RACE, FAMILY STRUCTURE, AND DELINQUENCY: A TEST OF DIFFERENTIAL ASSOCIATION AND SOCIAL CONTROL THEORIES*

ROSS L. MATSUEDA   KAREN HEIMER

University of Wisconsin–Madison

Studies of the relationship between race and delinquency have typically found that broken homes lead to greater delinquency among blacks than whites, but have not demonstrated empirically why this is so. This paper derives theoretical mechanisms from differential association theory and social control theory, specifying how broken homes may influence delinquency among both blacks and nonblacks. The analysis specifies a structural equation model of delinquency (Matsueda 1982), derives competing hypotheses from the two theories, and estimates a cross-population model for blacks and nonblacks using data from the Richmond Youth Project. Consistent with previous research, we find that broken homes have a larger impact on delinquency among blacks than nonblacks, but, unlike previous studies, our model explains this effect completely. In both populations, the effects of broken homes and attachment to parents and peers are mediated by the learning of definitions of delinquency, a finding that supports differential association over social control theory.

Although race is a critical variable in many theories of crime, little empirical research has examined competing explanations of the race-delinquency relationship. There are perhaps three reasons for this. First, given the history of racial discrimination in the United States, any examination of black-white differences in unlawful behavior is likely to be politically sensitive and controversial (Wilson and Herrnstein 1985; Wilson 1985). Second, differences in criminal and delinquent behavior, as measured by official statistics, have been attributed to racial bias in the criminal justice system. Third, racial disparities in delinquency have been difficult to measure reliably. Indeed, researchers disagree over the extent to which rates of unlawful behavior vary by race: official statistics and victimization surveys show wide disparities, while self-report surveys show few differences (Hindelang 1978; Hindelang, Hirschi, and Weis 1979, 1981). Moreover, because the responses of blacks to survey questions contain more random variability than those of whites, some have cautioned against making racial compari-

sons with delinquency data (Hirschi 1969). This implies that any cross-race comparison must consider differential errors of measurement (Bielby, Hauser, and Featherman 1977).

Most previous research on black-white differences in delinquency has focused on the structure of the family. Stimulated by the Moynihan Report (1965), which hypothesized that black youths commit more delinquent acts in part because of a tangle of pathology originating in female-headed households, unemployment, illegitimacy, and differential socialization, such research has examined the joint relationships among race, broken homes, and delinquency. The conclusions have been mixed: most researchers find that broken homes have a larger effect on delinquency among blacks (Monahan 1957; Moynihan 1965; Rosen, Lalli, and Savitz 1975); some find a greater effect among whites (Toby 1957; Chilton and Markle 1972; Austin 1978); still others find little difference by race (Tennyson 1967; Berger and Simon 1974). This literature has been preoccupied with the demographic question of whether the effect of broken homes on delinquency varies by race. From a theoretical standpoint, a more significant question concerns the causal mechanisms intervening between broken homes and delinquency for both races. What is needed, then, is a theoretical model that can explain these relationships.

This paper examines delinquent behavior among blacks and nonblacks using a causal model derived from two dominant sociological theories of delinquency: differential association theory and social control theory. The model builds on a statistical model previously esti-

mated to test differential association against control theory (Matsueda 1982). We use the model to examine differences in parameters across populations of black and nonblack youth, to focus on the relationship between family structure and delinquency, and to test the efficacy of differential association versus social control theory across race. The first section discusses the implications of differential association and social control theories for explaining the relationships among race, broken homes, and delinquency. Here we derive several testable hypotheses from the competing theories. The second section presents a structural equation model of these relationships, estimates the model's parameters, and tests key hypotheses. The third section discusses the implications of the results for theorizing about race, social structure, and delinquency.

MODELING RACIAL DIFFERENCES: DIFFERENTIAL ASSOCIATION VERSUS SOCIAL CONTROL THEORY

Our task is to develop a social-psychological explanation of the joint relationships among race, broken homes, and delinquency. Two distinct mechanisms can explain such relationships. First, race and broken homes could interact in their effects on delinquency: the effect of broken homes and other determinants of delinquency could be greater among blacks. Second, race could influence delinquency indirectly through its effects on broken homes. The latter assumes that the effect of broken homes on delinquency does not vary by race; consequently, testing the interaction effect is logically prior. For this reason, and because prior studies suggest that both measurement and substantive processes vary by race, we will examine a cross-race model of delinquency. Previous research suggests that the effects of race and broken homes must be disentangled from the influences of socioeconomic status and neighborhood processes (Shaw and McKay 1969; Monahan 1957; Moynihan 1965; Berger and Simon 1974). Therefore, we need to locate those intervening social-psychological processes explaining such relationships.

According to Sutherland's (1947) theory of differential association, delinquency is rooted in normative conflict. Modern industrial societies contain conflicting structures of norms, behavior patterns, and definitions of appropriate behavior that give rise to high rates of crime. At the *group* level of explanation, Sutherland posited that normative conflict is translated into group rates of delinquency through differential social organization: the extent to which a group is organized for or against delinquency determines its rate of law violation. This differential

organization consists of neighborhood organization, family processes, peer relationships, and the distribution of age, race, and class.

At the *individual* level, Sutherland maintained that normative conflict is translated into individual acts of delinquency through differential association. Definitions favorable and unfavorable to delinquent behavior are learned through communication, primarily in intimate groups. Whether delinquency occurs depends on the ratio of learned definitions favorable and unfavorable to that act. Moreover, each definition is weighed by four modalities: frequency, duration, priority, and intensity. Definitions presented more frequently, for a longer time, earlier in life, and from a more prestigious source receive more weight.

Taken together, the individual and group components of differential association explain the organizational and learning mechanisms by which race and family status influence delinquent behavior. The learning mechanism (differential association process) should be invariant across race, although the context or source of that learning, such as parents, peers, or neighborhoods (differential social organization), may vary by race. For example, if a broken home impedes parental supervision and attachment, it could indirectly increase a child's contact with prodelinquent definitions from delinquent boys and other influences outside the home (Sutherland and Cressey 1978, p. 219–24; Shaw and McKay 1931). Furthermore, broken homes may hamper the formation of attachments to parents (prestige) and the transmission of antidelinquent definitions from parent to child; thus, the prodelinquent organization of the community or neighborhood would not be offset by antidelinquent influences within the home. Since racial segregation often limits blacks to inner-city neighborhoods with low socioeconomic status and abundant definitions favorable to street crimes (Sutherland and Cressey 1978, p. 220), the influence of broken homes on delinquency may be particularly acute for blacks. The important point is that for both blacks and nonblacks, structural variables such as broken homes and neighborhood organization affect delinquency by influencing the dynamic process of learning definitions favorable and unfavorable to crime.

In contrast to differential association, Hirschi's (1969) social control theory denies the existence of normative conflict and ignores the importance of motives for delinquency, such as prodelinquent definitions. Control theory posits a single conventional moral order in society and assumes that the motivation for delinquency is invariant across persons. The question is not, "Why do some people violate the law?" since we are all equally motivated to do so, but rather,

"Why do most people refrain from law violation?" Hirschi's answer is that they are dissuaded by strong bonds to conventional society: attachment, commitment, involvement, and belief.

Attachment to others dissuades persons from delinquency through a moral process: those with warm relationships with their parents or friends are likely to consider their reactions to the unlawful act. Because only a single moral order exists, that reaction will always be negative. Commitment to conventional lines of action reflects an investment of time and energy in procuring an education, developing a business, or building a virtuous reputation. The greater the investment, the less likely the person will jeopardize it by violating the law. Involvement in conventional activities simply limits one's time to contemplate and execute illegal acts. Finally, belief in the moral order directly taps an individual's internalization of conventional morality. Here, Hirschi reconceptualizes Sutherland's definitions of delinquency to conform to the assumptions of control theory: since there is only one moral order, beliefs concerning delinquency are all conventional, and the greater the belief the less likely the deviation.

Each of these components of the bond, while intercorrelated, are said to affect delinquency independently and additively (Hirschi 1969, pp. 27–30). While differential association theory implies that attachments, involvements, and commitments will affect delinquency only indirectly through their effects on definitions (belief), control theory maintains that each element of the bond *itself* affects delinquency directly (Jensen 1972; Kornhauser 1978; Matsueda 1982).

Control theory implies that the causes of delinquency (social bonding) are the same for all racial groups (Hirschi 1969, p. 80). The theory would receive strong support if the absolute effect on delinquency of each element of the bond were identical for all races. This would imply that the theory describes a deep invariant structure that persists in the face of racial segregation and discrimination. But confirming control theory may not require such invariance, instead requiring only that the elements of the bond explain the probability of delinquent behavior. Thus, we might expect socialization practices or belief systems to vary across racial groups, causing attachment, commitment, involvement, and belief to affect delinquency differently by race.

Furthermore, the relative strength of structural determinants of social bonding may also vary by race. Here, we are on less-solid ground, since Hirschi (1969, p. 113) had little to say about factors affecting the strength of elements of the bond. Nevertheless, if we conceptualize the struc-

tural-level counterpart of bonding as social disorganization—a community's inability to control the behavior of juveniles because of weak and unlinked institutions—we can hypothesize about racial differences in bonding and its determinants (Kornhauser 1978; Shaw and McKay 1969). Broken homes, lower socioeconomic classes, and high-crime neighborhoods (disorganization) should influence delinquency by impeding the formation of strong attachments, commitments, involvements, and beliefs. Because nonintact homes undermine parent-child relations, attachment to parents—perhaps the most important element of the bond—should be the principal intervening variable between broken homes and delinquency (Hirschi 1969, 1983).[1] In turn, attachments to parents should generalize, allowing attachments to form among peers and reinforcing strong moral beliefs. If Moynihan and others are correct that blacks are ensnarled in a tangle of pathology, then social control theory would claim that this pathology is a reflection of disorganization and that broken homes, social class, and neighborhood delinquency will produce more delinquency among blacks by inhibiting the formation of strong attachments and beliefs.

In sum, control theory and differential association make different predictions of the causes of delinquency among black and nonblack males. Social control theory predicts that, for both blacks and nonblacks, delinquency is determined by the independent effects of the elements of the social bond. Family structure may affect the elements of the social bond differently across race, but each element of the bond should exert a unique effect on delinquency for both races. The relative importance of these bonds, however, may vary across race, due to a different emphasis on socialization practices, which in turn stems from social disorganization. Differential association, however, predicts that, for both blacks and nonblacks, delinquency is determined by learning definitions of the legal code (beliefs), which mediate the influence of attachments, commitments, and involvements. The sources of that learning, however, are determined by individuals' group location in the social structure, which organizes their patterns of interactions, and which may differ by race. This implies that the determinants of a person's learned definitions, such as being from a broken home, a trouble-ridden neighborhood, a close family unit, or a delinquent peer

---

[1] Hirschi (1969, 1983) has argued that single-parent families should have similar rates of delinquency as intact families, since, all things being equal, one parent should be as effective as two in socializing children. Nevertheless, all things are never equal, and logically, for social control theory, if broken homes influence delinquency, they do so by attenuating the elements of the social bond.
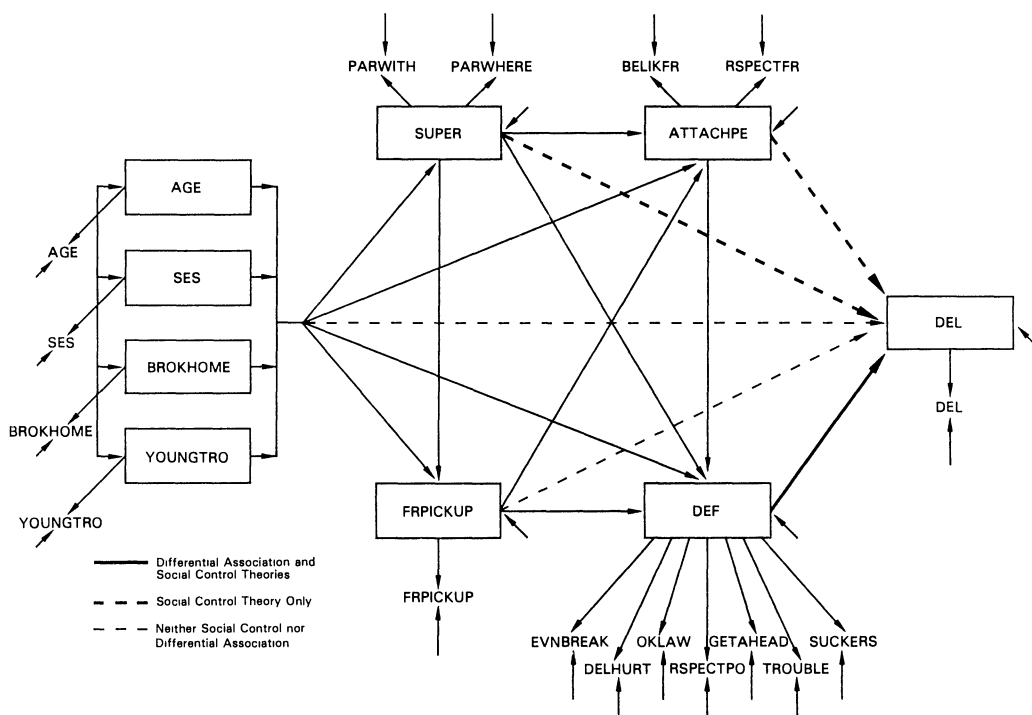
Fig. 1. Path Diagram of the Full Structural Equation Model of Delinquency

group, may vary across race, but the determinant of delinquency—an excess of definitions favorable to delinquency—will not.

A CROSS POPULATION MODEL OF RACE AND DELINQUENCY

Our investigation analyzes Matsueda's (1982) causal model of differential association, control theory, and delinquency by replicating the model on the black population of the Richmond Youth Project. We first examine whether the model as a whole varies across race, then test key hypotheses about substantive parameters both within and across groups. We examine two substantive issues: (1) the model's ability to explain the influence of family structure on delinquency; and (2) the relative efficacy of differential association versus social control theory.

The data were collected in 1965 as part of the Richmond Youth Project, which sampled a large number of students in 11 junior and senior high schools of Contra Costa County in California (Wilson 1965). These data are particularly well suited to the issues at hand: 1965 marked the publication of Moynihan's report; the population is a large heterogeneous metropolitan area containing substantial numbers of lower-income, inner-city blacks; and the random sample was stratified by race, as well as school, sex, and grade. Our analyses will focus on the

1,588 nonblack males and 1,001 black males.[2] Self-report measures, described in Appendix A, were obtained through questionnaires administered in schools.[3] (For further details of the data collection procedures and characteristics of the sample, see Hirschi 1969.)

Our causal model of delinquency, depicted in Figure 1, consists of a substantive model of the mechanisms generating delinquent behavior and a measurement model of the process by which underlying substantive concepts generate observable measures. The measurement model, indicated by the paths connecting latent variables to

---

[2] The response rate for nonblacks was 75 percent, for blacks, 68 percent. Hirschi (1969) examined potential bias due to nonresponse, finding that nonresponse was evenly distributed among permission denied by parent, no response by parent, transfers and dropouts, and absentees. Furthermore, while respondents were less likely than nonrespondents to have a police record, this effect did not vary much by race. Therefore, nonresponse should not bias our cross-population results appreciably. (Upon request, covariance matrices of observable variables are available from the authors.)

[3] In using a sample stratified by race, estimating separate models for nonblacks and blacks, and fixing the validity coefficient of self-reported delinquency to be larger for nonblacks than blacks, we are following the recommendations of Hindelang et al. (1981), who argue that, after taking these steps, self-reports of minor forms of delinquency are reasonably reliable and valid for testing theories.

observable indicators, allows us to estimate and control statistically for the biasing effects of measurement error in substantive constructs.[4] Such a model can be crucial for cross-population analyses because it can reveal differential measurement processes across populations, which, if not dealt with, can obscure cross-population comparisons. Therefore, before we proceed to our hypotheses derived from differential association and social control theory, we will examine our measurement models for the two populations.

The substantive component of our model consists of three blocks of variables: four exogenous background variables describing demographic characteristics of individuals, four intervening variables representing the social control and differential association processes, and an outcome variable of self-reported delinquency.[5] We specify the intervening variables — parental supervision (attachment to parents), delinquent friends, attachment to peers, and definitions of delinquency — as linear functions of our background variables: age, socioeconomic status, broken homes, and neighborhood trouble (see Figure 1). In both social control and differential association theories, these effects, representing the influence of social structure on socialization processes, may vary by race.

HYPOTHESIS 1. *The effects of background variables, including family structure, on social bonding (attachment and belief) vary by race.*

In addition, differential group organization predicts that attachment to parents and peers and delinquent friends may influence definitions differently by race:

HYPOTHESIS 2. *The effects of background variables and parental and peer processes on definitions of delinquency vary by race.*

According to both theories, the total impact of

---

[4] The measurement model of definitions of delinquency conceptualizes Sutherland's concept of a ratio of definitions favorable and unfavorable to delinquency as a unidimensional construct, which generates fallible indicators. Each indicator, measured on a single continuum from highly antidelinquent to highly prodelinquent, is assumed to capture one domain of the ratio of definitions. After controlling statistically for response errors, the common variation across our measures should adequately tap such a construct (see Matsueda 1982 for details).

[5] The causal ordering among our variables within a cross-sectional design follows previous research using these data (Hirschi 1969; Jensen 1972; Matsueda 1982). This ordering is consistent with both differential association theory and social control theory. Some recent evidence on this issue within a longitudinal framework confirms the causal priority of attachment to parents on delinquency (Liska and Reed 1985; Agnew 1985) and definitions of delinquency (belief) (Agnew 1985; Elliott, Huizinga, and Ageton 1985), but see also Minor (1984).

broken homes and other background variables on delinquency may differ by race. For example, as some previous research has found, broken homes may exert a larger effect on delinquency for blacks than for nonblacks. Whatever the magnitude, however, social control and differential association theories specify intervening mechanisms to account for the total effects. The most significant hypotheses for social control theory are that attachment to parents, attachment to peers, and belief in morality each have a direct effect on delinquency and together should mediate the influence on delinquency of background characteristics such as broken homes, age, SES, and neighborhood trouble. These hypotheses should hold equally for blacks and nonblacks. Furthermore, control theory allows the relative effects of these variables on delinquency to differ by race, reflecting, for example, differential socialization practices across racial groups. The foregoing can be expressed as two hypotheses:

HYPOTHESIS 3. *The effects on delinquency of broken homes and the other background variables are mediated by variables representing social bonding.*

HYPOTHESIS 4. *Attachment to parents, attachment to peers, and belief all have significant effects on delinquency.*

In contrast, the crucial proposition of differential association theory is that the effects of definitions of delinquency on delinquent behavior should be racially invariant and, for both blacks and nonblacks, should mediate the effects on delinquency of all other variables (see Figure 1). The antecedent variables, including background characteristics and other elements of the social bond, reflect elements of social organization that structure the differential learning of behavior patterns. Consequently, if age, broken homes, or parental supervision have large total effects on delinquency, it is because they represent an important source of learning definitions of delinquency. These propositions translate into two testable hypotheses:

HYPOTHESIS 5. *For both blacks and nonblacks, a person's learned ratio of definitions mediates the effects of other antecedent variables in the model, including the effect of broken homes.*

HYPOTHESIS 6. *The effect of definitions of the law on delinquency is racially invariant.*

RESULTS

We estimated the parameters of our measurement and substantive models jointly as a single system using the maximum likelihood estimator of Joreskog's LISREL V program (Joreskog and Sorbom 1984). Our analysis of the measurement

models, discussed in Appendix B, reveals larger measurement errors for blacks than nonblacks. Thus, the failure to correct for attenuation due to unreliability could lead to greater downward biases in regression coefficients among blacks than nonblacks. Overall, the model fits better for nonblacks (L^2 = 129.04 d.f. = 71) than blacks (L^2 = 216.22; d.f. = 71).[6] Both findings are consistent with other similar response models (Bielby et al. 1977).

Estimation of the Model for Nonblacks

Our discussion of the substantive model will focus on the above six hypotheses. We first highlight the results for nonblacks, then present the findings for blacks in more detail, emphasizing differences across race. Table 1 presents the unstandardized parameter estimates of our baseline model for nonblacks in their reduced, semi-reduced, and structural forms; their standardized counterparts appear in Table 2. These estimates reveal four principal findings. First, the model explains substantial variation in definitions of delinquency (R^2 = .66). Friends picked up by the police, attachment to peers, and parental supervision exert substantial direct effects on the learned ratio of definitions (line 10 of Table 2) and also mediate the effects of certain background variables. More precisely, the total effect of neighborhood trouble is mediated by supervision and delinquent friends (compare line 7 with lines 8 and 9). Thus, living in a troubled neighborhood exposes nonblacks to more delinquent definitions by attenuating parental supervision and increasing the number of delinquent companions. Also, the total effect of broken homes on definitions, modest in size but statistically significant, is mediated by parental supervision.

Second, the model also does well in explaining variation in delinquent behavior (R^2 = .56): every variable in the model except socioeconomic status has a significant total effect on delinquency. The largest total effect is exerted by delinquent friends, followed by definitions of delinquency, supervision, and neighborhood trouble. Broken homes exert a small but statistically significant total effect.

Consistent with social control theory (Hypothesis 3), our third finding is that the significant

total effects of age, broken homes, and neighborhood trouble are mediated by the joint effects of attachment to parents, delinquent friends, attachment to peers, and moral beliefs (line 15). Thus, being older, from a broken home, and from a troubled neighborhood increases the likelihood of delinquency by attenuating attachments to parents and peers, increasing the number of delinquent friends, and reducing the strength of conventional beliefs.

Nevertheless, our fourth finding, which addresses our crucial test of differential association versus social control theory (Hypothesis 4), supports differential association theory. Both attachment to parents and peers have substantial and statistically significant indirect effects on delinquency through definitions. Moreover, the remaining unmediated direct effects of the attachment variables are not only nonsignificant and small in magnitude, but, from the standpoint of social control theory, implausibly positive in sign (line 15 of Table 1). Thus, as differential association predicts, youths who are closely supervised and develop warm friendships commit fewer delinquent acts because they are exposed to fewer prodelinquent definitions.

In addition, none of the background variables has a significant direct effect on delinquency in the structural form (Hypothesis 5). The number of delinquent friends, however, does have a substantial and statistically significant influence on delinquency.[7] This direct effect is smaller than the effect of definitions, and about as large as the indirect effect of delinquent friends through definitions of delinquency; nevertheless, the result provides some negative evidence for differential association.[8] Although irrelevant to the debate between Hirschi and Sutherland, the finding supports a group process explanation

---

[6] This holds even though we have a larger sample of nonblacks, and, thus, greater statistical power to detect departure from the hypothesized model. For comparability, the model for blacks includes the same measurement error correlations specified by Matsueda (1982) for the nonblacks—some of which were nonsignificant. A sensitivity analysis, however, revealed that a better-fitting model did not alter the substantive picture in any meaningful way. Thus, it appears that the overall goodness-of-fit statistic is sensitive to trivial departures from uninteresting restrictions.

[7] This is the only finding inconsistent with Matsueda (1982), who found that the influence of delinquent friends on delinquent behavior was mediated by definitions. The discrepancy between our model for nonblacks and Matsueda's (1982) is due to a different method of handling missing values. Here, to insure comparability with the sample of blacks, we used pairwise deletion for nonblacks, while Matsueda (1982) used listwise deletion. We also estimated cross-population models using listwise deletion for both groups, and, while the sample size was reduced by 40 percent, the results were identical for blacks. Thus, missing values do not substantially influence the overall pattern of results.

[8] This direct effect of delinquent friends on delinquent behavior also results in three variables having indirect effects on delinquency through delinquent friends, not definitions of delinquency. The effects are modest in size, however, particularly in comparison to similar indirect effects through definitions. The relative indirect effects through delinquent friends and definitions, respectively, are: .07 and .08 for age, .09 and .19 for neighborhood trouble, and − .07 and − .20 for supervision.

Table 1. Unstandardized Parameter Estimates of the Substantive Model: Nonblack Males (N = 1,558)

Dependent Variable	Predetermined Variables								R^2	Components of Variation		
	AGE	SES	BROKHOME	YOUNGTRO	SUPER	FRPICKUP	ATTACHPE	DEF		Residual	Explained	Total
1. SUPER	-.031 (.008)	.004 (.008)	-.154 (.043)	-.107 (.020)					.089	.389	.120	.407
2. FRPICKUP	.157 (.024)	-.022 (.026)	.033 (.132)	.426 (.062)					.121	1.148	.427	1.225
3. FRPICKUP	.134 (.024)	-.019 (.025)	-.082 (.132)	.345 (.063)	-.715 (.122)				.178	1.110	.518	1.225
4. ATTACHPE	.020 (.009)	.015 (.008)	.031 (.041)	-.076 (.020)					.062	.303	.084	.315
5. ATTACHPE	.025 (.010)	.015 (.008)	.055 (.042)	-.059 (.020)	.159 (.041)				.089	.298	.100	.315
6. ATTACHPE	.035 (.010)	.013 (.008)	.050 (.042)	-.035 (.021)	.107 (.040)	-.069 (.016)			.161	.288	.126	.315
7. DEF	.037 (.010)	-.013 (.009)	.111 (.045)	.182 (.025)					.208	.336	.170	.377
8. DEF	.025 (.009)	-.011 (.009)	.052 (.043)	.140 (.023)	-.387 (.053)				.367	.300	.228	.377
9. DEF	.003 (.009)	-.008 (.009)	.065 (.041)	.082 (.021)	-.261 (.045)	.169 (.019)			.614	.235	.295	.377
10. DEF	.012 (.010)	-.004 (.009)	.080 (.041)	.072 (.021)	-.231 (.045)	.149 (.019)	-.282 (.071)		.660	.219	.307	.377
11. DEL	.062 (.018)	.000 (.020)	.227 (.101)	.365 (.047)					.123	.877	.327	.936
12. DEL	.043 (.018)	.002 (.019)	.133 (.101)	.299 (.048)	-.613 (.094)				.188	.844	.405	.936
13. DEL	-.017 (.018)	.011 (.018)	.169 (.096)	.144 (.048)	-.275 (.091)	.450 (.033)			.473	.680	.643	.936
14. DEL	-.011 (.019)	.013 (.018)	.179 (.096)	.137 (.048)	-.254 (.092)	.437 (.035)	-.189 (.151)		.476	.677	.646	.936
15. DEL	-.026 (.021)	.019 (.019)	.083 (.099)	.050 (.052)	.024 (.112)	.257 (.056)	.152 (.180)	1.208 (.292)	.557	.623	.699	.936

Note: Standard errors appear in parentheses.

Table 2. Standardized Parameter Estimates of the Substantive Model: Nonblack Males ($N = 1{,}558$)

Dependent Variable	Predetermined Variables							
	AGE	SES	BROK-HOME	YOUNG-TRO	SUPER	FRPICKUP	ATTACHPE	DEF
1. SUPER	− .123	.017	− .140	− .210				
2. FRPICKUP	.208	− .033	.010	.278				
3. FRPICKUP	.178	− .029	− .025	.225	− .250			
4. ATTACHPE	.106	.092	.037	− .193				
5. ATTACHPE	.132	.088	.066	− .150	.206			
6. ATTACHPE	.180	.080	.059	− .089	.138	− .271		
7. DEF	.160	− .063	.109	.384				
8. DEF	.109	− .056	.051	.296	− .419			
9. DEF	.011	− .040	.064	.173	− .282	.548		
10. DEF	.054	− .022	.078	.152	− .249	.484	− .235	
11. DEL	.108	.000	.090	.311				
12. DEL	.075	.005	.052	.255	− .267			
13. DEL	− .030	.022	.067	.123	− .120	.589		
14. DEL	− .018	.027	.071	.117	− .111	.572	− .063	
15. DEL	− .044	.037	.033	.043	.011	.336	.051	.487

of delinquency (Short and Strodtbeck 1965; Briar and Piliavin 1965).

Estimation of the Model for Blacks

Parameter estimates of our substantive model for blacks appear in Table 3 in unstandardized form, and Table 4 in standardized form. Our discussion will focus on our cross-population hypotheses. To test these hypotheses, we use likelihood-ratio statistics, which are distributed chi-square in large samples and are obtained by subtracting the pooled likelihood-ratio statistic of our baseline model ($L^2 = 345.26$; d.f. = 142) from that of the model with cross-group constraints. Using the overall test of invariance, we reject the hypothesis that all substantive parameters are the same for blacks and nonblacks ($L^2 = 427.79$; d.f. = 82; $p < .001$) and then proceed to more specific cross-group comparisons. Our first comparison hypothesizes that the determinants of the processes of social bonding and differential association vary by race. For the social control process, the effects of background variables on elements of the social bond (Hypothesis 1) appear invariant across groups ($L^2 = 20.13$; d.f. = 12; $p > .05$). For the differential association process, however, we find that the determinants of definitions of the legal code vary by race ($L^2 = 18.37$; d.f. = 7; $p < .01$). This finding (Hypothesis 2) is due primarily to the larger effects of broken homes, parental supervision, and neighborhood trouble on the process of learning definitions among blacks (compare line 10 in Tables 3 and 4). Thus, from the standpoint of differential association, the neighborhood and family organization of blacks is most telling in the process producing definitions of delinquency.

Turning to the equations predicting delinquent behavior, we first examine the total effects of

our substantive variables and then the causal structure explaining those total effects. Note that delinquent friends have a slightly larger total effect in our model for nonblacks than for blacks. Perhaps the most striking racial difference, however, is in the reduced-form effects of broken homes and neighborhood trouble: the former is three times larger among blacks, while the latter is five times smaller. Thus, consistent with much previous research, broken homes are more influential in producing delinquency among blacks than nonblacks.

Paralleling our findings for nonblacks, we find that, along with delinquent peers, the elements of the social bond—attachments to parents and peers and belief in morality—collectively mediate the influence of our background variables on delinquency (line 15). The indirect effects of age, broken homes, and neighborhood trouble are substantial, while the remaining unmediated effects are either trivial in size (broken homes) or opposite in sign than anticipated (age and neighborhood trouble). Again, this is consistent with social control theory (Hypothesis 3).

We can assess Hypotheses 4 and 5, which test control theory against differential association, by comparing lines 11–15 in Tables 3 and 4. Line 14 reveals that before adding definitions of the legal code into the equation, our model accounts for a substantial amount of variation in delinquency ($R^2 = .31$). Thus, our test of differential association—the extent to which definitions mediate the effects of other variables on delinquency—is a strong one, since substantial total effects must be mediated. As noted above, in the black sample, the reduced-form effect of broken homes on delinquency is substantial (line 11 of Table 4), as is the semi-reduced form (line 14). Before adding definitions into the equation, then, broken

Table 3. Unstandardized Parameter Estimates of the Substantive Model: Black Males ($N = 948$)

Dependent Variable	Predetermined Variables								R^2	Components of Variation		
	AGE	SES	BROKHOME	YOUNGTRO	SUPER	FRPICKUP	ATTACHPE	DEF		Residual	Explained	Total
1. SUPER	-.015 (.008)	.010 (.014)	-.178 (.058)	-.057 (.025)					.066	.332	.084	.344
2. FRPICKUP	.112 (.033)	-.032 (.056)	.347 (.221)	.190 (.096)					.063	1.108	.288	1.145
3. FRPICKUP	.097 (.032)	-.022 (.055)	.166 (.223)	.132 (.096)	-1.021 (.200)				.151	1.055	.445	1.145
4. ATTACHPE	.001 (.011)	.029 (.017)	.041 (.065)	-.050 (.029)					.035	.324	.063	.330
5. ATTACHPE	.004 (.011)	.027 (.017)	.072 (.068)	-.040 (.029)	.175 (.063)				.066	.318	.008	.330
6. ATTACHPE	.012 (.011)	.025 (.017)	.087 (.068)	-.029 (.029)	.086 (.065)	-.088 (.026)			.145	.305	.126	.330
7. DEF	.073 (.024)	.037 (.030)	.531 (.119)	.243 (.052)					.326	.437	.303	.532
8. DEF	.063 (.023)	.044 (.029)	.409 (.114)	.204 (.050)	-.688 (.123)				.509	.373	.379	.532
9. DEF	.049 (.024)	.047 (.029)	.384 (.112)	.184 (.049)	-.534 (.122)	.150 (.038)			.598	.338	.411	.532
10. DEF	.053 (.024)	.056 (.029)	.414 (.114)	.174 (.049)	-.504 (.121)	.119 (.041)	-.349 (.136)		.638	.319	.425	.532
11. DEL	.003 (.024)	.060 (.041)	.697 (.164)	.075 (.071)					.096	.794	.258	.835
12. DEL	-.007 (.024)	.067 (.041)	.576 (.166)	.037 (.071)	-.681 (.146)				.170	.761	.345	.835
13. DEL	-.034 (.024)	.073 (.041)	.530 (.165)	.000 (.071)	-.394 (.157)	.281 (.056)			.295	.701	.454	.835
14. DEL	-.030 (.024)	.082 (.041)	.560 (.167)	-.011 (.071)	-.364 (.156)	.250 (.060)	-.353 (.198)		.312	.693	.467	.835
15. DEL	-.082 (.041)	.026 (.051)	.149 (.245)	-.183 (.106)	.136 (.253)	.131 (.077)	-.007 (.255)	.992 (.371)	.456	.616	.565	.835

Note: Standard errors appear in parentheses.

Table 4 Standardized Parameter Estimates of the Substantive Model: Black Males ($N = 948$)

Dependent Variable	Predetermined Variables							
	AGE	SES	BROK-HOME	YOUNG-TRO	SUPER	FRPICKUP	ATTACHPE	DEF
1. SUPER	−.070	.039	−.180	−.135				
2. FRPICKUP	.162	−.039	.106	.136				
3. FRPICKUP	.141	−.027	.051	.094	−.306			
4. ATTACHPE	.006	.121	.043	−.125				
5. ATTACHPE	.019	.114	.076	−.100	.183			
6. ATTACHPE	.062	.106	.092	−.071	.089	−.306		
7. DEF	.228	.097	.348	.372				
8. DEF	.197	.115	.268	.312	−.444			
9. DEF	.151	.123	.252	.281	−.345	.323		
10. DEF	.165	.146	.272	.266	−.325	.257	−.216	
11. DEL	.006	.101	.291	.074				
12. DEL	−.014	.112	.241	.036	−.280			
13. DEL	−.068	.122	.221	.000	−.162	.385		
14. DEL	−.059	.137	.234	−.010	−.150	.342	−.139	
15. DEL	−.164	.044	.062	−.178	.056	.180	−.003	.632

homes have a large and significant effect on delinquency. After adding definitions, however, that effect becomes trivial in size and statistically indistinguishable from zero (line 15 of Table 3). As differential association predicts, broken homes influence delinquency by impeding the transmission of antidelinquent definitions and increasing the transmission of prodelinquent patterns. Similarly, in accord with control theory, attachment to parents (supervision) has a large total effect on delinquency that works partly indirectly through delinquent friends and partly directly before adding our definitions variable. But the structural form (line 15) reveals that, after adding definitions into the equation, the effect of supervision becomes nonsignificant, and, from the standpoint of control theory, implausibly positive. Again, this is consistent with differential association theory: supervision influences delinquency by influencing the ratio of learned definitions of delinquency. Furthermore, delinquent friends exert a large and significant effect on delinquency before adding definitions, but a comparatively small and nonsignificant effect in the presence of our definitions construct (compare lines 14 and 15). Thus, in contrast to our findings for nonblacks, delinquent friends influence delinquency by presenting definitions of the legal code; this finding supports differential association theory over group process theories.[9] While

the total effect of attachment to peers is small and statistically nonsignificant, the indirect effect through definitions is significant, rendering the direct effect on delinquency virtually nonexistent. Differential association is again supported over control theory.

Finally, we tested Hypothesis 6, derived from differential association theory, which postulates that the effect of definitions on delinquency is invariant across race. That test confirmed the hypothesis: the point estimates are indistinguishable from one another at conventional levels of significance ($L^2 = .17$; d.f. $= 1$; $p > .50$). Thus, differential association theory again receives strong support.

DISCUSSION

For both black and nonblack samples, our models support differential association theory over social control theory. Contrary to Hirschi's (1969) postulate that each element of the social bond shows a unique and substantial effect on delinquency, we find that the effects of attachment to parents and peers operate indirectly through the process of learning an excess of definitions favorable to delinquency. This finding is consistent with differential association theory, as are the findings that across racial groups, the effect of definitions on delinquency is invariant, and within groups, definitions mediate the influence on delinquency of our other explanatory variables.

Of more interest are the differences between our models for blacks and nonblacks. The most

---

[9] The nonsignificance of this parameter estimate for blacks could be due to type II error, given the smaller size of the black sample. To investigate this, we conducted a power analysis, following the recommendation of Matsueda and Bielby (1986). We found that the model for blacks had ample statistical power (.95) to detect a metric coefficient the size of the estimate for nonblacks. But, although we cannot detect, with reasonable power, a standardized coefficient of .20

(power $= .50$), we can detect a standardized coefficient of .23 (power $= .65$). Thus, we have sufficient protection against type II error, assuming a nontrivial (larger than .20) effect of delinquent friends on delinquency in our black population.

striking difference is that the total effect of broken homes on delinquency is much larger for blacks than nonblacks. Yet in both racial groups nonintact homes influence delinquency through a similar process—by attenuating parental supervision, which in turn increases delinquent companions, prodelinquent definitions, and, ultimately, delinquent behavior. But to a much greater extent, broken homes *directly* foster an excess of definitions favorable to delinquency, which then increases delinquent behavior. This effect, being much larger among blacks, accounts for the greater total effect of broken homes on delinquency among blacks.

A second racial difference is the total effect of neighborhood trouble on delinquency, which is much larger in the model for nonblacks. Among nonblacks, that effect works partly through delinquent friends, but largely through definitions of delinquency; among blacks, a large indirect effect operates solely through definitions. We also examined an interaction hypothesis between neighborhood trouble and broken homes: Do broken homes influence delinquency only in the context of a trouble-ridden, high delinquency neighborhood? Entering a product variable representing the interaction effect, we found evidence of a conditional effect among blacks but not nonblacks. Blacks from broken homes who also live in troubled neighborhoods are more likely than those residing in trouble-free neighborhoods to associate with delinquents, learn an excess of definitions favorable to delinquency, and, consequently, violate the law. We were unable to locate such an interaction in the nonblack model, perhaps due to multicollinearity among main and interaction effects.[10]

We should note that, following a long history of research on family structure and delinquency, we have used a single dichotomous variable to distinguish intact from nonintact homes. Recently, some have argued that the impact of family structure on delinquency may vary depending on the nature of that structure, such as whether a step-parent is present or whether the mother or father is absent (Rankin 1983; Johnson 1986; Wells and Rankin 1986). We were unable to examine the joint relationships among different forms of family structure, our intervening variables, race, and delinquency because the small number of cases falling into

each category of family status led to multicollinearity and unstable estimates. Other research suggests that the etiology of the break, such as death, divorce, or desertion, can influence subsequent behavior (McLanahan 1985). Furthermore, many argue that the pertinent variable is marital and familial discord, which could have an adverse effect on intimacy, supervision, and the transmission of antidelinquent behavior patterns, and which could also cause a marital breakup. Since marital severance is also likely to cause discord, cross-sectional research designs are likely to confound the causes and consequences of family disruption. Longitudinal designs are needed to disentangle the reciprocal effects of family process, family structure, and delinquent behavior. Based on the results of our models, we expect that the key intervening mechanism explaining the effects on delinquency of such family processes is the learning of delinquent and antidelinquent definitions.

But the link between definitions of delinquency and social structure may be more complex than implied thus far and may suggest another empirically testable divergence between the theories of differential association and social control. More precisely, social control theory, based on a consensus model of social order, denies the efficacy of competing subcultural norms and assumes that only conventional norms and definitions of morality influence behavior. In contrast, differential association theory, based on a group conflict model of social organization, specifies that subcultural groups may differ on two dimensions of definitions of delinquency—the dimension of the weight of the definition, and, more importantly, the dimension of the meaning or content of the definition (Matsueda 1982). The latter implies that groups located at different junctures in the social structure may communicate and behave according to very different definitions of unlawful behavior. In particular, the content of definitions of delinquency may vary by race, neighborhood, and social class.[11] To explore this issue, researchers must first use in-depth interviews to induce the content of such definitions for distinct communication groups and then develop empirical measures to tap such definitions. Structural equation methods within

---

[10] Large bivariate correlations between product variables and their constituents suggest the problem of multicollinearity in disentangling interaction effects from main effects in both samples. Thus, we treat these results with caution. We also failed to unearth interaction effects among SES, broken homes, and neighborhood trouble, which was expected, given the null effects of SES on the endogenous variables.

---

[11] We attempted to explore this inductively using the Richmond data. That is, with our confirmatory factor models of definitions, we examined the possibility that some indicators that are valid for nonblacks are invalid for blacks, and vice versa. By and large, we did not find such differences in validity across race; what was a strong indicator in one population was generally strong for the other. This is not surprising, of course, since the measures are global, and designed to apply across general populations.

the LISREL framework exist for making cross-population comparisons when indicators for concepts differ across groups (Allison 1985).

Viewed in broader perspective, our results raise larger questions concerning the role of social structure on race, cultural norms, and delinquency. That is, given that delinquency is largely determined by the learning of definitions of the legal code, what are the wider structural determinants of that learning process? Our ability to explain remarkably large amounts of variation in definitions with a small number of variables suggests that such a learning process is tightly structured. When examining a single cross-section of individuals, we find that the learning process is structured by elements of social organization such as age, neighborhoods, families, and peers. Moreover, the differential impact of these structures accounts, in large part, for racial disparities in delinquent behavior.

From both a scientific and policy standpoint, a more significant issue may be the historical emergence of social and economic structures that give rise to distinct racial patterns of social organization. Thus, the racial cleavages in normative definitions of delinquent behaviors may derive from a history of restricted opportunities, a sense of resignation, and, ultimately, new ways of adapting to a bleak situation (Cloward and Ohlin 1960). For example, William Julius Wilson (1985) argues that increasing social dislocations among the urban underclass were a culmination of a number of demographic, economic, and cultural changes. Specifically, the increasing disparity in crime across race is a result of historic not contemporary discrimination, the unabated migration of Southern blacks to the centers of Northern cities, the drop in age structure among inner-city blacks, and a general economic shift from a manufacturing to a service economy. In turn, these broad historical trends have led to different patterns of social organization among the urban underclass, which influence rates of delinquency. For example, we have shown that delinquency is in part spawned by broken homes, unsupervised family life, ineffective neighborhood organization, and, ultimately, differential association. If this historical explanation is correct, and the critical learning process is indeed interwoven in the fabric of such historical trends, it should be no surprise that simplistic policies of rehabilitation and deterrence have failed to stem the tide of rising rates of delinquency. Sweeping social and economic reforms may be necessary to reverse the strong currents of law violation (Wilson 1985).

In the absence of a substantial body of empirical research verifying these propositions,

however, such theorizing is speculative. Nevertheless, such speculation is consistent with our principal findings that the influence of broken homes on delinquency is greater among blacks; that this influence is explained by the process of learning definitions of delinquency; and that, for both blacks and nonblacks, differential association theory is supported over social control theory.

APPENDIX A

Key to Variable Labels

AGE: Age of respondent. 0 = 12 years or younger, 1 = 13 years, 2 = 14 years, 3 = 15 years, 4 = 16 years, 5 = 17 years, 6 = 18 years, 7 = 19 years, 8 = 20 years or older.

BELIKFR: "Would you like to be the kind of person your best friends are?" 0 = not at all, 1 = in a few ways, 2 = in most ways.

BROKHOME: A dummy variable coded as one if either the mother or the father did not live with the respondent.

DEL: An index of delinquency committed during the last year containing the following six items:

BATTERY: "Not counting fights you may have had with a brother or sister, have you ever beaten up on anyone or hurt anyone on purpose?"
CARTHEFT: "Have you ever taken a car for a ride without the owner's permission?"
THEFT2: "Have you ever taken little things (worth less than $2) that did not belong to you?"
THEFT250: "Have you ever taken things of some value (between $2 and $50) that did not belong to you?"
THEFT50: "Have you ever taken things of larger value (over $50) that did not belong to you?"
VANDALSM: "Have you ever banged up something that did not belong to you on purpose?"

DELHURT: "Most things that people call 'delinquency' don't really hurt anyone." Strongly disagree, disagree, undecided, agree, strongly agree.

EVNBREAK: "Policemen try to give all kids an even break." Strongly agree, agree, undecided, disagree, strongly disagree.

FRPICKUP: "Have any of your close friends ever been picked up by the police?" 0 = no or don't know, 1 = one friend has, 2 = two friends have, 3 = three friends have, 4 = four or more friends have.

GETAHEAD: "To get ahead, you have to do some things which are not right." Strongly disagree, disagree, undecided, agree, strongly agree.

OKLAW: "It is alright to get around the law if you can get away with it." Strongly disagree, disagree, undecided, agree, strongly agree.

PARWITH: A composite asked regarding each parent: "Do your parents know who you are with when you are away from home?" 0 = never-never, 0.5 = sometimes-never, 1.0 = sometimes-sometimes, 1.5 = usually-sometimes, 2.0 = usually-usually.

PARWHERE: Same as above but with the question: "Do you parents know where you are when you are away from home?"

RSPECTFR: "Do you respect your best friend's

opinions about the important things in life?" 0 = not at all, 1 = a little, 2 = pretty much, 3 = completely.

RSPECTPO: "I have a lot of respect for the Richmond police." Strongly agree, agree, undecided, disagree, strongly disagree.

SES: Father's occupation measured on the Duncan Scale; if there is no father living in the home, mother's occupation is used. For the few cases in which father's occupation had a missing value, and father's education was reported, values of father's occupation were predicted by regressing occupation on education.

SUCKERS: "Suckers deserve to be taken advantage of." Strongly disagree, disagree, undecided, agree, strongly agree.

TROUBLE: "I can't seem to stay out of trouble no matter how hard I try." Strongly disagree, disagree, undecided, agree, strongly agree.

YOUNGTRO: [In my neighborhood] "Young people are always getting into trouble." Strongly disagree, disagree, undecided, agree, strongly agree.

APPENDIX B

Analysis of the Measurement Models

Two issues concerning our measurement models require attention: (1) whether, as previous studies suggest, blacks respond with greater random variation; and (2) whether the metrics of latent variables appear equivalent across groups, allowing straightforward cross-population comparisons. Parameter estimates of our measurement models appear in Table A1. Column 2 reveals that, with the exception of age, the means of our observable variables all differ significantly across race. On average, nonblacks have higher socioeconomic status, fewer broken homes, less troubled neighborhoods, more parental supervision, fewer delinquent friends, more attachment to peers, a lower ratio of definitions favorable and unfavorable to delinquency, and fewer self-reported delinquent acts. Our analyses leave the observable means unconstrained.

Column 3 reveals that the observed indicators show more variation among blacks than nonblacks. This is due to uniformly larger random response errors among blacks, as indicated in column 4, a finding that is consistent with previous research. A formal test of invariant error variances revealed that invariance is rejected for measures of the two attachment constructs ($L^2 = 41.98$; d.f. $= 4$; $p < .001$), and also rejected for our measures of definitions ($L^2 = 77.10$; d.f. $= 7$; $p < .001$). The validity coefficients indicate a similar ordering of accurate indicators for both races: RSPECTFR is a better indicator of attachment to peers than BELIKFR; and OKLAW, RSPECTPO, and TROUBLE are more accurate measures of definitions. Following Matsueda (1982), we fixed the error variance of AGE to reflect a validity of .95, and fixed the error variances of SES, BROKHOME, YOUNGTRO, FRPICKUP, and DEL to reflect a validity of .80 for nonblacks and .70 for blacks. These values follow previous research, which finds larger measurement error variances among blacks than nonblacks for measures of socioeconomic status (Bielby et al. 1977) and delinquency (Hindelang et al. 1981). A sensitivity analysis varying the validity coefficients from .95 to .60 for nonblacks, and from .85 to .60 for blacks, did not appreciably change our substantive parameter estimates.

Column 5 presents the metric (unstandardized) slopes of our measures. We found that the metric slopes for indicators of parental supervision and attachment to peers are statistically indistinguishable across groups (lambda invariant) ($L^2 = 5.06$; d.f. $= 2$; $p > .05$), a finding that allows us to make straightforward cross-population comparisons of metric coefficients involving supervision and attachment. Because we have to normalize our indicators (here, by fixing the metric slope of one indicator of each construct to unity), only the ratios of metric slopes are identified. Consequently, lambda invariance literally means that the *ratios* of metric slopes of a given construct are invariant across groups (Bielby 1986). We also found the two metric slopes of supervision statistically indistinguishable within race (tau-equivalent) ($L^2 = 5.43$; d.f. $= 2$; $p > .05$), but rejected tau-equivalence for indicators of attachment to peers ($L^2 = 7.38$; d.f. $= 2$; $p < .05$).

For indicators of DEF, however, metric slopes appear dissimilar across groups ($L^2 = 19.42$; d.f. $= 6$; $p < .005$) and across indicators ($L^2 = 81.96$; d.f. $= 12$; $p < .001$). Relative to the reference indicator (TROUBLE), most of the other indicators in the black population have flatter slopes. Thus, relative to TROUBLE, blacks scoring high on the other indicators tend to understate their true definitions of delinquency, and those scoring low tend to overstate. By and large, the opposite holds for nonblacks: relative to TROUBLE, most of the other indicators have *steeper* slopes. This suggests that blacks use slightly different metrics than nonblacks in interpreting the Likert-scale indicators of definitions. In turn, this implies that cross-population comparisons of our unstandardized regression coefficients among substantive constructs could vary depending on which indicator we choose to normalize on (Bielby 1986; Williams and Thomson 1986). Therefore, we performed a sensitivity analysis, varying the reference indicator for the latent construct underlying our measures of definitions of delinquency. That analysis revealed no substantial differences in black-nonblack comparisons of regression coefficients, suggesting that our results are not sensitive to the choice of reference indicator. Given this, it seems reasonable to assume that we can make meaningful cross-population comparisons of metric coefficients.

Table A1. Parameter Estimates of the Measurement Models: Black (N = 948) and Nonblack Males (N = 1,558)

Variable (1) Latent	Observable	Observed Mean[a] (2) Blacks	Nonblacks	Observed Variance (3) Blacks	Nonblacks	Error Variance (4) Blacks	Nonblacks	Metric Slope (5) Blacks	Nonblacks	Validity Coefficient (6) Blacks	Nonblacks
1. AGE	AGE	2.79	2.86	3.108	2.977	.311f	.298f	1.000f	1.000f	.949f	.949f
2. SES	SES	2.36	3.96	3.994	5.572	2.037f	2.006f	1.000f	1.000f	.700f	.800f
3. BROKHOME	BROKHOME	0.55	0.31	.248	.215	.126f	.077f	1.000f	1.000f	.700f	.800f
4. YOUNGTRO	YOUNGTRO	2.91	2.43	1.355	.996	.691f	.359f	1.000f	1.000f	.700f	.800f
5. SUPER	PARWITH	2.29	2.56	.351	.308	.233	.142	1.000f	1.000f	.580	.734
6. SUPER	PARWHERE	2.42	2.61	.321	.291	.113	.133	1.329	.972	.806	.736
7. FRPICKUP	FRPICKUP	1.48	1.09	2.672	2.344	1.363f	.844f	1.000f	1.000f	.700f	.800f
8. ATTACHPE	BELIKFR	1.95	2.14	.482	.395	.373	.296	1.000f	1.000f	.475	.500
9. ATTACHPE	REPECTFR	2.51	2.70	.724	.529	.450	.354	1.588	1.331	.615	.574
8. DEF	EVNBREAK	2.84	2.59	1.609	1.506	1.556	1.355	.434	1.030	.182	.318
9. DEF	DELHURT	3.07	2.77	1.237	1.174	1.182	1.034	.441	.994	.212	.345
10. DEF	OKLAW	2.55	2.12	1.450	1.166	1.155	.860	1.020	1.464	.452	.512
11. DEF	RSPECTPO	2.58	2.41	1.362	1.243	1.183	.930	.791	1.475	.362	.502
12. DEF	GETAHEAD	2.86	2.43	1.568	1.255	1.447	1.053	.653	1.187	.277	.401
13. DEF	TROUBLE	2.49	2.22	1.360	1.008	1.077	.865	1.000f	1.000f	.456	.377
14. DEF	SUCKERS	2.86	2.53	1.457	1.202	1.332	1.020	.662	1.126	.293	.389
15. DEL	DEL	0.89	0.79	1.432	1.370	.726f	.493f	1.000f	1.000f	.700f	.800f

Notes: All parameter estimates significant at the .001 level. f = fixed coefficient.
[a] The difference between means for blacks and nonblacks are significant at the .001 level for all variables except AGE.

REFERENCES

Agnew, Robert. 1985. "Social Control Theory and Delinquency: A Longitudinal Test." *Criminology* 23:47–62.

Allison, Paul D. 1985. "Estimation of Linear Models with Incomplete Data." Revised version of a paper presented at the 1981 Annual Meetings of the American Sociological Association.

Austin, Roy L. 1978. "Race, Father-Absence, and Female Delinquency." *Criminology* 15:487–504.

Berger, Alan S. and William Simon. 1974. "Black Families and the Moynihan Report: A Research Evaluation." *Social Problems* 22:145–61.

Bielby, William T. 1986. "Arbitrary Metrics in Multiple Indicator Models of Latent Variables." *Sociological Methods and Research* 15:3–23.

Bielby, William T., Robert M. Hauser, and David L. Featherman. 1977. "Response Errors of Black and Nonblack Males in Models of the Intergenerational Transmission of Socioeconomic Status." *American Journal of Sociology* 82:1242–88.

Briar, Scott and Irving Piliavin. 1965. "Delinquency, Situational Inducements, and Commitment to Conformity." *Social Problems* 13:35–45.

Chilton, Roland and Gerald Markle. 1972. "Family Disruption, Delinquent Conduct, and the Effects of Sub-Classification." *American Sociological Review* 37:93–99.

Cloward, Richard A. and Lloyd E. Ohlin. 1960. *Delinquency and Opportunity.* New York: Free Press.

Elliott, Delbert S., David Huizinga, and Suzanne S. Ageton. 1985. *Explaining Delinquency and Drug Use.* Beverly Hills, CA: Sage.

Hindelang, Michael J. 1978. "Race and Involvement in Common Law Personal Crimes." *American Sociological Review* 43:93–109.

Hindelang, Michael J., Travis Hirschi, and Joseph G. Weis. 1979. "Correlates of Delinquency: The Illusion of a Discrepancy." *American Sociological Review* 44:994–1014.

―――. 1981. *Measuring Delinquency.* Beverly Hills, CA: Sage.

Hirschi, Travis. 1969. *Causes of Delinquency.* Berkeley: Free Press.

―――. 1983. "Crime and the Family." Pp. 53–68 in *Crime and Public Policy*, edited by J.Q. Wilson. San Francisco: ICS Press.

Jensen, Gary F. 1972. "Parents, Peers, and Delinquent Action: A Test of the Differential Association Perspective." *American Journal of Sociology* 78:562–75.

Johnson, Richard E. 1986. "Family Structure and Delinquency: General Patterns and Gender Differences." *Criminology* 24:65–80.

Joreskog, Karl G. and Dag Sorbom. 1984. *LISREL V: Analysis of Linear Structural Relationships by Maximum Likelihood and Least Squares Methods.* Chicago: National Educational Resources. Inc.

Kornhauser, Ruth R. 1978. *Social Sources of Delinquency.* Chicago: University of Chicago Press.

Liska, Allen E. and Mark D. Reed. 1985. "Ties to Conventional Institutions and Delinquency: Estimating Reciprocal Effects." *American Sociological Review* 50:547–60.

Matsueda, Ross L. 1982. "Testing Control Theory and Differential Association: A Causal Modeling Approach." *American Sociological Review* 47:489–504.

Matsueda, Ross L. and William T. Bielby. 1986. "Statistical Power in Covariance Structure Models." Pp. 120–58 in *Sociological Methodology 1986*, edited by N.B. Tuma. San Francisco: Jossey-Bass.

McLanahan, Sara. 1985. "Family Structure and the Reproduction of Poverty." *American Journal of Sociology* 90:873–901.

Minor, W. William. 1984. "Neutralization as a Hardening Process: Considerations in the Modeling of Change." *Social Forces* 62:995–1019.

Monahan, Thomas. 1957. "Family Status and the Delinquent Child: A Reappraisal and Some New Findings." *Social Forces* 35:250–58.

Moynihan, Daniel P. 1965. *The Negro Family: The Case for National Action.* Washington, DC: Office of Policy Planning and Research, U.S. Department of Labor.

Rankin, Joseph H. 1983. "The Family Context of Delinquency." *Social Problems* 30:466–79.

Rosen, Lawrence, M. Lalli, and Leonard Savitz. 1975. "City Life and Delinquency: The Family and Delinquency." Unpublished report submitted to the National Institute for Juvenile Justice and Delinquency Prevention, Law Enforcement Assistance Administration.

Shaw, Clifford R. and Henry D. McKay. 1969. *Juvenile Delinquency and Urban Areas.* Rev. ed. Chicago: University of Chicago Press.

Short, James F., Jr. and Fred L. Strodtbeck. 1965. *Group Process and Gang Delinquency.* Chicago: University of Chicago Press.

Sutherland, Edwin H. 1947. *Principles of Criminology*, 4th ed. Philadelphia: Lippincott.

Sutherland, Edwin H. and Donald R. Cressey. 1978. *Criminology*, 10th ed. Philadelphia: Lippincott.

Tennyson, R.A. 1967. "Family Structure and Delinquent Behavior." Pp. 57–69 in *Juvenile Gangs in Context*, edited by Malcolm W. Klein. Englewood Cliffs, NJ: Prentice-Hall.

Toby, Jackson. 1957. "The Differential Impact of Family Disorganization." *American Sociological Review* 22:505–12.

Wells, L. Edward and Joseph H. Rankin. 1986. "The Broken Homes Model of Delinquency: Analytic Issues." *Journal of Research in Crime and Delinquency* 23:68–93.

Williams, Richard and Elizabeth Thomson. 1986. "Normalization Issues in Latent Variable Modeling with Multiple Populations." *Sociological Methods and Research* 15:24–43.

Wilson, Alan B. 1965. *Richmond Youth Project* [MRDF]. Berkeley: Survey Research Center, University of California, Berkeley [Producer].

Wilson, James Q. and Richard J. Herrnstein. 1985. *Crime and Human Nature.* New York: Basic Books.

Wilson, William Julius. 1985. "Cycles of Deprivation and the Underclass Debate." *Social Service Review* 59:541–59.