Legal Socialization in Brazil:

Examining the Generalizability of the Procedural Justice Model

*Rick Trinkner
        -School of Criminology and Criminal Justice, Arizona State University, USA
        -Rick.Trinkner@asu.edu
Herbert Rodrigues
        -Department of Sociology and Anthropology, Missouri State University, USA
        -Center for the Study of Violence, University of São Paulo, Brazil
        -HRodrigues@MissouriState.edu
Debora Piccirillo
        -Center for the Study of Violence, University of São Paulo, Brazil
        -Debora.Veiga@usp.br
Faith E. Gifford
        -School of Criminology and Criminal Justice, Arizona State University, USA
        -Fgifford@asu.edu
Aline Morais Mizutani Gomes
        -Center for the Study of Violence, University of São Paulo, Brazil
        -Alinemizu@gmail.com

*Contact Information
Rick Trinkner
School of Criminology and Criminal Justice
Arizona State University
411 N. Central Ave
Phoenix, AZ
602.496.1513
Rick.Trinkner@asu.edu

Author Note

Abstract

Research examining the legal socialization process continues to be almost exclusively focused on US adolescents, calling into question the generalizability of this body of work. The purpose of this study was to test a popular model of legal socialization—the procedural justice model— amongst a representative sample of young adolescents in São Paulo, Brazil. Approximately 750 12 year-olds completed a survey assessing their direct and vicarious contact with police, judgments of police procedural justice, crime perceptions, police legitimacy, legal cynicism, and criminal offending. Both direct and indirect experience with the police was associated with lower procedural justice. Police legitimacy was associated with both procedural justice and crime perceptions; however, legal cynicism was only associated with perceptions of crime. Finally, higher perceptions of police legitimacy, but not legal cynicism, was associated with lower levels of self-reported offending. Overall, this study showed mixed support for the generalizability of the procedural justice model of legal socialization. While the links among police contact, procedural justice, police legitimacy, and offending were substantively identical to findings from the US, no support was found for the argument of legal cynicism as an additional mechanism linking police contact to criminal offending in youth.

Keywords: Legal socialization, procedural justice, police legitimacy, legal cynicism, delinquency

Work on legal socialization—generally defined as the process by which people develop their relationship with the law—has experienced a recent renaissance (e.g., Fine et al., 2017; Kaiser & Reisig, 2017; Trinkner & Tyler, 2016; Tyler & Trinkner, 2018). Despite this renewed interest and the nearly 50 years of theory and research on the topic (e.g., Tapp & Kohlberg, 1971), scholarship continues to be almost exclusively focused in Western countries, particularly the US. Given this focus, it is unclear the extent to which findings from the US can be generalized to other countries and cultures that have historically different relationships between the criminal justice system and the populace.

The generality problem is especially acute in terms of the theoretical models developed to explain the legal socialization process (e.g., Cohn et al., 2010; Cohn & White, 1990; Fagan & Tyler, 2005; Tapp, 1991; Trinkner & Tyler, 2016). For example, most recently scholars have drawn from the procedural justice literature (e.g., Tyler, 2006a) to develop a procedural justice model of legal socialization which argues that fair interactions with legal authorities encourage the internalization of law-related values and the development of positive orientations toward the law, which in turn promote compliance with laws, support of the criminal justice system, and cooperation with legal agents (Fagan & Tyler, 2005; Piquero et al., 2005; Trinkner & Cohn, 2014). However, to date, only pieces of this model have been examined among non-US youth (e.g., Murphy, 2015; Reisig & Lloyd, 2009), leaving the generality of the model an open question. At the same time, recent work on procedural justice with adults outside the US has questioned the utility of procedural justice in countries where law enforcement has a strained relation with the public and/or struggles to maintain a basic level of social utility in controlling crime (Bradford et al., 2014; Jackson et al., 2014).

The purpose of the current study was to test the procedural justice model of legal socialization in a sample of youth from São Paulo, Brazil. Unlike the US, Brazil has a history of authoritarian government and continues to see human rights abuses at the hands of law enforcement (Cardia, 1997, 2012; Pinheiro, 2002), making it an ideal location to assess the generalizability of the model.

Legal Socialization

Legal socialization is the process whereby people develop their understanding of the criminal justice system, its agents, and the role of the law within society more generally (Cohn & White, 1990; Tapp, 1991; Tyler & Trinkner, 2018). Legal socialization represents a subset of broader socialization pressures that shape the way youth and adults understand the social world. At its core, legal socialization describes how individuals develop and understand their relationship with the law (Tyler & Trinkner, 2018). That understanding is deeply rooted in the values people hold concerning how the legal system and its agents are supposed to behave while using their power to regulate the public's behavior. These values are reciprocal in nature, encompassing both how people believe the law ought to conduct itself and how they ought to behave as law-abiding citizens. They are acquired and continuously refined through natural maturation and cognitive–emotional growth (Cohn & White, 1990; Tapp, 1991), as well as with continued direct and vicarious experiences with the law (Trinkner & Tyler, 2016). Depending on the quantity and quality of these experiences, individuals can develop a healthy relationship with the law based on mutual understanding and respect or an unhealthy relationship characterized by animosity and mistrust (Tyler & Trinkner, 2018). The former has long been associated with more support for the

law and legal compliance (Fagan & Tyler, 2005; Tyler, 2003, 2006a; Tyler & Huo, 2002), while the latter has been shown to encourage cynicism, disobedience, and defiance (Anderson, 1999; Nivette et al., 2014; Paternoster et al., 1997; Sherman, 1993).

A key component of the legal socialization process is the development of one's orientation toward the law (Tapp & Levine, 1974; Tyler & Trinkner, 2018). As noted above, people acquire values that underlie expectations about how the law should exert its power. When the law meets these expectations, people are more likely to develop a positive orientation where they accept its societal role as a means of formal social control and trust in its agents as appropriate regulatory authorities (Jackson et al., 2012a, 2012b; Murphy, 2004; Murphy, Tyler, & Curtis, 2009; Tyler, 2001).

A second key component of the legal socialization process is the internalization of the behavioral norms underlying laws (Tapp & Levine, 1974; Tyler & Trinkner, 2018). Legal statutes defining appropriate citizen conduct are ostensibly an expression of societal values about right and wrong behavior. The acquisition of these norms is a vital component of successful legal socialization because of the inescapable reality that the law cannot be everywhere always to regulate all behavior (Tyler, 2009). A functional legal system depends on large quantities of the public being able to self-regulate their behavior without constant surveillance. The likelihood that people self-regulate is dependent on the degree to which they internalize social norms dictating proper conduct.

The Role of Legal Authorities

Scholars have always positioned legal authorities as the lynchpin of the legal socialization process (Tapp & Kohlberg, 1971; Tapp & Levine, 1974; Trinkner & Tyler, 2016). Legal authorities serve as conduits for the transmission of law-related values (Tyler et al., 2014; Tyler & Trinkner, 2016). On one hand, they provide information to the public about the social norms of appropriate conduct through the enforcement of laws. On the other hand, they also provide information about the way in which the law uses its power to regulate citizen behavior, effectively acting as exemplars of the values that underlie the administration of justice via the legal system. Thus, contact with legal authority represents a teachable moment that communicates values about the role and obligations of both citizens and legal authorities (Justice & Meares, 2014; Tyler, Fagan, & Geller, 2014; Tyler & Trinkner, 2018).

At the same time, people are sensitive to the manner in which legal authorities exert their power, constantly comparing their direct and vicarious experiences with the law to their expectations about how the law should behave (Tapp & Levine, 1974; Tyler & Trinkner, 2018). To the degree that legal authorities embody the foundational values of the law, they increase the likelihood that citizens will internalize the social norms of society and recognize legal agents as legitimate authorities. However, when legal authorities behave in ways that contradict those values, they increase the likelihood that citizens will reject those social norms (Anderson, 1999, Kirk & Papachristos, 2011; Papachristos, Meares, & Fagan, 2012, Sampson & Bartusch, 1998) and reduce the likelihood that they will accept the law as a legitimate institution that is "owed" deference (Carr, Napolitano, & Keating, 2007, Jackson et al., 2012a, 2012b; Trinkner, Jackson, & Tyler, 2018; Tyler, 2006a).

Procedural Justice Theory & Legal Socialization

Recognizing the importance of legal authorities in legal socialization, scholars have increasingly utilized procedural justice theory to explain this process (Fagan & Tyler, 2005; Piquero et al., 2005; Trinkner & Cohn, 2014; Fine et al., 2016; Kaiser & Reisig, 2017, Tyler et al., 2014). Procedural justice is founded on the notion that people's support of and deference to the law is more dependent on how legal authorities treat people and make decisions (i.e., the "procedures") rather than the outcomes of those decisions (i.e., distributive justice) (Sunshine & Tyler, 2003; Tyler, 2006a; Tyler & Huo, 2002). When people believe legal authorities behave in a fair manner—e.g., by treating them with respect, giving them a voice, making impartial decisions—they are more satisfied with the encounter (e.g., Murphy, 2009), more likely to support police and the law more generally (Trinkner et al., 2018), and more likely to follow the law (Kaiser & Reisig, 2017; Fagan & Piquero, 2007).

There are two important mechanisms linking the procedural fairness of legal authorities to the behavior of citizens. First, people are more likely to view the law as legitimate when they believe legal authorities treat them fairly and make fair decisions (e.g., Paternoster et al., 1997). Legitimacy is defined as the perception that the law and its agents have a right to be in a position of power to regulate behavior (Jackson et al., 2013; Tyler, 2006b). To the extent that people feel the law is a legitimate regulatory institution, they feel it is their duty to obey laws and defer to police directives. Numerous studies have identified a positive association between the legitimacy of legal authority and compliance among citizens (Fagan & Tyler, 2005; Reisig et al., 2007; Reisig et al., 2012; Reisig et al., 2014, Sunshine & Tyler, 2003; Tyler, 2006a).

Second, people are more likely to be cynical about the law and its agents when they experience procedurally unjust treatment at the hand of the justice system (Fagan & Tyler, 2005, Gau, 2015; Kirk et al., 2012; Tyler & Huo, 2002). Legal cynicism is rooted in notions of anomie and normlessness (Durkheim, 1897/1993; Srole, 1956; Merton, 1938). When an individual is cynical about the law, they have effectively rejected the underlying social norms embodied by the legal system. Cynical individuals do not see laws as binding in their everyday lives and dismiss the notion that it is their responsibility to comply (Sampson & Bartusch, 1998). Given this outlook, it is unsurprising that multiple studies have linked legal cynicism to higher levels of offending behavior (Fagan & Piquero, 2007; Fagan & Tyler, 2005; Kaiser & Reisig, 2017; Nivette et al., 2014, Reisig et al., 2011).

Procedurally fair treatment has been argued to be a fundamental component of the legal socialization process because it acts as a vehicle for the transmission of legal values and behavioral norms (Tyler & Trinkner, 2018). People are sensitive to fairness in legal encounters because it gives them information about their status as members of society (Lind & Tyler, 1988; Tyler & Lind, 1992). Treating members of the public with dignity, respect, fairness, and due process signals that they are valued members of the group, given that all members of society are entitled to such treatment. On the other hand, procedurally unfair behavior characterized by disrespect and biased treatment signals to the public that they are not considered an important part of the group and not entitled to the same treatment as other members of society (Justice & Meares, 2014). Crucially, when people feel they are valued pieces of society they are more inclined to internalize societal values about appropriate behavior and support the regulatory framework that binds members of

that group together (Hogan & Mills, 1976; Tyler, 2009). Thus, procedural justice is a way in which the law can encourage a sense of shared values and moral purpose between itself and society as a whole (Jackson et al., 2012b).

Although the vast majority of the literature examining procedural justice theory has focused on adults, more work has emerged recently testing the theory among youth samples. This work largely echoes that which has been found in adult samples and what is described above: that procedural justice is associated with police legitimacy and legal cynicism and that each of those variables are associated in turn with both offending and cooperation (Baz & Fernández-Molina 2018; Carr et al., 2007; Fagan & Piquero, 2007; Fagan & Tyelr, 2005; Fine & Cauffman, 2015; Fine et al., 2017; Hinds, 2007; Hinds, 2009; Kaiser & Reisig, 2017; McLean, Wolfe, & Pratt, 2019; Murphy, 2015; Murphy & Gaylor, 2010; Piquero et al., 2005; Piquero et al., 2016; Trinkner & Cohn, 2014; Tyler et al., 2014). It should be noted however that some studies have failed to replicate this pattern (Augustyn, 2015).

Legal Socialization beyond the United States

Empirical research examining the legal socialization process continues to be consolidated in the US. While scholars have paid lip-service to the likelihood of cultural variation (Tapp & Levine, 1974; Tyler & Trinkner, 2018), few studies have explored how this process unfolds in other countries, particularly those that have a historically different relationship between the law and citizenry (see Finkenauer, 1995 for exception). The lack of cross-cultural research is especially pertinent to the generalizability of procedural justice-based explanations of legal socialization. As noted above, both legitimacy and value internalization are promoted through procedurally fair interactions with legal authorities characterized by respectful treatment, impartial decision-making, and mutual participation between citizen and officer (Fagan & Tyler, 2005; Trinkner & Tyler, 2016). Fairness is judged along these dimensions because they represent civic and legal ideals enshrined in the US legal system and liberal democracies more generally (Tyler & Trinkner, 2018).

However, it is a mistake to assume that procedural justice is equally important in promoting the legitimacy of legal authority, norm internalization, and legal compliance in countries where the law may have historically served a different purpose or is ineffectual in controlling crime. For example, Tankebe (2009) found that Ghanaian citizens' cooperation with police was driven by their judgments about the effectiveness of police in controlling crime rather than procedural justice and/or legitimacy. Additionally, researchers in South Africa (Bradford et al., 2014) and Pakistan (Jackson et al., 2014) have shown that police legitimacy is equally or more dependent on the degree to which people believe the police are corrupt or able to control crime than on the degree to which legal authorities behave in a procedurally fair manner.

Across all these studies, the authors attribute their findings to the history of policing in the respective country. For a variety of reasons (e.g., apartheid in South Africa; struggles in creating a stable democracy in post-colonial Pakistan and Ghana), citizens' views of the law in these countries are characterized by substantial doubt of the ability of law enforcement to provide the basic social utility of maintaining public order and upholding core values of liberal democracies. As noted by Jackson and colleagues (2014), the baseline assumption of police efficacy that is taken

for granted in historically stable democracies such as the US or UK allows more space for procedural justice to matter in citizens' legal attitudes. When citizens' everyday experiences of crime challenge this baseline assumption, they are more sensitive to the security police provide in addition to the fairness with which they provide it (Bradford et al., 2014).

While this work suggests that legal socialization unfolds differently outside of the US, it is limited in that it utilizes samples of adults. Unfortunately, only a few studies of non-US youth exist. In her surveys of Australian teenagers, Hinds (2007, 2009) found police procedural justice was associated with a greater perception of police legitimacy and that legitimacy mediated the relation between procedural justice and youths' willingness to assist the police if asked, which has been replicated in two independent samples of Australian adolescents (Murphy, 2015; Murphy & Gaylor, 2010). Reisig and Lloyd (2009) also found a strong association between procedural justice and police legitimacy in a sample of Jamaican adolescents; however, police legitimacy was unassociated with youths' willingness to cooperate with police. Instead, procedural justice had a small positive direct association with cooperation. Most recently, in a large sample of Spanish adolescents Baz and Fernández-Molina (2018) found that police procedural justice was a major predictor of police legitimacy and that police legitimacy was associated with self-reported offending. Although they did not specifically test whether legitimacy mediated the relation between procedural justice and delinquency, their results fit that pattern.

Overall, these findings support the generalizability of the procedural justice model of legal socialization. However, they suffer from two important limitations. First, none of them measured legal cynicism (a limitation also applicable to the adult-focused literature discussed above). As noted previously, the internalization of law related values is a fundamental mechanism of the legal socialization process (Tapp, 1991; Tyler & Trinkner, 2018). Hence, a true test of the generalizability of the procedural justice model needs to include both legitimacy and cynicism. Second, most of the studies examined youth in Australia, which is arguably more like the US with respect to the relation between the public and police than countries such as Ghana or Pakistan. Interestingly, the one study that did not perfectly replicate the mediational relationship among procedural justice, legitimacy, and legal behavior took place in Jamaica, a country characterized by the same diminished community support for police and high levels of police corruption (Reisig & Lloyd, 2009) that was noted in the studies of Ghanaian, Pakistani, and South African adults.

Current Study

Legal socialization work continues to be dominated by studies of US youth, calling the generalizability of explanatory models—e.g., procedural justice theory—into question, particularly in countries characterized by high levels of violence and a history of a strained and/or abusive relationship between the public and law enforcement. To address this gap, we use data collected in the city of São Paulo, Brazil. In many ways São Paulo is an ideal location to examine issues of generalizability because its legal, political, and social history is substantively different from the US. Brazil is the largest country in South America, the fifth largest country in the world, and the world's ninth largest economy (Smith, 2018). Over the past several decades, Brazilian society has changed considerably. The emerging democratic state in the mid-1980s has achieved relative political and economic stability, compared to the region and its own past. Brazil has also

begun to access global financial markets and appears to be instituting a more transparent government.

Despite these recent achievements, Brazil has high rates of violence and poverty. In 2016, according to World Health Organization (2018), the homicide mortality rate was 31.3 per 100,000 persons in Brazil. For comparison, the US rate was only 6.5 per 100,000 persons. Violence is especially pronounced among young men, who are more likely than any other social group to be exposed to both urban and police violence. Male youths are the main victims of homicide across Brazil with a rate of 142.7 deaths per 100,000 (IPEA, 2016, 2018). In 2016, homicides accounted for more than 55% of deaths among 15 to 19-year-olds. Just over 75% of these deaths occurred among young Black men.

Within this context lies the South American economic and financial capital of São Paulo, with a population of almost 12 million people. It is a heterogeneous and complex urban environment with one of the widest income inequalities in the world (UN-Habitat, 2010). Despite Brazil's movement towards a liberal democracy, there persists a culture of authoritarianism within São Paulo's government often characterized by frequent abuses of human dignity (Cardia, 1997; Pinheiro, 2002). Official data from the State of São Paulo shows that 14% of the complaints against police officers are due to "abuse of power" and 12% due to homicides committed by the police (SSPSP, 2018). In São Paulo, police officers committed 17% of the homicides in 2016 (FBSP, 2017).

Despite these statistics, police officers have little to fear in the way of legal or social consequences for such actions. A recent study found that at least 80% of the police officers accused of torture were found not guilty by the criminal justice system, under the argument that the victim was a criminal or a suspect and, therefore, could not be trusted (Jesus, 2014). At the same time, the public continues to show strong support for police abuse and the use of torture—e.g., beatings, threating violence, administration of electric shocks—as an information gathering tool (Cardia, 2012). These studies highlight entrenched support for human rights violations at the hands of police officers amongst São Paulo's government institutions and the broader public.

Against this backdrop, the purpose of the current study was to test the procedural justice model of legal socialization (Fagan & Tyler, 2005; Trinkner & Cohn, 2014) using survey data from a representative sample of youth currently residing in São Paulo, Brazil. The theoretical model we test is presented in Figure 1. Starting from the left side, we start with direct and vicarious exposure to legal authority following the argument that experiences with legal authority serve as the lynchpin of the legal socialization process (Tapp & Levine, 1974). Such exposure provides an opportunity for individuals to make judgments about the procedural justice of the law (Tyler & Trinkner, 2018). We also include respondents' judgments about the levels of crime in their neighborhood to account for the possibility that individuals may be less concerned with fairness when they live in an area characterized by the inability of law enforcement to control crime (Bradford et al., 2014; Jackson et al., 2014; Tankebe, 2009). Next, we link judgments of procedural justice and crime perceptions to police legitimacy and legal cynicism. The latter two concepts represent youths' orientation toward the law (legitimacy) and internalization of legal values (cynicism), two key mechanisms of the legal socialization process (Fagan & Tyler, 2005; Trinkner & Cohn, 2014). Finally, we examine the extent to which police legitimacy and legal cynicism predict youths' self-reported offending behavior.

Method

Data

The present study used data from the São Paulo Legal Socialization Study (SPLSS), an ongoing longitudinal survey exploring early adolescents' legal development (Rodrigues & Gomes, 2017; Medina & Rodrigues, in press; Thomas et al., 2018). The SPLSS consists of a panel survey of sixth-grade students born in 2005, who attend public and private schools in the city of São Paulo, Brazil. To date, two waves of data collection have been completed. The first wave occurred from May to September 2016 when the participants were 10-11 years old. The second wave occurred approximately one year later from August to November 2017 when they were 11-12 years old. In terms of content, the survey was nearly identical for both waves; however, there was an important change with respect to item response structure. In the first wave, questions were asked in a yes/no format. In the second wave, questions were asked using an agree/disagree Likert-type response option. This was done to improve the psychometric properties of the measured constructs (e.g., reliability). The current study only analyzes data from the second wave of the study.

Sampling Procedure

To ensure that the heterogeneity of São Paulo was adequately represented, the sample was composed of students from both public and private schools across the city districts. Utilizing the probability proportion to size method, a sample was first drawn from the school population stratified by public vs. private. According to the National School Census (INEP, 2014), 59% of the students in São Paulo were at public schools, whereas 41% were at private schools. Each school in the sample was contacted to participate in the study. If schools refused, they were replaced by another school using the same sampling method. This procedure resulted in 64 public (77% response rate) and 48 private (41% response rate) schools agreeing to participate.[1] After the selection of schools, researchers went to each school to inform students about the project and to distribute parental consent forms. Each form was accompanied by a letter describing the study and an additional form asking about basic demographic information (e.g., economic bracket). Approximately 2,560 letters were sent home to families and 35% of parents returned the forms. Researchers then randomly selected students to participate from those that had returned parental consent form with the only caveat that at least one student, but no more than twelve, could be selected to participate from each school.

The demographics of the final sample resembled the population of the city of São Paulo. The SPLSS racial composition was: 47% White, 12% Black, 27% Multiracial, 9% other, 7% did not specify. This is similar to census data for the city of São Paulo: 37% Black or "Pardo" (Multiracial), 60% White, 2.2% Asian, and less than 1% Native Brazilian (IBGE, 2011). Participants also represented a range of socioeconomic backgrounds as measured in terms of the equivalent amount of monthly minimum wages, which is the standard method of assessing socioeconomic brackets in Brazil (Agenor & Canuto, 2015; Correa-Faria et al., 2015). The monthly minimum wage in 2016 was equivalent to approximately $260(US)/month[2] according to

---

[1] A full breakdown of the response rate can be found in the supplemental appendix available at
https://www.researchgate.net/profile/Rick_Trinkner
[2] US amount calculate using the conversion rate of $3.78 (Bloomberg, 2018)

the Ministry of Labor and Employment. SPLSS breakdown across economic brackets was: Up to 1 minimum wage/month: 17.63%; Between 1 and 2: 28.13%; Between 2 and 5: 22.50%; Between 5 and 10: 13.00%; Between 10 and 20: 6.38%; More than 20: 2,63%; No answer: 9,75%.

For the second wave of the study, we followed two complementary procedures to contact the participants. First, each school was contacted in order to check if the participants were still enrolled in that school. In positive cases, we scheduled a day to interview all the students from that school. Those who had moved from schools were contacted by telephone to reschedule the interview. Twenty-two percent of the total second wave participants were interviewed at home. Preliminary analyses indicated no significant differences as a function of interview location.

Survey Development & Administration

In creating the survey instrument, careful steps were taken to minimize the biases that inevitably arise when adapting concepts from one culture and language into another (in this case, US/English to Brazil/Portuguese). To start, a team of Brazilian researchers conducted ethnographic observations and semi-structured interviews with early adolescents across São Paulo. These interviews framed the construction of legal socialization measurements to a Brazilian context.

Once the initial survey was constructed, it was piloted with a diverse group to ensure the targeted population understood it. Researchers administered the instrument in both public and private schools across a range of São Paulo's administrative districts reflecting various demographic and neighborhood characteristics. In total, 12 pilot interviews were conducted. After conducting the initial interviews, the survey was further refined by changing specific words, removing some repetitive ideas, and clarifying questions. The final survey consisted of seven thematic sets of questions (Rodrigues & Gomes, 2017; Thomas et al., 2018) and included social/demographic questions such as race, gender, family income, and religion. Each set was designed to address various issues pertinent to the legal socialization process, such exposure to legal authorities, the quality of interactions with said authorities, cynicism towards laws, and adolescents' previous offending behavior.

Administration procedures were approved by the National Ethical Committee and by the Public Education Department and the private school boards. The final survey was administered by the Brazilian Institute of Public Opinion and Statistics using Survey-To-Go software (see Dooblo.net for description). Surveys were completed during in-person interviews rather than a paper-and-pencil survey due to the high rates of functional illiteracy in the city (IPM, 2012). Before each interview took place, participants were reminded that participation was voluntary and that all responses would be kept confidential. In order to guarantee confidentiality, participants received an ID number and all personally identifiable information were removed from the dataset. Each participant completed the questionnaire with the help of a research assistant who read aloud each item to ensure question comprehension. Each interview took approximately 25-30 minutes to complete.

Participants

As noted above, the study uses data from the second wave of the SPLSS. The initial (first wave) sample was composed of 800 students, equally divided between boys and girls. The second wave used in the present analysis consists of 743 adolescents (7.25% attrition) approximately 12 years old (M_{age}=11.96, SD.22). The sample maintained its 50% split between boys and girls. In terms of racial makeup, 46% identified as White, 33% as mixed race ("Pardo"), 12% Black, 2% Asian, 3% Indigenous, and 8% did not respond. All participants interviewed were given R$ 40.00 (approximately $12.00 US dollars) for their participation.

Measures

Individual items for each scale can be found in the supplemental appendix referenced in footnote 1. Unless otherwise noted, items were recoded so that higher scores reflect a greater amount of the measured construct. Descriptive statistics for each measure is provided in Table 1.

Police Contact. Six items were included assessing participants' contact with the police since the last time they were interviewed. Half of the items assessed their direct contact with the police and the other half assessed vicarious contact. For each item, respondents answered on a 4-point scale (0: *Never*; 3: *Many times*). Measures of direct (α=.67) and vicarious (α=.63) police contact were created by averaging their respective items.

Police Procedural Justice. Four items were included assessing participants' perceptions that a police officer would be procedurally fair if the officer thought they did something wrong. Each item was designed to tap into well-established components of procedural justice: voice, respect, neutrality, transparency (e.g., Tyler & Blader, 2003). Participants responded to each item using a 4-point Likert scale (1: *Completely disagree*; 4: *Complete agree*). A measure of police procedural justice was constructed by averaging the four items (α=.75).

Crime Perceptions. Ideally, the measure of crime perceptions would have asked respondents to rate the ability of the police to combat crime in their respective neighborhood. However, such a measure was not available in the SPLSS. Instead, we used five items assessing participants' beliefs about the level of crime in their neighborhood. Specifically, these items asked how afraid they were of being the victim of five different criminal behaviors. Participants responded to each item with a 4-point Likert scale (0: *Never*; 3: *Always*). A measure of crime perceptions was constructed by averaging the five items (α=.84). Although this measure is not optimal, both Tankebe (2009) and Sunshine and Tyler (2003) included similar items in their measure of police performance. Additionally, Bradford et al (2014) found that respondents' worry about crime was predictive of their views of police effectiveness in combating crime.

Police Legitimacy. Five items were included to assess participants' perceptions that police are an appropriate legal authority entitled to obedience. Following prior work, these items asked participants the degree to which they felt obligated to obey police directives, trusted police officers, and believed they had a right to regulate their behavior (Sunshine & Tyler, 2003; Jackson et al.,

2013; Tyler, 2006a).[3] Participants responded to each item with a 4-point Likert scale (1: *Completely disagree*; 4: *Completely agree*). A measure of police legitimacy was constructed by averaging the five items (α=.71).

Legal Cynicism. Legal cynicism was measured with 5 items assessing participants' cynical beliefs about the norms underlying laws (Sampson & Bartusch, 1998). Respondents rated their agreement with each item using a 4-point Likert scale (1: *Completely disagree*; 4: *Completely agree*). A measure of legal cynicism was created by averaging the five items (α=.53). Although this measure had poor reliability, an exploratory factor analysis suggested all items loaded on a single factor. Furthermore, dropping any single item would not have improved scale reliability.[4] We decided to utilize this measure as is for two reasons: (1) this measure is well established in the legal socialization literature (Fagan & Tyler, 2005; Fine & Cauffman, 2015; Piquero et al., 2005; Trinkner & Cohn, 2014) and (2) it has been shown to sometimes exhibit poor reliability (Fine & Cauffman, 2015; Mulvey et al, 2010).

Offending. Five items were included asking participants to self-report the extent to which they engaged in illegal behavior since the last time they were interviewed (approximately 1 year previously). These items spanned property offenses, violent offenses, and illegal substance use. For each item, respondents answered on a 4-point scale (0: *Never*; 3: *Many times*). Initially, we summed these items to create a measure of offending frequency; however, the reliability was unacceptable (α=.38). In looking at the distributions of each item, it was clear that the majority of individuals reported engaging in no offending behavior during the time period of study. This was unsurprising given the age of the sample (Steffensmeier & Ulmer, 2002). Given this, we decided to make a dichotomous measure of offending. For this measure, anyone who reported engaging in any of the five behaviors at least once was assigned to the delinquent group (coded as "1") and those that reported engaging in none of the five behaviors were assigned to the nondelinquent group (coded as "0").

Control Variables. Three control variables were included to improve the robustness of the statistical model. First, a measure of socio-economic status (SES) was created given prior literature showing the influence of SES on police contact and legal attitudes (e.g., Carr et al., 2007). This measure was created by combining two items: family income and school type. These two items were highly correlated (r=.69) and both items had identical patterns of association with the primary variables of interest. The item measuring family income was completed by participants' parents at the start of the survey and asked about family income in terms of "minimum wages" (see above). Responses used a 6-point response scale (1: *up to 1 minimum wage*; 6: *More than 20 minimum wages*). The second item classified whether the student attended a private school (coded as a "1") or a public school (coded as a "0"). Each item was standardized and then averaged to create a measure of SES.

---

[3] We recognize other researchers have found that these components are distinct constructs (e.g., Gau, 2015). However, in this dataset, exploratory factor analysis indicated the items were best represented as a single construct. Statistics are available in the supplemental appendix. Moreover, we also recognize that some have proposed alternative conceptualizations of legitimacy beyond "obligation to obey" and/or "trust" (Tankebe, 2013). However, these alternative conceptualizations are especially problematic when examining police legitimacy across international cultural contexts (see Jackson, 2018 for greater discussion).

[4] See supplemental appendix.

Second, participant sex and race were included in the model given that both have been linked to police attitudes and/or offending behavior (Steffensmeier & Allan, 1996; Trinkner & Goff, 2016). Sex was a dichotomous measure with the higher score assigned to participants identifying as female. Race was dichotomized into White (coded as "1") and non-White (coded as "0") categories. The majority (66%) of the non-White portion of the sample identified as mixed race. We should note that before dichotomizing race we examined the extent to which mixed race participants (the second largest ethnic group in the sample) differed from other non-White participants. For this we conducted a one-way MANOVA with race (White, Mixed Race, Other) as the independent variable and police direct/vicarious contact, police procedural justice, crime perceptions, police legitimacy, legal cynicism, and offending as dependent variables. This analysis revealed that legal cynicism significantly varied across race. However, post-hoc comparisons (with Tukey HSD adjustments) showed no significant differences between mixed race participants and other non-White participants, indicating that it was acceptable to collapse mixed race participants with other non-White participants.[5]

Analytic Strategy

We tested the theoretical model presented in Figure 1 with path analysis using Stata's structural equation modeling package (StataCorp, 2017, version 15). In this model, direct and vicarious police contact, sex, SES, and white were entered as exogenous observed variables. Procedural justice, crime perceptions, police legitimacy, legal cynicism, and offending were entered as observed endogenous variables. Importantly, logit estimation was used to predict offending, given its dichotomy, using Stata's *gsem* command which allows for non-linear estimation. Furthermore, the logit estimates were exponentiated so that coefficients represented odds ratios. Procedural justice, police legitimacy, and cynicism were estimated using standard maximum likelihood. The unstandardized estimates for this model are presented in Table 2.

However, using the *gsem* command comes with decreased functionality. Most pertinent to the present analysis, Stata does not provide (1) fit statistics in *gsem*, (2) standardized coefficients even for those portions of the model using maxim likelihood estimation, (3) estimates of indirect effects, or (4) estimates of equation level goodness of fit (i.e., R^2). To address this problem, we dropped offending and reran the model using Stata's *sem* command and maximum likelihood estimation throughout. Importantly, the unstandardized estimates from this model are identical to those from the model that included offending; however, these estimates can now be standardized, R^2 can be calculated for each outcome remaining in the model, and fit statistics are provided for this portion of the model (see Table 3). Additionally, the indirect effects of police contact on legitimacy and cynicism via procedural justice and crime perceptions can be estimated using bootstrapped standard errors (3000 repetitions) with bias-corrected confidence intervals to correct for the non-normal distribution of indirect effects (Preacher & Hayes, 2008).

Results

Unstandardized estimates from the full model can be found in Table 2; standardized coefficients from the portions of the model using maximum likelihood estimation can be found in Table 3; tests of indirect effects can be found in Table 4. Both direct and vicarious police contact

---

[5] Statistics from this analysis can be found in the supplemental appendix

were negatively associated with judgments about the police behaving in a procedurally fair manner. Participant race, gender, and SES were all unrelated to procedural justice. To the extent that participants either directly experienced or saw other people have involuntary negative contact with the police (e.g., stopped, searched, taken to a police station), they were also less likely to report that police officers were procedurally fair. On the other hand, only direct experience with police was associated with perceptions of crime. To the extent that youth had direct contact with police officers, they were less likely to worry about crime in their neighborhood. Additionally, SES was also negatively related with crime perceptions. Higher status youth were less likely to fear being the victims of crime in their daily life.

In terms of police legitimacy, girls were significantly less likely to view the police as legitimate authority figures; neither SES nor race affected legitimacy perceptions. As expected, procedural justice was strongly and positively associated with police legitimacy. Participants were more likely to view police officers as legitimate authorities entitled to deference to the extent that they believed police officers treated people in a procedurally just way. Interestingly, respondents were more likely to view the police as legitimate authorities when they were worried that they would be the victims of crime, although this effect was relatively small. Direct experience with police was not directly associated with police legitimacy; however, it did have a weak indirect effect via both procedural justice and crime perceptions as indicated by confidence intervals that did not include zero. Vicarious police contact also had an indirect effect on police legitimacy through procedural justice, but not through respondents' perceptions of crime in their neighborhood.

In terms of legal cynicism, once again sex was a significant predictor with girls being more likely to be cynical about the law than boys. Additionally, higher SES was associated with lower levels of cynicism. Contrary to expectations, procedural justice did not predict participants' legal cynicism; however, crime perceptions were positively associated. To the extent that participants were worried about crime in their neighborhood, they were also more likely to be cynical of the law. Neither direct nor vicarious experience with police had indirect effects on legal cynicism. Vicarious experience did maintain a direct effect, with more experience being associated with greater cynicism.

In terms of predicting offending, higher SES was associated with an increase in the odds of participants reporting delinquent behavior. The odds of boys reporting offending behavior was 56% higher than girls reporting such behavior. While direct contact with police was unassociated with offending behavior, vicarious contact showed a strong positive association. With every one-unit increase in vicarious exposure, the odds of participants reporting offending behavior increase by 61%. Neither procedural justice, crime perceptions, nor legal cynicism were related to self-reporting offending. However, perceptions of police legitimacy were associated with lower odds of offending behavior. Specifically, a one-unit increase in police legitimacy was associated with a 36% decrease in the odds of youth reporting offending behavior. As noted in the analytical strategy section, the indirect effects of police contact and procedural justice on offending could not be estimated.[6]

---

[6] However, post hoc analyses showed some support for an indirect effect of procedural justice on offending (see supplemental appendix).

Discussion

The goal of this article was to examine the generalizability of the procedural justice model of legal socialization outside a US context. We found partial support for the model using a representative sample of early adolescents from São Paulo, Brazil. As expected, direct and vicarious exposure to legal authority shaped participants' judgments of the procedural fairness of legal institutions and their perceptions of crime. Moreover, both procedural justice and crime perceptions were associated with higher perceptions of the police as legitimate authority figures. However, contrary to expectations, procedural justice was unassociated with legal cynicism, although crime perceptions were positively associated. Finally, as expected police legitimacy was associated with substantially lower odds of offending. On the other hand, legal cynicism had no relation with offending.

These findings provide an equivocal answer to whether the procedural justice model of legal socialization is generalizable outside of the US context. In some respects, an affirmative answer to that question is warranted. Broadly, the results highlight the importance of legal authorities to the legal socialization process. Legal authorities, particularly police, have always been positioned as the key socialization agent from the criminal justice system (Tapp & Levine, 1974). Interactions with legal authorities are a fundamental way in which the criminal justice system communicates its role in society and transmits legal values to the populace (Tyler & Trinkner, 2018). As shown in the present study, these experiences are linked to youths' judgments about the fairness and legitimacy of legal authorities, central components of the legal socialization process (Trinkner & Tyler, 2016). Interestingly, the youth in this study reported relatively low amounts of police contact, particularly direct contact, on average. It seems even low levels of exposure to legal authorities are an important part of legal development.

Although this study showed that higher amounts of police contact was associated with a greater belief that the police act in an unjust manner and subsequently are illegitimate, this should not be interpreted that police contact will necessarily have detrimental consequences for youth. The measures of direct and vicarious contact used in this study were largely tapping negative contact (e.g., being stopped and searched, being taken to a police station, witnessing a beating). It is likely also the case that if the youth had more positive contact (e.g., being helped by a police officer), they would be more likely to expect fair, respectful, and legitimizing behavior from officers. Indeed, recent work in the US has highlighted that law enforcement and public policy makers should view these interactions as teachable moments in which the quality of contact determines the kinds of messages youth receive about their place and status in society (Justice & Meares, 2014; Tyler et al., 2014). High quality contact sends positive messages that bond children (and adults) to society, while poor quality serves to alienate and build resentment (Trinkner & Tyler, 2016).

The present results also support the argument that procedural justice, police legitimacy, and legal behavior are inexorably linked (Tyler, 2006a; Jackson et al., 2012b). In doing so, they replicate prior work with adolescents in other Western countries (Fagan & Tyler, 2005; Hinds, 2007, 2009; Trinkner & Cohn, 2014. Although we were unable to explicitly test for mediation here, the pattern of results fit a mediational interpretation (Baron & Kenny, 1986). Given that the youths studied here were only twelve years old, this suggests that even young children are sensitive to the behavior

of legal authorities and the messages they communicate about the appropriate role of the law as a source of social control in society.

However, contrary to work in the US (Kaiser & Reisig, 2017; Trinkner & Cohn, 2014), the results provide no support for the legal cynicism path of the procedural justice model. Procedural justice was not associated with youths' cynicism about the values underlying the law, nor was legal cynicism associated with offending. On its face, this suggests that at least in the São Paulo context, interactions with legal authorities and the fairness of those interactions do not drive the internalization of law related values in youth. In one sense, this unsurprising. As discussed above, it is not uncommon for police officers in São Paulo to abuse their power and/or use excessive force with the public (Cardia, 1997; FBSP, 2017; IPEA, 2018; Pinheiro, 2002). Within this context, it may be that youth do not look to law enforcement for messages about appropriate behavioral values, but instead focus on other non-legal sources within their community (e.g., Thomas et al., 2018).

However, caution should be used when interpreting the lack of associations among procedural justice, legal cynicism, and offending. First, as noted above, the statistical reliability of the legal cynicism measure was low. We chose to include it in the model because it is the most widely used measure of legal cynicism in the legal socialization literature despite its low reliability (e.g., Fine & Cauffman, 2015; Mulvey et al., 2010; Trinkner & Cohn, 2014); however, these poor psychometric properties may have led to its poor performance in the present analysis. Second, this legal cynicism scale was originally developed in the US to measure the rejection of the underlying social norms embodied within the laws of the US legal system (Sampson & Bartusch, 1998). It is likely the case that the legal norms of São Paulo are not identical to those in the US. In this respect, a different pattern of results may have emerged if a scale was developed specifically targeting youths' adherence to Brazilian legal values/norms. Finally, the lack of findings with respect to legal cynicism may be due to the age of the sample. The internalization of legal norms is a process that transpires over time (Kaiser & Reisig, 2017; Tyler & Trinkner, 2018). One of the reasons why adolescence is positioned as a critical period of legal socialization is precisely because this is a time when individuals' legal values and attitudes are more malleable (Tapp & Levine, 1974). As youth move from early adolescence to young adulthood, these values become more stable and entrenched. Given that the youth in this study were 12 years old, their legal values may be in a more fluid state and subsequently less related to their offending. Future waves of SPLSS data collection will allow for the exploration of this possibility.

Additionally, the present study examined two antecedents of police legitimacy and cynicism: procedural justice and crime perceptions. The latter was included following work by Tankebe (2009), Bradford et al., (2014) and Jackson et al. (2014) showing that procedural justice is not the most important predictor of police legitimacy in countries characterized by high crime rates and public doubt about the ability of the local law enforcement to maintain social order. Although São Paulo fits this description (Cardia, 1997; Pinheiro, 2002; World Health Organization, 2018), the findings in this respect were largely similar to those found in other Western countries in terms of police legitimacy (e.g., Hinds, 2009; Murphy, 2015). While crime perceptions were associated with perceptions of police legitimacy, the association between procedural justice and legitimacy was nearly four times larger.

Once again though, one should interpret this finding with caution. As noted in the method, a measure of crime perceptions is not an ideal proxy for respondents' perceptions of law enforcement's ability to control crime. While prior literature has used crime perceptions as a measure of police performance (e.g., Sunshine & Tyler, 2003; Tankebe, 2009), a better test would include a measure focusing on the perceived ability of police officers to respond to crime. Unfortunately, the SPLSS does not contain such a measure. Additionally, the participants in this study were 12 years old. It is unclear if youth at this age would have a strong sense one way or the other of police performance if such a measure was available in the SPLSS.

An unexpected pattern of findings emerged among gender, police legitimacy, and legal cynicism. Contrary to studies with US youth (Fagan & Tyler, 2005), girls had more negative views about the law than boys. Although expectations of procedurally fair behavior did not vary across gender, girls were less likely to view the police as legitimate authorities and were more cynical about the law than boys. While this pattern has not been established within the US to our knowledge, similar findings have emerged in other countries (e.g., Spain, Baz & Fernández-Molina, 2017). One possible explanation may be that Brazilian boys are more likely than girls to accept the legitimacy of the police because they are more likely to see them acting on their behalf. Young Brazilian men are most likely to be the victims of violence with over 50% of all deaths among 15 to 19-year-olds attributed to homicide (IPEA, 2018), so perhaps they see the police as protectors. For example, a recent representative poll showed that adult men were more trusting of police than adult women (DataFolha, 2015).

That same poll also showed that women fear police to the same degree that they fear criminals, suggesting that they may not see police as an institution protecting them. Such fear might be especially well founded for Brazilian girls. For example, in the last three decades there has been a 230% increase in the number of violent deaths of women in Brazil (Waiselfisz, 2012). Brazil also has the fifth highest rate of femicide in the world, with 4.8 murders per 100,000 women (Waiselfisz, 2015). Moreover, Brazilian police officers often trivialize women's claims of domestic abuse and violent victimization more generally (Hawkesworth, 2016). These trends have occurred despite multiple attempts to address the problem via legal channels, such as the 2006 Federal Domestic Violence Law and the creation of the world's first Women's Police Station specifically designed to improve relations between Brazilian women and law enforcement (Kind et al., 2013; Medina & Rodrigues, in press; Rodrigues et al., 2017).

On the other hand, this finding might have less to do about police treatment of women but more strongly tied to the organization of gender within Brazil society. To the extent that the police profession represents masculine gender norms (Aiello, 2014; Caulfield & Schettini, 2017), Brazilian boys may be more likely to legitimize their authority. Young Brazilian men have been shown to identify more with police officers than girls, seeing officers as heroes and the profession as an aspirational occupation (Piccirillo & Gomes, 2018; Senkevics & Carvalho, 2016). In this case, the gender differences might not be due to girls' having particularly negative attitudes but rather boys having inflated attitudes. Given the lack of comparative data it is unclear if this is the case, but this does point to the need for further research exploring this issue.

Finally, it was also interesting that there were no significant differences between White and non-White youth with respect to procedural justice, crime perceptions, police legitimacy, legal

cynicism, or offending. This is in stark contrast to much of the literature from the US generally showing more negative police experiences and legal attitudes among non-White youth/adults compared to White youth/adults (e.g., Carr et al., 2007; Trinkner & Goff, 2016). While it would be a mistake to assume that race differences emerge in Brazil in exactly the same manner as the US given the historical differences that race relations have played within each country, the present findings do point to an area future researchers should investigate more rigorously. More broadly, the disparate findings with respect to gender and race indicate that the influence of demographic factors on the legal socialization process may be culturally variable as well. Future work should explore this issue more explicitly both in US contexts and outside of the US; demographic factors (particularly gender and SES) have received little, if any, attention by legal socialization scholars to date.

This study is not without limitations. As discussed, the measure of crime perceptions and legal cynicism were not ideal. Similarly, we relied on a measure of self-reported offending. Although self-report measures are considered valid and reliable (Thornberry & Krohn, 2000), future research should assess the validity of the procedural justice model of legal socialization using other sources (e.g., parent/teacher reports, arrest statistics). Additionally, this study relied on cross-sectional data, a problem in procedural justice literature more broadly (Nagin & Telep, 2017). As a result, causal relations among the variables cannot be established. For example, it may be the case that legitimacy influences crime perceptions or that delinquent youth judge procedural justice differently than non-delinquent youth. Although the findings are consistent with experimental studies using hypothetical vignettes (e.g., Trinkner & Cohn, 2014) and panel designs (e.g., Kaiser & Reisig, 2017), this does not supplant the need to go beyond cross-sectional methodology. Future waves of the SPLSS will allow for an examination of the procedural justice model in this respect. This study also focused exclusively on interactions with legal authorities as a source of legitimacy perceptions and legal cynicism. Legal socialization is a process that unfolds in both legal and non-legal settings (Tapp, 1991; Tapp & Levine, 1974) with the latter having a more pronounced effect on younger adolescents (Tyler & Trinkner, 2018). The decision to test the validity of the model only in terms of legal authority was made because the model was originally developed in terms of these types of interactions (Fagan & Tyler, 2005; Piquero et al., 2005). However, future waves of the SPLSS will be able to assess the confluence of both legal and non-legal authorities on youths' legal development.

Conclusions

The findings presented here highlight the important socializing effect that contact with law enforcement has on youth legal development. To the extent that such contact is viewed as procedurally unjust, youth are more likely to reject the legal values that undergird voluntary compliance and cooperation with the law. Public security forces in Brazil are increasingly turning to coercive policing tactics rooted in deterrence, zero tolerance, and public order maintenance to reduce the high rates of violence (Zanetic, 2017). Ironically, these are the types of strategies that increase contact with the public while also encouraging human rights abuses (Sinhoretto, Schlittler, & Silvestre, 2016). Given that the early teenage years are precisely the time when youths' legal attitudes and values are fluid and malleable (Tyler & Trinkner, 2018), the adoption of these policies are likely to lead to long-term resentment and alienation among youth.

References

Agenor, P. R. & Canuto, O. (2015). Gender equality and economic growth in Brazil: A long-run analysis. *Journal of Macroeconomics, 43*(C), 155-172. doi:10.1016/j.jmacro.2014.10.004

Aiello, M. F. (2014). Policing the masculine frontier: Cultural criminological analysis of the gendered performance of policing. *Crime Media Culture*, *10*(*1*), 59‑79. Doi: 10.1177/1741659013502351

Anderson, E. (1999). *Code of the street: Decency, violence, and the moral life of the inner city*. New York: Norton.

Augustyn, M. B. (2015). The (ir) relevance of procedural justice in the pathways to crime. *Law and Human Behavior*, *39*(4), 388-401. Doi: 10.1037/lhb0000122

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*(*6*), 1173–1182. doi:10.1037/0022-3514.51.6.1173.

Baz, O. & Fernández-Molina, E. (2018). Process-based model in adolescence. Analyzing police legitimacy and juvenile delinquency within a legal socialization framework. *European Journal on Crime Policy & Research*, *24*(*3*), 237-252. doi:10.1007/s10610-017-9357-y

Bloomberg (2018, July). USD:BRL conversion rate. Retrieved on July 24th, 2018 https://www.bloomberg.com/quote/USDBRL:CUR

Bradford, B., Huq, A., Jackson, J., & Roberts, B. (2014). What price fairness when security is at stake? Police legitimacy in South Africa. *Regulation & Governance*, *8*(2), 246-268. doi:10.1111/rego.12012

Cardia, N. (1997). O medo da polícia e as graves violações dos direitos humanos [The fear from police and the gross human rights violations]. *Tempo Social, 9*(1), 249-265. doi:10.1590/S0103-20701997000100014

Cardia, N. (2012). *Pesquisa nacional por amostragem domiciliar sobre atitudes normas culturais e valores em relação à violação de direitos humanos e violência, em 11 capitais de Estado*. [National research, by house sampling, about attitudes, cultural norms and values regarding human rights violations and violence: A study of 11 state capitals.] São Paulo: São Paulo: NEV/USP. Available at http://www.nevusp.org/downloads/down264.pdf.

Carr, P.J., Napolitano, L., & Keating, J. (2007). We never call the cops and here is why. *Criminology*, *45*, 445–480. doi:10.1111/j.1745-9125.2007.00084.x

Caulfield, S., & Schettini, C. (2017). Gender and sexuality in Brazil since independence. *Oxford Research Encyclopedia of Latin American History.* doi: 10.1093/acrefore/9780199366439.013.296

Cohn, E. S., Bucolo, D. O., Rebellon, C. J., & Van Gundy, K. (2010). An integrated model of legal and moral reasoning and rule-violating behavior: The role of legal attitudes. *Law and Human Behavior, 34,* 295–309. doi:10.1007/s10979-009-9185-9

Cohn, E. S., & White, S. O. (1990). *Legal socialization: A study of norms and rules*. New York, NY: Springer-Verlag. doi:10.1007/978-1-4612-3378-7

Correa-Faria, P., Paiva, S. M., Pordeus, I. A., Ramos-Jorge, M. L. (2015). Influence of clinical and socioeconomic indicators on dental trauma in preschool children. *Brazilian Oral Research, 29*(1), 1-7. doi:10.1590/1807-3107BOR-2015.vol29.0015

DataFolha (2015). Imagem da Polícia. [Police Image]. Available at http://media.folha.uol.com.br/datafolha/2015/11/06/imagem-da-policia.pdf

Durkheim, E. [1897](1993). *Suicide: A study in sociology*. New York, NY: Free Press.

Fagan, J., & Piquero, A. R. (2007). Rational choice and developmental influences on recidivism among adolescent felony offenders. *Journal of Empirical Legal Studies*, *4*(4), 715-748. doi:10.1111/j.1740-1461.2007.00105.x

Fagan, J. & Tyler, T. (2005). Legal socialization of children and adolescents. *Social Justice Research, 18*(3), 217-242. doi:10.1007/s11211-005-6823-3

FBSP. (2017). *11° Anuário Brasileiro de Segurança Pública*. [11th Brazilian annual report of public security.] São Paulo: Fórum Brasileiro de Segurança Pública. Retrieved from: http://www.forumseguranca.org.br/wp-content/uploads/2017/12/ANUARIO_11_2017.pdf

Fine, A., & Cauffman, E. (2015). Race and justice system attitude formation during the transition to adulthood. *Journal of Developmental and Life-Course Criminology*, *1*(4), 325-349. doi:10.1007/s40865-015-0021-2

Fine, A., Cavanagh, C., Donley, S., Frick, P., Steinberg, L., & Cauffman, E. (2017*). Is the effect of justice system attitudes on recidivism stable after youths' first arrest? Race and legal socialization among first-time offenders. *Law and Human Behavior, 41*(2), 146-158. doi: 10.1037/lhb0000229

Fine, A., Cavanagh, C., Donley, S., Steinberg, L., Frick, P. J., & Cauffman, E. (2016). The role of peer arrests on the development of youths' attitudes towards the justice system. *Law and Human Behavior*, *40*(2), 211-218. doi:10.1037/lhb0000167

Finkenauer, J. O. (1995). *Russian youth: Law, deviance, and the pursuit of freedom*. New Brunswick, NJ: Transaction Publishers.

Gau, J. M. (2015). Procedural justice and police legitimacy: A test of measurement and structure. *American Journal of Criminal Justice*, *39*(2), 187-205. doi:10.1007/s12103-013-9220-8

Hawkesworth, M. (2016). *Political worlds of women: Activism, advocacy, and governance in the twenty-first century*. New York: Routledge.

Hinds, L. (2007). Building police-youth relationships: The importance of procedural justice. *Youth Justice, 7*(3), 195–209. doi:10.1177/1473225407082510

Hinds, L. (2009). Youth, police legitimacy and informal contact. *Journal of Police and Criminal Psychology, 24*(1), 10-21. doi:10.1007/s11896-008-9031-x

Hogan, R., & Mills, C. (1976). Legal socialization. *Human Development*, *19*(5), 261-276. doi:10.1159/000271533

IBGE. (2011). *Características étnico-raciais da população: um estudo das categorias de classificação de cor ou raça.* [Race and ethnicity characteristics of the population: a study of the categories of race or color classification.] Rio de Janeiro: IBGE. Available at: https://biblioteca.ibge.gov.br/visualizacao/livros/liv49891.pdf

IPM. (2012). *Instituto Paulo Montenegro e Ação Educativa mostram evolução do alfabetismo funcional na última década.* [The Paulo Montenegro Institute and the Education Initiative show the evolution of functional illiteracy over the last decade.] São Paulo: IPM. Retrieved from http://www.ipm.org.br/pt-br/programas/inaf/relatoriosinafbrasil/Paginas/inaf2011_2012.aspx

INEP. (2014). *Censo Escolar* [School Census]. INEP: Brasília. Retrieved from http://inep.gov.br/microdados

IPEA. (2016). *Atlas de Violência 2016:* Nota Técnica. [Atlas of violence 2016: technical note.] Brasilia: IPEA. Retrieved from http://www.ipea.gov.br/portal/images/stories/PDFs/nota_tecnica/160322_nt_17_atlas_da_violencia_2016_finalizado.pdf

IPEA. (2018). *Atlas da violência 2018* [Atlas of violence 2018]. Brasilia: IPEA. Retrieved from http://www.ipea.gov.br/portal/images/stories/PDFs/relatorio_institucional/180604_atlas_ da_violencia_2018.pdf

Jackson, J. (2018). Norms, normativity, and the legitimacy of justice institutions: International perspectives. *Annual Review of Law and Social Science*, *14*, 145-165. doi: 10.1146/annurev-lawsocsci-110316-113734

Jackson, J., Asif, M., Bradford, B., & Zakria Zakar, M. (2014). Corruption and police legitimacy in Lahore, Pakistan. *British Journal of Criminology*, *54*(6), 1067-1088. doi:10.1093/bjc/azu069

Jackson, J., Bradford, B., Hough, M., Myhill, A., Quinton, P., & Tyler, T. R. (2012a). Why do people comply with the law? Legitimacy and the influence of legal institutions. *British Journal of Criminology*, *52*(6), 1051-1071. doi:10.1093/bjc/azs032

Jackson, J., Bradford, B., Stanko, B., & Hohl, K. (2012b). *Just authority?: Trust in the police in England and Wales*. Willan. doi:10.4324/9780203105610

Jackson, J., Asif, M., Bradford, B., & Zakria Zakar, M. (2014). Corruption and police legitimacy in Lahore, Pakistan. *British Journal of Criminology*, *54*(6), 1067-1088.

Jackson, J., Huq, A. Z., Bradford, B., & Tyler, T. R. (2013). Monopolizing force? Police legitimacy and public attitudes toward the acceptability of violence. *Psychology, Public Policy, and Law*, *19*(4), 479-497. doi:10.1037/a0033852

Jesus, M. G. (2014). Tortura: como são julgados esses crimes no sistema de justiça. [Torture: how these crimes are tried in the criminal justice system]. In Cardia, N. & Astolfi, R. (org.). *Tortura na era dos direitos humanos.* [Torture in the era of human rights.] São Paulo: Edusp.

Justice, B., & Meares, T. L. (2014). How the criminal justice system educates citizens. *The ANNALS of the American Academy of Political and Social Science*, *651*(1), 159-177. doi:10.1177/0002716213502929

Kaiser, K., & Reisig, M. D. (2017). Legal socialization and self-reported criminal offending: The role of procedural justice and legal orientations. *Journal of Quantitative Criminology*, 1-20. doi:10.1007/s10940-017-9375-4

Kind, L., Orsini, M. L. P., Nepomuceno, V., Gonçalves, L., Souza, G. A., & Ferreira, M. F. F. (2013). Primary healthcare and underreporting and (in)visibility of violence against women. *Cad. Saúde Pública, 29*(9), 1805-1815. doi: 10.1590/0102-311X00096312

Kirk, D. S., & Papachristos, A. V. (2011). Cultural mechanisms and the persistence of neighborhood violence. *American Journal of Sociology*, *116*(4), 1190-1233. doi:10.1086/655754

Kirk, D. S., Papachristos, A. V., Fagan, J., & Tyler, T. R. (2012). The paradox of law enforcement in immigrant communities: Does tough immigration enforcement undermine public safety?. *The Annals of the American Academy of Political and Social Science*, *641*(1), 79-98. doi:10.1177/0002716211431818

Lind, E. A., & Tyler, T. (1988). *The social psychology of procedural justice*. New York, NY: Plenum Press Publishing. doi:10.1007/978-1-4899-2115-4

Mclean, K., Wolfe, S. E., & Pratt, T. C. (2019). Legitimacy and the life course: An age-graded examination of changes in legitimacy attitudes over time. *Journal of Research in Crime and Delinquency*, *56*(*1*), 42-83.

Medina, J., & Rodrigues, H. (in press). The effects of victimization and fear of crime on the legal socialization of young adolescents in São Paulo, Brazil. *International Journal of Offender Therapy and Comparative Criminology*. doi: 10.1177/0306624X18818810

Merton, R. K. (1938). Social structure and anomie. *American Sociological Review*, *3*(5), 672-682. doi:10.2307/2084686

Mulvey, E. P., Steinberg, L., Piquero, A. R., Besana, M., Fagan, J., Schubert, C., & Cauffman, E. (2010). Trajectories of desistance and continuity in antisocial behavior following court adjudication among serious adolescent offenders. *Development and Psychopathology, 22,* 453–475. doi:10.1017/S0954579410000179

Murphy, K. (2004). The role of trust in nurturing compliance: A study of accused tax avoiders. *Law and Human Behavior*, *28*(2), 187-209. doi:10.1023/B:LAHU.0000022322.94776.ca

Murphy, K. (2009). Public satisfaction with police: The importance of procedural justice and police performance in police-citizen encounters. *Australian & New Zealand Journal of Criminology*, *42*(2), 159-178. doi:10.1375/acri.42.2.159

Murphy, K. (2015). Does procedural justice matter to youth? Comparing adults' and youths' willingness to collaborate with police. *Policing and Society*, *25*,(*1*), 53-76. doi:10.1080/10439463.2013.802786

Murphy, K., & Gaylor, A. (2010). Policing youth: Can procedural justice nurture youth cooperation with police? In K. Murphy (Ed.), *The Alfred Deakin Research Institute Working Paper Series*. Geelong, Victoria, Australia: Alfred Deakin Research Institute, Deakin University.

Murphy, K., Tyler, T. R., & Curtis, A. (2009). Nurturing regulatory compliance: Is procedural justice effective when people question the legitimacy of the law?. *Regulation & Governance*, *3*(1), 1-26. doi:10.1111/j.1748-5991.2009.01043.x

Nagin, D. S., & Telep, C. W. (2017). Procedural justice and legal compliance. *Annual Review of Law and Social Sciences*, *13*, 5-28. doi: 10.1146/annurev-lawsocsci-110316-113310

Nivette, A. E., Eisner, M., Malti, T., & Ribeaud, D. (2015). The social and developmental antecedents of legal cynicism. *Journal of Research in Crime and Delinquency*, *52*(2), 270-298. doi:10.1177/0022427814557038

Papachristos, A. V., Meares, T. L., & Fagan, J. (2012). Why do criminals obey the law? The influence of legitimacy and social networks on active gun offenders. *The Journal of Criminal Law and Criminology*, 397-440. doi: 0091-4169/12/10202-0397

Paternoster, R., Brame, R., Bachman, R., & Sherman, L. W. (1997). Do fair procedures matter? The effect of procedural justice on spouse assault. *Law and Society Review*, 163-204. doi:10.2307/3054098

Piccirillo, D., & Gomes, A. M. (2018). O campo da socialização legal no Brasil: Considerações sobre o fator vitimização. [The legal socialization field in Brazil: Notes on the victimization factor.]. In Hoffman, C., & Cavalheiro, J. C. (orgs). *Marcas da singularidade e da diferença*: o que as crianças e os adolescentes nos revelam (391-398). São Paulo: Instituto Langage.

Pinheiro, P. S. (2002). The paradox of democracy in Brazil. *The Brown Journal of World Affairs, 8*(2), 113-122.

Piquero, A. R., Bersani, B. E., Loughran, T. A., & Fagan, J. (2016). Longitudinal patterns of legal socialization in first-generation immigrants, second generation immigrants, and native-born serious youthful offenders. *Crime & Delinquency*, *62*(*1*), 1403-1425. doi: 10.1177/0011128714545830

Piquero, A. R., Fagan, J., Mulvey, E. P., Steinberg, L., & Odgers, C. (2005). Developmental trajectories of legal socialization among serious adolescent offenders. *The Journal of Criminal Law & Criminology*, *96*(1), 267-298.

Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, *40*(3), 879-891. doi:10.3758/BRM.40.3.879

Reisig, M. D., Bratton, J., & Gertz, M. G. (2007). The construct validity and refinement of process-based policing measures. *Criminal justice and behavior*, *34*(8), 1005-1028. doi:10.1177/0093854807301275

Reisig, M. D., & Lloyd, C. (2009). Procedural justice, police legitimacy, and helping the police fight crime: Results from a survey of Jamaican adolescents. *Police Quarterly*, *12*(1), 42-62. doi:10.1177/1098611108327311

Reisig, M. D., Tankebe, J., & Meško, G. (2012). Procedural justice, police legitimacy, and public cooperation with the police among young Slovene adults. *Varstvoslovje: Journal of Criminal Justice & Security*, *14*(2), 147-164.

Reisig, M. D., Tankebe, J., & Mesko, G. (2014). Compliance with the law in Slovenia: The role of procedural justice and police legitimacy. *European Journal on Criminal Policy and Research*, *20*(2), 259-276. doi:10.1007/s10610-013-9211-9

Reisig, M. D., Wolfe, S. E., & Holtfreter, K. (2011). Legal cynicism, legitimacy, and criminal offending: The nonconfounding effect of low self-control. *Criminal Justice and Behavior*, *38*(12), 1265-1279. doi:10.1177/0093854811424707

Rodrigues, H. & Gomes, A. M. M. (2017). Socialização legal e perfis de pré-adolescentes em São Paulo: uma análise de correspondência. [Legal socialization and profiles of early adolescents in Sao Paulo: An analysis of correspondence.] *Critica e Sociedade, 7*(2), 181-206.

Sampson, R. J., & Bartusch, D. J. (1998). Legal cynicism and (subcultural?) tolerance of deviance: The neighborhood context of racial differences. *Law and Society Review*, 777-804. doi:10.2307/827739

Senkevics, A.S. & Carvalho, M. P. (2016). "O que você quer ser quando crescer?" Escolarização e gênero entre crianças de camadas populares urbanas. ["What do you want to be when you grow up"? Schooling and gender among children from popular background.]. *Revista Brasileira de Estudos Pedagógicos. Brasília, 97*(245), 179-194. doi: 10.1590/S2176-6681/ 380613879

Sherman, L. W. (1993). Defiance, deterrence, and irrelevance: A theory of the criminal sanction. *Journal of Research in Crime and Delinquency, 30,* 445–473. doi:10.1177/0022427893030004006

Sinhoretto, J., Schlittler, M. C., & Silvestre, G. (2016). Juventude e violência policial no município de São Paulo [Youth and police violence in the city of São Paulo]. *Revista Brasileira de Segurança Pública. 10*(1), 10-35.

Smith, R. (2018). The world's biggest economies. *World Economic Forum*, April 18. Available at https://www.weforum.org/agenda/2018/04/the-worlds-biggest-economies-in-2018/

Srole, L. (1956). Social integration and certain corollaries: An exploratory study. *American Sociological Review*, *21*(6), 709-716. doi:10.2307/2088422

SSPSP. (2018) *Produtividade policial.* [Police productivity.] Retrieved from http://www.ssp.sp.gov.br/Estatistica/Pesquisa.aspx

Steffensmeier, D., & Allan, E. (1996). Gender and crime: Toward a gendered theory of female offending. *Annual Review of Sociology*, *22*(1), 459-487. doi:10.1146/annurev.soc.22.1.459

Steffensmeier, D., & Ulmer, J. (2002). Age and the patterning of crime. In S. Kadish (Ed.), *Encyclopedia of Crime and Justice* (pp. 31-37). New York: Macmillan.

Sunshine, J., & Tyler, T. R. (2003). The role of procedural justice and legitimacy in shaping public support for policing. *Law & Society Review*, *37*(3), 513-548. doi:10.1111/1540-5893.3703002

Tankebe, J. (2009). Public cooperation with the police in Ghana: Does procedural fairness matter?. *Criminology*, *47*(4), 1265-1293. doi:10.1111/j.1745-9125.2009.00175.x

Tankebe, J. (2013). Viewing things differently: The dimensions of public perceptions of police legitimacy. *Criminology*, *51*(*1*), 103-135. doi: 10.1111/j.1745-9125.20212.00291.x

Tapp, J. L. (1991). The geography of legal socialization: Scientific and social markers. *Droit et Société, 19,* 331–358. doi:10.3406/dreso.1991.1120

Tapp, J. L., & Kohlberg, L. (1971). Developing senses of law and legal justice. *Journal of Social Issues*, *27*(2), 65-91. doi:10.1111/j.1540-4560.1971.tb00654.x

Tapp, J. L., & Levine, F. J. (1974). Legal socialization: Strategies for an ethical legality. *Stanford Law Review, 27,* 1–72. doi:10.2307/1227929

Thomas, K., Rodrigues, H., Mizutani, A. M. M, Oliveira, R. T., Piccirillo, D., & Brito, R. C. (2018). Parental legitimacy, procedural justice and adolescent compliance with parental rules among Brazilian preadolescents. *International Journal of Child, Youth, and Family Studies, 9*(3), 21-46. doi:10.18357/ijcyfs93201818275

Thornberry, T. P., & Krohn, M. D. (2000). The self-report method for measuring crime and justice. In *Measurement and Analysis of Crime and Justice* (pp. 33-83) (Vol. 4 of *Criminal Justice 2000*). Washington, DC: National Institute of Justice, Office of Justice Programs, U.S. Department of Justice.

Trinkner, R., & Cohn, E. S. (2014). Putting the "social" back in legal socialization: Procedural justice, legitimacy, and cynicism in legal and nonlegal authorities. *Law & Human Behavior (American Psychological Association), 38*(6), 602-617. doi:10.1037/lhb0000107

Trinkner, R., & Goff, P. A. (2016). The color of safety: The psychology of race & policing. *The SAGE Handbook of Global Policing*, 61-81. doi:10.4135/9781473957923.n5

Trinkner, R., Jackson, J., & Tyler, T. R. (2018). Bounded authority: Expanding "appropriate" police behavior beyond procedural justice. *Law and Human Behavior*, *42*(3), 280-293. doi:10.1037/lhb0000285

Trinkner, R., & Tyler, T. R. (2016). Legal socialization: Coercion versus consent in an era of mistrust. *Annual Review of Law and Social Science*, *12*, 417-439. doi:10.1146/annurev-lawsocsci-110615-085141

Tyler, T. R. (2001). Trust and law abidingness: A proactive model of social regulation. *Boston University Law Review*, *81*, 361-406.

Tyler, T. R. (2003). Procedural justice, legitimacy, and the effective rule of law. *Crime and Justice*, *30*, 283-357. doi:10.1086/652233

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

Tyler, T. R. (2006b). Psychological perspectives on legitimacy and legitimation. *Annu. Rev. Psychol.*, *57*, 375-400. doi:10.1146/annurev.psych.57.102904.190038

Tyler, T. R. (2009). Legitimacy and criminal justice: The benefits of self-regulation. *Ohio St. J. Crim. L.*, *7*, 307-359.

Tyler, T. R., & Blader, S. L. (2003). The group engagement model: Procedural justice, social identity, and cooperative behavior. *Personality and Social Psychology Review*, *7*(4), 349-361. doi:10.1207/S15327957PSPR0704_07

Tyler, T. R., Fagan, J., & Geller, A. (2014). Street stops and police legitimacy: Teachable moments in young urban men's legal socialization. *Journal of Empirical Legal Studies*, *11*(4), 751-785. doi:10.2139/ssrn.2289244

Tyler, T. R., & Huo, Y. J. (2002) *Trust in the law: Encouraging public cooperation with the police and courts*. New York: Russell Sage Foundation.

Tyler, T. R., & Lind, E. A. (1992). A relational model of authority in groups. In *Advances in Experimental Social Psychology* (Vol. 25, pp. 115-191). Academic Press. doi:10.1016/S0065-2601(08)60283-X

Tyler, T., & Trinkner, R. (2018). *Why children follow rules: Legal socialization and the development of legitimacy*. New York: Oxford University Press.

UN-Habitat. (2010). *São Paulo, a tale of two cities*. Cities and Citizens series; bridging the urban divide. Nairobi: UN-Habitat. Retrieved from http://mirror.unhabitat.org/pmss/listItemDetails.aspx?publicationID=2924

Waiselfisz, J. J. (2012). *Mapa da violência 2012.* Atualização: homicídio de mulheres no Brasil. [Map of Violence 2012. Updated: homicide of women in Brazil.] São Paulo: FLACSO. Retrieved from http://www.mapadaviolencia.org.br/pdf2012/MapaViolencia2012_atual_mulheres.pdf

Waiselfisz, J. J. (2015). *Mapa da violência 2015:* Homicídio de mulheres no Brasil. [Map of Violence 2015: Homicide of women in Brazil.] São Paulo: FLACSO. Retrieved from http://www.mapadaviolencia.org.br/pdf2015/MapaViolencia_2015_mulheres.pdf

World Health Organization. (2018). *World health statistics 2018*: Monitoring health for the SDGs (sustainable development goals). Geneva: World Health Organization. http://www.who.int/gho/publications/world_health_statistics/2018/en/

Zanetic, A. (2017). Ação institucional, confiança na polícia e legitimidade em São Paulo [Institutional action, trust in the police, and legitimacy in São Paulo]. *Revista Brasileira de Ciências Sociais, 32*(95), 1-19. doi: 10.17666/329508/2017

Table 1 – Sample demographics.

	Completed	% Missing	M	SD	Min	Max
SES	742	0	-.003	.93	-1.04	1.92
Sex[†]	742	0	.50	--	0 (boy)	1 (girl)
White[†]	686	7.55	.50	--	0 (non-White)	1 (White)
Police Contact						
Direct Experience	740	0.27	.07	.28	.00	3.00
Vicarious Experience	742	0	.94	.70	.00	3.00
Police Procedural Justice	742	0	3.38	.73	1.00	4.00
Crime Perceptions	742	0	1.85	.89	.00	3.00
Police Legitimacy	742	0	3.11	.66	1.00	4.00
Legal Cynicism	742	0	1.95	.62	1.00	4.00
Criminal Offending†	742	0	.23	--	0 (none)	1 (yes)

[†]Binary variable

Table 2 – Unstandardized parameter estimates for structural equation model.

	Procedural Justice			Crime Perceptions			Police Legitimacy			Legal Cynicism			Offending[†]		
	b	[95% CI]	SE	b	[95% CI]	SE	b	[95% CI]	SE	b	[95% CI]	SE	Odds Ratio	[95% CI]	SE
SES	-.02	[-.09, .04]	.03	-.09*	[-.17, -.02]	.04	-.003	[-.06, .05]	.03	-.13***	[-.18, -.08]	.03	1.38**	[1.11, 1.71]	.15
Sex	-.05	[-.16, .06]	.06	.01	[-.12, .15]	.07	-.22***	[-.31, -.13]	.05	.12**	[.03, .21]	.05	.44***	[.30, .65]	.09
White	-.06	[-.18, .06]	.06	-.002	[-.14, .14]	.07	.08	[-.01, .18]	.05	-.03	[-.12, .07]	.05	1.18	[.79, 1.77]	.24
Direct Experience	-.24*	[-.44, -.05]	.10	-.28*	[-.51, -.05]	.12	-.12	[-.28, .04]	.08	.12	[-.04, .28]	.08	1.70	[.96, 3.01]	.49
Vicarious Experience	-.13***	[-.21, -.05]	.04	.07	[-.03, .16]	.05	-.06	[-.12, .01]	.03	.07*	[.01, .14]	.03	1.61***	[1.24, 2.09]	.22
Procedural Justice	--	--	--	--	--	--	.34***	[.28, .40]	.03	.01	[-.05, .07]	.03	.82	[.63, 1.07]	.11
Crime Perceptions	--	--	--	--	--	--	.08**	[.03, .13]	.03	.10***	[.05, .15]	.03	1.14	[.92, 1.43]	.13
Police Legitimacy	--	--	--	--	--	--	--	--	--	--	--	--	.64**	[.47, .87]	.10
Legal Cynicism	--	--	--	--	--	--	--	--	--	--	--	--	1.00	[.73, 1.36]	.16
Constant	3.57***	[3.44, 3.69]	.06	1.79***	[1.64, 1.94]	.08	1.95***	[1.70, 2.21]	.12	1.61***	[1.36, 1.86]	.13	1.39	[.39, 4.91]	.89

[†]logit estimation

*p < .05 ** p < .01 *** p < .001

Note: Sex: 1=woman; White: 1=White; *n*=684

Table 3 – Standardized regression estimates (β) from structural equation model.

	Procedural Justice	Crime Perceptions	Police Legitimacy	Legal Cynicism
SES	-.03	-.10*	-.004	-.19***
Sex	-.03	.01	-.16***	.10**
White	-.04	-.001	.06	-.02
Direct Experience	-.10*	-.10*	-.05	.06
Vicarious Experience	-.12***	.05	-.06	.08*
Procedural Justice	--	--	.38***	.01
Crime Perceptions	--	--	.10**	.14***
Constant	4.82***	2.03***	2.94***	2.56***
R^2	.03	.02	.20	.09
χ^2(df)		10.25(2), *p*=.01		
RMSEA		.08		
CFI		.97		
SRMR		.02		
n		684		

* *p* < .05 ** *p* < .01 *** *p* < .001

Note: Sex: 1=woman; White: 1=White; unstandardized estimates are identical to estimates in Table 2.

Table 4 – Bootstrapped indirect effects from structural equation model.

Indirect Path	β	b	SE†	95% CI‡
Direct experience → Police legitimacy				
Via procedural justice	-.04	-.08	.05	[-.21, -.001]
Via crime perceptions	-.01	-.02	.01	[-.06, -.001]
Vicarious experience → Police legitimacy				
Via procedural justice	-.05	-.04	.02	[-.08, -.02]
Via crime perceptions	.01	.005	.004	[-.002, .02]
Direct experience → Legal cyncisim				
Via procedural justice	-.001	-.002	.01	[-.03, .02]
Via crime perceptions	-.01	-.03	.02	[-.08, .000]
Vicarious experience → Legal cynicism				
Via procedural justice	-.001	-.001	.005	[-.01, .01]
Via crime perceptions	.01	.01	.01	[-.002, .02]

† Bootstrapped SE (3,000 samples)
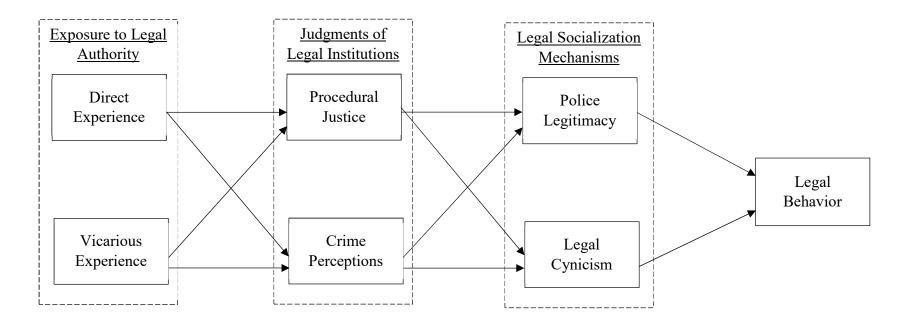‡ Bias-corrected confidence interval

Figure 1 – A general conceptual model of the procedural justice model of legal socialization.