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# Legal socialization: Understanding the obligation to obey the law

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None of the analyses in the current article appear in other publications. Results from this project have not been disseminated at any academic conferences.

## Abstract

During the emergence of the legal socialization field, the obligation to obey the law was central in theoretical and empirical approaches. Scholars in the last 50 years often noted that the obligation to obey the law (OOL) is vital for compliance, yet studies rarely empirically examined factors that promote the OOL. This study used data from 1000 adults stratified sampled to be nationally representative of the United States to examine how personal characteristics (i.e., impulsivity and morality), perceptions of the nonlegal social context (i.e., social bonds, teacher legitimacy, and parent legitimacy), and perceptions of the legal system context (i.e., deterrence and police procedural justice, distributive justice, bias, and legitimacy) are associated with the OOL. The results indicated that impulsivity, teacher legitimacy, deterrence, and perceptions of police legitimacy and bias were associated with the OOL. Implications for the next 50 years of legal socialization research are discussed.

## KEYWORDS

deterrence, legal socialization, obligation to obey the law, police legitimacy, procedural justice

Laws form the backbone of our contemporary societies. To a certain extent, the legal system relies on deterrence to promote compliance, yet the effects of perceptual deterrence are limited (Nagin, 2013) and relying on deterrence would require enormous resources. Consequently, legal systems must rely on individuals feeling obligated to obey the law (Justice & Meares, 2021; Tyler, 2006a). When people feel obligated to obey the law (OOL), they are more likely to comply even when there is limited enforcement. That is, they comply out of a sense of duty that transcends the threat of punishment (Trinkner et al., 2018; Tyler, 2006b). To have a functioning rule of law and effective

legal system, the obligation to obey the law is vital, yet people vary in the extent to which they actually feel that obligation (Hirschi, 1969). A key question, then, is why do people feel obligated to obey the law?

## Legal socialization and the obligation to obey the law

In a broad sense, legal socialization refers to the process through which individuals develop their relationship with the law (Fine & Trinkner, 2020). During the emergence of the legal socialization field during the 1960s and 1970s, the obligation to obey the law was central in the study of legal socialization. Hogan and Mills (1976, p. 262) cogently explained that legal socialization, “refers to those events that cause people to develop their particular (and usually favorable) orientations to the rules, values, and customs of their society. It follows from this that socialization provides the emotional basis for our feelings concerning the obligatory status of the law.” As they put it simply, “Legal socialization, then, is to a large degree concerned with the developmental dynamics of the sense of legal obligation” (Hogan & Mills, 1976, p. 262). Indeed, Tapp (1971, p. 5), one of the pioneers of the field, explained that, “The term ‘legal socialization’ delineates that aspect of the socialization process dealing with the emergence of legal attitudes and behaviors... Whether the term ‘law,’ ‘norm,’ or ‘rule’ is employed, all convey some obligation to obey and none is conceived without the possibility of disobedience.” Today, scholars still proclaim that at its core, “The goal of legal socialization is to instill in people a felt obligation or responsibility to follow laws” (Tyler & Trinkner, 2018, p. 3).

In the last few decades, the study of the obligation to obey the law has been largely dominated by the procedural justice and legitimacy perspective. The scholarship in this area has primarily focused on how people’s experiences with the legal system and its agents, especially police, shape perceptions of legitimacy (Tyler, 2017). To the extent that individuals feel as though they or others have experienced procedural justice (PJ) when interacting with criminal justice system actors, they are more likely to perceive the system as more legitimate, and then feel more obligated to obey the law or officers’ directives (Mazerolle et al., 2013; Reisig et al., 2012; Tankebe et al., 2016; Walters & Bolger, 2019).

To date, this PJ-focused lens has dominated the study of the obligation to obey the law. As a result, research on the obligation to obey the law has mostly been focused on how people experience the legal system. Indeed, this comports with many of Max Weber’s (1978, p. 37) original views on legitimacy and the OOL. Weber, for instance, argues “So far as it is not derived merely from fear or from motives of expediency, a willingness to submit to an order imposed by one man or a small group, always implies a belief in the legitimate authority (Herrschaftsgewalt) of the source imposing it.” That is, the willingness to obey the law or the directives of a legal authority voluntarily and without coercion implies some belief in legitimacy.

However, this is a somewhat narrow view of what drives the general obligation to obey the law and is not necessarily one that Tyler put forth in some of his early work on the obligation to obey the law (2006a) or that fits with the original perspectives within pioneering legal socialization scholarship (see Tapp, 1971). For instance, while Tyler (2006a) measured legitimacy using support for legal authorities and the obligation to obey, he analyzed them largely separately because the correlation was weak in both waves of his study ( $r = .25-.26, p < .001$ ). Further, the association between obligation and compliance with the law was approximately double the association between support for legal authorities and compliance. Indeed, Tyler (2006a, p. 50) indicated quite clearly that, “the two factors are largely distinct, although not totally so.” A crucial point, then, is

that just because one perceives legal authority to be legitimate, one does not therefore necessarily feel strictly and universally obligated to obey the law. Within a framework of conditional logic of *if p then q*, it is not necessarily the case that if I perceive the police to be legitimate (*p*), then I feel obligated to obey the law (*q*). One can reasonably perceive the police to be legitimate yet not feel obligated to obey the law, just as one can reasonably feel the police are not legitimate yet still feel obligated to obey the law. Other factors outside of police legitimacy may influence the felt obligation to obey the law.

## A broader view of the obligation to obey the law

Perhaps the most compelling theoretical views of the obligation to obey the law derive from the legal socialization field's pioneers during the 1960s and 1970s (Tapp, 1971; Tapp & Kohlberg, 1971; Tapp & Levine, 1974). Based on reviewing this body of work, we have devised a theoretical framework for organizing the constellation of factors that may impact the felt obligation to obey the law (Figure 1). The first area pertains to one's personal characteristics and traits, including their personality, morals, and values. For instance, self-control may play an integral role in impacting individuals' perceptions of the law and their relationships with legal authority in general. Jackson et al. (2020a) recently provided a robust review of this literature and provided a guiding framework (see also Jackson et al., 2020b). For instance, Reisig et al. (2011) found that those who were more impulsive reported higher levels of legal cynicism, indicating that impulsivity may undermine the extent to which individuals feel that the law is binding (see also Kaiser & Reisig, 2019; Nivette et al., 2019, 2020).

Beyond self-control, morality and values may matter. When the law is compatible with one's personal moral views, compliance occurs effortlessly and almost unconsciously. Rather than be a conscious, rational process, the extent to which one feels obligated to obey the law reflects the congruence between one's existing values and the morality of the law. As Kelman (1961, p. 66) explains, "Its manifestation depends neither on observability by the influencing agent nor on the activation of the relevant role, but on the extent to which the underlying values have been made relevant by the issues under consideration." Indeed, empirical evidence suggests that morality is vital in legal socialization (Fagan & Tyler, 2005; Tyler, 2006a) and is associated with the obligation to obey the law (Fine et al., 2016).

Second, legal socialization scholars have long argued that despite its name, legal socialization is also driven by a variety of non-legal forces (see Tapp & Kohlberg, 1971; Tapp & Levine, 1974; Tapp, 1991; Trinkner & Tyler, 2016; Fine & Trinkner, 2021). Primarily, concerns about "gaining approval or avoiding disapproval" from others impact one's behavior (Kelman, 1961, p. 62). The individual is driven to comply with or break the law "because it is instrumental in the production of a satisfying social effect" (Kelman, 1961, p. 62). That is, the extent to which we feel obligated to obey the law would then be driven at least in part by social influence and social bonds. Further, perhaps the most cogent description of the value of non-legal forces in recent years comes from the account by Trinkner and Cohn (2014, p. 603), in which the authors explain that "law-related norms are encoded within the rules of a multitude of different social institutions, each featuring their own socializing agents." Focusing on police, teachers, and parents, Trinkner and Cohn (p. 615) conclude that, "the internalization of law-related norms are also driven by one's social environment." Echoing Tapp (1991), they argue that both parents and teachers are vital extralegal authorities who socialize children's relationships with rules, laws, and authority, which helps them develop their own views of how much they feel obligated to follow the law. Indeed,

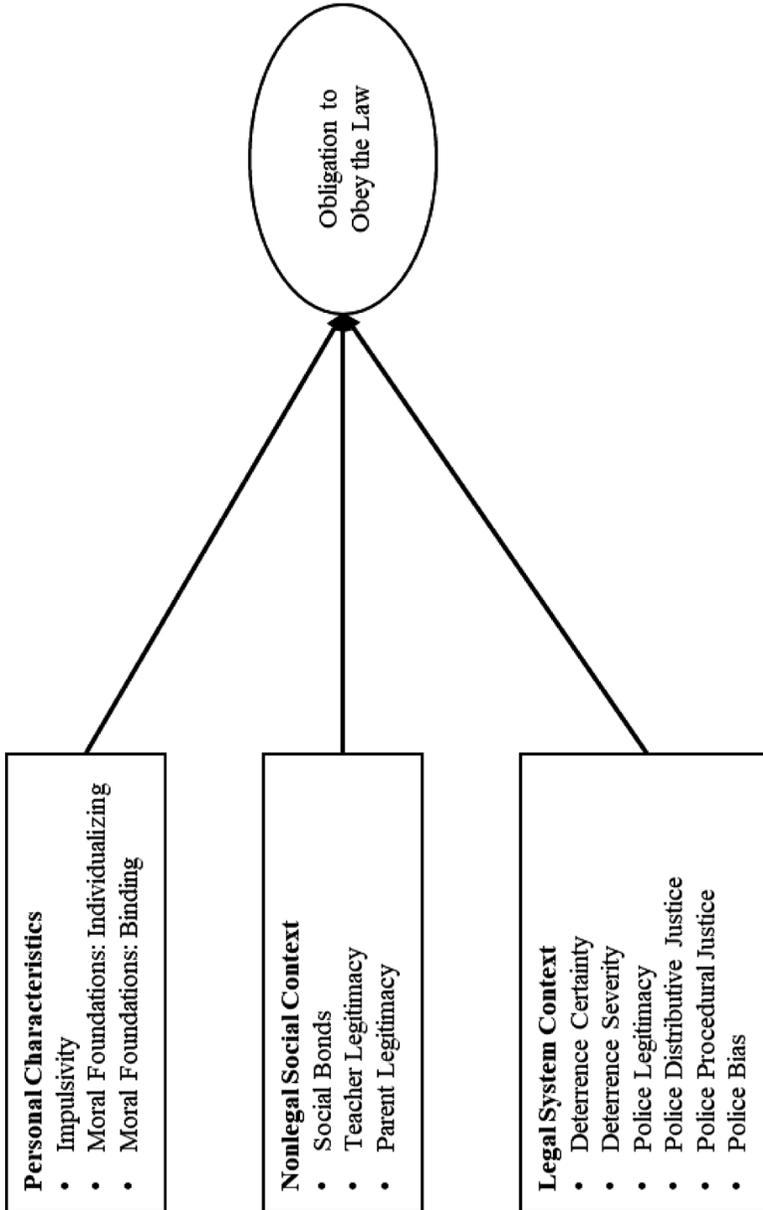


Fig 1 Theoretical perspective on the obligation to obey the law

empirical evidence suggests that parents may influence youths' obligation to obey the law, though the evidence is not yet causal (Fine et al., 2020).

Third, there is the legal context, which has garnered the most attention in the recent literature on the felt obligation to obey the law. Building upon Kelman's (1961) initial theorizing, Hogan and Mills (1976, p. 273) subsequently argued that for laws to be perceived as personally obligatory, they must be enacted and enforced by a legitimate authority. To the extent that the authority is, "regarded as credible, as worthy of respect and veneration, as authentically concerned with the welfare of its constituency, as an exemplar of probity and integrity," the public will feel obligated to obey the law. Further, the law must be fair, just, and unbiased, in that "no particular subgroup should be singled out for special abuse." Finally, the law must be viewed as consonant with one's values and principles. To this day, the field tends to prioritize examining the effect of views of legal authority on the obligation to obey (Trinkner, 2019; Tyler, 2006b).

At the same time, within the legal context, deterrence may also shape the felt obligation to obey (Tyler, 2006a; Tyler & Trinkner, 2018). Deterrence theory suggests that when the costs of crime outweigh the benefits, crime will not occur (Lee et al., 2018; Loughran et al., 2012). To the extent that individuals report more perceptual deterrence, they also feel more obligated to obey the law. This may speak to coerced obligation out of fear, pragmatism, or a dull compulsion rather than truly free consent (Nix et al., 2019; Posch et al., 2020). Indeed, as Tapp (1971, p. 6) noted, "There is little doubt from a social psychological perspective that a simple increment in punishment or the threat thereof usually will result in overt obedience."

## Present study

This study seeks to move the field of legal socialization forward by examining to what extent the felt obligation to obey the law is rooted in people's personal characteristics, their perceptions of the nonlegal social context, and their perceptions of the legal system context (Figure 1). It seeks to understand what shapes the obligation to obey the law, and thus offers a multi-dimensional view of the OOL in legal socialization. Personal characteristics we expected to be associated with the OOL were impulsivity (McLean et al., 2019; Nivette et al., 2019) and morality (Tyler, 2006a; Tyler & Trinkner, 2018). Nonlegal social context variables we expected to be associated with the OOL were social bonds (Humphrey & Van Brunschot, 2018; Kelman, 1961; Sampson & Laub, 1990), teacher legitimacy (Tapp, 1991; Trinkner & Cohn, 2014), and parent legitimacy (Tapp, 1991; Trinkner & Cohn, 2014). Finally, legal context variables we expected to be associated with the OOL were perceptions of police procedural justice, distributive justice, bias, and legitimacy (Gau, 2014; Tyler, 2006a), as well as perceptual deterrence (Tyler, 2006a; Tyler & Trinkner, 2018). We included demographic covariates such as age and gender considering prior work indicates their value in legal socialization (Tyler, 2006a). We expected that even after accounting for the legal context, personal characteristics and nonlegal social context variables would be associated with the felt obligation to obey the law.

## METHOD

### Participants

Using Prolific Academic, 1000 adults in the United States of America were sampled. Prolific Academic uses a stratified sampling approach in which the final intended sample size is divided

**Table 1** Demographic characteristics

Gender (%)	
Male	48.6
Female	51.4
Age ( <i>M</i> )	45.35
<i>SD</i>	15.2
Range	18–84
Race/Ethnicity (%)	
White	75.1
Black	13.1
Asian	6.6
Multi	2.8
Other	2.4

Note. *N* = 1,000.

into subgroups with the same demographic proportions (age, gender, and race/ethnicity) as the national population based on estimates from the U.S. Census Bureau (<https://www.census.gov/>). Individuals are invited to participate in the survey until the stratified subsample in which they belong is filled. Cross stratifying based on age (five 9-year brackets: 18–27, 28–37, 38–47, 48–57, and 58+), gender (male and female), and race/ethnicity (White, Black, Asian, Mixed, Other) brackets yields 50 subgroups.

By definition, Prolific samples are non-probability convenience samples, and while no sample can ever be completely nationally representative (Couper, 2017; Zhang et al., 2017), this stratified sampling yields greater generalizability. Further, while internet use is not universal (Couper, 2017) and opt-in internet surveys have non-response error (Couper et al., 2018), they can be as accurate as random digit dial telephone surveys (Ansolabehere & Schaffner, 2014; Hines et al., 2010) and social desirability may be lower for such internet-based samples versus offline samples (Zhang et al., 2017). Best practices include asking multiple attention check questions throughout the survey to screen out participants who are not paying attention or who may experience survey fatigue. We also specifically designed this short survey for this particular study in order to reduce survey fatigue. Out of the 1000 initial participants, five missed the two attention check questions. Those individuals were replaced with new participants from the same recruitment bracket so that the final sample size was 1000. Participants' demographic characteristics are reported in Table 1.

## Measures

### Obligation to obey the law

We used the 12-item Rule Orientation scale (Fine et al., 2016, 2020) that was developed to measure the felt obligation to obey the law. The scale assesses how much people feel obligated to obey the law even within a variety of circumstances wherein violating the law may be perceived to be acceptable (see Appendix). Earlier work has validated this scale, showing it is highly correlated with Tyler's original scale, follows the same age-graded trend (Fine et al., 2020), and has good convergent and divergent validity with key legal and moral reasoning scales (Fine et al., 2016).

Answer choices were given on a scale of 1 (*Strongly Disagree*) to 7 (*Strongly Agree*). Items were reverse-scored and mean-scored such that higher average scores indicated more OOL. Descriptive statistics and reliability coefficients for this and all study measures are presented in Table 2, and the items are presented in the Appendix.

### Police legitimacy

Perceptions of police legitimacy were assessed using Tyler's four items that tap police legitimacy through support for the police (Tyler, 2006a, p. 48; e.g., "I have a great deal of respect for the police"; "I feel people should support the police.") Responses were provided on a four-point response scale from *Strongly Disagree* to *Strongly Agree*. Higher mean scores indicated more police legitimacy.

### Police bias

Perceptions of police bias were assessed using four items (e.g., "Police treat people differently depending on their race/ethnic group"; "Police treat people different depending on the neighborhoods they are from"; see Fine et al., 2020). Items used a five-point response scale from *Strongly Disagree* to *Strongly Agree*. Higher mean scores indicated more police bias.

### Police procedural justice

Perceptions of police procedural justice (Tyler & Jackson, 2014) were assessed using three items (e.g., "How often (if ever) do you think the police in your neighborhood make fair and impartial decisions in the cases they deal with?"; "How often (if ever) do you think the police in your neighborhood explain their decisions to the people they deal with?"). Responses were provided on a five-point scale from *Never* to *Always*. Higher mean scores indicated more police procedural justice.

### Police distributive justice

Perceptions of police distributive justice were assessed using five items (e.g., "The police provide the same level of security to all community members"; "The police provide the same quality of service to all community members"; "The police deploy their resources in this city in an equitable manner.") Responses were on a five-point scale from *Strongly disagree* to *Strongly agree*. Higher mean scores indicated more police distributive justice.

### Impulsivity

Impulsivity was measured using the eight-item impulsivity subscale of the Weinberger Adjustment Inventory (Weinberger & Schwartz, 1990). Example items include "I should try harder to control myself when I'm having fun"; "I do things without giving them enough thought".

**Table 2** Descriptive statistics and bivariate correlations

Variable	M (SD)	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Obligation to obey the law	4.47 (1.22)	.92												
2. Police legitimacy	2.76 (.93)	.39***	.95											
3. Police bias	3.57 (.98)	-.37***	-.62***	.88										
4. Police procedural justice	3.49 (.83)	.28***	.75***	-.55***	.85									
5. Police distributive justice	3.05 (1.21)	.33***	.78***	-.67***	.73***	.96								
6. Impulsivity	1.86 (.74)	-.28***	-.12***	.18	-.12***	-.09**	.82							
7. Deterrence perceived severity	4.66 (.54)	.18***	.05	-.03	.07***	.01	-.25***	.89						
8. Deterrence perceived certainty	5.56 (1.34)	.25***	.17***	-.12***	.12***	.12***	-.24***	.37***	.92					
9. Social bonds	4.51 (.63)	.11***	.16***	-.10**	.14***	.16***	-.10**	.06	.12***	.82				
10. Teacher legitimacy	3.52 (.73)	.29***	.36***	-.25***	.28***	.30***	-.18***	.13***	.22***	.17***	.85			
11. Parent legitimacy	3.69 (.72)	.26***	.36***	-.24***	.25***	.28***	-.23***	.13***	.18***	.30***	.46***	.83		
12. Moral foundations individualizing	3.90 (.73)	.01	-.01	.05	.04	-.07*	-.13***	.19***	.16***	.12***	.09**	.09**	.77	
13. Moral foundations binding	2.64 (1.08)	.23***	.54***	-.32***	.35***	.48***	.01	-.01	.14***	.20***	.25***	.32***	.18***	.89

Note. Cronbach's alphas are on the diagonal.

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



Responses were provided on a five-point scale and averaged so that higher scores indicated more impulsivity (i.e., less self-control).

## Perceptual deterrence

We measured two aspects of deterrence using Roche and colleagues' recent scales (Roche et al., 2020). Following their approach, we asked respondents how small or big of a problem (1 = *Very small* to 5 = *Very big*) the punishments would create in their life if they were caught and convicted of committing six different crimes (drunk driving, buying illegal drugs, theft, assault, burglary, and robbery). The items were scored such that higher values indicated larger perceived severity. To measure respondents' perceptions of the likelihood of being arrested, we asked them to imagine they committed the same six crimes, but then asked them instead to estimate how likely or unlikely, on a scale of 1 (*Extremely unlikely*) to 7 (*Extremely likely*), it was that they would be caught. Responses were averaged such that higher values indicated higher perceived certainty.

## Social bonds

Social bonds are typically measured along three dimensions: attachment (e.g., I am very close with...), commitment (e.g., "It is important for me to be a good..."), and involvement (e.g., "I am actively involved with..."). Based on prior work (Grindal, 2017), respondents answered each of those three questions on a scale of 1 (*Strongly disagree*) to 5 (*Strongly agree*), to indicate their social bonding to their friends and family, yielding a total of six items. The items were averaged to give an overall metric for social bonds to friends and family.

## Parent and teacher legitimacy

Trinkner and colleagues (2012) used Sunshine and Tyler's (2003) police legitimacy scale to create a measure of parental legitimacy. Considering we were sampling adults, we required them to reflect on their parent and teacher legitimacy from when they were growing up. As such, we changed the instructions to read, "When I was growing up...", edited the items so that they read in the past tense (e.g., "I thought..."), and also omitted one item ("Families work best when people listen to their parents") because it would not directly translate to the school environment. Respondents reported their agreement with each item on a four-point Likert from *Strongly disagree* to *Strongly agree*. Responses to the nine items were averaged such that higher values indicated more parent and teacher legitimacy.

## Moral foundations

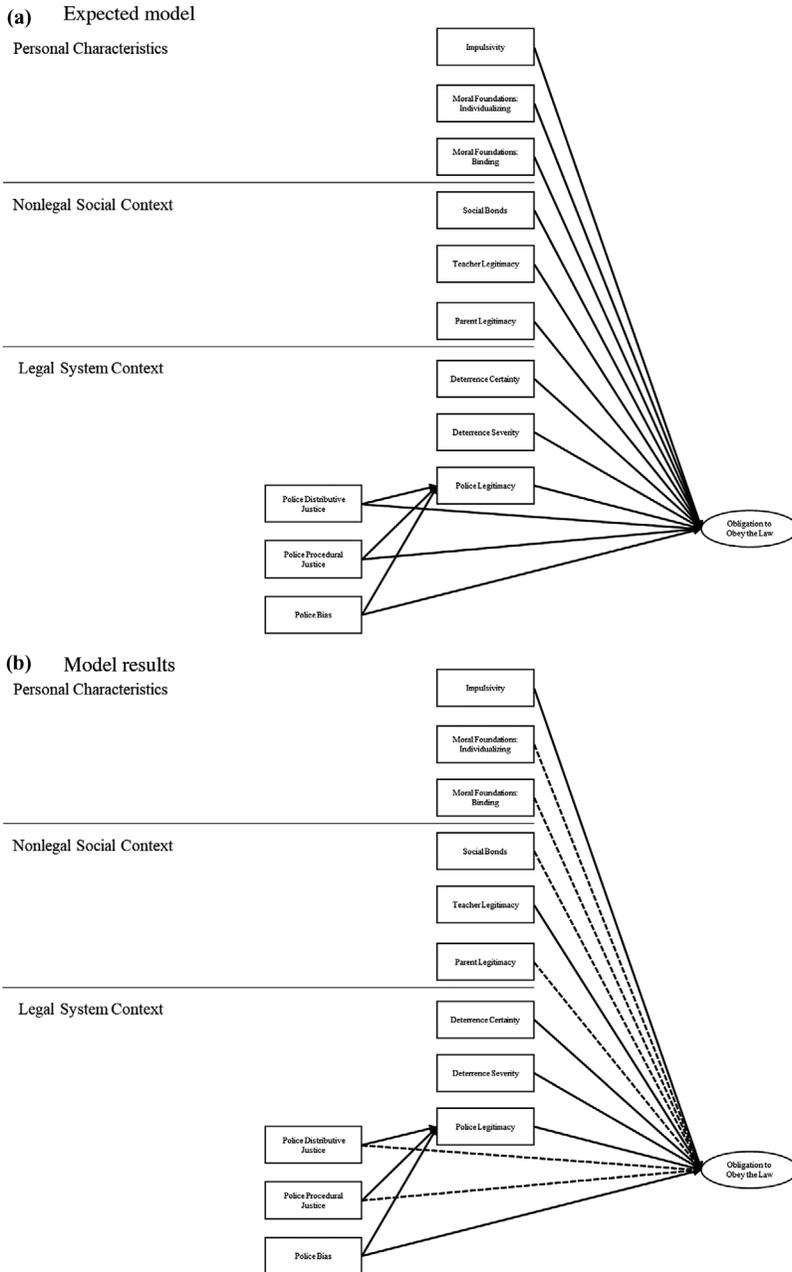
Participants completed the 20-item version (see Smith et al., 2017) of Graham et al. (2009) Moral Foundations Questionnaire. Items were delivered in two blocks. The first block began with the prompt, "When you decide whether something is right or wrong, to what extent are the following considerations relevant to your thinking?" Participants responded on a scale of 1 (*Not at all relevant*) to 6 (*Extremely relevant*) to 10 items (e.g., "Whether or not someone violated standards of

purity and decency”; “Whether or not someone suffered emotionally”). The second block began with the text, “Please read the following sentences and indicate your agreement or disagreement.” Using a six-point response scale from *Strongly disagree* to *Strongly agree*, participants rated their agreement with 10 more items (e.g., “Compassion for those who are suffering is the most crucial virtue”; “Justice is the most important requirement for a society”). Morality researchers divide moral foundations into individualizing and binding (Haidt, 2012; Vaughan et al., 2019). Individualizing foundations, which include care and fairness, focus primarily on moral concerns about individuals. Those scoring higher (vs. lower) in individualizing would consider it more wrong to treat another person unfairly. Binding moral foundations, such as authority, loyalty, and purity, elicit moral concerns for one’s collective groups. Those scoring higher (vs. lower) on binding would consider it more wrong to disregard a group’s hierarchy and traditions or to be disloyal to one’s group members. This empirically validated categorization process is widely used in the morality literature (Vaughan et al., 2019). Of the 20 total items, eight tap individualizing and 12 tap binding moral concerns. The internal consistencies were similar to those of other studies (Vaughan et al., 2019). The correlation between the individualizing and binding measures was small, indicating that as intended, they appear to assess largely distinct constructs.

## Analytic plan

All analyses were conducted in Mplus version 8. First, a confirmatory factor analysis (CFA) was run using the 28 items in the following measures: obligation to obey the law, police legitimacy, police bias, police procedural justice, and police distributive justice. In our case, we used the CFA results to validate that the measures were separable. Because of the nature of the individual items and the response options, we treated all ordinal items as categorical variables within the CFA as is recommended in Mplus (Muthén & Kaplan, 1985). Second, a bivariate correlation matrix was produced to examine associations between key study measures. Third, a series of ordinary least squares regression models was fit in order to accomplish three objectives: (1) identify which variables were associated with the obligation to obey the law; (2) examine how much variance was explained; and (3) identify any collinearity issues (i.e., high levels of interdependence among predictors) that may cause variance inflation (Thompson et al., 2017) in the final structural equation model. The first model regressed the obligation to obey the law on the covariates (age, gender, and race/ethnicity) and the personal characteristics (impulsivity, moral foundations internalizing, and moral foundations binding), the nonlegal social context (social bonds, teacher legitimacy, and parent legitimacy), and deterrence severity and deterrence certainty variables. Beginning with the second model, other components of the legal system context were added in a hierarchical fashion. The second model added police legitimacy. Police legitimacy was added before other perceptions of police because it is a more proximate predictor of the obligation to obey the law within the procedural justice framework. The third model added perceptions of police bias, police procedural justice, and police distributive justice. To identify collinearity issues, researchers often use a variance inflation factor (VIF) of either 5 or 10 (Craney & Surles, 2002; Thompson et al., 2017). VIF values were less than 5, suggesting that multicollinearity was not an issue.

Finally, path analysis tested the model presented in Figure 2(a). The standard maximum likelihood estimator (ML) was utilized in Mplus version 8. Significance tests for the indirect effects were calculated using bootstrapped standard errors (10,000 samples) and 95% bias-corrected confidence intervals (Allison, 2018; Preacher & Hayes, 2008). A benefit of this approach is that traditional *p*-values assume a symmetric distribution using a symmetric CI, whereas the bias-corrected



**Fig 2** Path model. *Note.* Solid lines indicate significant paths. Dotted lines indicate paths that were not statistically significant,  $p > .05$

bootstrapped confidence intervals do not place such a restriction on the data (Muthén et al., 2017). Bootstrapped methods are typically recommended for mediation analyses (Mallinckrodt et al., 2006; Pituch et al., 2006). The obligation to obey the law was modeled as a latent endogenous variable predicted by all key study variables (police legitimacy, police bias, police procedural justice, police distributive justice, impulsivity, deterrence severity, deterrence certainty, social bonds,

teacher legitimacy, parent legitimacy, moral foundations internalizing, and moral foundations binding) and covariates (age, gender, and race/ethnicity). Race/ethnicity was dummy coded so that the parameter estimates for Black, Asian, multi-race/ethnicity, and other reflected comparisons with the White participants.

In line with the procedural justice framework (Tyler, 2017; Walters & Bolger, 2019), police legitimacy was positioned as the mediator of the associations between police distributive justice, procedural justice, and bias on the obligation to obey the law. The default in Mplus is to estimate correlations between exogenous predictor variables. Because police legitimacy was considered as a mediating variable, it would no longer be considered exogenous, so we modeled correlations between police legitimacy and each of impulsivity, deterrence severity, deterrence certainty, social bonds, teacher legitimacy, parent legitimacy, moral foundations internalizing, and moral foundations binding to abide by the theoretical temporal ordering. All correlations between those predictors were estimated.

At the same time, Tyler and Trinkner (2018) have argued that perceptions of police and legal legitimacy are rooted in early experiences with other authorities, such as parents or teachers. It is plausible that parent and teacher legitimacy perceptions could shape perceptions of police legitimacy. Relatedly, to the extent that a person feels more bonded to society (Hirschi, 1969), they may also view the police or the law as more legitimate. As such, there are a variety of other potential model specifications, such as perceptions of parent legitimacy, teacher legitimacy, and social bonds predicting legitimacy, or parent and teacher legitimacy predicting social bonds which in turn predicts legitimacy. However, as each of these inherently assumes temporal ordering and this is a cross-sectional dataset, we opted for the most parsimonious model that does not include these potential paths, though the bivariate associations are all depicted in Table 2.

## RESULTS

### Factor analysis

The CFA demonstrated that the five-factor model with the 28 items had acceptable fit to the data (Table 3). In addition, the individual items' factor loadings were all high (all values  $>.60$ ). The results indicated that the model, wherein perceptions of police legitimacy, bias, distributive justice, procedural justice, and the obligation to obey the law were considered to be separate factors, fit the data.

### Bivariate associations

Descriptive statistics and bivariate correlations are depicted in Table 2. As expected, perceptions of police bias, police procedural justice, and police distributive justice were associated with perceptions of police legitimacy. Impulsivity was only weakly associated with police legitimacy. With the exception of moral foundations individualizing, all study variables were associated with the obligation to obey the law.

**Table 3** Confirmatory factor analysis standardized loadings

	Estimate	SE
<u>Factor 1 (Police legitimacy)</u>		
Item 1	.96	.004
Item 2	.94	.006
Item 3	.96	.004
Item 4	.94	.006
<u>Factor 2 (Obligation to obey the law)</u>		
Item 1	.66	.018
Item 2	.81	.012
Item 3	.76	.013
Item 4	.72	.015
Item 5	.78	.013
Item 6	.74	.015
Item 7	.79	.013
Item 8	.66	.017
Item 9	.71	.015
Item 10	.60	.019
Item 11	.84	.011
Item 12	.82	.012
<u>Factor 3 (Police distributive justice)</u>		
Item 1	.97	.003
Item 2	.96	.004
Item 3	.95	.004
Item 4	.91	.006
Item 5	.94	.004
<u>Factor 4 (Police procedural justice)</u>		
Item 1	.89	.010
Item 2	.81	.014
Item 3	.88	.010
<u>Factor 5 (Police bias)</u>		
Item 1	.75	.016
Item 2	.68	.018
Item 3	.97	.008
Item 4	.91	.009

Note.  $\chi^2 = 2343.18(340)$ ,  $p < .001$ , RMSEA = .08, 95% CI [.07, .08], CFI = .98, TLI = .98. All factor loadings were significant at  $p < .001$ .

## Ordinary least squares regressions

A series of ordinary least squares regression models was fit (Table 4). The first model regressed the obligation to obey the law on all of the key study variables (impulsivity, deterrence severity,

**Table 4** Regression analysis of obligation to obey the law

Variable	Model 1			Model 2			Model 3			
	b	SE	p	b	SE	p	b	SE	p	
<i>Demographic covariates</i>										
Age	<.01	<.01	.26	<.01	<.01	.35	<.01	<.01	.358	<.01
Female <sup>A</sup>	.01	.07	.87	.04	<.01	.61	.18	.07	.807	.15
<i>Race/Ethnicity<sup>B</sup></i>										
Asian	-.03	.14	.84	.04	.14	.77	.31	.14	.698	.32
Black	-.09	.11	.42	.12	.11	.25	.33	.11	.188	.35
Mixed	-.08	.21	.72	-.06	.21	.77	.35	.21	.627	.30
Other	-.32	.23	.15	-.20	.22	.37	.24	.22	.369	.23
<i>Personal characteristics</i>										
Impulsivity	-.33	.05	<.001	-.32	.05	<.001	-.22	.05	<.001	-.38
<i>Moral foundations</i>										
Individualizing	-.18	.05	<.001	-.11	.05	.03	-.01	.05	.077	.01
Binding	.20	.04	<.001	.27	.04	.21	.13	.04	.302	.12
<i>Nonlegal social context</i>										
Social bonds	.01	.06	.84	<.01	.06	.96	.12	.06	.867	.12
Teacher legitimacy	.25	.06	.000	.36	.18	.001	.29	.05	.001	.08
Parent legitimacy	.10	.06	.10	.05	.06	.34	.17	.06	.399	.16
<i>Legal system context</i>										
<i>Deterrence</i>										
Perceived severity	.19	.07	.009	.33	.18	.009	.32	.20	.004	.34
Perceived Certainty	.10	.03	.001	.16	.09	.002	.14	.03	.002	.03
<i>Police legitimacy</i>										
Police bias				.38	.05	<.001	.47	.07	<.001	.16
Police procedural justice							-.23	.05	<.001	-.33
Police distributive justice							-.09	.07	.175	.04
Constant	2.42	.48	<.001	1.48	3.35	1.29	3.11	.52	<.001	2.37
R <sup>2</sup>	.21			.25			.27			
Adjusted R <sup>2</sup>	.20			.24			.26			

Note. <sup>A</sup>Compared to male. <sup>B</sup>Compared to White.

deterrence certainty, social bonds, teacher legitimacy, parent legitimacy, moral foundations internalizing, and moral foundations binding) and covariates (age, gender, and race/ethnicity). Most of the key variables, including personal characteristics (impulsivity, moral foundations internalizing, and moral foundations binding), nonlegal social context (teacher legitimacy), and legal system context (deterrence severity and certainty) were associated with the obligation to obey the law. Two of the nonlegal social context variables (social bonds and parent legitimacy) were not associated with the OOL.

The second model added perceptions of police legitimacy. The results were largely consistent with the first model, with the exception that moral foundations binding was no longer statistically significantly associated with the OOL. Perceptions of police legitimacy were associated with the OOL, and the explained variance increased to approximately 25%. The third model included perceptions of police bias, police procedural justice, and police distributive justice. The results were virtually identical to the previous model. Perceptions of police legitimacy and bias were associated with the OOL, whereas perceptions of police procedural justice and distributive justice were not.

## Path model

The final model identified which variables were associated with the obligation to obey the law. The results are presented in Table 5 and Figure 2(b). First, the model tested the procedural justice framework's assertion that perceptions of police legitimacy mediate the association between perceptions of police bias, police procedural justice, and police distributive justice on the obligation to obey the law. To assess the significance of the indirect effects, bootstrapping was conducted by taking 10,000 samples to construct 95% bias-corrected confidence intervals. The results indicated that as expected, each of the three main variables—police distributive justice, police procedural justice, and police bias—were associated with police legitimacy, which in turn was associated with the obligation to obey the law (Table 5, Figure 2(a)). However, as the direct paths failed to achieve statistical significance for both distributive justice and procedural justice, the results indicate that they appear to operate primarily indirectly through police legitimacy. That is, while this study cannot establish causality, perceptions of police distributive injustice, and procedural injustice appear to influence the OOL primarily through undermining perceptions of police legitimacy. In comparison, perceptions of police bias undermine the OOL both directly as well as indirectly through eroding police legitimacy.

Beyond perceptions of police legitimacy, perceptions of both deterrence certainty and deterrence severity were associated with the OOL, indicating that all three of the legal system context variables were associated with the OOL. Beyond the legal system context variables, the model also tested the personal characteristics (i.e., impulsivity, moral foundations internalizing, and moral foundations binding) variables. The results indicated that only impulsivity, but neither of the moral foundations, was associated with the OOL. Finally, the model also tested the nonlegal social context variables (i.e., social bonds, parent legitimacy, and teacher legitimacy). Of the three, two of the nonlegal social context variables, namely, social bonds and parent legitimacy, were not associated with the OOL, whereas teacher legitimacy emerged as significantly associated with the OOL.

Table 5 Path model

Variable	Path	Estimate (SE)	p-value	95% CI
<i>Demographic covariates</i>				
Age	Direct <sup>A</sup>	.25	-.01	.01
	To legitimacy	< .001	.01	.01
Gender <sup>C</sup>				
Female	Direct <sup>A</sup>	.39	-.07	.19
	To legitimacy	.63	-.07	.05
Race/Ethnicity <sup>D</sup>				
Asian	Direct <sup>A</sup>	.98	-.27	.26
	To legitimacy	.19	-.19	.04
Black	Direct <sup>A</sup>	.44	-.13	.31
	To legitimacy	< .001	-.29	-.09
Multi	Direct <sup>A</sup>	.51	-.62	.31
	To legitimacy	.82	-.17	.13
Other	Direct <sup>A</sup>	.32	-.44	.14
	To legitimacy	.14	-.33	.05
<i>Personal characteristics</i>				
Impulsivity	Direct <sup>A</sup>	< .001	-.38	-.17
<i>Moral foundations</i>				
Individualizing	Direct <sup>A</sup>	.08	-.19	.01
Binding	Direct <sup>A</sup>	.57	-.06	.11
<i>Nonlegal Social Context</i>				
Social bonds	Direct <sup>A</sup>	.81	-.12	.09
Teacher legitimacy	Direct <sup>A</sup>	.002	.06	.27
Parent legitimacy	Direct <sup>A</sup>	.22	-.04	.18

(Continues)

**Table 5** (Continued)

Variable	Path	Estimate (SE)	p-value	95% CI
Legal system context				
Deterrence				
Perceived severity	Direct <sup>A</sup>	.009	.05	.36
Perceived certainty	Direct <sup>A</sup>	.016	.01	.12
Police legitimacy	Direct <sup>A</sup>	<.001	.16	.46
Police bias	Direct <sup>A</sup>	<.001	-.30	-.11
	To legitimacy	<.001	-.14	-.05
	Indirect <sup>B</sup>	.003	-.05	-.01
Police procedural justice	Direct <sup>A</sup>	.44	-.20	.09
	To legitimacy	<.001	.31	.43
	Indirect <sup>B</sup>	<.001	.05	.17
Police distributive justice	Direct <sup>A</sup>	.98	-.10	.10
	To legitimacy	<.001	.18	.27
	Indirect <sup>B</sup>	<.001	.03	.11

Note.  $\chi^2 = 1479.95(315)$ ,  $p < .001$ , RMSEA = .06, 95% CI [.06, .06], CFI = .87, TLI = .87. To assess the significance of the indirect effects, bootstrapping was conducted by taking 10,000 samples to construct 95% bias-corrected confidence intervals. The model also accounts for age, gender, and race/ethnicity.

<sup>A</sup> Direct effect path to the obligation to obey the law.

<sup>B</sup> Indirect path to the obligation to obey the law through police legitimacy.

<sup>C</sup> Comparison group is Male.

<sup>D</sup> Comparison group is White.

## DISCUSSION

The present study sought to understand how personal, nonlegal social, and legal system contextual variables are associated with the felt obligation to obey the law. Overall, the results indicate that the obligation to obey the law originates in a combination of people's personal characteristics, the way they have been socialized from nonlegal authorities, and the way they view the legal system and law enforcement. Through detailed analysis, we gain an understanding of which variables in each of the three core areas shape the obligation to obey the law.

The first area we tested included perceptions of the legal system context, namely perceptual deterrence and perceptions of police legitimacy, procedural justice, distributive justice, and bias. The results indicated that several systemic factors were consistently directly associated with the OOL, including deterrence, police legitimacy, and police bias. The findings about legitimacy and procedural justice generally align with existing research following in the tradition set by Tyler (e.g., Tyler, 2006a,b), although few directly measure the general obligation to obey the law (Walters & Bolger, 2019). The findings also align with tenets of deterrence theory (Lee et al., 2018; Loughran et al., 2012); to the extent that individuals report more perceptual deterrence, they also feel more obligated to obey the law. This may speak to coerced obligation out of fear, pragmatism, or a dull compulsion rather than truly free consent (Nix et al., 2019; Posch et al., 2020).

The second area we tested focused on personal characteristics. The most important personal variable is impulsivity which is consistently associated with the OOL in all of the models we tested. Clearly, people who are more impulsive tend to also report less obligation to obey the law. The second personal factor we tested, morality, was less consistently associated with the OOL. Individualizing foundations include care and fairness, and those who exhibit more individualizing moral foundations would consider it more morally incorrect to treat another person unfairly (Haidt, 2012; Vaughan et al., 2019). In comparison, binding moral foundations such as authority, loyalty, and purity focus on moral concerns with violating the norms and customs of one's collective groups. For instance, those scoring high on binding would consider it more morally problematic to disregard a group's hierarchy and traditions or to be disloyal to one's group member (see Haidt, 2012; Vaughan et al., 2019). In this study, moral foundations individualizing was not associated with the obligation to obey the law in either bivariate or multivariate analyses. However, while moral foundations binding was associated with the OOL in the bivariate associations, it was no longer associated once the full model was tested. This indicates that morality, at least as assessed from the moral foundations perspective, may not be associated with the obligation to obey the law in general. Future research should consider alternative perspectives and frameworks on assessing morality such as moral disengagement (Bandura, 1999; Moore et al., 2012).

The third area we tested included the nonlegal social contextual variables. Tapp (1991) theorized that legal socialization is shaped by both legal and nonlegal environments. While few recent empirical studies have tested this assertion (see Cohn et al., 2012; Trinkner & Cohn, 2014), the results of this study are somewhat consistent with the sparse literature. Teacher legitimacy was consistently directly associated with the OOL, thus people who reported more perceived legitimacy of their past educators felt more obligated to obey the law as adults. On the one hand, this suggests that within schools, youth may develop their orientation to rules and such orientations may generalize beyond adolescence into adulthood, as well as beyond school rules to laws. Perceptions of teacher legitimacy may impact legal socialization exactly how Tapp (1991) suggested. At the same time, we did not find similar consistent associations for social bonds or parent legitimacy. This may suggest that while youth may derive their obligation to

obey the law at least in part from their parents (Fine et al., 2020), it may be the case that their effects are limited to childhood and adolescence, or that their effects operate through setting a schema that impacts the person's subsequent experiences in schooling, work, and society, which may have comparatively larger measurable impacts over time that mask the initial source of legal socialization. However, given that there are few studies in this area, more research is clearly necessary, particularly work following youth from childhood through adulthood to assess longitudinally any within-person developmental and contextual effects on legal socialization.

The findings indicate that the obligation to obey the law originates in who people are, how they have been socialized, and how they view the legal system. As the obligation to obey the law is crucial for understanding the functioning of law and legal socialization more broadly, this study shows that the field of legal socialization should return to its roots and view the OOL beyond merely being impacted by perceptions of police procedural justice and legitimacy. Clearly police procedural justice and legitimacy matter for the OOL, but they are just part of the broader constellation of forces that shape how people develop an obligation to obey the law. At the same time, the models also show that there is much variation in the OOL that is not yet accounted for by the host of variables we tested here; approximately 73–74% of the variation in the OOL is not yet explained. This points to a clear research agenda for the future, for the next 50 years of legal socialization research. Scholars must consider other personal, social, and systemic variables to better understand how people develop a sense of obligation to obey the law voluntarily and without coercion.

## Limitations

This study is certainly not without limitations. First, while the sample was large and the stratified sampling procedures generated a nationally representative sample, no study can truly be representative. Indeed, internet use is not universal (Couper, 2017) and opt-in internet surveys certainly do have non-response error (Couper et al., 2018). Nonetheless, there is evidence that such convenience samples can be as accurate as random digit dial telephone surveys (Ansolabehere & Schaffner, 2014; Hines et al., 2010) and they may reduce social desirability biases (Zhang et al., 2017). In light of the fact that this is an understudied topic in the legal socialization and legitimacy literatures, we consider this a first step in understanding why a general population of adults may feel obligated to obey the law. Future work is clearly necessary using other types of samples. Second, as the study did not include an experiment with random assignment, all associations are purely correlational and we cannot establish causation.

Third, the study was cross-sectional. Replications should be conducted using longitudinal samples. Relatedly, our model specification included a single mediator, with perceptions of police legitimacy positioned between perceptions of police distributive justice, procedural justice, and bias on the obligation to obey the law. As scholars have long argued, perceptions of police legitimacy may be rooted in early experiences with other authority figures such as parents or teachers (see also Tapp, 1991; Trinkner & Cohn, 2014; Tyler & Trinkner, 2018), which means that the model could have been specified with perceptions of teacher and parent legitimacy predicting police legitimacy. In addition, to the extent that a person feels more bonded to society (Hirschi, 1969), they may subsequently view the police as more legitimate authority figures. The bivariate correlations presented in Table 2 provide support for each of these propositions, but the fact that the data were cross-sectional limits our ability to construct such temporal models. We recommend subsequent studies use longitudinal data spanning developmental epochs, which can provide the necessary temporal ordering, to adequately parse and test these theoretical propositions.

A fourth limitation is that this study used the Rule Orientation scale that was designed to improve upon Tyler's (1990) original obligation to obey the law scale. Tyler's measure is widely used in the field, though often altered with items removed or added. The Rule Orientation scale tends to be highly correlated with Tyler's original scale and follow the same age-graded trend (Fine et al., 2020). Further, it aligns well with Baker's (Baker & Gau, 2018; Baker et al., 2015) three-item scales. Rule Orientation also tends to have a higher alpha than that scale and variations of Tyler's original scale (e.g., Reisig et al., 2007; Vidal et al., 2017). Nonetheless, because it is a newer scale in the field, replications are encouraged to assess the felt obligation to obey the law using a wider variety of metrics. To our knowledge, no study has comprehensively examined and compared more than two obligation to obey the law scales, though the field is moving towards separating out coercive versus consensual obligation. Relatedly, our measure of police legitimacy may vary from others being utilized in the field, some of which include a dimension of the obligation to obey the police (Piccirillo et al., 2021; Wolfe & McLean, 2021).

Finally, we assessed parent and teacher legitimacy using adults' retrospective reports. There are clear limitations with using retrospective reports. The memory-experience gap is a well-studied phenomenon (Miron-Shatz et al., 2009) and applies even to children (van den Brink et al., 2001). Indeed, retrospective measures can introduce a potential bias; participants could use their current experiences and knowledge of their current outcomes to reconstruct their recall, which could create a misleading association between the retrospective measure and the outcome of interest. Yet, some studies suggest that perceptions of relationships can remain stable from adolescence to adulthood (Rossi & Rossi, 1990; Yancura & Aldwin, 2009). For instance, a recent 25-year study of parents and their adolescent children found moderate associations between prospective and retrospective measures of the family environment (Bell & Bell, 2018). Nonetheless, because the retrospective reporting method may have biased the findings, future research should utilize prospective, longitudinal methodologies.

## CONCLUSION

The obligation to obey the law is widely viewed as a necessary component enabling modern society to function, undergirding the very fabric that builds our rule of law. Indeed the goal of legal socialization is to instill in people a felt obligation to obey the law (Hogan & Mills, 1976; Tyler & Trinkner, 2018). Yet in her seminal legal socialization piece, Tapp (1971, p.1) observed that, "many challenge the justice and efficacy of our sociolegal order, and others seriously question if present rule structures encourage order or disorder, justice or injustice." This is as true now as it was then. At a time when many are questioning the role of law enforcement in society, its purpose, its function, its history, and its efficacy (Wolfe & McLean, 2021), especially in the wake of repeated incidents of police brutality, it is vital to understand how people develop their views of law enforcement and the influence these perceptions have on the felt obligation to obey the law. A logical conclusion from the procedural justice framework is that to the extent that the public's views of law enforcement are declining, we should also have marked reductions in the public's felt obligation to obey the law. In fact, writing in the mid-1970s, Hogan and Mills (1976, p. 274) concluded that the "model of legal socialization presented above, in conjunction with the current climate of opinion in America, suggests a rather bleak view."

However, the present study finds that the obligation to obey the law depends on more than just people's views of police. On the one hand, we can take solace in the fact that when the public's views of law enforcement appear to be markedly lower than they have been in recent history, we

would not necessarily see corresponding declines in the felt obligation to obey the law because their own personal characteristics and their nonlegal socialization experiences also matter. Yet on the other hand, as people's views of law enforcement do matter for the obligation to obey the law, the implications are quite clear: to the extent that law enforcement treat individuals unjustly or engage in biased policing, they will very likely undermine their own legitimacy and the public's felt obligation to obey the law.

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## APPENDIX

### Rule Orientation Scale

1. The legal rule is clearly against your moral principles.
2. This legal rule makes unreasonable demands of you.
3. Obeying this legal rule is very expensive for you.
4. This legal rule is not enforced.
5. Most of your direct colleagues/friends also break this legal rule.
6. You are in one way or another unable to do what this legal rule asks of you.
7. Most of your direct colleagues and/or friends think breaking the legal rule is justified.
8. You do not know this legal rule.
9. You do not understand this legal rule.
10. This legal rule has not been published.
11. You feel that this legal rule was made without representing your interests.
12. You think this legal rule is enforced unfairly.