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LEGAL CYNICISM AND PARENTAL APPRAISALS OF ADOLESCENT VIOLENCE

BRIAN SOLLER*, AUBREY L. JACKSON AND CHRISTOPHER R. BROWNING

Research suggests that legal cynicism—a cultural frame in which the law is viewed as illegitimate and ineffective—encourages violence to maintain personal safety when legal recourse is unreliable. But no study has tested the impact of legal cynicism on appraisals of violence. Drawing from symbolic interaction theory and cultural sociology, we tested whether neighbourhood legal cynicism alters the extent to which parents appraise their children's violence as indicative of aggressive or impulsive temperaments using data from the Project on Human Development in Chicago Neighborhoods. We find that legal cynicism attenuates the positive association between adolescent violence and parental assessments of aggression and impulsivity. Our study advances the understanding of micro-level processes through which prevailing cultural frames in the neighbourhood shape violence appraisals.

Keywords: legal cynicism, cultural frames, adolescent delinquency, neighbourhood effects

Criminologists increasingly have focused on the consequences of legal cynicism within neighbourhoods. Legal cynicism refers to the cultural view that the legal system is illegitimate, inadequately protects against victimization and fails to properly handle (criminal) offenses. Accordingly, extralegal strategies to resolve disputes or to secure personal safety should be favoured over legal recourse in legally cynical contexts. Indeed, higher levels of neighbourhood legal cynicism have been associated with increased rates of violence (Kirk and Papachristos 2011) and with a decreased likelihood of arrest for juvenile delinquency (Kirk and Matsuda 2011). But apparently no study has quantitatively assessed whether and how legal cynicism influences appraisals of violence and aggression, which have been inconsistently associated with adolescent crime and delinquency across neighbourhoods (Lynam et al. 2000; Zimmerman 2010). To address this gap in the literature, we investigate whether and how legal cynicism influences appraisals of adolescents' violent behaviour. Specifically, we test whether the level of legal cynicism characterizing the residential neighbourhood influences parents' interpretations of their children's violent behaviour as indicative of trait-based predispositions.

Understanding the factors influencing parental appraisals of violence is important because it may help explain why the association between parental assessments of traitbased predispositions and adolescent crime and delinquency is inconsistent across neighbourhoods. For instance, Lynam *et al.* (2000) found that among a sample of boys in Pittsburgh, the positive association between an impulsivity measure—which

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combined parent, self, teacher and researcher assessments—and offending was stronger in disadvantaged neighbourhoods. Using data from the Project on Human Development in Chicago Neighborhoods (PHDCN), Zimmerman (2010) found that the association between parent reports of impulsivity and adolescent offending was weakest in neighbourhoods with high levels of legal cynicism. One possible explanation for this variation across neighbourhoods is that assessments of trait-based predispositions, such as impulsivity and externalizing behaviour problems, often were based on parents' *interpretations* of their children's behaviour (Wareham and Boots 2011). Importantly, it is possible that parental assessments of trait-based predispositions although likely influenced by children's actual behaviour—are systematically biased by neighbourhood-based cultural frames. Furthermore, according to Kirk and Matsuda (2011) and Kirk and Papachristos (2011), legal cynicism functions as a cultural frame that influences interpretations of violent behaviour within larger contexts, such as neighbourhoods.

To explain how legal cynicism might influence parental appraisals of adolescents' violent behaviour, our theoretical framework focuses on how cultural 'frames' (Goffman 1974; Benford and Snow 2000) inform 'role-taking' and appraisal processes (Matsueda 1992). Based on this approach, we propose legal cynicism shapes appraisals of violence through a process in which individuals project themselves into the roles of others and appraise, from their standpoints, the situation, themselves in the situation and possible lines of action (Mead 1934; Matsueda 1992). Specifically, we argue that parents residing in legally cynical neighbourhoods—which are characterized by pervasive views that legal recourse is inadequate—will interpret their children's violent behaviour as rational, situated behavioural responses to precarious circumstances rather than as symptoms of trait-based predispositions. Accordingly, we hypothesize that legal cynicism attenuates the positive association between children's self-reported violent behaviour and parental assessments of their children's aggression and of a related temperament—impulsivity—which prominent criminological theories suggest is a trait strongly associated with delinquency (Gottfredson and Hirschi 1990; Moffitt 1993). We test hypotheses with multilevel statistical models using data from the PHDCN.

A Focus on Cultural Frames

Much of the recent research concerning the relationship between culture and crime draws from classical theories of criminal subcultures, which propose that structurally disadvantaged and socially disorganized neighbourhoods engender deviant systems of values and norms that sanction violence (Cohen 1955; Cloward and Ohlin 1960; Kubrin and Weitzer 2003; Stewart and Simons 2006). Accordingly, individuals are thought to offend primarily because they adopt norms and values that are conducive to violence from the surrounding cultural context. But research suggests that residents of poor and disorganized neighbourhoods *share* values with those from more advantaged and socially organized communities (Hannerz 1969; Harding 2007). Given the discrepancy between the propositions of subcultural theories and empirical findings, we instead employ an alternative and perhaps more fruitful approach to culture that focuses on 'frames' (Goffman 1974; Harding 2007).

According to a framing approach, culture influences action in part through the provision of cognitive frames that shape individuals' perceptions and understanding of how the world works (Goffman 1974; Berg et al. 2012). Frames condense and simplify the external world by selectively encoding actions, events and mundane occurrences (Benford and Snow 2000). Frames are behaviourally consequential because they help individuals identify the practical consequences of various 'strategies of action' (Swidler 1986) within particular contexts or situations (Berg et al. 2012). Decisions to employ particular victimization-avoidance strategies, e.g., are influenced by interpretations of violent contexts and of the perceived consequences of violence. These interpretations are based on past observations, which were filtered through cultural frames pertaining to violence. Rather than inducing individuals to adhere to certain norms or values, culture influences action in large part by informing individuals' interpretations of situations—through the provision of frames—thereby making violent strategies of action possible and more or less probable (Lamont and Small 2008; Berg et al. 2012). Importantly, this approach to culture helps explain why individuals act violently without adhering to a coherent set of oppositional cultural norms or values as is suggested by subcultural theories (Harding 2007).

The specific cultural frame we focus on in this study is legal cynicism, which fosters the expectation that legal recourse is unreliable and illegitimate. Given this interpretation, adolescents' strategies for resolving disputes are constrained to extralegal forms of social control, such as self-help (Black 1976; 1983). Black (1983) defines 'self-help' strategies as rational, aggressive responses to grievances that may include violence. Strategies to avoid victimization are especially likely to include violence if legal protections are inadequate (Anderson 1999; Stewart and Simons 2006). The cultural frame of legal cynicism thus may encourage perceptions that legal dispute-resolution and victim-avoidance strategies are limited, thereby making violence more probable. Indeed, Kirk and Papachristos (2011) found that violence is pervasive in legally cynical neighbourhoods. Thus, distinct from the typical criminological view that violence inherently is delinquent or antisocial (Shaw and McKay 1942; Gottfredson and Hirschi 1990; Moffitt 1993), a cultural frame perspective allows for the possibility that adolescents within legally cynical neighbourhoods act violently even if they do not 'value' violence or adhere to norms that legitimize violence. Violence in legally cynical neighbourhoods may be interpreted instead as practical, situated behavioural responses within contexts (perceived to be) bereft of legal recourse.

Building upon Kirk and Papachristos' (2011) study, we propose that as a cultural frame, legal cynicism not only influences adolescents' decisions to use violence but also shapes parents' views regarding the strategies of action that are reasonably available to neighbourhood youth engaged in conflict or threatening situations. This is because cultural frames not only 'inform how people cognitively perceive themselves and the world in which they live' (Kirk and Papachristos 2011: 1196) but they also alter how people appraise others' behaviour through the 'role-taking' process (Mead 1934; Matsueda 1992). In the following section, we explain how—through the role-taking process—the cultural frame of legal cynicism alters parents' interpretations of their children's violent behaviour as symptomatic of individual psychological or trait-based predispositions to aggression and impulsivity.

LEGAL CYNICISM AND PARENTAL APPRAISALS

Legal Cynicism and Role-Taking

Adolescent violence likely is positively associated with parental assessments of their aggression and impulsivity. But we argue the association between observed behaviour and appraisals of that behaviour is contingent upon cultural frames—in this case, legal cynicism—through which parents interpret the situations that adolescents face throughout their daily lives. These interpretations in turn are realized through the role-taking process in which parents, who experience different external behavioural expectations than do their children, nonetheless may identify the constraints associated with their children's roles.

According to symbolic interaction theory, role-taking is the process of 'projecting oneself into the role of other persons and appraising, from their standpoint, the situation, oneself in the situation, and possible lines of action' (Matsueda 1992: 1580). For adolescents and adults, this process involves taking the role of the 'generalized other' (Mead 1934), which encompasses 'the norms, rules, and expectations of a group, community or society' (Matsueda 1992: 1581). Because cultural frames help individuals interpret these aspects of the social world, frames help individuals make sense of the generalized other, thereby influencing behaviour appraisals. Taking the role of the generalized other allows one to understand and identify potential strategies of action that are associated with the roles *others* occupy, which may be quite different from one's own role(s). In this way, cultural frames influence how, e.g., a parent interprets and identifies, from his or her child's standpoint, appropriate courses of action given situational constraints.

Upon projecting themselves into the role of their children, parents perceiving adolescents' behaviour through a legal cynicism frame may interpret violence as an appropriate strategy of action to resolve grievances or to secure personal safety because legal recourse is unavailable, illegitimate or ineffective. Accordingly, parents residing in neighbourhoods with pervasive legal cynicism may be less likely to interpret violence as symptomatic of individual psychological or trait-based predispositions and instead understand violence as a situated behavioural response. In contrast, parents in neighbourhoods with low levels of legal cynicism may interpret violence as an unnecessary and undesirable strategy of action symptomatic of a trait-based predisposition, such as an aggressive or impulsive temperament.

In summary, we propose legal cynicism encourages residents to interpret violence as a rational reaction within contexts void of formal social control rather than as indicative of a trait-based predisposition. Accordingly, we hypothesize that legal cynicism will attenuate the positive association between adolescents' violence and parental assessments of the extent to which adolescents are aggressive or impulsive. That is, results support the situated behavioural response hypothesis if, compared to those residing in less cynical neighbourhoods, parents in highly cynical neighbourhoods appraise their children's violent behaviour as less indicative of an aggressive or impulsive temperament.

Data and Methods

We used data from the first wave (1994–97) of the PHDCN Longitudinal Cohort Study (LCS) to construct our dependent and individual-level independent variables. Data for variables measured at the neighbourhood cluster (NC) level—that is, aggregations

of one to three census tracts—were drawn from the 1995 PHDCN Community Survey (CS), the Homicides in Chicago 1965–95 data set (Block *et al.* 2005) and the 1990 Decennial Census.

Longitudinal Cohort Study

The PHDCN-LCS is a longitudinal study that examines human development throughout early childhood and emerging adulthood among young people in Chicago. For the LCS, Chicago's 865 census tracts were combined into 343 NCs that maintained relative population homogeneity regarding racial and ethnic composition, and housing and family structural characteristics. PHDCN investigators also defined NCs on the basis of ecological boundaries, such as parks, railways and freeways. Each NC consisted of roughly 8,000 people. From there, a two-stage sampling procedure was used to construct a probability sample consisting of 80 of the 343 NCs stratified by socio-economic status (high, medium and low), and racial and ethnic make-up (seven categories). The primary objective of sample stratification was to obtain equal representation of NCs across the 21 strata. Census blocks were randomly selected from each of the 80 representative NCs. Within each block, children and emerging adults from seven age cohorts (infants, and ages 3, 6, 9, 12, 15 and 18) were sampled from randomly selected households. In-home interviews were conducted with youth respondents and their primary caregivers. We focused on respondents from cohorts 9 through 15 because both parental assessments of trait-based predispositions and respondent reports of violence were collected from only these cohorts during the first wave of the PHDCN. Our final sample consisted of 2,293 adolescent respondents with their primary caregivers nested in 80 NCs.

Community Survey

The PHDCN-CS consists of a probability sample of more than 8,700 adult residents of Chicago focusing on their assessments of neighbourhood environments. The survey used a three-stage sampling procedure in which city blocks within Chicago's 343 NCs were randomly selected. Dwelling units within these blocks were then randomly selected. Finally, one adult aged 18 years or older per household was randomly selected to complete the survey questionnaire. Although 343 NCs were identified, CS respondents resided in only 342 of them. Approximately 25 respondents were selected from each of the NCs to allow reliable estimation of neighbourhood-level characteristics from individual survey responses. PHDCN researchers collected oversamples among the 80 NCs that included PHDCN-LCS respondents, resulting in an average of roughly 50 CS respondents in each of those NCs.

Dependent Variables

We modelled the interactive effects of legal cynicism and adolescent violence on two dependent variables that came from validated and widely used behavioural scales, namely the Child Behavior Checklist/4-18 (CBCL) (Achenbach 1991), and the Emotionality, Activity, Sociability, and Impulsivity Temperament Survey (EASI) (Buss and Plomin 1984).

The first dependent variable, *parental assessments of aggression*, was measured with a CBCL subscale that was designed to identify syndromes of co-occurring behavioural problems related to violence and aggression (Achenbach 1991). During the Wave 1 interview, caregivers were asked to indicate whether a set 20 of problem behaviours 'describes [CHILD] *now or within the past 6 months*'. Initial responses were scored on a three-point scale ranging from 0 ('not true') to 2 ('often true'). The aggressive behaviour scale included behaviours such as getting in many fights, physically attacking people, being cruel, being mean or bullying others and threatening people.¹ As suggested by Achenbach (1991), we measured parental assessments of aggression by first summing responses to the 20 items ($\alpha = 0.880$). Because this variable's distribution was highly skewed, we then added 1 to each individual's externalizing score and log-transformed the resulting measure. Higher values on this scale suggested parents assess their children as more temperamentally aggressive.

The second dependent variable, *parental assessments of impulsivity*, was measured using 20 items from the EASI (Buss and Plomin 1984). For this portion of the interview, parents were asked whether a number of statements were characteristic of the focal child. Similar to Gibson et al. (2010), our measure of parental assessments of impulsivity combined four subscales from the EASI. The first subscale, inhibitory control, included five items capturing the perceived inability of the child to delay gratification and control his or her frustrations (e.g. '[CHILD] has trouble controlling his/her impulses'). Decision time, the second subscale, included five items gauging the parent's perception of child's inability to delay decision making before considering alternatives (e.g. '[CHILD] often acts at the spur of the moment'). The third subscale, sensation seeking, comprised five items tapping preference for new stimuli and acting in the spur of the moment (e.g. '[CHILD] sometimes does "crazy" things just to be different'). The final subscale, persistence, included five items in which parents assessed their child's diligence and ability to complete a task (e.g. '[CHILD] generally likes to see things through to the end'). Responses to all scale items ranged from 1 ('uncharacteristic or not at all like [CHILD]') to 5 ('characteristic or very much like [CHILD]'). To measure parental assessments of impulsivity, we first reverse-coded scale items that measured low impulsivity (e.g. '[CHILD] generally likes seeing things through the end'). We then calculated the mean of the items ($\alpha = 0.768$). Higher values on the resulting scale indicated higher levels of perceived impulsivity. Descriptive statistics for both dependent variables and for the individual- and neighbourhood-level variables are listed in Table 1.

Individual-level independent variables

Adolescent violence

Adolescent respondents indicated whether they engaged in various violent acts within the 12 months prior to the first-wave interview. We used responses from these items to construct our key individual-level independent variable—*adolescent violence*. Adolescent respondents were asked whether they engaged in the following violent behaviours: (1) 'Hit someone with whom you did not live with the intention of hurting them' (22.3 per cent); (2) 'Carried a hidden weapon' (7.2 per cent); (3) 'Attacked someone with a

¹ As an empirical check, we reran analyses using the full externalizing behaviour scale, which also included parental assessments of their children's non-violent delinquent behaviour (e.g. swears, vandalism, lies, and cheats). Results from those models were nearly identical to those obtained from the aggressive behaviour subscale presented in this study.

	Mean	Standard deviation
Individual (N = 2.293)		
Parental assessments		
Aggression	2.69	1.28
Impulsivity	2.68	0.60
Age	11.98	2.43
Male	0.50	
Race/ethnicity (white/other omitted)		
Black	0.36	
Latino	0.46	
Other	0.04	
Family structure	0.49	
Socio-economic status	-0.12	1.40
Parental warmth	0.71	0.24
Place monitoring	0.80	0.40
Peer monitoring	0.80	0.40
Support from friends	2.47	0.45
Support from family	2.70	0.38
Residential tenure	6.36	6.97
Exposure to violence	0.39	0.49
Peer violence	1.5	0.37
Family history of arrest	0.30	
Adolescent violence	0.50	0.97
Neighbourhood $(N=80)$		
Collective efficacy	3.48	0.23
Homicide rate	-5.61	1.03
Concentrated disadvantage	13	0.81
Immigrant concentration	0.31	1.09
Residential stability	-0.22	1.08
Legal cynicism	2.43	0.26
Tolerance of fighting	1.79	0.32
Victimization	0.12	0.06
Police responsiveness	0.16	0.12
Perceived frequency of violence	-2.69	0.86

 TABLE 1
 Descriptive statistics on individual and neighbourhood variables

weapon' (2.8 per cent); (4) 'Purposely set fire to a house, building, car or vacant lot' (0.9 per cent); (5) 'Snatched someone's purse or wallet or picked someone's pocket' (0.6 per cent); (6) 'Thrown objects, such as rocks or bottles, at people' (12.2 per cent); (7) 'Used a weapon or force to get money or things from people' (0.2 per cent) and (8) 'Been involved in a gang fight in which someone was hurt or threatened with harm' (4.8 per cent). Our measure of adolescent violence represents the number of these violent acts that the respondent engaged in during the past 12 months.²

Parent-child relationship and family environment

We included measures of the parent-child relationship that likely impact parents' awareness of their children's behaviour. *Parental warmth* captured affective parenting styles as measured by the Home Observation for Measurement of the Environment (HOME) Inventory (Caldwell and Bradley 1984). The scale included nine interviewer-assessed

² We ran additional analyses (results not displayed but available upon request) that relied on the IRT-scaled violence measure proposed by Raudenbush *et al.* (2003). Results based on the IRT-scaled violence measure are nearly identical to those presented in this study. Additionally, the two violence measures are correlated at 0.97.

items indicating whether the primary caregiver performed acts such as mentioning a particular skill of the focal respondent or praised the adolescent during the Wave 1 interview. Past research using PHDCN data found high reliability and validity for the parental warmth scale (Leventhal *et al.* 2004). Our measure of parental warmth represented the mean of the items ($\alpha = 0.759$).

We also included two measures capturing parental monitoring of children's activities and peer groups. *Place monitoring* was a binary variable indicating whether the adolescent is allowed to wander unsupervised for more than two hours (Browning *et al.* 2005). *Peer monitoring* indicated whether the primary caregiver had contact with at least two of the adolescent's friends in the past two weeks (Coleman 1990; Browning *et al.* 2005).

Because parental social capital likely increases parents' access to information about their children's delinquency, we included two measures from the Provision of Social Relations module (Turner *et al.* 1983) that capture dimensions of parents' social relationships. *Support from friends* represented a six-item scale that included responses to questions such as 'I share the same approach to life as my friends do' and 'My friends would take the time to talk about my problems, should I ever want to' ($\alpha = 0.751$). *Support from family* represented a six-item scale that included responses to questions such as 'I know my family will always stand by me' and 'People in my family help me find solutions to my problems' ($\alpha = 0.762$). Responses to scale items for both support measures ranged from 1 ('very true') to 3 ('not true'). To construct each scale, we recoded initial responses so that higher values indicated higher levels of support and then took the mean of the items. We also included a measure of *residential tenure* because it is positively associated with individuals' neighbourhood-based social capital (Swaroop and Morenoff 2006). This measure was the number of years that the primary caregiver has lived at the current address.

Adolescent experiences with violence

We controlled for parents' assessments of their children's *exposure to violence* with a dummy variable indicating whether the primary caregiver thought the adolescent was exposed to at least one of four violent events, such as witnessing a shooting or a physical assault, in the year leading up to the interview. We included a measure of *peer violence*, which was based on four items that indicated the proportion of the adolescent's friends who have engaged in violent acts, such as attacking someone with a weapon (as reported by the adolescent respondent). Responses ranged from 1 ('none of them') to 3 ('all of them') (Zimmerman and Messner 2010). Our measure of peer delinquency consisted of the mean of the items ($\alpha = 0.675$). We also included a dummy variable indicating whether anyone in the adolescents' *family has a criminal record* or has been arrested.

Demographic characteristics

We also included a measure of *age* (in years) and a dummy indicating *male* sex. Race and ethnicity were captured with a series of indicators for *black*, *Latino* and *other* (*white* was the omitted reference category). *Family structure* was assessed with an indicator of whether both biological parents were present. *Socio-economic status* was captured by the first component from a principal component analysis of the maximum value for occupational status, education and income among the parents in each adolescent's household.

Neighbourhood-level independent variables

Legal cynicism

Our key neighbourhood-level independent variable, *legal cynicism*, was assessed using responses from all adult participants in the PHDCN-CS. This measure captures the extent to which residents lack confidence in the law and law enforcement. Following Kirk and Papachristos (2011), our measure of legal cynicism included responses to the following three items: (1) 'Laws were made to be broken', (2) 'The police are not doing a good job in preventing crime in this neighbourhood' and (3) 'The police are not able to maintain order on the streets and sidewalks in the neighbourhood'. Initial responses ranged from 1 ('strongly agree') to 5 ('strongly disagree'). To measure legal cynicism, we first estimated a three-level, linear item response theory (IRT) model with reversecoded items nested within respondents nested within each of the 342 NCs. The IRT model considered legal cynicism as an underlying construct whose neighbourhoodlevel latent value is based on scale items as well as individual and neighbourhood predispositions.³ From the IRT model, we derived the neighbourhood-level empirical Bayes (EB)-adjusted intercepts (multilevel reliability = 0.785). These EB-adjusted intercepts comprised our final measure—the mean value of legal cynicism within each neighbourhood adjusted for scale item severity as well as individual- and neighbourhoodlevel random variation (Sampson et al. 1997; Raudenbush and Bryk 2002).

Collective efficacy

We also controlled for collective efficacy in our models because neighbourhood cohesion and intergenerational closure may influence parents' knowledge of their children's delinquency. We measured collective efficacy by combining information from two subscales—social cohesion/trust and intergenerational closure—that were administered as part of the PHDCN-CS. This collective efficacy scale was intended to capture adult–child social ties and expectations for support and informal social control of local youth by neighbourhood adults (Browning *et al.* 2005). Following Sampson *et al.* (1999), we combined the 10 items comprising these subscales into a single measure of collective efficacy using the same IRT modelling strategy previously described (multilevel reliability = 0.780).⁴

Neighbourhood violent crime

To reduce the possibility that the effect of legal cynicism on the slope of violence is attributable to high levels of neighbourhood violence, we controlled for the NC-level *homicide rate.*⁵ We obtained incident-level homicide data from the victim-level file of

³We employed this IRT approach to measure key neighbourhood-level variables because the random effects in the IRT model adjust for unique individual- and neighbourhood-level propensities for legal cynicism. The IRT model also adjusts legal cynicism values according to the inverse of their reliability, i.e. less reliable neighbourhood values are pulled towards the grand mean. Neighbourhood values of legal cynicism are less reliable if they are based on either fewer valid responses to scale items within the individual or on fewer individuals within the neighbourhood (Sampson *et al.* 1997; Raudenbush and Bryk 2002).

⁴Our measure of collective efficacy is more theoretically relevant to our analysis—e.g. it captures parents' potential to become aware of their children's delinquency—than is the more common collective efficacy measure, which combines the cohesion/ trust and informal social control subscales (Sampson *et al.* 1997). Nonetheless, results from analyses using the more common measure are nearly identical to those presented in this article.

⁵ We use the homicide rate because this crime is measured with greater reliability than other violent crimes (e.g. robbery and assault).

the Homicides in Chicago, 1965–95 data set (Block *et al.* 2005). We aggregated counts of homicides occurring between 1992 and 1994 to the NC level. Because a neighbourhood's population size likely impacts its homicide rate, we estimated an unconditional two-level Poisson model with variable exposure based on the 1990 census-based population of the NC. From this model, we obtained the EB-adjusted homicide rate for each NC. The EB-adjusted homicide rate is the adjusted log of the event rate ratio per 1,000 population for each NC's three-year homicide count (Kirk and Papachristos 2011). The major benefit of this approach is that the procedure reduces the skew of the homicide count distribution while taking into account variation in population exposure (Raudenbush and Bryk 2002).

Because neighbours' direct experiences with violence also may alter parental appraisals of violence, we included two measures that capture neighbourhood residents' experience with neighbourhood violence. Neighbourhood victimization was captured by the following question asked of PHDCN-CS respondents: 'While you have lived in this neighbourhood, has anyone ever used violence, such as in a mugging, fight, or sexual assault, against you or any member of your household anywhere in your neighbourhood?' Our neighbourhood victimization measure represented the proportion of NC residents who answered affirmatively to the question. A second measure captured neighbourhood residents' perceived frequency of violence. This measure was based on four indicators of whether the following events occurred 'often' in the past six months (0 = no, 1 = yes): (1) 'a fight in this neighbourhood in which a weapon was used', (2) 'a violent argument between neighbours', (3) 'gang fights' and (4) 'a robbery or mugging'. We combined the four items into a single measure, which equalled the neighbourhood-level EB-adjusted intercepts from a three-level Rasch model (multilevel reliability = 0.698)—that is, an extension of the IRT model that is suitable for analysing dichotomous outcomes (Raudenbush et al. 2003).

Subcultural norms or attitudes condoning violence among neighbourhood residents also may attenuate the positive association between violence and parental assessments of aggression and impulsivity. *Tolerance of fighting* was captured by the following question asked of PHDCN-CS respondents: 'How wrong is it for teenagers around thirteen years of age to get into fist fights?' Initial responses ranged from 1 ('extremely wrong') to 5 ('not at all wrong'). Our measure of tolerance of fighting represented the mean response within each neighbourhood.

Finally, legal cynicism may be confounded with residents' perceptions of police responsiveness. We, therefore, included a neighbourhood-level measure of perceptions of *police responsiveness*, which was captured by the following question asked of PHDCN-CS respondents: 'How much of a problem is police not patrolling the area or responding to calls from the area?' Our police responsiveness measure was the proportion of respondents within each neighbourhood who answered 'Somewhat of a problem' or 'A big problem' (versus 'Not a problem').

Neighbourhood structural characteristics

We constructed measures of neighbourhood structural characteristics using data from the 1990 Census. Following past research and theory on the determinants of neighbourhood crime (Land *et al.* 1990), we constructed our measures using principle components analysis with oblique rotated factor patterns of nine measures at the NC level.

The first principle component from the analysis, *concentrated disadvantage*, was dominated by the percentage of residents on public assistance, percentage of residents with incomes below the poverty line, percentage female-headed households, percentage unemployed and percentage of residents who are younger than 18. The second component, *immigrant concentration*, was defined by the percentage of foreign-born residents and percentage of residents who are Latino. Finally, *residential stability* consisted primarily of the percentage of owner-occupied homes and the percentage of persons living in the same house for five or more years.

Analytic strategy

Missing values on individual-level independent variables were multiply imputed using Stata's Imputation through Chained Equations (ICE) command. We use this imputation procedure because unlike traditional methods that substitute missing values with central tendency measures (e.g. mean and mode), ICE accounts for random variation in responses (Royston 2004). Following von Hippel (2007), we created ten imputed data sets from a data set that included respondents with missing data on the dependent variable. These data sets comprised the aforementioned independent and dependent variables so that the imputations take into account the multivariate structure of analysis models as well as the associations between predictors and outcomes. In other words, this approach ensures that the imputation and analysis models are 'compatible'. We then dropped respondents with missing data on the dependent variable in our final analysis models.

All analysis models are two-level, hierarchical linear models (HLM) estimated with the imputed data sets using HLM7's multiple imputation estimation procedure. We use HLM because the PHDCN data are hierarchically structured. Because respondents are nested within neighbourhoods, they are likely to be correlated on the dependent variable; in the absence of adjustment for residual correlation among observations within neighbourhoods, standard errors may be biased downward. We account for clustering of individuals within neighbourhoods using a random effects approach (Raudenbush and Bryk 2002).

Table 2 displays results from multilevel regressions of parental assessments of aggression on adolescent violence, and Table 3 displays results from comparable regressions of parental appraisals of impulsivity. For each outcome, Model 1 included adolescent violence and the following individual-level control variables: age, sex, race, family structure, socio-economic status, residential tenure, parental warmth, place monitoring, peer monitoring, family history of arrest, support from friends, support from family, exposure to violence and peer violence. At the neighbourhood level, we also controlled for collective efficacy, the homicide rate, concentrated disadvantage, immigrant concentration and residential stability. In Model 2, we allowed the slope of adolescent violence to randomly vary to measure the extent of variation in the effect of this variable across neighbourhoods. In Model 3, we introduced legal cynicism at the neighbourhood level. Finally, in Model 4, we tested our primary hypothesis—that legal cynicism attenuates the positive association between adolescent violence and parental assessments of related trait-based predispositions-by introducing a cross-level interaction between legal cynicism and adolescent violence. In all analyses, statistical significance was assessed with two-tailed tests and robust standard errors.

	N = 2,293; n	$eighbourhood N = 80)^a$		
Variables	Model 1	Model 2	Model 3	Model 4
Individual				
Age	-0.059^{***} (0.011)	-0.059^{***} (0.011)	-0.059^{***} (0.011)	-0.059^{***} (0.011)
Male	0.037 (0.042)	0.039~(0.042)	0.039 (0.042)	0.038 (0.042)
Race/ethnicity				
Black	-0.042 (0.100)	-0.038(0.101)	-0.033 (0.101)	-0.028(0.102)
Latino	0.040(0.080)	0.041 (0.080)	0.043 (0.081)	0.044(0.081)
Other	-0.226(0.145)	-0.234(0.143)	-0.231(0.142)	-0.221(0.141)
Family structure	-0.204^{**} (0.067)	-0.202^{**} (0.067)	-0.202^{**} (0.067)	-0.203^{**} (0.067)
Socio-economic status	-0.032(0.020)	-0.032(0.020)	-0.032(0.020)	-0.032(0.020)
Parental warmth	-0.394^{**} (0.120)	-0.398^{**} (0.118)	-0.398^{**} (0.118)	-0.392^{**} (0.119)
Place monitoring	-0.146^{*} (0.057)	-0.146^{*} (0.058)	-0.145*(0.058)	-0.140*(0.058)
Peer monitoring	-0.140^{*} (0.069)	-0.135^+ (0.069)	-0.135^+ (0.069)	-0.136*(0.069)
Support from friends	-0.079 (0.054)	-0.077 (0.054)	-0.076(0.054)	-0.078 (0.054)
Support from family	-0.486^{***} (0.073)	-0.488^{***} (0.072)	-0.488^{***} (0.072)	-0.488^{***} (0.073)
Residential tenure	-0.005(0.004)	-0.005(0.004)	-0.005(0.004)	-0.005(0.004)
Exposure to violence	0.381^{***} (0.052)	$0.386^{***} (0.052)$	0.386^{***} (0.052)	0.388^{***} (0.052)
Peer violence	0.340^{***} (0.078)	0.327 * (0.078)	0.328^{***} (0.078)	0.324^{***} (0.078)
Family history of arrest	0.328^{***} (0.064)	$0.330^{***} (0.064)$	$0.330^{***} (0.064)$	0.329^{***} (0.064)
Adolescent violence	$0.099^{**}(0.038)$	0.107^{**} (0.037)	0.107^{**} (0.037)	$0.120^{***} (0.033)$
Neighbourhood				
Intercept	3.628^{***} (0.486)	3.622^{***} (0.485)	3.752^{***} (0.559)	3.760^{***} (0.564)
Collective efficacy	-0.266^{+} (0.139)	-0.264^{+} (0.138)	-0.302^{+} (0.159)	$-0.304^{+} (0.161)$
Homicide rate	-0.041 (0.029)	-0.041 (0.029)	-0.039 (0.031)	-0.040(0.031)
Concentrated disadvantage	0.007 (0.048)	$0.007\ (0.048)$	0.019 (0.067)	0.020(0.066)
Immigrant concentration	-0.042 (0.030)	-0.042(0.030)	-0.038 (0.033)	-0.038 (0.033)
Residential stability	0.020(0.033)	0.020(0.033)	$0.024 \ (0.035)$	$0.024 \ (0.035)$
Legal cynicism			-0.073 (0.228)	-0.075(0.228)
Legal cynicism × adolescent violence				-0.270*(0.103)
$ au_{00}$	0.010	0.011	0.011	0.011
$ au_{01}$		0.013*	0.013*	0.006^{+}

"Coefficients and robust standard errors in parentheses. Missing values on individual-level variables multiply imputed with ten replications.

 $p_{1}^{+} p < 0.10, \ * p < 0.05, \ ** p < 0.01, \ *** p < 0.001$ (two-tailed significance tests).

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LEGAL CYNICISM AND PARENTAL APPRAISALS

	N = 2,293; n	$eighbourhood N = 80)^a$		
Variables	Model 1	Model 2	Model 3	Model 4
Individual				
Age	-0.027 * * (0.004)	-0.027 *** (0.004)	-0.027 * * (0.004)	-0.027^{***} (0.004)
Male	0.101^{***} (0.026)	0.104^{***} (0.026)	0.104^{***} (0.026)	0.102^{***} (0.026)
Race/ethnicity			~	
Black	-0.099*(0.043)	-0.099*(0.043)	-0.103*(0.044)	-0.099*(0.044)
Latino	-0.170 * * (0.038)	-0.171^{***} (0.038)	-0.173^{***} (0.038)	-0.172^{***} (0.039)
Other	-0.119^+ (0.068)	-0.119^{+} (0.067)	-0.121^{+} (0.067)	-0.118^+ (0.067)
Family structure	-0.138^{***} (0.027)	-0.139^{***} (0.027)	-0.139^{***} (0.027)	-0.139^{***} (0.027)
Socio-economic status	0.034^{**} (0.011)	$0.033^{**}(0.011)$	$0.033^{**}(0.011)$	0.033^{**} (0.011)
Parental warmth	-0.167^{**} (0.050)	-0.170^{**} (0.050)	$-0.169^{**}(0.050)$	-0.165^{**} (0.050)
Place monitoring	-0.106^{***} (0.026)	-0.105^{***} (0.026)	-0.105^{***} (0.026)	-0.102^{***} (0.026)
Peer monitoring	-0.024 (0.036)	-0.023 (0.035)	-0.023 (0.035)	-0.023(0.035)
Support from friends	-0.020(0.028)	-0.022 (0.028)	-0.022(0.028)	-0.022(0.028)
Support from family	-0.262^{***} (0.033)	-0.261^{***} (0.032)	-0.261^{***} (0.032)	-0.262^{***} (0.032)
Residential tenure	0.002 (0.002)	0.002 (0.002)	0.002 (0.002)	0.002 (0.002)
Exposure to violence	0.117^{***} (0.027)	0.120^{***} (0.027)	0.119^{***} (0.027)	0.120^{***} (0.027)
Peer violence	$0.169^{***} (0.037)$	$0.158^{***} (0.036)$	0.157^{***} (0.036)	$0.156^{***} (0.036)$
Family history of arrest	0.106^{***} (0.026)	0.109^{***} (0.026)	0.109^{***} (0.026)	$0.108^{***} (0.026)$
Adolescent violence	$0.032^+ (0.018)$	0.039*(0.018)	0.039*(0.018)	0.047^{**} (0.016)
Neighbourhood				
Intercept	2.540^{***} (0.278)	$2.540^{***}(0.277)$	2.460^{***} (0.346)	2.462^{***} (0.347)
Collective efficacy	0.041 (0.079)	0.041 (0.079)	$0.064 \ (0.099)$	$0.064\ (0.099)$
Homicide rate	-0.022(0.016)	-0.022(0.016)	-0.023(0.017)	-0.023(0.017)
Concentrated disadvantage	0.004 (0.022)	0.005(0.022)	-0.003 (0.022)	-0.003 (0.022)
Immigrant concentration	0.002 (0.016)	0.001 (0.016)	-0.001 (0.016)	0.000 (0.016)
Residential stability	-0.013 (0.013)	-0.013(0.013)	-0.015(0.014)	-0.015(0.014)
Legal cynicism			0.046(0.096)	0.040(0.096)
Legal cynicism × adolescent violence				-0.182^{***} (0.046)
$ au_{00}$	0.001	0.002	0.002	0.002
$ au_{01}$		0.005**	0.005 **	0.002

Multilevel linear models of parental assessments of impulsivity regressed on adolescent violence and neighbourhood legal cynicism (individual TABLE 3

^aCoefficients and robust standard errors in parentheses. Missing values on individual-level variables multiply imputed with ten replications. $p_{1}^{+} p < 0.10, \ * p < 0.05, \ * * p < 0.01, \ * * * p < 0.001$ (two-tailed significance tests).

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In analyses, all individual- and neighbourhood-level covariates were grand-mean centred save for adolescent violence, which was group-mean centred. We group-mean centred adolescent violence to isolate within- from between-neighbourhood variation (Raudenbush and Bryk 2002). This allowed us to control for the possibility that the differential effect of adolescent violence across neighbourhoods is attributable neighbourhood compositional differences—e.g. little within-neighbourhood variation in adolescent violence but higher average levels of violence among adolescents residing in legally cynical neighbourhoods-rather than contextual differences in legal cynicism. In Models 1–3, the coefficient on adolescent violence, therefore, refers to the expected difference in parental assessments of aggression or impulsivity for adolescents residing in the same neighbourhood who differ by one unit on self-reported violence. The Level 2 intercept refers to the neighbourhood mean parental assessment value unadjusted for adolescent violence but adjusted for other individual-level variables included in the model. In Model 4, the coefficient on the *adolescent violence* \times *legal cynicism* interaction term refers to the effect of legal cynicism on the slope of adolescent violence within a given neighbourhood.

Results

Parental assessments of aggression

Results from Model 1 in Table 2 indicate that, as expected, adolescents' self-reported violence is positively associated with parental assessments of aggression. We also find that the age of the adolescent, family structure, parental warmth, place monitoring, peer monitoring and parents' support from family each is negatively associated with parents' assessments of their children's aggression. In contrast, exposure to violence, peer violence and family history of arrest each is positively associated with parental assessments of aggression. Coefficients on other variables in this model fail to reach statistical significance at the p < 0.05 level.

In a model otherwise identical to Model 1, Model 2 includes a random effect on the slope of adolescent violence. The random effect is significant suggesting that there is unexplained variation in the effect of adolescent violence on parental assessments of aggression across neighbourhood contexts ($\tau_{01} = 0.013$, p < 0.05). With the inclusion of this random effect, the coefficient on peer monitoring reaches only marginal statistical significance, but all the other findings from Model 1 persist.

Building on Model 2, in Model 3, we added the neighbourhood legal cynicism measure at level two. Although this measure is not statistically associated with parental assessments of aggression, the other findings from Model 2 persist. Finally, in Model 4, we tested the cross-level interaction between adolescent violence and legal cynicism. We find that the coefficient on this interaction term is negative and significant, suggesting that neighbourhood legal cynicism attenuates the positive association between adolescent violence and parental assessments of aggression. Additionally, we find that the random effect on the slope of adolescent violence no longer reaches statistical significance—that is, with the inclusion of the *adolescent violence* × *legal cynicism* interaction term, we no longer find unexplained variation in the effect of adolescent violence on parental assessments of aggression across neighbourhoods. This suggests that legal cynicism accounts for the random variation in the association between adolescent violence and the outcome across neighbourhoods. In this more inclusive model, the coefficient on peer monitoring again reaches statistical significance at the p < 0.05 level, and the other findings from Model 3 persist.

Figure 1 illustrates the interactive effect of legal cynicism and adolescent violence on parental assessments of aggression. Predicted values along the y-axis are based on results from Model 4 of Table 2 when all other variables are held at their grand means. Values along the x-axis refer to an adolescent's relative distance from the within-neighbourhood mean of self-reported violence. The black, grey and dashed lines represent the association between adolescent violence and assessments of aggression in neighbourhoods with low (1.5 standard deviations below the mean), medium (the mean) and high (1.5 standard deviations above the mean) levels of legal cynicism, respectively. The black line suggests that when neighbourhood legal cynicism is low, adolescents are assessed by their parents as more aggressive if they are more violent relative to other neighbourhood youth. In contrast, the dashed line suggests that in neighbourhoods characterized by high levels of legal cynicism, there is little difference in parental assessments of aggression across levels of adolescent violence. For example, when legal cynicism is low, the predicted parental assessment of aggression score for an adolescent who engages in one fewer act of violence relative to the neighbourhood mean (3.56) is approximately 11 per cent lower than that of an adolescent who engages



FIG. 1 Predicted parental assessments of aggression by adolescent violence and neighbourhood legal cynicism (predictions based on results from Model 4 of Table 2 when all other values are held at their grand means).

in one additional act of violence relative to the neighbourhood mean (4.01). But when neighbourhood legal cynicism is high, the predicted aggression score of the less violent adolescent (3.72) is less than 1 per cent lower than that of the more violent adolescent (3.75). Thus, in highly legally cynical neighbourhoods, there is a negligible influence of adolescents' violent behaviour on parental assessments of their aggression. This finding supports our assertion that legal cynicism encourages parents to conceptualize violence as situated behavioural responses to threatening contexts, rather than as indicative of an aggressive temperament.

Parental assessments of impulsivity

To further investigate whether parents' interpretations of children's behaviour are influenced by neighbourhood legal cynicism, we now turn to models of parental assessments of impulsivity. In Model 1 of Table 3, we find that adolescents' self-reported violence is positively associated with assessments of impulsivity, but this measure only reaches marginal statistical significance in this model (p < 0.10). We also find that younger adolescents are assessed by their parents as less impulsive, and boys are assessed as more impulsive than girls. Our results also show that compared to adolescents who are white, adolescents who are black or Latino are assessed by their parents as less impulsive. Family structure, parental warmth, place monitoring and parents' social support from family each is negatively associated with parental assessments of impulsivity. In contrast, socio-economic status, exposure to violence, peer violence and family history of arrest each is positively associated with assessments of impulsivity. None of the coefficients on the other variables reaches statistical significance at the p < 0.05 level.

We added a random effect on the slope of adolescent violence in Model 2. Consistent with the results on assessments of aggression, the random effect is significant, suggesting that there is unexplained variation in the effect of adolescent violence on parental assessments of impulsivity across neighbourhoods ($\tau_{01} = 0.005$, p < 0.01). With the inclusion of this random effect, the positive coefficient on adolescent violence now reaches statistical significance (p < 0.05) and the other findings from Model 1 persist.

We introduced legal cynicism to the neighbourhood-level equation in Model 3. The coefficient on legal cynicism fails to reach statistical significance, but the other findings from Model 2 persist. Finally, in Model 4, we added the cross-level interaction between adolescent violence and neighbourhood legal cynicism. We find that the coefficient on the interaction term is negative and significant. Thus, consistent with our hypothesis, legal cynicism attenuates the positive association between adolescent violence and parental assessments of impulsivity.

With the inclusion of this interaction term, we also no longer find unexplained variation in the slope of adolescent violence across neighbourhoods. Consistent with the results for assessments of aggression, this finding suggests that legal cynicism accounts for the random variation in the association between adolescent violence and parental assessments of impulsivity across neighbourhoods.

Analogous to Figure 1, Figure 2 illustrates the interactive effect of adolescent violence and legal cynicism on parental assessments of impulsivity (predictions based on results from Model 4 of Table 3 when all other variables are held at their grand

means). The black line in Figure 2 suggests that where neighbourhood legal cynicism is low, adolescents are assessed as more impulsive if they exhibit higher levels of violence compared to other neighbourhood youth. In contrast, the dashed line suggests that where neighbourhood legal cynicism is high, there is little difference in parental assessments of impulsivity for relatively non-violent and violent youth. For example, when legal cynicism is low, the predicted parental assessment of impulsivity score for an adolescent who engages in one fewer act of violence relative to the neighbourhood mean (2.33) is approximately 9 per cent lower than that of an adolescent who engages in one additional act of violence relative to the neighbourhood mean (2.56). But when neighbourhood legal cynicism is high, the predicted aggression score of the less violent adolescent (2.45) is only 2 per cent lower than that of the more violent adolescent (2.5).

In summary, we hypothesized that where legal recourse is believed to be an ineffective or an otherwise unreasonable strategy of action, parents appraise violent behaviour as reasonable responses to conflict or threatening situations in contexts bereft of formal social control rather than as indicative of trait-based predispositions. Consistent with this situated behavioural response hypothesis, we find that the positive association between adolescent violence and parental assessments of aggression and of impulsivity observed at low levels of neighbourhood legal cynicism becomes negligible at higher levels of legal cynicism.



FIG. 2 Predicted parental assessments of impulsivity by adolescent violence and neighbourhood legal cynicism (predictions based on results from Model 4 of Table 3 when all other values are held at their grand means).

Sensitivity analyses

We hypothesized that neighbourhood legal cynicism modifies how parents appraise their children's violent behaviour. We found strong support for this hypothesis across two outcomes—assessments of aggression and of impulsivity. Nonetheless, we explored whether other processes account for our results. Models 4 of Tables 2 and 3 are the bases for the following sensitivity analyses of aggression and impulsivity, respectively.

Berg *et al.* (2012) and Harding (2007) suggested that disadvantaged neighbourhoods were characterized by heterogeneity in cultural frames. Cultural heterogeneity in turn was thought to shape violence in part because it provided a wider variety of strategies of action (including violence) for residents to draw upon. Following the approach of Berg *et al.* (2012) to measuring neighbourhood cultural heterogeneity with multi-item scales, we constructed a measure of neighbourhood heterogeneity in legal cynicism and tested whether it modified the association between adolescent violence and appraisals of aggression and impulsivity (results not shown). We fail to find that cultural heterogeneity influences the slope of adolescent violence for either outcome.

We also performed a sensitivity analysis on each outcome to test whether the effects of legal cynicism on the adolescent violence slopes are attributable to other mechanisms. For each model, we introduced all remaining neighbourhood covariates—neighbourhood victimization, frequency of violence, tolerance of fighting and police responsiveness to the neighbourhood-level intercept and adolescent violence slope equations (i.e. we added cross-level interactions between each neighbourhood variable and adolescent violence). We also interacted adolescent violence with the following individual-level variables: residential tenure, parental warmth, place monitoring, peer monitoring, family history of arrest, support from friends and family, exposure to violence and peer violence. Table 4 displays the results from the sensitivity analysis of parental assessments of aggression (Model 1) and of impulsivity (Model 2).

The results from Model 1 indicate that the interactive effect of legal cynicism and adolescent violence on parental assessments of aggression remains significant and increases in magnitude after including the aforementioned individual- and cross-level interactions with adolescent violence. Similarly, the results from Model 2 show that interactive effect of legal cynicism and adolescent violence on parental assessments of impulsivity remains significant and also increases in magnitude. Together, these results attest to the robustness of the interactive effects of adolescent violence and legal cynicism on parental assessments of aggressive and impulsive temperaments.

Discussion

Recently, research has focused on the criminological consequences of legal cynicism the belief that legal recourse is illegitimate, unavailable or otherwise ineffective. Our study contributes to this emerging endeavour by examining the influence of neighbourhood legal cynicism on parental appraisals of adolescent violent behaviour. We integrated insights from symbolic interaction theory and a cultural frames approach to investigate the microprocesses through which cultural frames shape interpretations of violent behaviour. We argued that frames not only inform strategies for resolving disputes but also influence interpretations of behaviour through the role-taking process. Specifically, we proposed that legal cynicism influences behaviour appraisals by leading individuals

Variables	Model 1	Model 2
Individual Paramtal warmath	0 404** (0 119)	0 174*** (0 050)
Parental warmun	-0.404^{+++} (0.118)	$-0.174^{+++}(0.030)$
Place monitoring	$-0.128^{+}(0.000)$	$-0.084^{++}(0.020)$
Feel monitoring	-0.128 (0.008)	-0.022(0.034)
Support from friends	-0.077(0.055) 0.480*** (0.074)	-0.024(0.028)
Support from family	$-0.480^{+++}(0.074)$	$-0.200^{+++}(0.032)$
Exposure to violence	0.382^{***} (0.052)	0.112^{***} (0.027)
Peer violence	0.318^{***} (0.079)	0.150^{***} (0.036)
Family history of arrest	0.326^{***} (0.063)	$0.107^{***}(0.026)$
Adolescent violence	0.119 (0.874)	0.210(0.401)
Adolescent violence × parental warmth	-0.009 (0.098)	0.000(0.041)
Adolescent violence × place monitoring	-0.060 (0.052)	-0.093^{***} (0.025)
Adolescent violence × peer monitoring	0.027 (0.067)	-0.005 (0.031)
Adolescent violence × support from friends	0.003 (0.050)	0.033 (0.026)
Adolescent violence × support from family	-0.069 (0.056)	$-0.041^{+}(0.025)$
Adolescent violence \times exposure to violence	-0.003 (0.057)	$0.045^{+}(0.026)$
Adolescent violence × peer violence	-0.028 (0.069)	-0.009(0.034)
Adolescent violence × family history of arrest	0.014(0.064)	0.016 (0.027)
Neighbourhood		
Intercept	3.873^{***} (0.599)	2.488^{***} (0.296)
Collective efficacy	$-0.339^{+}(0.171)$	0.054(0.085)
Homicide rate	-0.028(0.028)	-0.019(0.017)
Concentrated disadvantage	0.047(0.068)	0.004(0.023)
Immigrant concentration	-0.031 (0.039)	0.005 (0.018)
Residential stability	0.024 (0.035)	-0.004(0.017)
Legal cynicism	0.116 (0.218)	0.039(0.095)
Tolerance of fighting	-0.117(0.097)	-0.051 (0.039)
Victimization	-0.043(0.519)	0.241 (0.200)
Police responsiveness	-0.824*(0.311)	-0.466*(0.187)
Perceived frequency of violence	-0.010(0.054)	0.038^{+} (0.022)
Adolescent violence × collective efficacy	0.009 (0.250)	-0.048(0.114)
Adolescent violence × homicide rate	0.038 (0.027)	0.038*(0.017)
Adolescent violence × concentrated disadvantage	-0.161*(0.071)	-0.027(0.032)
Adolescent violence × immigrant concentration	-0.045(0.048)	0.001 (0.022)
Adolescent violence × residential stability	0.008 (0.044)	0.009 (0.020)
Adolescent violence × legal cynicism	-0.612*(0.267)	-0.400 ** (0.144)
Adolescent violence × tolerance of fighting	-0.103 (0.104)	-0.001(0.049)
Adolescent violence × victimization	-0.271(0.625)	0.117 (0.336)
Adolescent violence × police responsiveness	0.822^{+} (0.469)	0.170(0.305)
Adolescent violence × perceived frequency of violence	· · ·	0.050^{*} (0.025)
τ _{ee}	0.010	0.001
τ	0.008	0.004*
- 01		

 TABLE 4
 Sensitivity analyses of parental assessments of aggression (Model 1) and impulsivity (Model 2) regressed on adolescent violence and legal cynicism^a

^aCoefficients and robust standard errors in parentheses. Missing values on individual-level variables multiply imputed with ten replications.

 $^{+}p < 0.10, *p < 0.05, **p < 0.01, ***p < 0.001$ (two-tailed significance tests).

to interpret violence as a central component of adolescent roles caused by contextual constraints (i.e. a lack of legal recourse) rather than by individual temperaments. We, therefore, predicted that when the surrounding context is characterized by higher levels of legal cynicism, parents—upon taking the roles of their children—increasingly would rationalize their children's violence as situated behavioural responses to legitimate threats rather than as indicative of temperamental predispositions to violence alone.

Using data from the PHDCN and administrative sources, we tested our hypothesis with multilevel regressions of parental assessments of two trait-based predispositions related to violence—aggression and impulsivity—on adolescent's self-reported violence, neighbourhood legal cynicism and a cross-level interaction between the two measures. We find that legal cynicism attenuates the positive associations between adolescents' reported violence and each parental assessment outcome. Consistent with our hypothesis, our results, therefore, suggest that parents are less likely to appraise adolescents' violent behaviour as indicative of aggressive or impulsive temperaments when the neighbourhood is characterized by higher levels of legal cynicism.

Our findings suggest that although parental assessments of trait-based predispositions may be influenced by children's actual behaviour, they also may be biased by contextual factors. This finding is relevant to a number of prominent criminological theories that focus on individual traits and temperaments to explain criminal offending. For instance, Gottfredson and Hirschi (1990) argue that low self-control is stable throughout adolescence and adulthood and is the underlying cause of antisocial behaviour across the life course. Empirical assessments of Gottfredson and Hirschi's theory depend upon valid measures of key constructs like impulsivity. Moffitt (1993) suggests that adolescent limited offenders' delinquency is assessed differently by parents and teachers because of the instability of their antisocial behaviour across time and social contexts. But it may be that such differential assessments in part are a function of the frame (e.g. legal cynicism) through which appraisers view and interpret their behaviour. Given the common reliance on parental or other external assessments (e.g. teacher assessments) in studies of adolescent crime and delinquency (Wareham and Boots 2011), it is crucial to identify and control for the influence of contextual factors on appraisals of adolescent behaviour. Identifying and controlling for such contextual biases—namely, legal cynicism—may help explain why the associations between trait-based predispositions, such as impulsivity and externalizing behaviour problems, and adolescent crime and delinquency are inconsistent across neighbourhoods (Lynam et al. 2000; Zimmerman 2010).

Our findings also have implications for understanding processes related to adolescent delinquency. Parents who rationalize violence as necessary to deter victimization may be less likely to emphasize non-violent victimization-avoidance strategies and instead encourage aggressive posturing in order maintain street status and the respect of one's peers (Anderson 1999). While aggressive posturing may entail advantages within legally cynical residential neighbourhoods, it likely is detrimental within mainstream contexts, such as schools or workplaces, and consequently may lead to further marginalization and social isolation. Subsequent research may provide more insight into whether changes in parenting behaviour mediate the association between legal cynicism and delinquency among adolescents and their subsequent well-being throughout the life course.

Despite our robust findings on the moderating influence of legal cynicism on the effect of adolescent behaviour on two parental assessment outcomes, our study is not without limitations. The data collection of the PHDCN took place in 1994 and 1995. Unfortunately, no subsequent neighbourhood-based study has included both the sophisticated sampling design and extensive neighbourhood and individual measures characteristic of the PHDCN. Although our theoretical approach is not period specific, future research using more recently collected data could assess whether the influence of legal cynicism on parental appraisals remains the same.

Another limitation of the PHDCN is that the data come from a single city. It is possible that the cultural processes we examine in this study were shaped by unique attributes of Chicago, including its situation in the historical context of US crime patterns and administration of criminal justice. The legacy of slavery, immigration policy, residential segregation and extreme racial and ethnic disparities in criminal justice outcomes may shape the importance and character of legal cynicism in US cities, especially as they pertain to African Americans and Latinos. For instance, Kirk and Matsuda (2011) found that in Chicago, African American-concentrated neighbourhoods had higher levels of legal cynicism, which were associated with a lower likelihood of arrest following the commission of a crime. In their study of New York City, Kirk et al. (2012) found that communities with high immigrant concentration exhibited lower levels of legal cynicism, which were associated with increased cooperation with the police. Kirk and colleagues emphasized that the lower levels of legal cynicism in these immigrant communities could be jeopardized by aggressive enforcement of immigration laws. These two studies not only demonstrate the salience of race and ethnicity in the United States but they also show that racial and ethnic differences in outcomes related to cooperation with the police are partially explained by a cultural frame-legal cynicism. The broader implication, which is beyond the scope of this analysis, is that cultural frames such as legal cynicism may explain differences between the racial and ethnic groups relevant to a given national or historical context.

Even though our analysis is based on just one city, this study provides a general foundation for investigating how cultural frames shape interpretations of behaviour. So although legal cynicism may be less applicable or fundamentally different in non-US or rural contexts, e.g. the role-taking process through which a relevant local cultural frame influences appraisals of behaviour is a general process (Mead 1934) and, therefore, likely has explanatory power, regardless of the larger context. Ultimately, this is an empirical question. Future research that includes neighbourhoods from several urban, suburban and rural areas within or outside of the United States can test whether the results from our analysis stem from general processes or from dynamics that are unique to the city of Chicago. Furthermore, examining neighbourhoods across multiple macro-level units would help identify how higher order factors shape local cultural processes.

Despite its temporal and geographic limitations, the PHDCN data include extensive information on adolescents and their caregivers. But we were unable to measure two important characteristics of parents. First, primary caregivers' legal cynicism which could represent an important mediating factor—was not measured. While the CS component of the PHDCN enabled more reliable measurements of legal cynicism in neighbourhoods, we were unable to test the influence of legal cynicism of the adolescent respondents' parents. Second, parents' knowledge of their children's delinquency within legally cynical neighbourhoods may influence their appraisals. As Rios's (2011) recent ethnographic study suggests, adolescents embedded in neighbourhoods with high distrust of legal authorities may be less likely to 'snitch' on fellow residents to police. Restrictions against snitching may increase the likelihood that violent offenses remain unknown by the offenders' parents as well as other authority figures, such as teachers and school officials. Unfortunately, due to data limitations, we were unable to assess how anti-snitching norms influence parental appraisals of their children's violent behaviour. Nonetheless, we tested whether related factors, such as collective efficacy—which captures intergenerational closure—and indicators of the parentchild relationship, explained the interactive effect of legal cynicism and adolescent violence on parental appraisals. We find that including interactions between these variables and adolescent violence failed to account for our findings. Still, further research that directly measures parent's awareness of their children's delinquency may advance our understanding of the impact of legal cynicism on parental appraisals of their children's behaviour.

This study highlights the potential role police and other agents of the law have in changing violent contexts. Our study suggests that as cultural frame, legal cynicism induces individuals to interpret violence as a reasonable strategy to avoid victimization or to settle grievances. But improved police effectiveness and relations between law enforcement and community residents may decrease the salience of legal cynicism, thereby attenuating notions that violence is an appropriate or desirable reaction to threatening circumstances. In this way, better relations between law enforcement and community residents could contribute to less violent and healthier environments.

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