, Ian R., Patrick Royston, and Angela M. Wood. 2011. Multiple imputation using chained equations: Issues and guidance for practice. Statistics in Medicine 30: 377-399.

Winship, Christopher, and Robert D. Mare. 1983. Structural equations and path analysis for discrete data. American Journal of Sociology 89: 54-110.

Wolfe, Scott E. 2011. The effect of low self-control on perceived police legitimacy. Journal of Criminal Justice 39: 67-74.

Wu, Yuning, and Ivan Y. Sun. 2009. Citizen trust in police: The case of China. Police Quarterly 12: 170–91.

Wu, Yuning, Ivan Y. Sun, and Brad W. Smith. 2011. Race, immigration, and policing: Chinese immigrants' satisfaction with police. Justice Quarterly 28: 745-774.

Zelditch, Morris, and Henry A. Walker. 2003. The legitimacy of regimes. Advances in Group Processes 20: 217-249.

Zhang, Zhen, Michael J. Zyphur, and Kristopher J. Preacher. 2009. Testing multilevel mediation using hierarchical linear models problems and solutions. Organizational Research Methods 12: 695-719.

Zhao, Jihong Soloman, Matthew Schneider, and Quint Thurman. 2002. The effect of police presence on public fear reduction and satisfaction: A review of the literature. *The Justice Professional* 15: 273-299.

Zvekic, Ugljesa. 1998. Policing and attitudes towards police in countries in transition: Preliminary results of the international crime (victim) survey. Policing and Society: An International Journal 8: 205-224.