The Social and Developmental Antecedents of Legal Cynicism

The Social and Developmental Antecedents of Legal Cynicism

Amy E. Nivette, Ph.D.
Nuffield College
New Road
University of Oxford
Oxford, OX1 1NF
(+44) (0) 1865 278502
amy.nivette@sociology.ox.ac.uk

Manuel Eisner, Ph.D.
Institute of Criminology
Sidgwick Avenue
University of Cambridge

Tina Malti, Ph.D.
Department of Psychology
University of Toronto

Denis Ribeaud, Ph.D.
Chair of Sociology
Swiss Federal Institute of Technology (ETH) Zurich

Objectives: This study explores the social, experiential, and developmental antecedents of legal cynicism. The study comprises a range of indicators organized into four domains—bonds to institutions, predispositions, experiences, and delinquent involvement—that bear on theoretically plausible mechanisms involved in the development of legal cynicism.

Methods: This study examines four pathways to legal cynicism using data from two waves of the Zurich Project on the Social Development of Children and Youths ($N=1226$). OLS procedures are used to regress legal cynicism at t_2 (age 15) on social and psychological characteristics measured at t_1 (age 13), and retrospective variables measured at t_2 . Baseline legal cynicism was included as a covariate in all models.

Results: The results show that self-reported delinquency is the strongest predictor of legal cynicism ($\beta=.27$, $t=8.48$). There is also evidence that alienation from society ($\beta=.07$, $t=.58$), negative experiences with police ($\beta=.07$, $t=2.79$), and association with deviant peers ($\beta=.10$, $t=8.22$) can foster legal cynicism.

Conclusions: This study shows that legal cynicism amongst adolescents is to a small extent the result of alienation from social institutions and negative experiences with the police. To a much larger degree legal cynicism seems to represent a cognitive neutralization technique used to justify one's previous self-reported delinquency.

The concept of legal cynicism is grounded in a much wider literature on citizens' satisfaction with the police and the legitimacy of the criminal justice system (Cao, Frank, and Cullen 1996; Carr, Napolitano, and Keating 2007; Reiss 1971; Sampson and Bartusch 1998; Tyler 2006). Attitudes towards the law and police play an important role in motivating individuals to participate in informal social control, obey police directives, report crime, and obey the law (see Bottoms and Tankebe 2012; Tyler 2009 for reviews; see also Kirk and Matsuda 2011). Legal cynicism refers to attitudes that deny the binding nature of laws, and is arguably separate from other domains of legal orientation including moral disengagement, trust, and police legitimacy (Reisig, Wolfe, and Holtfreter 2011). Specifically, Sampson and Bartusch (1998:786) define legal cynicism as "the sense in which laws or rules are not considered binding in the existential, present lives of respondents...[legal cynicism items] tap variation in respondents' ratification of acting in ways that are 'outside' of law and social norms."

Legal cynicism has been linked to a number of crime-related outcomes: higher violent crime rates (Kirk and Papachristos 2011), a lack of collective efficacy (Kirk and Matsuda 2011), self-reported criminal behaviors (Fagan and Piquero 2007; Reisig et al. 2011), and lower desistance from intimate partner violence (Emery, Jolley, and Wu 2011). The concept therefore has the potential to be an important mechanism linking social experiences, individual development, and structural characteristics with crime.

However, research on the developmental and social antecedents of legal cynicism is less coherent. The neighborhood-level tradition following Sampson and Bartusch's (1998) work focuses primarily on structural correlates of cynicism, including concentrated disadvantage, immigrant concentration, and residential

stability, while controlling for a handful of individual demographic variables, such as ethnicity, socio-economic status, gender, and marital status (see also Emery et al. 2011; Kirk and Matsuda 2011; Kirk and Papachristos 2011). While this research provides us with an understanding of between-neighborhood differences in legal cynicism, we largely lack an understanding of individual variation. For example, using data from the Project on Human Development in Chicago Neighborhoods, Kirk and Papachristos (2011) examined the correlates of legal cynicism across 342 neighborhoods. Their final model (Model 4:1218-1219), which included both individual-level demographics and neighborhood-level correlates, explained nearly 80 percent of the between-neighborhood variance in comparison to 4.3 percent of the variance between individuals within a neighborhood.

This suggests that there is substantial variation occurring between individuals that is not attributable to race, gender, socio-economic status, or living conditions. Lee, Steinberg, Piquero, and Knight (2011) argue that in order to fully understand how individuals form attitudes about the law and police, we must examine the problem from both developmental and social perspectives. Developmental processes are crucial because they shape an adolescent's social identity, emotional maturity, and morality, such as an understanding of justice, fairness, and law (Dunn 2005). Although longitudinal research on the developmental antecedents of legal cynicism is sparse, recent cross-sectional research has found that certain personality characteristics, such as low self-control, are linked to higher levels of cynicism (Reisig et al. 2011; Wolfe 2011). Taken together, these findings suggest that the roots of legal cynicism are in part founded in childhood when personal and moral characteristics are forming.

With these gaps in mind, we ask: what are the social and developmental antecedents of legal cynicism? Due to the lack of existing theoretical frameworks for analyzing this question the paper has an exploratory goal: It examines the antecedents of legal cynicism in relation to social, experiential, and psychological correlates identified in previous research on attitudes towards the law and legal socialization. Specifically we focus on antecedents related to four constructs that can impact legal cynicism: bonds to social institutions, moral and temperamental developmental predispositions, negative experiences with authorities, and involvement in delinquent activities. In order to examine these long-term processes, we use data from the ongoing Zurich Project on the Social Development of Children and Youths (z-proso), a large-scale, multi-ethnic longitudinal study in Zurich, Switzerland (Eisner, Malti, and Ribeaud 2011).

ANTECEDENTS OF LEGAL CYNICISM

Sampson and Bartusch (1998) introduced the concept of legal cynicism to challenge the notion that African Americans held separate, subcultural values that tolerated deviance, leading to higher levels of neighborhood crime. They argued that normative orientations towards the law – i.e. cynicism and distrust – “are rooted more in experiential differences associated with neighborhood context than in a racially induced subcultural system” (1998:801). This implies that legal cynicism is not associated with particular individual characteristics, but with continual exposure to injustice, segregation, and insecurity. In Anderson’s (1999:32-33) words, “[a]lthough there are often forces in the community that can counteract the negative influences [...] the despair is pervasive enough to have spawned an oppositional culture, that of ‘the street’.”

In a similar vein, Kirk and colleagues (Kirk and Matsuda 2011; Kirk and Papachristos 2011) contend that legal cynicism is a cultural adaptation to persistent isolation and alienation from societal institutions. Cynicism develops as residents exchange information and experiences about the law and criminal justice system, creating a collective cynical understanding of the law (Kirk and Papachristos 2011). Legal cynicism thus becomes a cultural “frame through which individuals interpret the functioning and usefulness of the law and its agents” (2011:1207). This adaptation is also dependent on policing practices and experiences with misconduct. Harassment, misconduct, and “aggressive policing” all tend to occur more frequently in low-income, disadvantaged areas (Kane 2005; Terrill and Reisig 2003), compounding residents’ sense of injustice and further alienating them from societal institutions (Nivette 2014).

According to this framework, legal cynicism arises through individual and collective experiences of disadvantage and injustice. As bonds to social institutions weaken, legal norms lose their “bindingness” and may be replaced by attitudes that justify contempt of legal rules, the self-centered pursuit of one’s goals, and distrust in the police. Key to this mechanism is an experience – direct or vicarious – with an authority, usually an agent of the criminal justice system. From a developmental perspective, children receive signals regarding the “fairness” of authorities (e.g. police, teachers, parents) through personal experiences and social interactions (Fagan and Tyler 2005). The quality and nature of these experiences can signal to an individual or group that authorities are unfair and unjust, and as a consequence weaken commitment to institutional norms. Specifically, Tyler (2006) argues that encounters with the police where officers are perceived as fair, transparent, and procedurally just will improve trust in legal authorities and instill positive orientations

towards the law (see for reviews, Eisner and Nivette 2013; Mazerolle, Bennett, Davis, Sargeant, and Manning 2013; Tyler 2009).

Both direct and vicarious experiences with authorities accumulate to form an individual's outlook on the law and legal authority (Rosenbaum, Schuck, Costello, Hawkins, and Ring 2005). Direct experiences are likely to range from day-to-day encounters on the street to personal wrongdoing. However, Rosenbaum et al. (2005) argue that only a small proportion of citizens have contact with the police in a given year, meaning that individuals typically draw on indirect experiences with the police from family, friends, and the media to shape attitudes towards the law.

Not all experiences are weighted equally in the legal socialization process. Skogan (2006:117) found that negative interactions with the police have a far greater impact on individual attitudes than positive interactions: “[n]egative events are given more weight, people pay more attention to negative cues, the lessons they carry are learned more quickly and negative experiences have more impact on behavior.” A single negative encounter can form long-lasting negative impressions about the police, and further “contaminate” agents and institutions associated with the police, including the law, court officials, and more broadly, the government (see Baumeister, Bratslavsky, Finkenauer, and Vohs 2001; Rozin and Royzman 2001). A study by Hurst and Frank (2000) suggests that among adolescents vicarious negative experiences have a greater impact on forming impressions about the police than direct negative experiences.

These signals are integral to what scholars have called “legal socialization”, which can be defined as the process by which children acquire knowledge and develop normative beliefs about the law and its representatives (Cohn et al. 2012; Fagan and Tyler 2005; Tapp and Levine 1977). In developmental science this process

of increasing knowledge acquisition and differentiation in the moral domain is referred to as the development of moral reasoning (Eisner and Malti 2014).

Early forms of moral reasoning development, and the individual differences that consequently arise, are also believed to be important to understand later attitudes towards legal authorities. Research on moral reasoning development in children shows that even at an early age (3 years of age and up) children are able to identify moral wrongs, make judgments about rightfulness of an act based on underlying harm, and to distinguish unjust from just authorities, commands, and laws (Helwig and Turiel 2004; Laupa, Turiel, and Cowan 1995). However, their reasoning about moral rules and obligations is typically still undifferentiated. As children are exposed to more social relationships, types of authority, punishments, and social settings, they develop more systematic and complex and differentiated ways of evaluating and reasoning about right and wrong (Dunn 2005; Keller 2004). This process of moral reasoning development instills moral values that promote prosocial actions such as sharing and helping, while inhibiting negative actions such as aggression and violence (Malti and Krettenauer 2013; Malti and Ongley 2014; Tisak, Tisak, and Goldstein 2006). Thus a child who is moral in the sense of accepting the shared rules of right and wrong can also be expected to endorse the law as binding and rightful.

Fagan and Piquero (2007) have shown that perceptions of risks and sanctions influence how individuals evaluate and trust authorities. Again, this process relies in part on key interactions with the social environment: “with each offending episode – and its eventual outcomes, such as punishment or punishment avoidance – offenders acquire information that may be used to update both their sanction risk estimate as well as more general orientations and perceptions about the law, legal system, and its social control actors” (Fagan and Piquero 2007:723). This argument implies that

offending itself reinforces and augments attitudes that are cynical about the law. This may be partly a sign of broader neutralizing techniques (Sykes and Matza 1957), but it may also reflect a detrimental evaluation of the “rule of law” as delinquent individuals re-calibrate their estimates of risks and costs.

Relatively stable personality characteristics are likewise important in shaping how individuals view risks, costs, and legal boundaries (Reisig et al. 2011). Low self-control limits an individual’s ability to obey his or her internalized moral and legal rules, leading to rule-breaking (Wikström, Oberwittler, Treiber, and Hardie 2012). More broadly, Gottfredson and Hirschi (1990) argued that in addition to being the core element of a propensity towards crime, low self-control also affects relationships, attachments, and beliefs. Individuals with low self-control tend to hold favorable attitudes about rule-breaking behavior, associate with peers who have similar attitudes about the law, perceive fewer social and legal constraints, and avoid attachments to social institutions (Wolfe, 2011:68-69). Piquero, Gomez-Smith, and Langton (2004:723) found that university students with low self-control were more likely to perceive police sanctions as unfair and react with anger “when [they] are singled out for punishment.” Individuals with low self-control are also significantly more likely to be arrested, independent of age, race, and previous offenses (Beaver, DeLisi, Mears, and Stewart 2009). Beaver et al. (2009) argue that this is because individuals with low self-control are often insensitive, hot-headed, and self-centered, which is likely to affect how criminal justice agents perceive their character, and consequently how they are treated. This could mean that individuals with low self-control are more cynical about the law because they are effectively overproportionally likely to be caught, and to be treated poorly by criminal justice agents.

THE PRESENT STUDY

In summary, research on legal cynicism and related concepts suggests that attitudes towards the law are formed as individuals repeatedly interact with their social environments. A lack of moral reasoning, low self-control, and delinquent social networks can lead to negative experiences with authorities as well as influence how these experiences are perceived. Over time, children receive differential signals about the legitimacy and bindingness of the law from police, supervising adults, peers, as well as personal experiences with rule-breaking, and through repeated social interactions these signals crystallize to form legal cynicism. These processes can be grouped into four interrelated theoretical pathways: 1) bonds to social institutions, including a child's sense of attachment or alienation from parents, peers, school, and society; 2) developmental predispositions, which includes measures of characteristics such as moral reasoning, trust, and low self-control that may affect how individuals interpret and react to situations; 3) negative experiences with authority, including interactions with authorities that can enforce rules and punish wrongdoing; and 4) involvement in delinquent activities, such as personal rule-breaking as well as associations with deviant peers. Grouping predictors into these theoretical pathways allows us to better distinguish the possible mechanisms at work in the developmental process that foster legal cynicism. As such, this study aims to examine the antecedents of legal cynicism in relation to these four theoretical domains.

METHODS

Participants

The present study examines these pathways to legal cynicism using data from two waves of the Zurich Project on the Social Development of Children and Youths [z-

proso], an ongoing prospective longitudinal study of a cohort of children that entered one of 56 primary schools in the City of Zurich in 2004 (for a detailed overview see Eisner et al. 2011). The initial sample of schools was randomly selected using a stratified sampling procedure that over-sampled disadvantaged school districts, resulting in 1675 children from 56 primary schools (Eisner and Ribeaud 2005). The study comprises six waves of child interviews at ages 7, 8, 9, 11, 13 and 15. In wave 5 (age 13) of the study the participating youths were legally old enough to give the active consent to participate on their own whereas their parents received an information letter which allowed them to proscribe their child's participation (passive consent procedure).

Legal cynicism was measured beginning in wave 5 (t_1 , age 13) and again in wave 6 (t_2 , age 15). In order to reconstruct a plausible temporal sequence of events between ages 13 and 15, we use both antecedent variables measured at t_1 , including legal cynicism, and retrospective experiential variables measured at t_2 . The sample was restricted to respondents who participated in both waves ($N=1325$).

Measures

The variables used in this analysis reflect important risk factor domains highlighted in the prior review. Broadly, we found that attachments to social institutions, developmental predispositions, experiences with authorities, and involvement in delinquent activities are most likely to come together to affect individual legal cynicism. Based on this evidence, we compiled ten potential predictors to reflect these social and developmental domains. All scales were constructed by taking the average score across items, with the exception of delinquency, which is an additive scale.

Descriptive statistics are reported in Table 1.

Dependent Variable

Legal cynicism. Legal cynicism is operationalized using six items adapted from Karstedt and Farrall (2006), who in turn derived the items from Sampson and Bartusch's (1998) original scale. Respondents indicate their agreement with statements such as "It is okay to do whatever you want as long as you are not hurting anybody", "There are no right or wrong ways to make money", and "Laws are made to be broken" using a four-point Likert scale ranging from "fully untrue" to "fully true." All six items loaded onto one factor, with Chronbach's alphas of .70 for t_1 (age 13) and .73 for t_2 (age 15). The mean cynicism score for adolescents was 2.19 ($SD = 0.58$) at age 13 and 2.20 ($SD = 0.56$) at age 15.

Independent Variables

Bonds to social institutions

Three constructs are included that represent the strength of bonds with social institutions, namely parental involvement in the adolescent's life, a sense of alienation and exclusion from society, and commitment to school.

Parent involvement. As a proxy for family bonds, we used a measure of a parent's involvement in the child's everyday life. Parenting items were adapted from the *Alabama Parenting Questionnaire* (Shelton, Frick, and Wootton 1996) and the Parenting Scale from the Criminological Research Institute of Lower Saxony (KFN). The involvement scale consists of 6 items measuring how often (from 1 "never" to 5 "very often") a child's parents talk with them, comfort them, show interest, ask if they have problems and help with their homework. The involvement scale was measured at t_1 (age 13) and is reliable with a Cronbach's alpha of .75 ($M = 3.09$, $SD = 0.59$).

Social Exclusion. To capture a child's bond to society more generally, we used a set of items measuring personal feelings of social exclusion and alienation. The exclusion scale consists of seven items measuring agreement with statements

concerning the respondent's feelings of segregation, alienation, worthlessness, isolation, and lack of opportunities in relation to society. Each item was measured using a four-point Likert scale ranging from "fully untrue" to "fully true". The scale, measured at t_1 , had a Cronbach's alpha of .87 ($M = 1.49$, $SD = 0.52$).

School commitment. A child's bond and commitment to school was operationalized using a four-item scale developed by the z-proso team. Students' agreement to the statements "I like going to school", "I like doing my homework", "I find school useless" (reverse coded), and "I do all my homework" was measured using a four-point Likert scale ranging from "totally wrong" to "totally correct." The Cronbach's alpha for school commitment at t_1 was .69 ($M = 0.20$, $SD = 0.63$).

Developmental predispositions

We examined three constructs that represent aspects of broader personality characteristics and moral beliefs, namely generalized interpersonal trust, morality, and self-control.

Trust. We include a measure of generalized trust at t_1 to capture an adolescent's predisposition towards trusting others. The trust scale consists of three items adapted from the World Values Survey Questionnaires.¹ Students' agreement with the statements: "most people are trustworthy", "most people are helpful", and "most people are fair" are measured using a four-point Likert scale. The scale at t_1 was reliable with a Cronbach's alpha of .74 ($M = 2.62$, $SD = 0.57$).

Morality. To assess respondents' moral evaluations of rule transgressions, we used a scale measuring judgments about the wrongfulness of seven deviant acts: lying to adults, truancy, hitting someone if insulted, stealing something worth less than 5 Swiss Francs (US\$5), and insulting someone out of dislike. Responses were recorded

¹ Available online at http://www.worldvaluessurvey.org/index_html.

on a 7-point scale ranging from “not bad at all” to “very bad”. The scale was administered at t_1 (age 13) and has a Cronbach’s alpha of .81 ($M = 4.62$, $SD = 1.27$).

Low self-control. Low self-control is measured using a 10-item scale adapted from Grasmick, Tittle, Bursik, and Arneklev (1993). The scale consists of five sub-dimensions: impulsivity (e.g. “I act spontaneously without thinking”), self-centeredness (e.g. “I don’t care if others are upset”), risk-seeking (e.g. “I like dangerous activities, just for fun”), preference for physical activities (e.g. “If I can, I’d rather do something with my own hands than with my head”), and short temper (e.g. “I easily lose my temper”). The scale was measured at t_1 and has a Cronbach’s alpha of .78 ($M = 2.20$, $SD = 0.47$).

Experiences with authority

The third group of potential predictors relates to two types of experiences with authorities that involve potential sanctions in reaction to wrongdoing.

Censure at school. Censure is a dichotomous event variable measuring whether or not an individual was punished at school for some deviant act. Respondents at t_2 (age 15) were asked retrospectively to mark whether they had been censured at school in the past two years (coded as 1), or not (coded as 0). Fourteen percent ($SD = 0.35$) of children reported being censured at school.

Contact with police. Police contact is a dichotomous event variable coded “0” for individuals who have not had contact in the two years prior to taking the survey at t_2 , and “1” for those who have reported to or heard from the police. Specifically, police contact in this question refers to experiences with legal authorities in relation to wrongdoing. Eight percent ($SD = 0.28$) of adolescents reported contact with the police.

Delinquent involvement

The last two measures represent two aspects of involvement in delinquent activities.

Deviant peer group. To measure an adolescent's association with deviant peers and subsequent exposure to deviant norms, we used a variable measuring whether or not an individual is a member of a deviant peer group at t_2 . Individuals who identified as part of a deviant group were coded as "1" whereas individuals who identified as part of a non-deviant peer group or no group were coded as "0" ($M = 0.22$, $SD = 0.41$).

Delinquency. A 28-item overall delinquency variety scale represents an individual's prevalence of rule-breaking in the past 12 months (measured at t_2). This scale includes a wide range of deviant behaviors, including substance use, bullying, truancy, cheating at school, theft at school, shoplifting, robbery, carrying a weapon, and assault. A higher score on the delinquency scale indicates the prevalence of different delinquent acts in the past 12 months. Adolescents on average committed 7.46 different delinquent acts in the past year ($SD = 4.26$).

Control Variables

Socio-demographic background. Three demographic variables are included as controls in the analysis: gender, socio-economic status [SES], and primary language spoken with the parent(s). Gender was coded "0" for females and "1" for males ($M = 0.51$, $SD = 0.50$). SES was measured based on the primary caregiver's current occupation, and the codes were transformed into an International Socio-Economic Index of occupational status [ISEI] score (Ganzeboom, De Graaf, and Treiman 1992). A higher score indicates a higher SES status. The ISEI scores are designed to reflect the relationship between education and income. The final SES score was based on the highest ISEI recorded for each household. If information for waves 5 and 6 were

missing, we used the most recent high score from previous waves. The average SES score was 49.20 ($SD = 19.06$).

Finally, we created a dummy variable to represent the primary language spoken at home. A lack of language proficiency among immigrants is considered a significant barrier to employment opportunities and higher earnings (see Dustmann and Fabbri 2003). Such barriers can therefore lead to alienation and cynicism among immigrants. Adolescents with at least one parent that speaks German at home are coded “1”, whereas all others are coded “0” ($M = 0.63$, $SD = 0.48$). Non-German languages spoken at home include Albanian, Portuguese, Turkish, and Serbian, among others.

Missing Data

As the percentage of missing values among the target variables was low, we conduct all primary analyses using listwise deletion. Nonetheless, we perform a robustness check by imputing missing values using full information maximum likelihood [FIML] procedures available with the `–sem–` command in Stata 12 (Statacorp 2013). Socio-economic status had the highest number of missing values at 3.2% ($n=42$). Correlations showed that missingness for SES was related to whether or not a parent was employed. We include an auxiliary variable measuring parental employment specifically to improve estimates for SES. In order to include the auxiliary variable in the full information maximum likelihood models, we adopt the “extra DV model” as recommended by Graham, Hofer, Donaldson, MacKinnon, and Schafer (1997). The extra DV model specification requires that the auxiliary variable (here a dummy variable indicating whether at least one parent was employed), is predicted by all predictor variables and that the auxiliary residual must be correlated with the outcome residual (Graham 2003:83).

Analytical Procedure

Our intent was to examine the social, developmental, and experiential predictors of legal cynicism at age 15. In order to do so, we used Ordinary Least Squares procedures to regress legal cynicism at t_2 (age 15) on social and psychological characteristics measured at t_1 (age 13), and retrospective variables measured at t_2 . Each broad predictor domain – bonds to institutions, predispositions, experiences, and deviant behaviors – was entered into the regression equation in blocks. Attitudinal predictors measured at t_1 were entered first, followed by experiences and deviant behaviors at t_2 . Baseline legal cynicism was included as a covariate in all models, meaning that all other variables measure the effects over and above the stability of legal cynicism.

[Table 1 here]

RESULTS

Table 2 shows the bivariate correlations between all study variables. The two strongest correlates of legal cynicism at age 15 were delinquency ($r=.45, p<.001$) and legal cynicism at age 13 ($r=.44, p<.001$). Low self-control at age 13 was also significantly related to cynicism at age 15 ($r=.38, p<.001$). Further, adolescents who report higher commitment to schooling ($r=-.26, p<.001$), parental involvement ($r=-.22, p<.001$), and morality ($r=-.28, p<.001$) were less likely to be cynical about the law at age 15. SES and language spoken at home were not significant correlates of legal cynicism at age 15 (respectively, $r=-.03, p=.28$ and $r=-.03, p=.23$).

[Table 2 here]

Before estimating the regression models, we examined the characteristics of legal cynicism over time. The change in mean levels is slight ($M t_1=2.19$, $SD t_1=0.58$; $M t_2=2.20$, $SD t_2=0.57$). The correlation between legal cynicism at t_1 and t_2 is moderate ($r=.44$).

Next we estimated five hierarchical linear regression models. Table 3 presents the standardized correlation coefficients (β), t -values, and significance levels for each coefficient. All models include a vector of controls: SES, language spoken at home with parents, and gender. Model 1 adds only legal cynicism to the equation; Model 2 incorporates variables that measure bonds to social institutions; Model 3 adds the predispositional characteristics; Model 4 includes direct experiences with authorities measured at t_2 ; Model 5 incorporates involvement in delinquent activities at t_2 .

[Table 3 here]

As can be seen, Model 1 revealed that nearly 20 percent of the variance in legal cynicism at age 15 is explained by prior attitudes ($\beta=.43$, $t=16.47$).² Model 2 showed that attachments to social institutions had a small effect on legal cynicism, independent of prior attitudes. Adolescents who are committed to school ($\beta=-.08$, $t=-2.98$) and who have parents who are more often involved in their lives ($\beta=-.08$, $t=-2.80$) were less likely to develop cynical attitudes towards the law. As expected, adolescents who feel alienated from society were more likely to espouse cynical values, independent of prior attitudes.

In Model 3, only low self-control proved to be a significant predictor of later cynicism ($\beta=.16$, $t=5.23$) among the socio-psychological predispositions included here. Surprisingly, an adolescent's sense of morality did not significantly predict levels of cynicism, although the sign is in the expected direction ($\beta=-.05$, $t=-1.47$).

² The cumulative effect of the control variables was negligible ($R^2 = .02$).

Model 3 explained only 3 percent more of the variance than the baseline model ($R^2=.22$). In Model 4, both negative experiences with police and schools significantly increased adolescents' cynicism towards the law (respectively, $\beta=.12$, $t=4.72$ and $\beta=.08$, $t=3.14$).

Finally, Model 5 included measures of engagement in delinquent activities. The results show that, independent of prior attitudes and contact with police, delinquency and gang involvement significantly increased cynical perceptions of the law among adolescents (respectively, $\beta=.27$, $t=8.48$ and $\beta=.10$, $t=3.85$). It is important to note that the effect of low self-control drops to non-significance ($\beta=.05$, $t=1.50$) once these variables are added to the model. However, feelings of exclusion from society, parental involvement, and police contact remained significant. The full model explained 33 percent of the variance in legal cynicism at age 15, however over half was accountable to prior cynicism.

To check whether the results were affected by bias stemming from listwise deletion, we estimated the full model using FIML techniques. Generally, with the exception of miniscule adjustments to the standardized coefficients, the results were not affected by listwise deletion.

DISCUSSION

Interest in the consequences of legal cynicism has grown in the past few years. Researchers have so far linked pervasive cynicism to a number of negative outcomes: individual criminal behavior, high violent crime rates, and lower collective efficacy (e.g. Fagan and Piquero 2007; Kirk and Matsuda 2011; Kirk and Papachristos 2011; Reisig et al. 2011). However, less attention has been paid to how cynicism arises on an individual level. Often cynicism is examined alongside police legitimacy as part of

a wider process of legal socialization in which individuals form beliefs about criminal justice authorities (e.g. Fagan and Tyler 2005; Reisig et al. 2011). Yet this explanation is vague about how the processes involved generate cynicism.

Our goal in this paper was to explore the developmental and social antecedents of legal cynicism. Based on extant literature, we identified four pathways that likely generate adolescents' cynical attitudes towards the law: lack of bonds to social institutions, lack of moral and temperamental development, negative experiences with authorities, and involvement in delinquent activities. The results show that self-reported delinquency is the strongest predictor of legal cynicism, supporting the notion that legal cynicism is a post-hoc justification for wrongdoing. There is also evidence that weak bonds to parents, alienation from society, negative experiences with police, and association with deviant peers can foster legal cynicism.

More specifically, our results shed light on five important characteristics of legal cynicism. First, in line with Piquero, Fagan, Mulvey, Steinberg, and Odger's (2005) findings, between-individual differences in cynicism were moderately ($r=.44$) consistent between ages 13 and 15, a period of rapid developmental change. This suggests that cynical attitudes towards the law are already formed during early adolescence, and that these attitudes continue to influence the process of legal socialization as children grow older. At the same time, the level of rank-order stability in legal cynicism between ages 13 and 15 is lower than that of personality traits such as self-control, suggesting that attitudes towards the law are also substantially influenced by ongoing social interactions and experiences (i.e. Fagan and Tyler 2005; Sampson and Bartush 1998).

Second, the strength of bonds with social institutions at age 13 had a small effect on legal cynicism at age 15 over and beyond prior level of legal cynicism at age

13. Model 2 suggests that children who have a strong sense of social exclusion, share few activities with their parents, and have a low commitment to school were more likely to be cynical about the law at age 15. However, when other variables were considered only social exclusion and low parental involvement remained significant predictors. The findings hence provide some, but limited support for the notion, developed by Kirk and colleagues (Kirk and Matsuda 2011; Kirk and Papachristos 2011) that a broader lack of integration into social institutions is associated with higher legal cynicism.

Third, we found no evidence that personality characteristics such as generalized trust, self-control, and moral evaluations directly foster legal cynicism. Most notably, neither generalized trust in other people nor moral evaluations were predictive of legal cynicism. The latter finding is particularly surprising, given the plausible expectation that beliefs about the binding nature of laws during adolescence are linked to the earlier moral reasoning development of children (Tapp and Kohlberg 1977). It gives ground to the possibility that the development of attitudes towards the law and its representatives is a process that is not reducible to the general development of moral evaluations of norm-breaking acts. Model 3 suggests that low self-control at age 13 is a highly significant predictor of legal cynicism at age 15 when only variables measured at age 13 are considered. This suggests that legal cynicism is developmentally associated with elements of self-control such as self-centeredness, risk-seeking, and impulsivity (see Cauffman, Steinberg, and Piquero 2005).

Fourth, contrary to Reisig et al.'s (2011) findings, the full model (Model 5) suggests that low self-control at age 13 was not directly related to legal cynicism at age 15 once prior offending was considered. Instead, a comparison of Models 4 and 5

suggests that low self-control indirectly affects cynicism by increasing the likelihood of committing delinquent acts, which in turn is associated with an increase in legal cynicism (Pratt and Cullen 2000).

Fifth, the strongest predictor of legal cynicism at age 15 was self-reported delinquency in the preceding year. This finding may suggest that cynical attitudes towards the law have a neutralization function. In other words, adolescents may adopt legal cynicism as a technique to justify wrongdoing. Evidence of this process is identifiable in the items used to measure cynicism: e.g. the sentiment that “it is okay doing whatever you like as long as you’re not hurting anyone” is a mechanism of self-serving cognitive distortion that minimizes the behavior’s real harm, denies responsibility, and disregards the consequences (Bandura et al. 1996; Barriga and Gibbs 1996; Ribeaud and Eisner 2010; Sykes and Matza 1957). Thus legal cynicism in part involves cognitive processes – or what one may call *legal neutralization* – that work to distort or deny the “bindingness” of the law. This finding suggests that contrary to the assumptions by Sampson and Bartusch (1998), legal cynicism amongst adolescents may be less of a reflection of continuing experiences of injustice than a post-hoc justification of one’s own rule-breaking behavior.

The substantial effects of prior police contact and gang involvement provide further evidence that legal cynicism is a neutralization technique. Sherman’s (1993) defiance theory proposes that sanctioning (in this case by police) can provoke defiant attitudes if the individuals involved deny the shame of punishment and embrace consequent isolation. Thus, following a negative police contact, we venture that cynicism operates as a cognitive distortion that denies the shameful aspects of sanctioning and instead places blame on the law itself (i.e. “laws are made to be broken”). Sherman adds that defiant reactions are reliant in part on the quality of

contact, namely how fair the police officer's action are perceived (Tyler 2006), as well as an individual's bond to society.

Similarly, adolescents who associate with delinquent peers are exposed to delinquent norms and neutralizing values that reinforce legal cynicism. This is in line with Kirk and Papachristos' (2011) argument that legal cynicism is generated through social interactions; in this case delinquent peers. However, the precise order in which these events occur is difficult to determine. On the one hand, adolescents who are already highly cynical may self-select into a delinquent group to embrace alienation as part of the defiance process. As such, the peer group will only serve to reinforce cynical values. On the other hand, otherwise law-abiding adolescents who begin to associate with delinquent peers may be persuaded to change their views on the "bindingness" of laws. The mechanism here is one of vicarious transmission: peers are sharing negative experiences and cynical attitudes, providing an alternative normative "code" or "frame" in which to view the law (Anderson 1999; Kirk and Papachristos 2011).

Limitations and Future Research

The present study had several strengths: Notably, it is one of very few longitudinal studies on legal cynicism during the critical phase of early to mid-adolescence, and one of the only studies for this demographic that has repeat measures of legal cynicism, which allows for a more realistic assessment of influences by predictors other than legal cynicism at an earlier age. Also, the study comprises a considerable range of indicators that bear on theoretically plausible mechanisms involved in the development of legal cynicism. However, there are also several limitations of this study: First, we acknowledge that some important processes postulated to be involved in the development of legal cynicism are only partly

represented in the indicators that were available. In particular, the study does not have direct measures of experiences of unfair treatment by state representatives, which according to Sampson and Bartusch (1998; Fagan and Tyler 2005; Kirk and Papachristos 2011) is a main mechanism leading to legal cynicism. Further, this study does not account for possible neighborhood-level effects, such as concentrated disadvantage and collective efficacy. Second, we were unable to include a number of police-related measures shown to be associated with attitudes towards the law, such as procedural and distributive justice (Tyler 2006), moral alignment (Jackson et al. 2012), and effectiveness (Tankebe 2013). However, research from the Pathways to Desistance study suggests that procedural justice is not predictive of legal cynicism over time (Fagan and Piquero 2007; Lee et al. 2011). Nevertheless, future studies should investigate whether cynicism and legitimacy arise from the same normative, legal, and instrumental sources (see Bottoms and Tankebe 2012; Tankebe 2013).

The present study showed that legal cynicism amongst adolescents is to a small extent the result of alienation and detachment from social institutions. To a much larger degree legal cynicism seems to represent a cognitive neutralization technique used to justify one's previous wrongdoing. We suspect it is affected by psychosocial predispositions, particularly low self-control, which seems to predict legal cynicism through its effect on self-reported delinquency. Future research would benefit from exploring more/other developmental antecedents, such as trustfulness, empathy, and depression. Lee et al. (2011) demonstrated that a composite measure of psychosocial maturity was significantly negatively related to later cynicism; researchers should unpack this relationship in order to understand which aspects of emotional, cognitive, and social development may prevent or generate cynicism. Legal cynicism is unique in that it offers a potential connection between macro-level

structural and institutional characteristics and individual-level psychological risk factors. Investigating these multilevel connections could therefore advance theories of legal socialization as well as bring insight into a prospective risk factor for crime.

REFERENCES

- Anderson, Elijah. 1999. *Code of the Street: Decency, Violence, and the Moral Life of the Inner City*. London: W.W. Norton and Company.
- Bandura, Albert, Claudio Barbaranelli, Gian Vittorio Caprara, and Concetta Pastorelli. 1996. "Mechanisms of Moral Disengagement in the Exercise of Moral Agency." *Journal of Personality and Social Psychology* 71(2):364-374.
- Barriga, Alvaro Q. and John C. Gibbs. 1996. "Measuring Cognitive Distortion in Antisocial Youth: Development and Preliminary Validation of the "How I Think" Questionnaire." *Aggressive Behavior* 22(5):333-343.
- Baumeister, Roy F., Ellen Bratslavsky, Catrin Finkenauer, and Kathleen D. Vohs. 2001. "Bad is Stronger than Good." *Review of General Psychology* 5(4):323-370.
- Beaver, Kevin M., Matt DeLisi, Daniel P. Mears, and Eric Stewart. 2009. "Low Self-Control and Contact with the Criminal Justice System in a Nationally Representative Sample of Males." *Justice Quarterly* 26(4):695-715.
- Bottoms, Anthony and Justice Tankebe. 2012. "Beyond Procedural Justice: A Dialogic Approach to Legitimacy in Criminal Justice." *The Journal of Criminal Law and Criminology* 102(1):119-170.
- Cao, Liqun, James Frank, and Francis T. Cullen. 1996. "Race, Community Context and Confidence in the Police." *American Journal of Police* 15(1):3-22.
- Carr, Patrick J., Laura Napolitano, and Jessica Keating. 2007. "We Never Call the Cops and Here is Why: A Qualitative Examination of Legal Cynicism in Three Philadelphia Neighborhoods." *Criminology* 45(2):445-480.
- Cauffman, Elizabeth, Laurence Steinberg, and Alex R. Piquero. 2005. "Psychological, Neuropsychological and Physiological Correlates of Serious Antisocial Behavior in Adolescence: The Role of Self-Control." *Criminology* 43(1):133-176.

- Cohn, Ellen S., Rick J. Trinkner, Cesar J. Rebellon, Karen T. Van Gundy, and Lindsey Cole. 2012. "Legal Attitudes and Legitimacy: Extending the Integrated Legal Socialization Model." *Victims and Offenders* 7(4):385-406.
- Dunn, Judy. 2005. "Moral Development in Early Childhood and Social Interaction in the Family." Pp. 331-350 in *Handbook of Moral Development*, edited by M. Killen and J. Smetana. Mahwah, NJ: Lawrence Earlbaum Associates Inc.
- Dustmann, Christian and Francesca Fabbri. 2003. "Language Proficiency and Labour Market Performance of Immigrants in the UK." *The Economic Journal* 113(July):695-717.
- Eisner, Manuel and Tina Malti. 2014. "The Development of Aggressive Behavior and Violence." In *Handbook of Child Psychology and Developmental Science*, 7th Edition, Vol. 3: *Social, Emotional and Personality Development*, edited by M.E. Lamb. New York: Wiley.
- Eisner, Manuel and Amy E. Nivette. 2013. "Does Low Legitimacy Cause Crime? A Review of the Evidence." Pp. 308-325 in *Legitimacy and Criminal Justice: An International Exploration*, edited by J. Tankebe and A. Liebling. Oxford: Oxford University Press.
- Eisner, Manuel, Tina Malti, and Denis Ribeaud. 2011. "Large-Scale Criminological Field Experiments: The Zurich Project on the Social Development of Children." Pp. 410-424 in *The SAGE Handbook of Criminological Research Methods*, edited by D. Gadd, S. Karstedt, and S. Messner. London: Sage Publications.
- Eisner, Manuel and Denis Ribeaud. 2005. "A Randomised Field Experiment to Prevent Violence: The Zurich Intervention and Prevention Project at Schools, ZIPPS." *European Journal of Crime, Criminal Law and Criminal Justice* 13(1):27-43.
- Emery, Clifton R., Jennifer M. Jolley, and Shali Wu. 2011. "Desistance from Intimate Partner Violence: The Role of Legal Cynicism, Collective Efficacy, and Social

- Disorganization in Chicago Neighborhoods.” *American Journal of Community Psychology* 48:373-383.
- Fagan, Jeffrey and Alex R. Piquero. 2007. “Rational Choice and Developmental Influences on Recidivism Among Adolescent Felony Offenders.” *Journal of Empirical Legal Studies* 4(4):715-748.
- Fagan, Jeffrey and Tom R. Tyler. 2005. “Legal Socialization of Children and Adolescents.” *Social Justice Research* 18(3):217-241.
- Ganzeboom, Harry, Paul De Graaf, and Donald Treiman. 1992. “A Standard International Socio-Economic Index of Occupational Status.” *Social Science Research* 21(1):1-56.
- Gottfredson, Michael R. and Travis Hirschi. 1990. *A General Theory of Crime*. Stanford: Stanford University Press.
- Graham, John W. 2003. “Adding Missing-Data-Relevant Variables to FIML-Based Structural Equation Models.” *Structural Equation Modeling: A Multidisciplinary Journal* 10(1):80-100.
- Graham, John W., Scott M. Hofer, Stewart I. Donaldson, David P. MacKinnon, and Joseph L. Schafer. 1997. “Analysis with Missing Data in Prevention Research.” Pp. 325-366 in *The Science of Prevention: Methodological Advances from Alcohol and Substance Abuse Research*, edited by K. Bryant, M. Windle, and S. West. Washington, D.C.: American Psychological Association.
- Grasmick, Harold G., Charles R. Tittle, Robert J. Bursik Jr., and Bruce J. Arneklev. 1993. “Testing the Core Empirical Implications of Gottfredson and Hirschi’s General Theory of Crime.” *Journal of Research in Crime and Delinquency* 30(1):5-29.
- Helwig, Charles C. and Elliot Turiel. 2004. “Children’s Social and Moral Reasoning.” In *Blackwell Handbook of Childhood Social Development*, edited by P.K. Smith and C.H. Hart. Oxford, UK: Blackwell Publishing. Retrieved on May 13, 2013, from

Blackwell Publishing Online

[http://www.blackwellreference.com/subscriber/tocnode.html?id=g9780631217534_c_hunk_g978063121753432].

Huizinga, David, Anne Wylie Weiher, Rachele Espiritu, and Finn Esbensen. 2003.

“Delinquency and Crime.” Pp. 47-91 in *Taking Stock of Delinquency: An Overview of Findings from Contemporary Longitudinal Studies*, edited by T.P. Thornberry and M.D. Krohn. London: Springer.

Hurst, Yolander G. and James Frank. 2000. “How Kids View Cops: The Nature of Juvenile Attitudes toward the Police.” *Journal of Criminal Justice* 28(3):189-202.

Jackson, Jonathan, Ben Bradford, Mike Hough, Andy Myhill, Paul Quinton, and Tom R.

Tyler. 2012. “Why do People Comply with the Law? Legitimacy and the Influence of Legal Institutions.” *British Journal of Criminology* 52(6):1051-1071.

Kane, Robert J. 2005. “Compromised Police Legitimacy as a Predictor of Violent Crime in Structurally Disadvantaged Communities.” *Criminology* 43(2):469-498.

Karstedt, Susanne and Stephen Farrall. 2006. “The Moral Economy of Everyday Crime:

Markets, Consumers and Citizens.” *British Journal of Criminology* 46(6):1011-1036.

Keller, Monika. 2004. “Self in Relationship.” Pp. 267-298 in *Moral Development, Self, and Identity*, edited by D.K. Lapsley and D. Narvaez. Mahwah: Erlbaum.

Kirk, David S. and Mauri Matsuda. 2011. “Legal Cynicism, Collective Efficacy, and the Ecology of Arrest.” *Criminology* 49(2):443-472.

Kirk, David S. and Andrew V. Papachristos. 2011. “Cultural Mechanisms and the Persistence of Neighborhood Violence.” *American Journal of Sociology* 116(4):1190-1233.

Laupa, Marta, Elliot Turiel, and Phillip A. Cowan. 1995. “Obedience to Authority in

Children and Adults.” Pp. 131-165 in *Morality in Everyday Life: Developmental Perspectives*, edited by M. Killen and D. Hart. Cambridge: Cambridge University

Press.

- Lee, Joanna M., Laurence Steinberg, Alex R. Piquero, and George P. Knight. 2011. "Identity-Linked Perceptions of the Police among African American Juvenile Offenders: A Developmental Perspective." *Journal of Youth and Adolescence* 40:23-37.
- Malti, Tina and Tobias Krettenauer. 2013. "The Relation of Moral Emotion Attributions to Prosocial and Antisocial Behavior: A Meta-Analysis." *Child Development* 84(2):397-412.
- Malti, Tina and Sophia F. Ongley. 2013. "The Development of Moral Emotions and Moral Reasoning." Pp. 163-183 in *Handbook of Moral Development*, 2nd Edition, edited by M. Killen and J.G. Smetana. New York: Psychology Press.
- Mazerolle, Lorraine, Sarah Bennett, Jacqueline Davis, Elise Sargeant, and Matthew Manning. 2013. "Procedural Justice and Police Legitimacy: A Systematic Review of the Research Evidence." *Journal of Experimental Criminology* 9(3):245-274.
- Nivette, Amy E. 2014. "Legitimacy and Crime: Theorising the Role of the State in Cross-National Criminological Theory." *Theoretical Criminology* doi: 10.1177/1362480613499793.
- Piquero, Alex R., Jeffrey Fagan, Edward P. Mulvey, Laurence Steinberg, and Candice Odgers. 2005. "Developmental Trajectories of Legal Socialization among Serious Adolescent Offenders." *Journal of Criminal Law and Criminology* 96(1):267-298.
- Piquero, Alex R., Zenta Gomez-Smith, and Lynn Langton. 2004. "Discerning Unfairness Where Others may Not: Low Self-Control and Unfair Sanction Perceptions." *Criminology* 42(3):699-733.
- Pratt, Travis C. and Francis T. Cullen. 2000. "The Empirical Status of Gottfredson and Hirschi's General Theory of Crime: A Meta-Analysis." *Criminology* 38(3):931-964.
- Pratt, Travis C., Michael G. Turner, and Alex R. Piquero. 2004. "Parental Socialization and

- Community Context: A Longitudinal Analysis of the Structural Sources of Low Self-Control.” *Journal of Research in Crime and Delinquency* 41(3):219-243.
- Reisig, Michael D., Scott E. Wolfe, and Kristy Holtfreter. 2011. “Legal Cynicism, Legitimacy, and Criminal Offending: The Nonconfounding Effect of Low Self-Control.” *Criminal Justice and Behavior* 38(12):1265-1279.
- Reiss, Albert J. 1971. *The Police and the Public*. New Haven, CT: Yale University Press.
- Ribeaud, Denis and Manuel Eisner. 2010. “Are Moral Disengagement, Neutralization Techniques, and Self-Serving Cognitive Distortions the Same? Developing a Unified Scale of Moral Neutralization of Aggression.” *International Journal of Conflict and Violence* 4(2):298-315.
- Rosenbaum, Dennis P., Amie M. Schuck, Sandra K. Costello, Darnell F. Hawkins, and Marianne K. Ring. 2005. “Attitudes towards the Police: The Effects of Direct and Vicarious Experience.” *Police Quarterly* 8(3):343-365.
- Rozin, Paul and Edward B. Royzman. 2001. “Negativity Bias, Negativity Dominance, and Contagion.” *Personality and Social Psychology Review* 5(4):296-320.
- Sampson, Robert J. and Dawn Jeglum Bartusch. 1998. “Legal Cynicism and (Subcultural?) Tolerance of Deviance: The Neighborhood Context of Racial Differences.” *Law and Society Review* 32(4):777-804.
- Shelton, Karen K., Paul J. Frick, and Jane Wootton. 1996. “Assessment of Parenting Practices in Families of Elementary School-Age Children.” *Journal of Clinical Child Psychology* 25(3):317-329.
- Sherman, Lawrence W. 1993. “Defiance, Deterrence, and Irrelevance: A Theory of Criminal Sanction.” *Journal of Research in Crime and Delinquency* 30(4):445-473.
- Skogan, Wesley G. 2006. “Asymmetry in the Impact of Encounters with Police.” *Policing and Society: An International Journal of Research and Policy* 16(2):99-126.

- StataCorp. 2011. *Stata Statistical Software: Release 12*. College Station, TX: StataCorp LP.
- Sykes, Gresham and David Matza. 1957. "Techniques of Neutralization: A Theory of Delinquency." *American Journal of Sociology* 22(6):664–670.
- Tankebe, Justice. 2013. "Viewing Things Differently: The Dimensions of Public Perceptions of Police Legitimacy." *Criminology* 51(1):103-135.
- Tapp, June L. and Lawrence Kohlberg. 1971. "Developing Senses of Law and Legal Justice." *Journal of Social Issues* 27(2):65-91.
- Tapp, June L. and Felice J. Levine. 1977. *Law, Justice, and the Individual in Society: Psychological and Legal Issues*. New York: Holt, Rinehart, and Winston.
- Terrill, William and Michael D. Reisig. 2003. "Neighborhood Context and Police Use of Force." *Journal of Research in Crime and Delinquency* 40(3):291-321.
- Tisak, Marie S., John Tisak, and Sara E. Goldstein. 2006. "Aggression, Delinquency, and Morality: A Social-Cognitive Perspective." Pp. 611-629 in *Handbook of Moral Development*, edited by M. Killen and J. Smetana. Mahwah, NJ: Lawrence Earlbaum Associates Inc.
- Tyler, Tom R. 2009. "Legitimacy and Criminal Justice: The Benefits of Self-Regulation." *Ohio State Journal of Criminal Law* 7(1):307-359.
- Tyler, Tom R. 2006. *Why People Obey the Law*. Princeton: Princeton University Press.
- Wikström, Per-Olof H., Dietrich Oberwittler, Kyle Treiber, and Beth Hardie. 2012. *Breaking Rules: The Social and Situational Dynamics of Young People's Urban Crime*. Oxford: Oxford University Press.
- Wolfe, Scott E. 2011. "The Effect of Low Self-Control on Perceived Police Legitimacy." *Journal of Criminal Justice* 39:67-74.

Table 1. Means, standard deviations, and reliability coefficients for study variables ($N = 1226$).

Variables	Mean	Standard Deviation	Cronbach's alpha
Gender (1=Male)	0.51	0.50	N/A
SES	49.20	19.06	N/A
German-speaking parent (1=Yes)	0.63	0.48	N/A
Legal Cynicism (age 15)	2.20	0.56	0.73
Legal Cynicism (age 13)	2.19	0.58	0.70
Social Exclusion	1.49	0.52	0.75
Parental Involvement	3.09	0.59	0.87
School Commitment	0.20	0.63	0.69
Generalized Trust	2.62	0.57	0.74
Low Self-Control	2.20	0.47	0.78
Morality	4.62	1.27	0.81
Censure (1=Yes)	0.14	0.35	N/A
Police Contact (1=Yes)	0.08	0.28	N/A
Delinquent Peer Group (1=Yes)	0.22	0.41	N/A
Delinquency	7.48	4.26	N/A