Legal socialization, perceptions of the police, and delinquency in three Caribbean nations

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Abstract: Legal socialization is the process by which individuals obtain their attitudes and beliefs about formal social control mechanisms such as the police, including how these are formed through domains of social life. These attitudes and subsequent beliefs toward the police, whether positive or negative, have been found to impact individuals' compliance with the law and cooperation with legal authorities. Despite research advancements on legal socialization, the theoretical hypotheses drawn from this perspective have not been tested in the Caribbean context, a high crime and violence setting where the police are often viewed as corrupt, untrustworthy, and ineffective. This study uses data from 4,293 youths to examine the effect of socializing agents (i.e., family, school, and peers) on youth perceptions of the police in three nations – Guyana, St. Kitts and Nevis, and St. Lucia – and whether these perceptions impact delinquency. We find that legal socialization domains and perceptions of the police are important factors that influence delinquency in the Caribbean. Implications are discussed in light of future research and policy.

Keywords: Caribbean, delinquency, islands, legal socialization, perception of the police, youth

https://doi.org/10.24043/isj.407 • Received May 2022, Early access December 2022

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Introduction

Over the past several decades, much criminological research has documented that social environment, including family, school, and peers, is associated with delinquency (Assink et al., 2015). Expansions of this work suggest that these social domains are also related to youth perceptions of the police, which may be a key factor explaining delinquency (Fine et al., 2020; Trinkner & Cohen, 2014; Tyler & Trinkner, 2018). The process by which these perceptions of police, legal attitudes, and behaviors emerge is known as 'legal socialization' (Tapp, 1971, p. 5). According to the legal socialization perspective, "law-related norms are encoded within the rules of many different social institutions, each featuring their own socializing agents" (Trinkner & Cohen, 2014, p. 630). For instance, parents and teachers are vital extralegal authorities who socialize young peoples' relationships with laws and authority, helping them develop their views about the degree to which they feel obligated to follow the law (Fine & Trinkner, in press; Trinkner & Reisig, 2021). This line of inquiry is critical for at least two reasons. First, juveniles have disproportionate contact with the police (Hurst & Frank, 2000). Interactions and experiences with the police are believed to be foundational to their moral orientation toward the law and legal authorities (Fagan & Tyler, 2005). Second, youths' perceptions of the police likely become stable and carry over well into adulthood (Wu et al., 2015), which may impact their criminal involvement in later lives.

However, most existing research on legal socialization and delinquency has been conducted in Western countries (for exceptions, see Trinkner et al., 2020; Reisig & Lloyd, 2009). Little is known about how this relationship holds in Caribbean nations, which have faced substantial increases in crime and violence (Harriott & Katz, 2015), and where the police are often viewed as corrupt, untrustworthy, and ineffective (Beuermann & Pecha, 2018). In addition, Caribbean nations are characterized by the presence of 'islandness', from islanders' lifelong experiences with physical isolation, truncated social networks, and shared interests, attitudes, and behavior (Conkling, 2007). Prior research has noted that islandness necessarily results in more "distinct normative structures and distinct forms of social control" that may provide unique insight into understanding crime and responses to crime (Scott & Staines, 2021, p. 596). Given its distinctiveness, it is unclear whether the legal socialization framework is applicable in the Caribbean context. Understanding the social processes in these contexts may carry significant implications for criminological theory and policies related to reducing youth delinquency in island communities.

Against this backdrop, the current study contributes to research on legal socialization and youth delinquency in three Caribbean nations (Guyana, St. Kitts and Nevis, and St. Lucia), each designated as a Small Island Developing State (SIDS) by the United Nations. Specifically, we examine three hypotheses. First, socialization domains, including weak parental supervision, low school commitment, negative peer influence, and peer delinquency, will be positively associated with youths' negative perceptions of the police. Second, negative perceptions of the police will be positively associated with delinquency. Third, youths' negative perceptions of the police will mediate the

relationship between legal socialization domains and delinquency. Collectively, testing these three hypotheses advances the existing literature on legal socialization and delinquency.

Literature review

Legal socialization, perceptions of the police, and youth delinquency

Legal socialization encompasses the processes by which individuals establish norms, values, attitudes, and beliefs about the legal system and laws and actors, such as the police within society (Fine & Trinkner, in press; Tyler & Trinkner, 2018). The concept of legal socialization first emerged in the late 1960s and has been explored in subsequent years under two major perspectives (Tapp & Kohlberg, 1971). The cognitive development approach initially led to legal socialization research which focuses on individuals' cognitive development, particularly their maturation over time and their relationship with the law (Fine & Trinkner, in press). The second perspective, Tyler's process-based model of self-regulation – also called the procedural justice model – and subsequent research served to reinvigorate interest (Tyler, 1990; Fagan & Tyler, 2005). It proposes that perceptions of police legitimacy are significantly related to individuals' behavioral compliance with the law and subsequent delinquency (Fine et al., 2018; Kaiser & Reisig, 2019). Incorporating legal socialization into the procedural justice model draws attention to social influences beyond the police such as family and school (e.g., Fagan & Tyler, 2005; Trinkner & Cohn, 2014).

Youths develop law-related norms from several extralegal sources (Tapp, 1991). Specifically, studies have found that family context, such as parenting styles, plays a significant role in promoting individuals' positive attitudes toward legal authorities (Ferdik et al., 2014; Nivette et al., 2015; Wu et al., 2015). For example, Darling and Steinberg (1993) argue that parental involvement and monitoring help socialize children through specific behaviors, such as helping with homework, reading, and attending school activities. When parents provide adequate supervision, children often foster a stronger sense of legitimacy toward the police (Fagan & Tyler, 2005).

Schools also influence youths' legal attitudes because teachers hold positions of authority and enforce rules and punishments (Flexon et al., 2009; Trinkner & Cohen, 2014). Existing studies have used bonds to schools, teachers, and school commitment to assess the connection between the school context and legal attitudes, producing mixed findings (Ferdik et al., 2014; Nivette et al., 2015; Wu et al., 2015). Some studies have found direct associations between the school context and legal attitudes (Lurigio et al., 2009; Wu et al., 2015), while others find no significant relationship between the two (Ferdik et al., 2014; Nivette et al., 2015).

While not formal authority figures, peers also socialize individuals' views of the law and attitudes toward the police (Ferdik et al., 2019). Youths often associate with similar-minded peers, and, further, attitudes and behaviors among group members converge over time (Brechwald & Prinstein, 2011). In line with this, prior research finds that youths with friends who possess favorable attitudes toward delinquency and

youth with higher commitment to delinquent peers hold more negative perceptions of the police (Ferdik et al., 2019; Nivette et al., 2020). While not focused on law enforcement perceptions, Cardwell et al. (2021) found that youths who perceived higher levels of deviant peer associations held poorer perceptions of school authority figures. These effects, however, were no longer significant when perceptions of procedural justice were considered.

Prior research supports the nuanced associations between legal socialization, perceptions of the police, and delinquency. In Spain, Baz Cores and Fernández-Molina (2022) examined the influence of social life domains on perceptions of police legitimacy and involvement in delinquency among youth aged 13 to 18. They found that parental monitoring, school attachment, delinquent peers, and procedural justice evaluations directly affected perceptions of police legitimacy. In turn, positive perceptions of legitimacy predicted lower levels of delinquency. Similarly, a longitudinal study of youths in Switzerland found police legitimacy formed through socialization influences such as teacher bonds, parental supervision, school commitment, and peer disapproval of deviance, although subsequent delinquent was not examined (Nivette et al., 2020).

Legal socialization in Caribbean and other SIDS

Although much of the knowledge on legal socialization derives from the United States (e.g., Cohen et al., 2010; Cohen & White, 1990; Fagan & Tyler, 2005; Tapp, 1991; Trinkner & Cohen, 2014), historical differences in relationships with legal authorities and law enforcement foreshadow cross-cultural variability in the legal socialization process. This variation may be salient for the Caribbean islands, given their history and current political and social climate. As former colonial states with the majority of populations brought over as enslaved people or indentured servants, Caribbean nations only relatively recently gained independence. Further, the region experiences some of the highest levels of crime and violence in the world (Harriott & Katz, 2015), including among youths (Foss et al., 2013), and the police are often viewed as corrupt, untrustworthy, and ineffective (Beuermann & Pecha, 2018).

In addition, Caribbean islands are particular in that they are characterized by their islandness—a way of thinking that has been defined through metaphors, "reality of place," islander identity, and physical and social isolation (Robinson et al., 2021). Vannini and Taggart (2013, p. 225) argue that islandness is the result of islanders being required to make "use of whatever is at hand, solving ongoing concerns as they present themselves." Prior research suggests that while islandness can provide substantial protection to islanders, for example, in the form of independence, loyalty, and strong community ties and cohesion (Conkling, 2007), it can also manifest into normative values that generate crime (Scott & Staines, 2021). Support for such a culture in the Caribbean was illustrated by Katz et al. (2022) who reported that English-speaking Caribbean youths across nine nations reported fairly typical rates of property crime, but reported exceptionally high rates of violence compared to many other nations. It is unclear, however, whether islandness causes island-specific variation in the

prevalence and nature of delinquency, and whether legal socialization plays the same role in youth delinquency in the context of Caribbean SIDS.

Current research on the legal socialization process in the Caribbean context is limited and derives primarily from only a few nations. Most prior work has explored perceptions of the police and their correlates in Trinidad and Tobago. These studies suggest that youths hold negative views of the police (Johnson et al., 2008; Stamatakis, 2019), and youths committed to school and who are not delinquent view the police more favorably (Johnson et al., 2008). Adams (2020) corroborates this sentiment. Drawing from interviews with 40 adults in Trinidad and Tobago, she asserts that the lack of institutional trust leaves citizens unwilling to trust and work collaboratively with police officers. In addition, Reisig and Lloyd (2009) analyzed data from a sample of Jamaican secondary school students and found that youths who perceived the police as more procedurally just were more willing to report suspicious activity to the police.

Similarly, little insight can be drawn from research on the legal socialization process in other SIDS given relatively little attention to the topic. Public perception of police in Pacific Island nations is also generally low (Chand et al., 2022; Howes et al., 2022). In a recent study of community satisfaction with the police in Guam, Howe et al. (2022, p. 325) note the importance of "a focus on procedural justice and police performance to contribute to improved community satisfaction with police service provision." Cawthray (2019) examined police legitimacy in the Solomon Islands and Tonga highlighting the unique and complex processes involved in judgments of police legitimacy informed by individuals' experiences with and expectations of the police as well as broader sociopolitical environments. Neither of these studies focused specifically on youths.

The current study

Building from prior work, the current study examines the legal socialization framework and the relationship between perceptions of the police and delinquency in three Caribbean nations. Similar to other Caribbean islands, the nations of interest in the current study – Guyana, St. Kitts and Nevis, and St. Lucia – experience high levels of crime and violence with legal socialization and perceptions of the police as salient topics. Guyana's intentional homicide rate in 2016 was 18 per 100,000 population. In St. Kitts and Nevis and St. Lucia the rates were 58 and 17, respectively (WHO, 2015). Youth involvement in violence, property offending, among other delinquency is likewise high in these nations (Freemon et al., in press; Katz, 2015). The selection of these nations for a United States Agency for International Development (USAID) program provided a unique dataset that allows us to test our hypotheses in high-crime island settings.

We hypothesize:

- *Hypothesis 1*. Socialization domains (i.e., weak parental supervision, low school commitment, negative peer influence, and peer delinquency) will be positively associated with negative perceptions of the police.
- *Hypothesis 2*. Negative perceptions of the police will be positively associated with delinquency.

Hypothesis 3. Socialization domains will be positively associated with delinquency, and negative perceptions of the police will at least partially explain this relationship.

Method

The present study relies on data from a United States Agency for International Development (USAID) program administered in three Caribbean nations: Guyana, St. Kitts and Nevis, and St. Lucia. All three countries are designated as Small Island Developing States (SIDS) by the United Nations and are characterized by their islandness; a socio-cultural consciousness developed due to physical isolation, fragility, and lack of urbanity – traits often not found in settings studied as part of criminological research. In the early 2000s, crime and violence in the Eastern and Southern Caribbean approached epidemic proportions (Katz et al., 2021). In 2016, in response to the problem, a USAID-funded project, Community, Family and Youth Resilience (CFYR), deployed a family-based secondary prevention program to reduce delinquency and risk factors among high-risk youth. All communities within each nation were ranked based on crime and census data. With some exceptions, those five communities identified as having the greatest need and high levels of crime and violence within each nation were selected to be targeted for intervention.

The present study examines data from the Caribbean Youth Services Eligibility Tool (C-YSET), used to determine program eligibility. The C-YSET includes 150 items, broken down into six sections. Data collected from this tool include socio-demographic information, risk factors associated with delinquency and other problem behaviors, perceptions of police, including trust in police and whether the police have treated them poorly in the past, involvement in delinquency, including violence, property crime, and drug use, youths' assessments of contact and relationships with immediate and extended family members, and involvement with gangs and, if gang-involved, the characteristics of their gang.

Sample

From 2017 to 2018, two approaches were used to identify and recruit as many youths as possible for participation in the family-based secondary prevention program. The first approach sought to identify youths in the school population. Program staff recorded 16 schools in Guyana, 17 in St. Kitts and Nevis, and 30 in St. Lucia that served youths in the targeted communities. Program staff visited each of these schools to identify youths who were 10 to 17 years old and lived in target communities (Diaz-Cayeros et al., 2020). The second approach sought to identify youths not attending school. Program staff prepared location maps for each targeted community and determined appropriate intervals, based on community size, to have enumerators knock on household doors to identify 10- to 17-year-olds in each community until the households were exhausted (Katz et al., 2020).

Caregivers for identified youths were provided with a description of the program and gave consent prior to youth interviews. A total of 5,021 youths were interviewed with the C-YSET: 2,044 in Guyana, 875 in St. Kitts and Nevis, and 2,102 in St. Lucia. Detailed records were not kept on the number of caregivers and youths who refused to participate in the survey. In addition, while it was not possible to determine the population of youths aged 10- to 17-years old residing in each community, it was estimated that no more than 82% of the target population completed the survey (Diaz-Cayeros et al., 2020, p. 11). For the final sample in the current study, youths who did not answer the relevant questions were excluded from the analysis, noting that youths who are not enrolled in school were excluded because they did not answer the questions asking about school commitment. Therefore, a total of 4,293 youths remained in the final sample. Table 1 shows the demographic background of the sample by nation. Nearly 45% of the sample was from St. Lucia, 37.5% was from Guyana, and 18% was from St. Kitts and Nevis. Approximately half of the sample was male, and the average age was about 13 years old. When comparing sample differences by nation, there were no significant difference by gender; however, youths in St. Kitts and Nevis were slightly older compared to those in Guyana and St. Lucia.

Measures

Dependent variable

Delinquency. The dependent variable in this study, delinquency, is a variety score of different problem behaviors, including violent crime (5 items), property crime (3 items), drug use (1 item), drug selling (1 item), carrying a weapon (1 item), and truancy (1 item). Respondents were asked if they had engaged in each delinquent behavior in the past six months (1 = yes; 0 = no). The answers, then, were summed. Higher values indicate a higher level of delinquency.

Explanatory variables

For socialization domains, we ran an explanatory factor analysis (EFA) using all the items used for each theoretical construct. The EFA result indicated that the four-factor solution is the best for social domain constructs ($\chi^2_{(167)}$ = 232.656, *p* < 0.001, RMSEA = 0.029, CFI = 0.970, TLI = 0.954) which confirms that they are four different constructs.

Weak parental supervision. Respondents were asked six questions to elicit responses indicating their level of parental supervision. Individual questions included "My parent or guardian cares about where I go and what I do." The response options were on a Likert scale from 1 (Always) to 5 (Never). Higher values represent weaker parental supervision. The Cronbach's alpha for this measure was high at 0.74, indicating high congruence among the six items. In addition, a confirmatory factor analysis (CFA) showed sufficient standardized factor loadings (> 0.50) indicating that six items significantly load onto weak parental supervision. The model fit statistics indicate good model fit (χ^2 (9) = 41.920, *p* < 0.001, RMSEA = 0.035, CFI = 0.991, TLI = 0.984).

Low school commitment. Respondents were asked four questions regarding school commitment, including "I try hard in school." The response options were on a Likert scale from 1 (Strongly agree) to 5 (Strongly disagree). Higher values indicate lower school commitment. The Cronbach's alpha for this measure was moderately high at 0.65, and a CFA showed that the model fits the data well ($\chi^2_{(2)}$ = 4.246, *p* = 0.120, RMSEA = 0.020, CFI = 0.999, TLI = 0.998) with sufficient standardized factor loadings (> 0.62).

Negative peer influence. Negative peer influence was measured using four items, including "If your friends were doing something that was wrong or bad, would you go along with them?" The responses were captured using a Likert scale from 1 (No, definitely not) to 5 (Yes, definitely). Higher values represent a higher level of negative peer influence. The Cronbach's alpha for this measure was high at 0.72. In addition, a CFA was performed indicating that standardized factor loadings (>0.59) significantly loaded onto negative peer influence with good model fit ($\chi^2_{(2)} = 4.627$, p = 0.099, RMSEA = 0.021, CFI = 0.998, TLI = 0.995).

Peer delinquency. Six questions were asked regarding respondents' peers' involvement in delinquency during the last six months. These questions included "How many of your friends have attacked someone with a weapon?" The response options were on a Likert scale from 1 (None) to 5 (All). Higher values represent higher peer delinquency. The Cronbach's alpha for this measure was high at 0.75, and a CFA indicated that standardized factor loadings (> 0.59) were significantly loaded onto peer delinquency. The model fit statistics showed that the model fits the data well ($\chi^2_{(9)}$ = 12.985, *p* = 0.163, RMSEA = 0.012, CFI = 0.999, TLI = 0.998).

Negative perception of the police. The present study also explores negative perceptions of the police as a mediating variable between legal socialization and delinquency. Respondents were asked three questions related to their perception of the police, including "The police treat people fairly." The response options were on a Likert scale from 1 (Very often) to 5 (Never); higher values indicate a more negative perception of the police. The Cronbach's alpha for this measure was moderately high at 0.65, and a CFA showed that standardized factor loadings (> 0.55) were significantly loaded onto negative perception of the police with adequate model fit ($\chi^2_{(0)} = 0.000$, p < 0.001, RMSEA = 0.000, CFI = 1.000, TLI = 1.000).

Control variables

Three demographic variables were used as controls in the statistical model to ensure that the observed relationships between independent and dependent variables were not spurious. These demographic variables included gender (1 = male, 0 = female), age (in years), and binary variables for each country (Guyana = 1, St. Kitts and Nevis = 1, and St. Lucia = 1).

Analytical strategy

For this study, negative binomial structural equation modeling (SEM) was used to assess the impact of the socialization domains on delinquency using Mplus 8. It

simultaneously estimates the direct and indirect effects of socialization domains on delinquency (see Schumacker & Lomax, 2004). In addition, as noted above, the CFYR program was administered in five communities within each nation, which could result in violations of the assumption of independent observations and produce biased parameter estimates, deflated standard errors, and inaccurate measures of model fit (Julian, 2001). Therefore, a design-based approach and estimated cluster-robust standard errors were adopted using the CLUSTER command in Mplus.

We evaluated model fit against the Pearson Chi-square (χ^2) goodness-of-fit statistic provided by WLSMV estimation, the comparative fit index (CFI), the Tucker-Lewis index (TLI), and the root-mean-square error of approximation (RMSEA). A small non-significant Chi-square value indicates optimal fit, and values higher than .95 for CFI and TLI indicate that the tested model provides an acceptable fit to the data, as does the RMSEA value of less than .06 (Hu & Bentler, 1999).

	Total (n = 4,293)		1. Guyana (n = 1,609)		2. St. H	Kitts and	3. St. Lucia			
					Nevis (n = 775)		(n = 1,909)		Sig. diff.	
Variables	Mean/n	SD/%	Mean/n	SD/%	Mean/n	SD/%	Mean/n	SD/%		
Delinquency	1.08	1.5	1.00	1.4	1.23	1.5	1.09	1.5	2 > 1,3	
Weak parental supervision	1.58	0.6	1.46	0.6	1.73	0.7	1.62	0.7	2 > 3 > 1	
Low commit. to school	1.82	0.5	1.87	0.5	1.85	0.5	1.75	0.5	1, 2 > 3	
Negative peer influence	1.47	0.7	1.31	0.6	1.69	0.8	1.52	0.7	2 > 3 > 1	
Peer delinquency	1.39	0.5	1.40	0.5	1.41	0.5	1.38	0.5	-	
Perceptions of the police	2.38	0.9	2.54	1.0	2.59	1.0	2.15	0.8	1, 2 > 3	
Demographics										
Male	2,077	48.4%	758	47.1%	360	46.4%	959	50.2%	-	
Age	12.95	2.1	12.88	1.97	13.22	2.11	12.91	2.11	2 > 1, 3	

Table 1. Descriptive statistics. *Source:* Prepared by authors.

Note. Average scores and proportion were compared by country using t-test and chi-square test. Only significant relationships (p < .05) are presented.

Results

We report descriptive statistics for each variable included in the analysis in Table 1. For the total sample, youth delinquency has a mean score of 1.08 (SD = 1.49). The mean scores of weak parental supervision, low school commitment, negative peer influence, and peer delinquency are 1.58 (SD = 0.65), 1.82 (SD = 0.53), 1.47 (SD = 0.69), and 1.39 (SD = 0.48), respectively. Negative perception of the police has a mean score of 2.38 (SD = 0.94). When comparing differences by nation, respondents in St. Kitts and Nevis reported a slightly higher delinquency count compared to Guyana and St. Lucia. Respondents in St. Kitts and Nevis also scored higher on weak parental supervision and negative peer influence, followed by St. Lucia and Guyana. Respondents in Guyana and St. Kitts and Nevis had higher scores for low commitment to school and negative perceptions of the police compared to those in St. Lucia. There were no significant differences in peer delinquency among the nations.

Before running multivariate analyses, multicollinearity diagnostics were conducted to ensure multicollinearity was not a problem. The variance inflation factor (VIF) was within the conservative threshold of 5 (Kock & Lynn, 2012), and our measures were not highly correlated; thus, there was no critical issue regarding multicollinearity. Table 2 displays the standardized coefficients associated with an SEM analysis for delinquency. The model fit indices of this model meet the criteria of SEM, indicating that the theoretical models fit the empirical data well (see Hu & Bentler, 1999). First, the model examined the direct effects of socialization domains on the mediator (i.e., negative perceptions of the police), testing Hypothesis 1-that is, socialization domains will be positively associated with negative perceptions of the police. The results indicate that weak parental supervision and low school commitment are positively associated with negative perceptions of the police ($\beta = 0.25$, se = 0.04, p < .001; $\beta = 0.10$, se = 0.03, p < .01, respectively). In other words, youths who experience weaker parental supervision and/or lower school commitment are more likely to have negative perceptions of the police. Negative peer influence and peer delinquency, however, are not significantly related to negative perceptions of the police ($\beta = 0.03$, se = 0.02, p = .191; β = 0.02, se = 0.02, p = .460, respectively). Thus, Hypothesis 1 is partially supported.

Second, the model examines the effect of negative perceptions of the police on delinquency (Hypothesis 2). We found that negative perceptions of the police are significantly and positively associated with delinquency, which means that youths who hold more negative perceptions of the police are more likely to engage in delinquency ($\beta = 0.18$, *se* = 0.04, *p* < .001). Therefore, Hypothesis 2 is supported.

	Perceptio	ons of tl	ne police	Delinquency			
Variables	В	е	р	β	se		
Direct effects							
Socialization domains							
Weak parental supervision	0.25	.04	**	0.22	0.02	**	
Low school commitment	0.10	.03	*	0.01	0.03		
Negative peer influence	0.03	.02		0.13	0.02	**	
Peer delinquency	0.02	.02		0.37	0.03	**	
Perceptions of the police	0.18	0.04	**				
Control variables							
Male	-0.11	.02	**	0.11	0.02	**	
Age	0.21	.02	**	0.05	0.03		
Country (Guyana: reference)							
St. Kitts and Nevis	-0.02	.05		0.05	0.05		
St. Lucia	-0.25	.03	***	0.04	0.06		
Indirect effects							
Weak parental supervision				0.05	0.01	**	
Low school commitment				0.02	0.01	*	
Negative peer influence				0.01	0.01		
Peer delinquency				0.00	0.00		

Table 2. Direct and indirect relationships between socialization domains, perceptions of the police, and delinquency. *Source:* Prepared by the authors.

Note. Coefficients are all standardized, se = standard errors

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

Third, we investigated the direct and indirect effects of socialization domains on delinquency through negative perceptions of the police, thus testing Hypothesis 3 that is, the relationship between socialization domains and delinquency is partially mediated through negative perceptions of the police. The findings suggest that weak parental supervision's direct and indirect effects on delinquency are statistically significant. Weak parental supervision is positively associated with delinquency (β = 0.22, se = 0.02, p < .001). In addition, weak parental supervision is positively associated with negative perceptions of the police, which is positively associated with delinquency. Thus, the relationship between weak parental supervision and delinquency is partially explained by perceptions of the police ($\beta = 0.05$, se = 0.01, p < .001). In terms of school commitment, while the direct effect of low school commitment on delinquency is not statistically significant (β = 0.01, *se* = 0.03, *p* = .762), the indirect effect of low school commitment through negative perceptions of the police is statistically significant (β = 0.02, se = 0.01, p < .05). Low school commitment is positively associated with negative perceptions of police, which is also positively related to delinquency. This result suggests that the relationship between youth school commitment and delinquency is explained by the levels of youth perceptions of the police. With regards to negative peer influence and peer delinquency, both only show direct effects on delinquency ($\beta = 0.13$, se = 0.02, p < .001; $\beta = 0.37$, se = 0.03, p < .001). Youths who experience negative peer influence and/or associate with a delinquent peer are more likely to engage in delinquency. Overall, the findings partially support Hypothesis 3.

We also conducted supplementary analyses for country-specific models and found consistent results except for the effect of low school commitment and negative peer influence (Table 3). Specifically, the effects of school commitment are not consistent across countries. Both direct and indirect effects of low school commitment in Guyana are marginally significant, only the direct effect is significant in St. Kitts and Nevis, and low school commitment is not significantly related to delinquency in St. Lucia. In terms of negative peer influence, both direct and indirect effects of negative peer influence on delinquency are not statistically significant in St. Kitts and Nevis.

	Guyana (n = 1,609)			St. Kitts and Nevis (n = 775)			St. Lucia (n = 1,909)			All three nations (n = 4,293)		
Specific effects	β	se	Р	β	se	р	β	se	Р	β	se	Р
Weak parental supervision												
Total	0.301	0.04	***	0.392	0.04	***	0.272	0.07	***	0.310	0.02	***
Direct	0.241	0.05	***	0.327	0.04	***	0.236	0.07	***	0.256	0.03	***
Indirect	0.060	0.03	*	0.065	0.02	***	0.037	0.01	**	0.054	0.01	***
Low school commitment												
Total	0.076	0.03	*	-0.127	0.04	**	0.083	0.08		0.035	0.04	
Direct	0.057	0.03	†	-0.131	0.06	*	0.054	0.09		0.013	0.04	
Indirect	0.018	0.01	†	0.005	0.02		0.029	0.02		0.022	0.01	*
Negative peer influence												
Total	0.210	0.03	***	0.035	0.09		0.201	0.03	***	0.161	0.03	***
Direct	0.207	0.03	***	0.034	0.09		0.182	0.03	***	0.154	0.03	***
Indirect	0.003	0.01		0.001	0.01		0.020	0.01		0.007	0.01	
Peer delinquency												
Total	0.458	0.04	***	0.446	0.04	***	0.428	0.05	***	0.446	0.03	***
Direct	0.453	0.05	***	0.448	0.04	***	0.424	0.05	***	0.442	0.02	***
Indirect	0.005	0.01		0.002	0.01		0.004	0.00		0.004	0.00	

Table 3. Total, direct and indirect effects of socialization domains on delinquency by nation. *Source:* Prepared by the authors.

Note. Coefficients are all standardized, se = standard errors

*** p<0.001, ** p<0.01, * p<0.05, † p<0.1

Discussion

Findings from the present study suggest that legal socialization domains and perceptions of the police are important factors that influence delinquency in the Caribbean. After controlling for gender, age, and nation, both weak parental supervision and low school commitment were significantly related to negative perceptions of the police. These findings are consistent with prior research that reports that youths with stronger relationships with their families and schools are more likely to possess more positive beliefs about the police (Molpeceres et al., 1999; Murray & Thompson, 1985). Some researchers have proposed that this is the result of youths having positive experiences and perceptions of one type of authority, such as parents and schools, and generalizing these positive perceptions to other authorities, such as the police (Trinkner & Tyler, 2016).

Contrary to our expectations, we did not find significant relationships between negative peer influence, peer delinquency, and negative perceptions of the police. This result does not support prior research in developed nations that has repeatedly shown that a youths' peers socialize them in a variety of contexts (e.g., Decker et al., 2013; Ferdik et al., 2019; Fine et al., 2016; Sweeten et al., 2013) and that youths with delinquent peers and who are more negatively influenced by peers hold more negative views of the police (Baz Cores & Fernández-Molina, 2022). However, there have been some notable exceptions, which are consistent with what we found in this study. For instance, Fagan and Tyler (2005), in New York City, reported that greater association

with delinquent peers did not impact perceptions of the police, and McLean et al. (2019), using the Pathways to Desistance data, reported similar results in a sample of serious juvenile offenders in the United States. Notably, Johnson et al. (2008), in their analysis of more than 2,300 school-attending youths in Trinidad and Tobago, reported that friendship with delinquent peers was not significantly related to a respondent's perceptions of the police in terms of police fairness, responsiveness, use of force, and negative perceptions of the police. Thus, we speculate that youths in some small island developing nations, where the police are widely perceived as corrupt, untrustworthy, and ineffective (Beuermann & Pecha, 2018), might have a unique and complex relationship with the police that makes the association with deviant peers less influential when considering their impact on attitude towards the police. Given the longstanding problems between the police and the public in these Caribbean nations, youths who already possess negative perceptions of the police will not be as influenced by socializing with deviant peers. Further research is needed to explore these issues.

Our second hypothesis tested whether negative perceptions of the police are positively associated with delinquency. The analysis showed that negative perceptions of the police are directly related to increased delinquency. This finding was robust and held after we controlled for legal socialization domains, gender, age, and nation, supporting process-based models of self-regulation and empirical studies (Fine et al., 2018; Kaiser & Reisig, 2019). The connection between perceptions of the police and delinquency underscores the importance of examining the mechanisms involved in the formation of police perceptions, extending this to nations where, as noted, police overall are not viewed positively (Beuermann & Pecha, 2018). Community policing initiatives to rebuild positive community relationships and partnerships with the police, which intend to improve perceptions of the police, may, in turn, reduce crime and delinquency. In support, in a randomized control trial, Mazerolle et al. (2021) looked at an Australia-based police-school partnership program to reduce antisocial behavior. They found shifts in adolescents' views of the police, not school legitimacy, were the primary driver of reductions in antisocial behavior.

The third hypothesis we tested was direct and indirect effects on the relationship between legal socialization domains, perceptions of the police, and youth delinquency. For direct effects, we found that weak parental supervision, negative peer influence, and peer delinquency were significantly related to delinquency, which is consistent with existing studies in both North America and Western Europe (e.g., Barnes et al., 2006; Nuño & Katz, 2019), as well as the Caribbean (e.g., Katz & Fox, 2010; Katz et al., 2021). These findings fit with and support several criminological theories that explain the relationships between social domains and delinquency, such as social bond (Hirschi, 1969) and social learning (Akers, 2011). They also provide support for policies that support family-level interventions (Barnes et al., 2006) and programming that addresses peer pressure (Chou et al., 1998) and gangs (Thornberry et al., 2018).

For indirect effects, we found that both weak parental supervision and low school commitment were related to negative perceptions of police, which in turn were related to delinquency. These findings provide partial support for the legal socialization

framework in explaining delinquency. Baz Cores and Fernández-Molina (2022) reported similar findings in Spain. They suggested that parental supervision positively contributes to "moral alignment" with the police and that attachment to school, where school rules are normalized and facilitate youths to regulate themselves in the classroom, promote "the acquisition of positive values and attitudes towards the police and [lead] to voluntary compliance with the law" (Baz Cores & Fernández-Molina, 2022, pp. 247-250). While there was an indirect effect, we found no direct relationship between low school commitment and delinquency. This finding is in contrast to theoretical assumptions (Hirschi, 1969); however, it aligns with Baz Cores and Fernández-Molina's (2022) findings. It may be that school settings outside of traditional research locations, like the United States, differ in instilling legal norms and attitudes, which future research should continue to examine. For instance, Baz Cores and Fernández-Molina (2022) suggest the indirect relationship may be due to schools occupying an intermediary role between the family and formal institutions.

While both negative peer influence and peer delinquency had direct effects on delinquency, neither had indirect effects through perceptions of the police. This is partially in line with prior research showing that peer influence and delinquency are some of the strongest predictors of individual delinquency (Ferdik et al., 2019), and Baz Cores and Fernández-Molina (2022) similarly failed to find indirect effects through police perceptions. This may be due in part to youths' stage in the development process. Adolescents are strongly influenced by peer pressure, which may not directly translate to the internalization of attitudes, such as those toward police, like they do for family and school influencers. In addition, the authority relationship approach, which focuses on interactions with authorities and how those interactions translate into orientations toward the law and legal authority (Trinkner & Cohen, 2014; Trinkner & Tyler, 2016), posits peers are qualitatively different from parents and schools as legal authorities. Youths may not perceive a peer as an authority figure, so their attitude toward legal authorities, in this case, the police, would not be altered.

Our results raise more questions than answers with respect to their interpretation through the lens of islandness. While we observed that legal socialization and perceptions of the police are important factors in understanding delinquency in three Caribbean nations, it is unclear how islandness manifests in terms of legal socialization, perceptions of the police, and delinquency. To be sure, islandness manifests itself through geography, culture, societal norms, and government actors. Its integration into island life is so "fluid and ambiguous as to render it problematic as a variable in the analysis of crime" (Scott & Staines, 2021, p. 594). Greater attention to the role of islandness in social control and delinquency is needed.

Directions for future research

While our findings suggest relationships between legal socialization domains, perceptions of the police, and delinquency, there is much room for future research. Longitudinal research is needed to determine the temporal relationship, if any,

between socializing agents and perceptions of the police and between these factors and delinquency. Our findings are also not representative of our study nations' youths. Future research examining a representative sample of youths in SIDS is necessary to determine whether any observed relationships are generalizable across individuals and communities. Related, our findings are not generalizable to other English-speaking nations in the region, and we observed differences between nations in the relationship between legal socialization and delinquency. Further research is needed to better understand the causes of this variation, and whether it might be attributable to islandness. We recognize these relationships may be specific to these nations, or the Caribbean region. Future work in this area should be explored in other SIDS including comparative studies. Last, future research should focus on additional informal socializing agents such as the media or other potential influencers, as well as the amount of legal socialization received through each socializing agent or the specific types and number of contacts with the police.

Recommendations for policy and practice

Given the findings from this study, there are several recommendations for policy and practice. First, parental supervision is a consistent and robust contributor to both perceptions of the police and delinquency. While direct supervision typically starts easing during the teenage years, it is important that parents monitor their children, know where their children are, what they are doing, and who they are with to promote prosocial behaviors. Successful interventions to improve police perceptions and reduce delinquency need to incorporate parental figures, given their influence. For instance, the Ability School Engagement Program (ASEP), evaluated by Mazerolle et al. (2021), brought together police and school authorities and engaged both parents and children. Combining restorative practices, education for parents and students on legal expectations, and action planning, this program improved police perceptions and reduced delinquency. Translating successful interventions like this one to the Caribbean might be considered with careful examination, adaptation, and piloting, given cultural differences.

Second, school commitment is also an important correlate for building positive perceptions of legal authorities, such as police, and in turn influencing delinquent behavior. Several large-scale U.S. intervention programs have been school-based, such as Project PATHE (Positive Action Through Holistic Education) (Gottfredson, 1986) and Gang Resistance Education and Training (G.R.E.A.T.) (Esbensen & Osgood, 1997). Across the Caribbean, USAID has spearheaded projects to improve the education system and juvenile justice reform, often through expanding education and employment training opportunities (USAID, 2021). Considering the benefits of school-based intervention programs, enhancing school commitment by emphasizing positive relationships between youths and teachers, maintaining consistent school policies, and incorporating family support for youth schooling would be beneficial for youths in

Caribbean countries to establish positive perceptions of legal authorities and ultimately influence delinquency.

Last, perceptions of the police play an important role in youth delinquency. Recent research, for example, has reported that positive, non-enforcement contacts with the police can improve youth perceptions of police legitimacy (Fine et al., 2022); and areas where police officers received procedural justice training experienced fewer crime incidents compared to areas where officers were not trained in procedural justice (Weisburd et al., 2022). These findings, combined with ours and prior research, suggests that it is possible to positively change the perceptions of youths about the police, and that practices and programs-across settings such as schools, streets, and community forums-aimed at increasing positive attitudes among youths about the police might result in delinquency reductions. There have been efforts to improve policing across the Caribbean in recent years which should subsequently improve perceptions of the police. Advancements in policing have included the embrace of community policing in several nations (St Jean, 2022) and CariSECURE — an effort to improve police data collection and evidence-based decision making for citizen security in ten nations (Katz et al., 2021). Guyana, Jamaica, and Trinidad and Tobago (all SIDS) all rely on civilian oversight of the police — by increasing transparency through this oversight they hope to increase police integrity, then public confidence in the police and legitimacy (Wallace, 2019). Researchers should evaluate how these efforts influence perceptions of the police in the Caribbean and beyond in other SIDS. Future research should further examine these issues through the lens of islandness to determine how the unique physical, social, and normative structures of islands might further influence (positively or negatively) perceptions of the police and delinquency.

Acknowledgments

The authors would like to thank Debra Wahlberg for her leadership and support throughout the project and Gamil Pierre for all of his assistance on matters related to data collection and interpretation. This work was supported by Creative Associates under Subcontract no. CN70503-SVPA through USAID prime award no. AID-OAA-I-15-00011. The views and conclusions contained in this document are those of the authors and should not be interpreted as representing the official policies, either expressed or implied, of Creative Associates or USAID. All procedures performed were conducted in accordance with the ethical standards of Arizona State University (approved ASU IRB study #00006605).

References

Adams, E. B. (2020) Police legitimacy in Trinidad and Tobago: Resident perceptions in a high-crime community. *Journal of Crime and Justice, 43*(1), 78-92. https://doi.org/10.1080/0735648X.2019.1582350

- Akers, R. A. (2011). *Social learning and social structure: A general theory of crime and deviance.* Thousand Oaks, CA: Sage. <u>https://doi.org/10.4324/9781315129587</u>
- Assink, M., van der Put, C. E., Hoeve, M., de Vries, S. L., Stams, G. J. J., & Oort, F. J. (2015). Risk factors for persistent delinquent behavior among juveniles: A metaanalytic review. *Clinical Psychology Review*, 42, 47–61. <u>https://doi.org/10.1016/j.cpr.2015.08.002</u>
- Barnes, G. M., Hoffman, J. H., Welte, J. W., Farrell, M. P., & Dintcheff, B. A. (2006). Effects of parental monitoring and peer deviance on substance use and delinquency. *Journal of Marriage and Family*, *68*(4), 1084-1104. https://doi.org/10.1111/j.1741-3737.2006.00315.x
- Baz Cores, O., & Fernández-Molina, E. (2022). An empirical approach to the study of legal socialization in adolescence. *European Journal of Criminology*, 19(2), 237-258. <u>https://doi.org/10.1177/1477370819896212</u>
- Beuermann, D. W., & Pecha, C. (2018). Trust and institutions in Caribbean countries. InD. W. Beuermann & M. J. Schwartz (Eds.), *Nurturing institutions for a resilient Caribbean* (pp. 185-216). Inter-American Development Bank.
- Brechwald, W. A., & Prinstein, M. J. (2011). Beyond homophily: A decade of advances in understanding peer influence processes. *Journal of Research on Adolescence*, 21(1), 166–179. <u>https://doi.org/10.1111/j.1532-7795.2010.00721.x</u>
- Cardwell, S. M., Mazerolle, L., Piquero, A. R., & Luengen, K. (2021). Perceiving teachers as procedurally just limits the negative effects of delinquent peer associations: An analysis of Australian adolescent boys' and girls' perceptions of school authority. *Journal of Social Issues*, 77(2), 547-576. https://doi.org/10.1111/josi.12447
- Cawthray, T. L. (2019). Understanding police legitimacy in Solomon Islands and Tonga: Examining the application of the procedural justice, service delivery and authority perspectives and the influence of context. Doctoral dissertation, Griffith University. <u>https://doi.org/10.25904/1912/4025</u>
- Chou, C. P., Montgomery, S., Pentz, M. A., Rohrbach, L. A., Johnson, C. A., Flay, B. R., & MacKinnon, D. P. (1998). Effects of a community-based prevention program on decreasing drug use in high-risk adolescents. *American Journal of Public Health*, 88(6), 944-948. <u>https://doi.org/10.2105/AJPH.88.6.944</u>
- Chand, A., Karan, M. F., & Goundar, P. (2022). Public perceptions of police in Fiji. *Journal of Contemporary Criminal Justice*, *38*(3), 295-310.
- Cohn, E. S., Bucolo, D., 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*(4), 295-309. https://doi.org/10.1007/s10979-009-9185-9
- Cohen, E. S., & White, S. O. (1990). *Legal socialization: A study of norms and rules*. New York, NY: Springer-Verlag. <u>https://doi.org/10.1007/978-1-4612-3378-7</u>
- Conkling, P. (2007). On islanders and islandness. *Geographical Review*, 97(2), 191–201.
- Darling, N., & Steinberg, L. (1993). Parenting style as context: An integrative model. *Psychological bulletin*, *113*(3), 487-496.

- Decker, S. H., Melde, C., & Pyrooz, D. C. (2013). What do we know about gangs and gang members and where do we go from here? *Justice Quarterly*, *30*(3), 369-402.
- Diaz-Cayeros, A., Stahlberg, S. G., Pizatella-Haswell, R., Sabet, D., & Kresky, J. (2020, August). *Evaluation of Secondary Prevention in the Community, Family and Youth Resilience (CFYR) Program in St. Lucia, St. Kitts, and Nevis and Guyana*. Arlington, VA: Social Impact, Inc.
- Esbensen, F.-A., & Osgood, D. W. (1997). *G.R.E.A.T. program effectiveness*. Research in Brief. Washington, DC: U.S. Department of Justice, National Institute of Justice.
- Fagan, J., & Tyler, T. (2005). Legal socialization of children and adolescents. *Social Justice Research*, *18*(3), 217-242. <u>https://doi.org/10.1007/s11211-005-6823-3</u>
- Farrington, D. P. (1986). Age and crime. *Crime and Justice*, *7*, 189-250. https://doi.org/10.1086/449114
- Ferdik, F. V., Gist, J., & Evans, S. Z. (2019). Deviant peer associations and perceived police legitimacy: Is there a connection? *Criminal Justice Policy Review*, 1-36. <u>https://doi.org/10.1177/0887403417742949</u>
- Ferdik, F. V., Wolfe, S. E., & Blasco, N. (2014). Informal social controls, procedural justice and perceived police legitimacy: Do social bonds influence evaluations of police legitimacy? *American Journal of Criminal Justice*, 39, 471–492. https://doi.org/10.1007/s12103-013-9230-6
- Fine, A., Cavanagh, C., Donley, S., Steinburg, 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.
- Fine, A., Padilla, K., & Tom, K. (2022). Police legitimacy: Identifying developmental trends and whether youths' perceptions can be changed. *Journal of Experimental Criminology, 18*, 67-87. <u>https://doi.org/10.1007/s11292-020-09438-7</u>
- Fine, A., Simmons, C., Cavanagh, C., Rowan, Z., & Cauffman, E. (2020). Implications of youths' perceptions of police bias and the code of the street for violent offending. *Psychology of Violence*, 10(5), 473-482. <u>https://doi.org/10.1037/vio0000286</u>
- Fine, A., & Trinkner, R. (in press). Legal socialization. In R. Gurung (Ed.). *Routledge encyclopedia of psychology in the real world*. Abingdon, UK: Routledge.
- Fine, A., Wolff, K. T., Baglivio, M. T., Piquero, A. R., Frick, P. J., Steinberg, L., & Cauffman, E. (2018). Does the effect of justice system attitudes on adolescent crime vary based on psychosocial maturity? *Child Development*, *89*(6), e468-e479. <u>https://doi.org/10.1111/cdev.12983</u>
- Flexon, J. L., Lurigio, A. J., & Greenleaf, R. G. (2009). Exploring the dimensions of trust in the police among Chicago juveniles. *Journal of Criminal Justice*, 37(2), 180-189. <u>https://doi.org/10.1016/j.jcrimjus.2009.02.006</u>
- Foss, A., Laurent, B., de Garcia, D., Charles, H., Puucilowski, M., Hazel, N., Sahai, R., & McKenzie, S. (2013). *Eastern and Southern Caribbean Youth Assessment (ESCYA)*.
 Arlington, VA: United States Agency for International Development (USAID).

- Freemon, K., Cheon, H., Katz, C. M., & Nuño, L. (In Press). Differences between incarcerated and non-incarcerated youth in the English-speaking Caribbean. *International Criminal Justice Review.*
- Gottfredson, D. (1986). An empirical test of school based environmental and individual interventions to reduce the risk of delinquent behavior. *Criminology*, *24*(4), 705-731. <u>https://doi.org/10.1111/j.1745-9125.1986.tb01508.x</u>
- Harriott, A., & Katz, C. M. (eds.) (2015). *Gangs in the Caribbean: Responses of State and Society.* University of the West Indies Press: Kingston.
- Hirschi, T. (1969). Causes of Delinquency. Berkeley: University of California Press.
- Howes, L. M., Watson, D., Ryan, V., Rivera, J. J., & McNinch-Su, R. L. (2022). Community satisfaction with policing on Guam. *Journal of Contemporary Criminal Justice*, *38*(3), 311-329.
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1–55. <u>https://doi.org/10.1080/10705519909540118</u>
- Hurst, Y. G., & Frank, J. (2000). How kids view cops the nature of juvenile attitudes toward the police. *Journal of Criminal Justice*, *28*(3), 189-202. https://doi.org/10.1016/S0047-2352(00)00035-0
- Johnson, D., King, W. R., Katz, C. M., Fox, A. M., & Goulette, N. (2008). Youth perceptions of the police in Trinidad and Tobago. *Caribbean Journal of Criminology and Public Safety*, *13*(1&2), 217-253.
- Julian, M. W. (2001). The consequences of ignoring multilevel data structures in nonhierarchical covariance modeling. *Structural Equation Modeling*, *8*(3), 325-352.
- Kaiser, K., & Reisig, M. D. (2019). Legal socialization and self-reported criminal offending: The role of procedural justice and legal orientations. *Journal of Quantitative Criminology*, 35(1), 135-154. <u>https://doi.org/10.1007/s10940-017-9375-4</u>
- Katz, C. M. (2015). An introduction to gangs and gang violence in the Caribbean. In A. Harriott & C. M. Katz (Eds), *Gangs in the Caribbean: Responses of State and Society*. University of the West Indies Press: Kingston.
- Katz, C. M., Cheon, H., Hedberg, E. C., & Decker, S. H. (2021). Impact of Family-Based Secondary Prevention Programming on Risk, Resilience, and Delinquency: A 6-Month Follow Up within a Randomized Control Trial in Honduras. *Justice Quarterly*, 1-26. <u>https://doi.org/10.1080/07418825.2021.1967425</u>
- Katz, C. M., Cheon, H., & Zheng, Y. (2020). *A longitudinal validation of the Caribbean Youth Services Eligibility Tool*. Phoenix, AZ: Center for Violence Prevention and Community Safety.
- Katz, C. M., & Fox, A. M. (2010). Risk and protective factors associated with ganginvolved youth in Trinidad and Tobago. *Revista Panamericana de Salud Pública*, 27, 187-202. <u>https://doi.org/10.1590/S1020-49892010000300006</u>

- Katz, C. M., Harriott, A., & Hedberg, E. C. (2022). Mediating violence in Jamaica through a gang truce. *International Criminal Justice Review*, 32(2), 129-150. <u>https://doi.org/10.1177/1057567720975631</u>
- Katz, C. M., Walcott, J., Freemon, K, & delMistro, P. (2021). Enhancing the Capacity for Data-Driven Decision Making on Citizen Security across the English-Speaking Caribbean: A Case Study of CariSECURE. *Caribbean Journal of Criminology*, 3(1), 93-123.
- Kock, N., & Lynn, G. (2012). Lateral collinearity and misleading results in variancebased SEM: An illustration and recommendations. *Journal of the Association for information Systems*, *13*(7), 1-40.
- Lurigio, A. J., Greenleaf, R. G., & Felxon, J. L. (2009). The effects of race on relationships with police: A survey of African American and Latino youths in Chicago. *Western Criminology Review*, *10*(1), 29–41.
- Mazerolle, L., Antrobus, E., Cardwell, S. M., Piquero, A. R., & Bennett, S. (2021). Harmonizing legal socialization to reduce antisocial behavior: Results from a randomized field trial of truanting young people. *Justice Quarterly*, 38(1), 152-179. <u>https://doi.org/10.1080/07418825.2019.1618894</u>
- McLean, K., Wolfe, S., & Pratt, T. (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. https://doi.org/10.1177/0022427818793934
- Molpeceres, M. A., Llinares, L. I., & Bernad, J. C. (1999). Perception of formal and informal authority and delinquent behavior in adolescence: a preliminary analysis. *Intervención Psicosocial*, *8*, 349–367.
- Murray, C., & Thompson, F. (1985). The representation of authority: An adolescent viewpoint. *Journal of Adolescence*, 8(3), 217-229. https://doi.org/10.1016/S0140-1971(85)80054-3
- 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. <u>https://doi.org/10.1177/0022427814557038</u>
- Nivette, A., Eisner, M., & Ribeaud, D. (2020). Evaluating the shared and unique predictors of legal cynicism and police legitimacy from adolescence into early adulthood. *Criminology*, 58(1), 70-100. <u>https://doi.org/10.1111/1745-9125.12230</u>
- Nuño, L. E., & Katz, C. M. (2019). Understanding gang joining from a cross classified multi-level perspective. *Deviant Behavior*, 40(3), 301-325. https://doi.org/10.1080/01639625.2017.1421706
- Vannini, P., & Taggart, J. (2013). Doing islandness: A non-representational approach to an island's sense of place. *Cultural Geographies*, *20*(2), 225–242.
- 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. <u>https://doi.org/10.1177/1098611108327311</u>

- Robinson, S., Bidwell, N. J., Cibin, R., Linehan, C., Maye, L., Mccarthy, J., & Teli, M. (2021). Rural Islandness as a Lens for (Rural) HCI. *ACM Transactions on Computer Human Interaction*, 28(3), 1-32.
- Schumacker, R. E., & Lomax, R. G. (2004). *A beginner's guide to structural equation modeling* (2nd ed). Mahwah, NJ: Lawrence Erlbaum.
- Scott, J., & Staines, Z. (2021). Charting the place of islands in criminology: On isolation, integration and insularity. *Theoretical Criminology*, *25*(4), 578-600.
- St Jean, P. K. (2022). From social promise to social fad: The evolution of community policing on the Caribbean island of Dominica. In D. Watson, S. N. Amin, W. C. Wallace, O. M. Akinlabi, & J. C. Ruiz-Vásquez. (Eds.), *Policing the Global South: Colonial legacies, pluralities, partnerships, and reform*. (pp. 306-320). New York, NY: Routledge.
- Stamatakis, N. (2019). Perceptions of incarcerated youth about police violence and legitimacy in Trinidad and Tobago. *Journal of Police and Criminal Psychology*, 34(3), 314–329. <u>https://doi.org/10.1007/s11896-018-9309-6</u>
- Sweeten, G., Pyrooz, D. C., & Piquero, A. R. (2013). Disengaging from gangs and desistance from crime. *Justice Quarterly*, *30*(3), 469-500.
- Tapp, J. (1971). Reflections. *Journal of Social Issues, 27*(2), 1-16. https://doi.org/10.1111/j.1540-4560.1971.tb00650.x
- Tapp, J. (1991). The geography of legal socialization: Scientific and social markers. *Droit et Société, 19,* 331–358. <u>https://doi.org/10.3406/dreso.1991.1120</u>
- Tapp, J., & Kohlberg, L. (1971). Developing senses of law and legal justice. *Journal of Social Issues*, *27*(2), 65-91.
- Thornberry, T. P., Kearley, B., Gottfredson, D. C., Slothower, M. P., Devlin, D. N., & Fader, J. J. (2018). Reducing crime among youth at risk for gang involvement: A randomized trial. *Criminology & Public Policy*, 17(4), 953-989. <u>https://doi.org/10.1111/1745-9133.12395</u>
- Trinkner, R., & Cohn, E. S. (2014). Putting the "social" back in legal socialization: Procedural justice, legitimacy, and cynicism in legal and nonlegal authorities. *Law and Human Behavior, 38*(6), 602-617. https://doi.apa.org/doi/10.1037/lbb0000107
- Trinkner, R., & Reisig, M. D. (2021). Celebrating 50 years of legal socialization. *Journal* of Social Issues, 77(2), 281-290. <u>https://doi.org/10.1111/josi.12458</u>
- Trinkner, R., Rodrigues, H., Piccirillo, D., Gifford, F. E., & Gomes, A. M. M. (2020). Legal socialisation in Brazil: Examining the generalisability of the procedural justice model. *International Journal of Comparative and Applied Criminal Justice*, 44(1-2), 7-27. <u>https://doi.org/10.1080/01924036.2019.1587710</u>
- Trinkner, R., & Tyler, T. (2016). Legal socialization: Coercion versus consent in an era of mistrust. *Annual Review of Law and Social Science, 12,* 417-439. https://doi.org/10.1146/annurev-lawsocsci-110615-085141
- Tyler, T. (1990). *Why people obey the law.* Princeton, NJ: Princeton University Press.
- Tyler, T., & Huo, Y. (2002). *Trust in the law: Encouraging public cooperation with the police and courts*. New York, NY: Russell Sage Foundation.

- Tyler, T., & Trinkner, R. (2018). *Why children follow rules: Legal socialization and the development of legitimacy*. Oxford University Press.
- USAID (2021). Youth/Citizen security. USAID. <u>https://www.usaid.gov/barbados/citizen-security</u>
- van der Leeden, R., Meijer, E., & Busing, F. M. T. A. (2008). Resampling multilevel models. In J. De Leeuw & E. Meijer (Eds.), *Handbook of multilevel analysis* (pp. 401–433). New York, NY: Springer.
- Wallace, W. C. (2019). An analysis of civilian oversight of police agencies in small island developing states: Evidence from three Caribbean countries. *Journal of Behavioral and Social Sciences*, 6, 231-245.
- Weisburd, D., Telep, C. W., Vovak, H., Zastrow, T., Braga, A. A., & Turchan, B. (2022). Reforming the police through procedural justice training: A multicity randomized trial at crime hot spots. *Proceedings of the National Academy of Sciences*, 119(14), e2118780119. <u>https://doi.org/10.1073/pnas.2118780119</u>
- Wu, Y., Lake, R., & Cao, L. (2015). Race, social bonds, and juvenile attitudes toward the
police.*JusticeQuarterly*,32(3),445-470.https://doi.org/10.1080/07418825.2013.778325