

PREDICTING THE VIOLENT OFFENDER: THE DISCRIMINANT VALIDITY OF THE SUBCULTURE OF VIOLENCE*

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This study tests the extent to which an adherence to the subculture of violence uniquely predicts a tendency to favor violence or instead predicts a more generalized offending repertoire, of which violence is part. Specifically, we use a unique analytic technique that provides the opportunity to distinguish empirically between the “violent offender” and/or the “frequent offender.” The results suggest that holding values favorable toward violence consistently predicts general offending but do not identify youth who systematically favor violence over nonviolence. This discussion considers the impact of these findings for the continued utility of the subculture of violence perspective.

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Given the ample empirical attention directed at identifying what produces a violent offender, one might reasonably assume that criminologists consider it a worthy area of inquiry. Indeed, the fact that such literature guides the development and structure of intervention programs aimed at curbing youth violence underscores this point (e.g., Reiss and Roth, 1993). Yet there is a fundamental debate in criminology about the “uniqueness” of the violent offender and, consequently, whether he deserves research attention. Many leading criminological theorists are skeptical of the claim that offenders specialize in any meaningful way, thus questioning the need for theory to classify offenders based on the type of crimes they commit or for policies to address supposedly unique proclivities (Felson, 1994; Gottfredson and Hirschi, 1990; Hirschi and Gottfredson, 2008; Sampson and Laub, 1993). Others disagree, however, arguing that some factors exist that have special relevance in the etiology of violence, which are worthy of attention and inquiry (e.g., Anderson, 1999; Wolfgang and Ferracuti, 1967). In the end, this debate is no small matter; at issue is the question about what sort of criminological theory—general or specific/typological—the field should pursue and value.

Even though the empirical literature has identified a large stack of individual and social factors as purported predictors of violent offending, it does little to clarify this debate. Most of these prior analyses have focused on predicting the rate or frequency of violence, not on the portion of the total offenses that are violent (e.g., Elliott, 1994; Piquero et al., 2005; Stewart and Simons, 2006). This approach is effective insofar as it allows researchers to identify predictors of violence, but it does so at the price of being unable to establish which factors *uniquely* predict violence. Because frequent offenders engage in violence, as well as exhibit many other forms of antisocial behavior, studies of violence typically are not identifying a distinct violent offender so much as predicting “violent offenses [that] are essentially committed at random in prolific criminal careers” (Farrington, 1998: 429; see also MacDonald, Haviland, and Morral, 2009).

This limitation is especially salient when considering theories that are explicitly meant to identify violent offenders. Specifically, determining whether some offenders systematically favor violence and identifying factors that distinguish such people from others is of paramount importance for assessing the validity of the subculture of violence perspective. This framework asserts that the adherence to violent norms and beliefs should identify individuals prone toward violence, not simply those who sporadically engage in violence as part of a versatile offending profile. Although numerous studies have observed a relationship between violent attitudes/values and aggressive behavior (e.g., Baron, 2001; Hartnagel, 1980; Heimer, 1997; Kubrin and Weitzer, 2003; Markowitz and Felson, 1998; Stewart and Simons, 2006, 2010), they have focused only on violence as

the outcome. Put another way, individuals who possess violent attitudes supportive of the subculture of violence may be just as likely to engage in theft, burglary, and white collar offending as they are aggression (see Gottfredson and Hirschi, 1990). Until research explicitly untangles the connection between frequent, generalized offending and offending that systematically favors violence, the very core of the subculture of violence will remain untested.¹

The current study addresses this void by using a recently developed statistical method for studying specialization (see Osgood and Schreck, 2007). This method provides the unique and theoretically important capacity to clarify whether key variables of interest predict the level of overall offending (of which violence is part), or (also) influence the extent to which there is a greater propensity toward violent rather than nonviolent offending (see Schreck, McGloin, and Kirk, 2009). Thus, this inquiry will address whether an adherence to the subculture of violence identifies the violent offender and/or the frequent offender. Our analysis therefore has the potential to provide greater insight into the explanation of the distinct dimensions of individual criminal careers and to better assess the core assumptions that underlie a seminal theoretical perspective in criminology.

THE SUBCULTURE OF VIOLENCE: PREDICTING THE VIOLENT OFFENDER OR THE FREQUENT OFFENDER?

The idea that particular pockets of society subscribe to norms and values endorsing deviance—the “subcultural perspective”—is a core theoretical tradition in criminology (e.g., Cloward and Ohlin, 1960; Cohen, 1955; Miller, 1958). The factors that supposedly produce these subcultures, as well as the values and characteristics that comprise them, vary across perspectives, but they share in common the view that deviant behavior is best understood as an expression of the endorsed, contextual social norms in which offenders are embedded. Quite simply, individuals who belong to or endorse these delinquent subcultures are significantly more likely to engage in illegal behavior than are individuals who do not adhere to these subcultural norms. Within this subcultural tradition, perspectives emerged that

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1. Of course, the subculture of violence perspective contains other important elements. For instance, should one find significant race, class, or regional differences in attitudes and norms regarding violence, this could be viewed as empirical support. Our focus is specifically on the extent to which attitudes supportive of a subculture of violence actually predict a tendency to favor violence. In this way, our focus is one test of the subculture of violence, but clearly also it has implications for the larger debate about the utility of theories of violence as compared with theories of crime.

sought to explain a particular sort of deviant behavior: violence. Although the people to whom the subculture of violence applies has varied—from Southerners to African Americans and even to Scotch Irish clans settled in Appalachian communities (Anderson, 1990; Dixon and Lizotte, 1987; Fischer, 1989; Hackney, 1969; Messner, 1983; Nisbett and Cohen, 1996)—the unifying core concept remains the same. Individuals who adhere to a normative system that tolerates and endorses violence as a way of managing social interactions and disputes have a systematic heightened proclivity for being aggressive (Felson et al., 1994; Ousey and Wilcox, 2005).

This perspective gained traction largely because of Wolfgang and Ferracutti's (1967) research on homicide rates in Philadelphia. Based on observations of differential homicide patterns, they argued that for some groups of people in disadvantaged settings, violence is a frequent and normative way of managing most dimensions of social life, from parenting, to romantic relationships, to basic social exchanges. From the beginning, then, it is important to recognize that this theoretical premise was developed to explain violence, but because Wolfgang and Ferracutti (1967) looked specifically at homicide trends, it was empirically unclear whether this subculture discriminated violence from other forms of crime and deviance. Even so, this perspective endured and several scholars offered their own versions of the subculture of violence (see Bernard, 1990; Luckenbill and Doyle, 1989). Most recently, Anderson (1990, 1999) argued that an oppositional subculture oriented around violence and aggression has developed in highly disadvantaged neighborhoods, particularly among a segment of African American residents.

The key goal among those who adhere to the subculture of violence is the development and maintenance of a tough reputation, which when compared with traditional middle-class markers of success such as education and good employment, is relatively ephemeral, easily damaged, or "stolen." For instance, Anderson (1990) noted that Black youth in highly disadvantaged circumstances can have their source of respect and success snatched away in a momentary interaction, thereby forcing them to develop a willingness to ward off perceived threats and reinforce this reputation. In this way, for those who adhere to violent norms, mundane interactions that are trivial at the outset can easily escalate into serious violence, given the normative status aggression has with regard to interpreting and responding to social situations. Several scholars have spoken about this subculture in terms of the cognitive scripts that individuals import into situations and rely on when interpreting and responding to social interactions (Luckenbill and Doyle, 1989; Wilkinson and Fagan, 1996; see also Lee and Ousey, 2011). Whereas someone who does not adhere to the subculture of violence may view being bumped by a passerby as accidental or perhaps somewhat rude, individuals who adhere to the subculture of violence are likely to interpret

this bump as a sign of disrespect that demands an aggressive response.² Thus, whereas subculture of delinquency theories seek to identify individuals who are more likely to engage in deviance than their counterparts, the subculture of violence framework is invested in explaining why some individuals are more likely to appeal to violence.

As stated, most prior studies testing the validity of the subculture of violence have focused on explaining variation in measures of the overall level of violence, not the extent to which violence is more or less prevalent in relation to other types of offending behavior. For instance, Stewart, Simons, and Conger (2002: 813) studied the neighborhood and psychological predictors of violence among a sample of African American youth. They measured whether subjects subscribed to a street code according to the level of agreement with statements, such as “people will take advantage of you if you don’t let them know how tough you are” and “people tend to respect a person who is tough and aggressive.” Their results demonstrated a positive relationship between adherence to the street code and violent behavior (see also Stewart and Simons, 2006). Because no other outcomes were considered, however, it remains unclear whether the street code primarily promotes violence or whether it simply leads to a higher overall rate of general offending, of which violence is one component. This same issue applies to the majority of empirical work testing the subculture of violence (e.g., Baron, Kennedy, and Forde, 2001; Bernburg and Thorlindsson, 2007; Markowitz and Felson, 1998; Stewart and Simons, 2010).

Perhaps the closest acknowledgment of this problem is found in the work of Felson et al. (1994), who examined whether the subculture of violence predicted violent as well as nonviolent crime (theft and vandalism). They found that an adherence to the subculture of violence increased the likelihood of engaging in violence, as well as in nonviolent criminal behaviors, which argues against this perspective as a “specialist” theory of violent offending (see also Bernburg and Thorlindsson, 1999). They stated: “[V]alues regarding violence generally predict other forms of delinquency as well as they predict violence. Previous research on the subculture of violence does not concern itself with this issue since it never examines other forms of delinquent behavior” (Felson et al., 1994: 168). The question then emerges, is the fact that the subculture of violence predicts nonviolent crime

2. Felson et al. (1994) have observed that there are two layers to the subculture of violence. The first is the normative system that defines the subculture. The second is social control, whereby if the rules of the street are not followed as expected, this can result in sanctions for one’s reputation and consequently physical safety (see also Stewart, Schreck, and Simons, 2006).

a fatal blow to this theoretical perspective? After all, “a theory of aggression is needed to explain effects that are only observed for violence, while a theory of deviance is needed to explain effects that are observed for all types of criminal behavior” (Felson, 2009: 24).

We are not suggesting that the subculture of violence posits that individuals who endorse it will *only* engage in violence. For instance, Anderson observed that residents in the neighborhoods he studied showed a “flagrant disregard for the law” (Anderson, 1999: 23). Still, Anderson also clearly asserted: “[A]t the heart of this code is a set of prescriptions and proscriptions, or informal rules, of behavior organized around a desperate search for respect that governs public social relations, *especially violence*” (emphasis added; Anderson, 1999: 9). In other words, individuals who exist within a subculture of violence may partake in nonviolent crime, such as theft, but their offending profile clearly should be dominated by aggression and violence. Simply put, the analytic and explanatory value of the subculture of violence perspective rests in the notion that *violence should figure more prominently than other crimes in the overall pattern of criminal activity for people who are part of the subculture* (see also Jacobs and Wright, 2006). Thus, an adherence to violent norms clearly should not identify an offender who favors nonviolence or a frequent offender who shows no tendency to favor any particular crime type (i.e., violence or nonviolence).

Because Felson et al. (1994) examined each type of offending separately, rather than considering the balance of crime types within individuals, it remains unclear whether the subculture of violence predicts a greater proclivity toward violence relative to other offenses. After all, an offender who systematically favors violence can still engage in theft and vandalism at a higher rate than his counterparts who do not adhere to the subculture.³ To test this theoretical premise effectively, then, it is essential that researchers analytically disentangle a proclivity for violent offending from an overall tendency to commit crime. The current study addresses this void by employing an analytic technique that distinguishes between the latent propensity for offending and the latent tendency to favor violent crime over nonviolent crime. In the end, this investigation will provide clear evidence on whether an adherence to the subculture of violence truly identifies and distinguishes the violent offender.

3. Conversely, Felson et al.'s (1994) findings could be even more damaging if they actually reflect a tendency to favor nonviolence over violence (i.e., if for subjects who had values consistent with the subculture of violence, nonviolent crime is more likely in any given situation than is violence).

DATA AND METHODS

DATA

Data for this study were drawn from the Rural Substance Abuse and Violence Project (RSVP), a prospective four-wave panel study of adolescents residing in the state of Kentucky (NIDA Grant DA-11317) during the period between 2001 and 2004. The RSVP project data were collected initially in the spring of 2001 when the sample was in the seventh grade, and subsequent measurements took place during the spring of the next three years. The RSVP sample involved a multistage procedure with a random selection of 30 (of 120) counties drawn from population-based strata. Within the 30 selected counties, each of the 74 public schools with seventh graders was contacted and access was granted by 65 schools. The targeted population was 9,488 seventh graders enrolled in those 65 middle schools at the initiation of the study. Active parent consent was required because underage study participants were identified and followed across multiple years. Using a "Dillman method" for mailed surveys (Dillman, 1978), active consent was granted by 43 percent of parents, leaving 4,102 sample participants with parental approval. Using mass administration methods at the participating schools, completed surveys were obtained from 3,692 students in wave I and 3,638 students in wave II. In waves III and IV, after most students had traversed from the originally sampled middle schools into their local high school, completed surveys were obtained from 3,050 and 3,040 respondents, respectively. Across the 4 years of study, at least one observation was recorded for 3,976 of the original 4,102 respondents whose parents granted active consent.⁴

DEPENDENT VARIABLES

Our outcome measures are based on four self-report items measuring approximately how frequently within the current school year the respondent physically attacked someone else or had stolen someone else's money or property, with separate items for offending at school and away from school. Responses are coded using an ordinal metric: 1 = never, 2 = less than once a month, 3 = approximately once a month, 4 = approximately 1–2 times per week, and 5 = daily or almost daily.⁵ As is typical with offense data,

4. For additional details on sample characteristics and attrition, see Ousey and Wilcox (2007).

5. Poisson regression assumes that the lowest score is zero, so for the multivariate analyses (which will be described in more detail later), we recoded these items by subtracting one from the original score. Descriptive statistics, such as those reported in the narrative and in table 3, employ the original coding.

the responses are positively skewed, with most respondents reporting they had not engaged in any of the offense activities (the mean scores for each item in all four waves are reported in appendix A). Confirmatory factor analyses show that the offense items load well onto the primary factor, thus showing that they are statistically homogeneous; however, the second factor loading also shows some evidence of distinctiveness between the violence and nonviolence items. That is, even though all offense measures are positively correlated with each other, the violence items are somewhat more strongly correlated with other violence items than they are with nonviolent items, with a similar pattern unfolding for the nonviolent items. As Osgood and Schreck noted (2007: 287–8), this pattern is consistent with the basic assumptions of their approach, where the data reveal latent variables for both overall offending and specialization in violence.

INDEPENDENT VARIABLE

Subculture of Violence

The Kentucky data contained four items that are suitable for our purposes (see also Ousey and Wilcox, 2005). These items ask respondents their level of agreement with the following: “Beating up other kids to gain respect,” “beating up others who call you a dirty name,” “beating up others who start a fight with you,” and “hitting other people is acceptable to get what one wants.” Responses were coded as 1 = strongly disagree through 4 = strongly agree. Respondents indicated that, on average, they disagreed with these value statements, with mean scores hovering around 1.70 for all four waves. Alpha reliability tests indicate a generally acceptable level of internal consistency for our street codes measure across waves (α = mid-.70s for waves I through III and .64 for wave IV).⁶ Table 1 contains

6. We also created measures of attitudes favoring nonviolent offending as a form of sensitivity analysis in order to address the possibility that beliefs about crime, whether violent or nonviolent, tended to correlate strongly with each other. In other words, we wanted to ensure that our SOV measure was not instead measuring attitudes toward deviance generally. This nonviolent index contained items asking about how wrong it was to steal, vandalize, or break into buildings in order to steal. This index was statistically distinct from the subculture of violence beliefs measure (i.e., the violent belief items that comprise our SOV measure and the nonviolent belief items loaded on two different factors). Furthermore, including it in the regression models did not result in any changes with regard to the predictive abilities of the subculture of violence measure (for either general offending or specialization in violence). We elected not to report these sets of supplemental results because a careful consideration of this measure, its theoretical relevance, and the models that contain it requires more attention than we have space for here. In the end, the key issue is that the SOV measure seems not to be measuring beliefs about general deviance, instead capturing our concept of interest.

Table 1. Descriptive Statistics

Variables	Wave I (<i>n</i> = 3,692)		Wave II (<i>n</i> = 3,638)		Wave III (<i>n</i> = 3,050)		Wave IV (<i>n</i> = 3,040)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Male	.48	.50	.45	.50	.46	.50	.45	.50
Black	.06	.23	.06	.23	.04	.21	.04	.19
Age	13.44	.59	14.40	.59	15.40	.53	16.19	.52
Parents' education	4.72	1.71	4.80	1.69	1.69	1.69	4.80	1.69
Parents unemployed	.09	.29	.05	.22	.03	.18	.05	.21
Impulsivity	1.86	.72	1.85	.73	1.73	.71	1.75	.73
SOV	1.70	.74	1.71	.75	1.72	.68	1.67	.66
Attachment to mother	4.02	.89	3.91	.93	3.87	.93	3.85	.94
Friends' specialization	.17	.46	.11	.41	.10	.42	.09	.42

ABBREVIATIONS: SD = standard deviation; SOV = subculture of violence.

descriptive information for our subculture of violence (SOV) measure, as well as all controls.

CONTROL VARIABLES

Impulsivity

The Kentucky data include numerous items measuring self-described impulsivity, which is a personality characteristic that Gottfredson and Hirschi (1990) attributed to the presence of low self-control and is a common component of the usual measures in tests of self-control theory (e.g., Grasmick et al., 1993).⁷ This attribute has been connected with offending generally and violent behavior across an impressive number of studies (see Hawkins et al., 2000; Pratt and Cullen, 2000). Six of these items (“difficulty remaining seated at school,” “difficulty keeping attention on tasks,” “get restless after a few minutes,” “get thrown off by little distractions,” “am nervous/on edge,” and “I can’t seem to stop moving”) were common across all four waves of data and are used in our analyses. Respondents could answer with four response options (1 = never true through 4 = always true). The responses indicate that the average respondent felt that these descriptions never or rarely applied to them, with mean scores approximately 1.80 for each wave. The impulsivity indexes across the 4 years are highly reliable (α = mid-.80s).

7. The Kentucky data also include items measuring difficulty in controlling temper, but we elected not to use these insofar as they could arguably be too closely linked with violent outcomes.

Friends' Specialization in Violence

Given the robust relationship between deviant peers' attitudes and various dimensions of offending behavior (Warr, 2002), we control for friends' tendency to specialize in violence, which measures the contrast between reported violent and nonviolent offending. The index comprised two items, which ask how many friends 1) stole something and 2) physically attacked someone. Having at least one friend who attacked someone increased the friend's violent specialization index score by 1, whereas having at least one friend who engaged in theft reduced the index score by 1. The mean friends' specialization scores were approximately +15 across each of the four waves. Although this index has obvious potential theoretical significance (e.g., differential association theory), we only employ this item as a control, given that there are legitimate concerns about the validity of respondents' claims about their friend's behavior (Gottfredson and Hirschi, 1990; Haynie and Osgood, 2005).⁸

Maternal Attachment

Maternal attachment is an item often linked with offending (e.g., Hirschi, 1969), although not necessarily specialization. Attachment to mother is based on the average response by subjects to four items: mother understands me, mother makes me feel wanted, I share my thoughts with mother, and I talk to my mother. Scores range from 1 (never) through 5 (always), with mean scores being fairly consistent across the waves (from 3.8 through 4.0, meaning that the children felt that these statements "often" characterized their relationships with their mother).

Demographic Measures

Our analysis also incorporates the standard demographic controls: socioeconomic status, age, race (1 = African American), and gender (1 = male). We have two measures of socioeconomic status: parental education and parental unemployment. For parents' education, we selected the parent with the higher level of education because many children only have one parent. This ordinal variable ranges from 1 (grade school or less) to 7 (graduate or professional school). Parents' unemployment reports whether at least one parent was unemployed for a given wave (1 = yes and 0 = no).

8. In supplementary models, we omitted friends' specialization in violence to see whether this measure was unduly influencing the results; the basic pattern reported in the text changed only slightly, with just two of the seven models now revealing a significant effect for subcultural beliefs about violence. This, in our view, is not compelling evidence to change our conclusions with respect to subculture's ability to influence specialization.

During the 4 years of observation, these measures remained consistent. The average respondent had at least one parent with some college education, and parental unemployment ranged from 5 percent to 10 percent. Age is a continuous measure, with the average respondent 13.4 years old at wave I. Race was coded as 1 AAfrican American (0 all others), and gender was coded as 1 male and 0 female. Approximately 48 percent of the sample was male and 5 percent were African American. As with the socioeconomic status (SES) measures, the demographic profiles across each wave did not meaningfully change.

ANALYTIC METHODS

Our statistical approach uses Osgood and Schreck's (2007) item response theory (IRT)-based statistical model for detecting specialization in offending. As this approach has been employed in several studies to date (e.g., Schreck, McGloin, and Kirk, 2009; Schreck, Stewart, and Osgood, 2008; Sullivan et al., 2009), the presentation will only describe the main features of the model.

The Osgood and Schreck model incorporates two levels of analysis, where individual offense items are nested within individual subjects.⁹ The level 1 model works to define two latent measures that are the focus of the analysis: overall offending (β_{0j}) and offending specialization (β_{1j}). To define the specialization index, the model includes a group-mean-centered dummy variable, "Spec," which takes on positive scores for violent offense items and negative scores for nonviolent offense items. The coefficient associated with this specialization variable reports the difference in the log of the expected event-rate for violent offense items to the log of the expected

9. In the notation of hierarchical linear modeling (Raudenbush and Bryk, 2002), our level 1 regression equation is:

$$\ln(\lambda_{ij}) = \beta_{0j} + \beta_{1j}\text{Spec} + \sum_{i=2}^{I-1} \beta_{ij} D_{ij} \quad (1)$$

The level 2 regression equations are:

$$\beta_{0j} = \gamma_{00} + \gamma_{01}X_{1j} + \gamma_{02}X_{2j} + \dots + u_{0j} \quad (2)$$

$$\beta_{1j} = \gamma_{11}X_{1j} + \gamma_{12}X_{2j} + \dots + u_{1j} \quad (3)$$

$$\beta_{ij} = \gamma_{i0} \quad (4)$$

In equation 1, the intercept, β_{0j} , refers to the average score for all offenses, β_{1j} is the specialization coefficient, and the remainder incorporates the base rates for the individual offense items through dummy variables indicative of each item.

event-rate for nonviolent offense items.¹⁰ This coefficient is specified as a random-parameter that varies over individuals, which yields a summary statistic indicating whether there is evidence of significant specialization in the sample. Specifically, the significance in offense specialization is reflected in the variance component (τ) associated with the specialization variable included in the level 1 model. Where there are multiple waves of data, the level 1 model also allows researchers to estimate the stability of measures of overall offending and specialization over time. Note that in the present study, the level 1 model uses as its outcome measure an ordinal-level offending score for an individual for one of the four offense items. This differs from previous analyses using the IRT method, which used dichotomized offense data (see Osgood and Schreck, 2007; Sullivan et al., 2009). To address the difference in level of measurement, and the fact that the offense data are skewed, we specified a Poisson regression.

The level 2 portion of the model allows researchers to estimate the effects of substantive predictors on overall offending (β_{0j}) and offending specialization (β_{1j}), thus permitting a test of the subculture of violence predictions delineated earlier. The coefficients associated with the predictor variables included in the level 2 equation report how much the logged incident rate ratio of violent-to-nonviolent offense scores changes for each unit change in a predictor. A significant positive coefficient therefore indicates that a unit increase in a predictor variable increases the ratio of violent offenses to nonviolent offenses.¹¹ A nonsignificant coefficient indicates that changes in the level of a predictor variable do not influence the contrast in violent-to-nonviolent offending; however, it should be noted that the predictor could still influence the expected level for overall offending. The analysis incorporates data from all subjects, giving greater weight to information from those with higher levels of offending activity.¹²

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10. Exponentiating this coefficient gives us the incident rate ratio (IRR) of violent-to-nonviolent offending items.
 11. In more specific terms, calculating $[(\exp(\beta) - 1) \times 100]$ yields the percentage change in the violent-to-nonviolent offense ratio for a unit change in a given level 2 explanatory variable.
 12. This is a reason why the IRT-based method has an advantage over simply using the proportion of all (or total) offenses that are violent as the outcome measure. For example, a person who committed only one offense might have a 1.00 proportion of violent offenses, thus indicating a specialist; however, this conception of specialization would suffer problems of face validity. Technically, a score of 1.00 would indicate perfect specialization, but the question would turn to whether this person's information should count the same in an analysis as a person who has ten violent offenses and no nonviolent offenses. The latter individual would also have a 1.00 proportion of violent offenses, but his record shows a much clearer pattern. One could counter this by only focusing on the most frequent offenders; however,

Table 2. Reliability and Variance of Overall Offending and Specialization

	Wave I	Wave II	Wave III	Wave IV
Overall Offending				
Reliability	.52	.54	.54	.45
Variance (τ)	4.99(.21)	5.45(.24)	6.29(.33)	6.88(.44)
Specialization				
Reliability	.31	.32	.31	.25
Variance (τ)	5.89(.38)	6.46(.42)	6.92(.54)	8.05(.78)

NOTE: Standard errors of τ in parentheses.

RESULTS

Our first step is to determine whether specialization in violence exists to a degree that is statistically significant and is relatively stable over time (see also Osgood and Schreck, 2007; Sullivan et al., 2009). Table 2 reports the variances, standard errors, and reliability scores for the two latent variables defined by the level 1 measurement model: overall offending and specialization. Some prior research has found that reliability scores for overall offending are relatively high (i.e., in the .70–.80 range; see Osgood and Schreck, 2007); however, our scores for each of the four waves are comparatively low and are more consistent with those reported in Sullivan et al. (2009). Previous research using the IRT method suggests that specialization is relatively unreliably measured, owing to the relatively few members of the sample who self-report much offense activity, and the reliabilities of the specialization index in the RSVP data conform to this expectation. The implication of this is that specialization becomes more difficult to detect and predict largely because of the limited information coming from most of the sample (i.e., we are dealing with a lot of zeroes or ones in these data). An approach that can take this into account, such as our latent variable approach, can alleviate this problem while using data from everyone in the sample. To assess the statistical significance of the degree of specialization in the sample, we compute a z score by obtaining the ratio of the variance component to its standard error. For all four waves, the ratio exceeds 10, indicating that there is statistically significant differentiation in individual offense patterns from the population base-rates (i.e., specialization), with less than a .0001 probability that the observed pattern is a function of chance.

Table 3 provides one illustration of the variation in offending specialization, focusing on the most frequent offenders in the Kentucky data

this would exclude most subjects and the information they provide. For more, see Osgood and Schreck (2007).

Table 3. Observed Violent and Nonviolent Offending Averages, by Level of Specialization

Specialization	Observed Distribution of Offending		
	Violent	Nonviolent	<i>n</i>
Wave I			
Violent (>1 SD)	3.5	1.0	140
Neither (>-1 SD and <1 SD)	3.3	2.3	120
Nonviolent (<-1 SD)	2.1	3.5	37
Wave II			
Violent (>1 SD)	3.3	1.0	145
Neither (>-1 SD and <1 SD)	2.9	2.5	163
Nonviolent (<-1 SD)	1.3	3.2	16
Wave III			
Violent (>1 SD)	2.6	1.0	142
Neither (>-1 SD and <1 SD)	2.6	2.3	123
Nonviolent (<-1 SD)	1.0	2.2	33
Wave IV			
Violent (>1 SD)	2.6	1.0	104
Neither (>-1 SD and <1 SD)	2.5	2.4	79
Nonviolent (<-1 SD)	1.0	2.1	20

NOTE: 1 = never, 2 = less than once a month, 3 = 1–2 times per week, and 4 = almost daily.

(i.e., the 90th percentile of overall offending in our sample, as defined by having the highest average score for the four offense items). This table classifies the high-frequency offenders into three categories, based on whether their pattern of offending favors violence, nonviolence, or is fairly equitable across offense types. The values in the “observed distribution of offending” column report the average score on the two violent offending items and the average score on the nonviolent offending items. Among those whose specialization score was 1 standard deviation above the mean in wave I—indicating a violent specialist—we find that he or she reported engaging in each of the assault items between “once or twice a week” to “once a month.” In contrast, the 1.0 average for the nonviolent offending items is indicative of no nonviolent activity whatsoever (1 = never). Moving to the next row, we see that those frequent offenders who fell within 1 standard deviation of the mean in wave I exhibited some tendency to favor violence, but the differential was not meaningfully large enough to be distinct. Such individuals reported, on average, committing each of the offense items, whether violent or nonviolent, up to about once a month. Turning to the final row, we see that those offenders who were classified as “nonviolent” indicated rarely participating in violent offenses (averaging a 2.1 and a 1.3 score on each violent offense for the first two waves and 1.0 for the last two). In contrast, they engaged in each nonviolent offense at least once a month or more, except for waves III and IV where the averages declined to “less than once a month.”

Table 4. Correlations Among Wave I and Wave II Measures of Overall Offending and Specialization in Violence

	Overall Offending				Specialization			
	Wave I	Wave II	Wave III	Wave IV	Wave I	Wave II	Wave III	Wave IV
Overall Offending								
Wave I	1.00							
Wave II	.43 (.002)	1.00						
Wave III	.31 (.002)	.33 (.002)	1.00					
Wave IV	.30 (.002)	.36 (.002)	.33 (.002)	1.00				
Specialization								
Wave I	.49 (.002)	.20 (.002)	.10 (.003)	.15 (.002)	1.00			
Wave II	.21 (.002)	.44 (.002)	.15 (.002)	.16 (.002)	.33 (.003)	1.00		
Wave III	.19 (.002)	.17 (.002)	.28 (.002)	.25 (.003)	.24 (.002)	.39 (.003)	1.00	
Wave IV	.24 (.002)	.20 (.002)	.23 (.002)	.40 (.002)	.33 (.003)	.34 (.003)	.54 (.003)	1.00

NOTE: Standard errors in parentheses.

Evidence of the stability of specialization can be assessed by correlating the latent specialization measures for the four waves of data analyzed. Table 4 reports the results of that analysis. Consistent with previous research (Osgood and Schreck, 2007), there is significant consistency in specialization across waves in panel data, although the stability is not perfect. Those persons classified as violent offenders at wave I often remained so at waves II, III, and IV. Also worth noting is the correlation between overall offending and specialization. In our data, there is a weak but significant tendency for individuals who score higher in overall offending to have a greater preponderance of violent offending relative to nonviolent offending, which is consistent with prior work that has noted a link between violence and offending frequency (Piquero, 2000).

Because specialization is both statistically significant and exhibits some stability, it is reasonable to see whether tendencies to specialize are predictable on the basis of the subculture of violence perspective, as discussed earlier. Table 5 reports the Poisson regression coefficients for each of the four waves of data (cross-sectional analyses). In the models that predict the latent measure of overall crime, the coefficients have a fairly standard interpretation: Each unit increase in the predictor variable corresponds with a higher overall offense score. As the models demonstrate, subcultural values are associated with higher levels of crime generally, net of controls.

Table 5. Relationships of Explanatory Variables to Overall Offending and Specialization from Poisson-Based Hierarchical Linear Model, Cross-Sectional Models

Variables	Wave I				Wave II				Wave III				Wave IV			
	Overall Crime		Specialization		Overall Crime		Specialization		Overall Crime		Specialization		Overall Crime		Specialization	
	γ	SE	γ	SE	γ	SE	γ	SE	γ	SE	γ	SE	γ	SE	γ	SE
Male	.62*	.13	-.19	.20	.53*	.14	-.29	.21	.67*	.16	-.31	.23	.60*	.19	.32	.30
Black	.45	.27	.10	.37	.65*	.27	.33	.42	.97*	.29	-.38	.44	.97*	.40	-.73	.59
Age	.12	.11	-.10	.17	.02	.12	-.07	.19	.13	.15	.37	.21	.35	.18	-.27	.29
Parents' education	.04	.04	-.05	.06	.03	.04	-.03	.06	-.01	.05	-.05	.06	.12*	.06	-.04	.09
Parents unemployed	.06	.20	-.56	.29	.49	.28	-.72	.39	.57	.34	.27	.58	.11	.42	-.55	.63
Impulsivity	.71*	.09	-.29*	.13	.78*	.10	-.22	.14	.77*	.11	-.17	.14	.72*	.13	.04	.20
SOV	.99*	.09	-.05	.13	1.00*	.10	.19	.13	1.10*	.12	.29	.15	1.81*	.14	-.18	.22
Attachment to mother	-.45*	.06	.17	.09	-.48*	.07	.05	.11	-.34*	.09	-.01	.11	-.37*	.10	-.02	.16
Friends' specialization	.12	.13	1.68*	.20	.11	.16	2.71*	.27	-.20	.17	2.19*	.28	.21	.21	1.86*	.33

NOTE: γ is the hierarchical linear modeling population average estimate, and SE is its robust standard error.

ABBREVIATIONS: SE = standard error; SOV = subculture of violence.

* $p < .05$.

Additionally, being male, having weak maternal attachment, and impulsivity are also related with higher levels of (general) illegal behavior.

The most important question, however, is whether the independent variables are associated with the tendency to favor violence over nonviolence. As noted earlier in our description of the models, regression coefficients in the specialization equation indicate how each unit change in a predictor variable affects the ratio of violent-to-nonviolent offenses. Our key theoretical hypothesis concerned subcultural values, which we predicted would be associated with a tendency to specialize in violent behavior. This prediction was not supported in *any* of the waves. Children who reported stronger beliefs in the use of violence were statistically neither more nor less likely to engage in violence than other subjects, although they engaged in more crime overall. The only measure to predict specialization tendencies consistently was the tendency for friends to specialize, and this measure did so in all four waves. This measure is somewhat risky to interpret, however, because of the possibility that respondents could, at least partly, be projecting their own qualities on their friends (see Haynie and Osgood, 2005). In short, although there is a significant tendency for many offenders to specialize, our models do not consistently detect the reasons why, at least among our key substantive predictors.¹³

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13. To add further rigor to our analyses, we examined longitudinal models with lagged predictors (e.g., wave II offending and wave I predictors). In all cases, the results reported in the cross-sectional models were confirmed. Subcultural beliefs in violence still do not significantly influence the probability that a person will engage in a greater preponderance of violence relative to nonviolence. Such beliefs do, however, correspond with higher levels of crime generally. These results are available from the authors upon request. As an additional form of supplementary analyses, we also ran models that predicted counts of violent crime and nonviolent crime, which is more in line with previous analyses of the subculture of violence (see appendix B, which presents one of the cross-sectional models, for wave I). Under this specification (with the same control variables), subculture of violence values predicted both violent and nonviolent offending. Had our analysis only focused on violent offending, like the majority of previous analyses, we would have most likely concluded that the subculture of violence explains violent behavior, although we would not know if it *uniquely* predicted violence. Had we used both models as our primary analysis, this would have left us in the same position as Felson et al. (1994)—suspicious that the subculture of violence may instead be a subculture of deviance, but unaware of whether it predicted a tendency to favor violence over nonviolence (or vice versa). In contrast, our main models confirm that adherence to the subculture of violence does not predict any preference for violence over nonviolence, nor nonviolence over violence. Instead, it only predicts (general) offending frequency.

DISCUSSION

If one were to assess empirical progress based on the amount of research and policy attention directed at an issue, then criminology has made significant headway in understanding the violent offender. More critical introspection offers a very different opinion, however. Although we have ample information on the factors that are related to violent offending (see Hawkins et al., 2000), the methodological specifications of previous studies have left us in the curious position of not knowing whether these risks produce a high-rate versatile offender, for whom violent offending is simply a random part of the broader repertoire, or instead produce an offender who has a unique and specific tendency to favor aggressive acts over other forms of crime. Resolving this confusion is not an esoteric exercise; it has serious implications for particular theories, as well as for the larger debate about whether the discipline should value theoretical viewpoints that argue for general or specific orientations.

Perhaps the theoretical perspective that stands to benefit or suffer the most from empirical commentary on this debate is the subculture of violence. According to this viewpoint, violence occurs because adherents to the subculture of violence value a set of norms that reflect a particular affinity for this behavior. Members of this subculture are not necessarily going to engage in violence exclusively, but these values clearly should predict an unusually strong systematic proclivity for violence and aggression, given that the code's "basic requirement is the display of a certain predisposition to violence" (Anderson, 1999: 72). As scholars have debated the merits of the theoretical perspective, they curiously have left untested the question of whether values indicative of the subculture of violence indeed identify offenders who systematically favor violence over nonviolence. The current study sought to extend prior research and comment directly on this void by using a method that differentiates the latent tendency to offend, in general, from the tendency to favor violence, in particular.

Our results now join those from several other inquiries across various data sets in demonstrating that some youth favor violent crime over non-violent crime at a level not expected by chance, just as some youth instead favor nonviolent crime more so than the average adolescent (MacDonald, Haviland, and Morral, 2009; Osgood and Schreck, 2007; Sullivan et al., 2009). Our analysis also offered unique findings. Across numerous cross-sectional (and longitudinal) models, our results demonstrated that an adherence to the subculture of violence consistently predicts higher levels of offending generally but that it does *not* predict the tendency to favor violent crime over nonviolent crime. How does one reconcile this with the extant literature that identifies a link between subculture of violence values and violent behavior? Supplemental analyses with our data demonstrated that

the same measure of subculture of violence beliefs does predict counts of violence (see appendix B). Had this been our plan of analysis, this study likely would have been added to the pile of those supportive of this theoretical perspective. But, by relying on a method that distinguishes between general offending and violence specialization, it becomes clear that such models and findings can be deceptive.

Our findings therefore stand in contrast to the core premise—if not the very name—of the subculture of violence. The primary reason why this theoretical perspective stood out from other subculture of deviance perspectives was that it focused on identifying and describing the reasons for heightened violence among particular pockets of society. Yet, our results suggest that these supposed etiological factors and processes are instead identifying heightened levels offending, of which violence is a part.¹⁴ To be clear, we are not joining other scholars in criticizing the subculture of violence perspective on the grounds that tendencies to specialize in violence do not exist (see Gottfredson and Hirschi, 1990)—they do. Rather, we are troubled by the finding that measures reflective of this perspective do not identify these tendencies (at least in the data used here). For decades, scholars have been skeptical of the empirical validity of the subculture of violence (e.g., Dixon and Lizotte, 1987; Erlanger, 1974; Felson et al., 1994; Gottfredson and Hirschi, 1990; Loftin and Hill, 1974), and the current study joins these voices.

Given the now increasing evidence that at least some individuals “specialize” in violent offending, the question now turns to what theories and constructs contained therein can predict a tendency to favor violent over nonviolent offending. Recent work confirming the presence of a latent tendency to favor violent offending largely has been atheoretical (e.g., Osgood and Schreck, 2007; Sullivan et al., 2009), and our analysis questions a “usual suspect” as a consistent and dominant explanation of this specialization (i.e., the subculture of violence). Although not specifically focused on violence, other work on specialization has increasingly highlighted the importance of opportunity structures in shaping crime profiles, even if the motivation for such behavior stems from an enduring propensity (McGloin et al., 2007; McGloin, Sullivan, and Piquero, 2009). As work continues on this front, incorporating a situational perspective may turn out to be a fruitful direction of development (see also Wikström, 2006).

Although we believe this study poses significant challenges to the predictive validity of the subculture of violence premise, we recognize that

14. This raises the question of why violent attitudes would predict general offending. One possibility rests on the idea that violence is usually regarded as more “serious” than nonviolent offending. Individuals with attitudes that endorse violence may therefore be willing to engage in both serious and minor crime.

additional work is necessary to overcome the limitations of this piece. First, many respondents in our data are youth drawn from a rural setting. Many subculture of violence perspectives were developed to explain behavior among residents in disadvantaged urban communities (although some also were applied to rural communities; see Ayers, 1991; Nisbett and Cohen, 1996). Although our data certainly cover some significantly disadvantaged geographic areas, it would be beneficial for future work to replicate our analysis with data sets that capture youth who reside in more urban environments. Second, our data covered 4 years, but the sample was young (12–16 years old on average across the years). Given that we know crime patterns shift with age, as can the factors and mechanisms implicated in producing offending, replicating this analysis with samples that extend further into adulthood would provide an important assessment of the robustness of the current findings. Finally, we would be remiss to ignore that our measures of offending are based on self-reports. Although scholars often favor self-reports over official records of crime when studying offending behavior, it is possible that youth were reticent to report whether they had attacked another person, perhaps more so than whether they had stolen another's property. Of course, social desirability also may have led them to overreport violence as a means of "looking tough." In the end, all self-reports are limited by such concerns as recall errors, lying, and telescoping—our data are no different. Therefore, it would be ideal to confirm the results here with alternative outcome measures.

For substantive reasons, this research was focused on the contrast between assaults and thefts. Other theories make different distinctions, such as between white-collar crime and other crimes (e.g., Friedrichs and Schwartz, 2008), and to consider these claims was beyond the scope of this article. Nevertheless, given appropriate data, these questions are just as important and Osgood and Schreck's (2007) approach can help assess the validity of these theoretical claims. Future research could therefore extend both measures used here to capture violence and nonviolence as well as to clarify the extent to which some individuals favor other crime "types" and whether such tendencies coincide with theoretical predictions or established risk factors.

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Appendix A. Descriptive Statistics and Item Parameters for Measures of Violent and Nonviolent Offending

	Wave I			Wave II			Wave III			Wave IV		
	Mean	γ_{i0}	SE	Mean	γ_{i0}	SE	Mean	γ_{i0}	SE	Mean	γ_{i0}	SE
Violent Offending												
Attacked someone (at school)	1.35	-.85	.04	1.29	-1.04	.06	1.21	-1.14	.06	1.20	-1.45	.07
Attacked someone (not at school)	1.50	.39	.01	1.38	.27	.01	1.29	.30	.01	1.24	.18	.01
Nonviolent Offending												
Stolen property (at school)	1.12	-1.19	.05	1.12	-1.04	.06	1.10	-.68	.06	1.09	-.86	.07
Stolen property (not at school)	1.14	-.95	.05	1.15	-.79	.06	1.12	-.45	.06	1.11	-.66	.07

NOTE: Lower values of γ_{i0} reflect greater item “difficulty”; see equations 1 and 4. γ is the hierarchical linear modeling population average estimate, and SE is its robust standard.

ABBREVIATION: SE = standard error.

Appendix B. Negative Binomial Regression Results for Predictors and Violent and Nonviolent Offending, Wave I

	Violent Offending		Nonviolent Offending	
	β	SE	β	SE
Male	.38*	.07	.67*	.12
Black	.45*	.15	.33	.24
Age	.10	.06	.22*	.10
Parents' education	-.01	.02	.01	.03
Parents unemployed	-.07	.12	.01*	.17
Impulsivity	.46*	.05	.76*	.08
SOV	.60*	.05	.67*	.07
Attachment to mother	-.21*	.04	-.33*	.06
Friends' specialization	.59*	.07	-.68*	.12

ABBREVIATIONS: SE = standard error; SOV = subculture of violence.

* $p < .05$.