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CRIMINOLOGY

IS GENDER SUBORDINATE TO CLASS? AN EMPIRICAL ASSESSMENT OF COLVIN AND PAULY'S STRUCTURAL MARXIST THEORY OF DELINQUENCY

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I. INTRODUCTION

For Karl Marx, the problem of crime in capitalist societies was linked to the material forces of capitalism and class domination.¹ Although Marx did not extensively discuss the problem, he did remark that criminality seemed to be concentrated in the dangerous classes.² The lumpenproletariat, or "parasitic class" of criminals, consisted of unproductive, unorganized labor whose criminal activity victimized capitalists and productive labor alike.³ Neither Marx nor Friedrich Engels noted the gender regularity of criminality. Over the years, Marxist and neo-Marxist scholars have replicated this omission, and it appears to have become a legacy of criminological Marxism.

Scholars have noted racial differences among the criminal population. For instance, David Gordon contends that crime is a rational response to the pressures of class, society, and the competition manifest in capitalist systems.⁴ Racial division in the working class benefits capitalism, because the competition between excluded minorities and

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¹ See KARL MARX & FRIEDRICH ENGELS, *THE GERMAN IDEOLOGY* (1965).

² See *id.*

³ See generally IAN TAYLOR, PAUL WALTON, & JOCK YOUNG (1973).

⁴ David M. Gordon, *Capitalism, Class, and Crime in America*, 19 *CRIME & DELINQ.* 163 (1973).

employed labor depresses wages. Although Gordon's study analyzed the reasonableness of a crime as a response to joblessness and the lack of economic opportunity in urban poverty areas, it did not consider the relationship between these pressures and gender.

Similarly, Hall, Critcher, Jefferson, Clarke, and Roberts note the ways in which race modifies class consciousness and ideology, and, consequently, criminality.⁵ However, the circumstances and conditions they describe, along with their criminogenic consequences, primarily reflect upon the black male experience. Patterns of crime by gender in the black laboring classes and the way in which crime may reflect different class experiences by males and females are ignored.

To the extent that inequalities, other than class, are thought to permeate and divide society, Marxist scholars credit these power differences to a more "fundamental" division (*i.e.*, the organization of production).⁶ In criminology, this approach is obvious in Colvin and Pauly's recent presentation of an "integrated structural Marxist theory of delinquency production."⁷ As characterized by the theory, workplace experience, regardless of sex or race, subjects workers to distinct processes of discipline and control by the capitalist. These experiences, in turn, produce particular bonds to authority that are reproduced within the workers' familial relationships with their children. Colvin and Pauly go on to discuss how these control structures and initial bonds to authority are reinforced through education and peer influences. However, they do not discuss how experiences in the labor force, family, and school may differ by gender.

Although scholars have criticized the breadth and scope of Colvin and Pauly's theory (*e.g.*, Paternoster and Tittle suggest that it would be more appropriate to characterize it as a "sensitizing idea system"), few have explicitly tested the key relationships proposed by the theory.⁸ Thus, one research goal of this article is to subject the basic relationship between class, family, peers, and educational experiences, and serious patterned delinquency to empirical testing. A second task, however, is to determine whether the implicit assumption of gender neutrality in Colvin and Pauly's theory is, in fact, warranted.

⁵ See STUART HALL ET AL., *POLICING THE CRISIS* (1978).

⁶ Hall, Critcher, Jefferson, Clarke, and Roberts describe how capitalist social organization creates classes that are then structured by race. *Id.* at 394.

⁷ Mark Colvin & John Pauly, *A Critique of Criminology: Toward an Integrated Structural-Marxist Theory of Delinquency Production*, 89 AM. J. SOC. 513 (1983).

⁸ See generally Raymond Paternoster & Charles R. Tittle, *Parental Work Control and Delinquency: A Theoretical and Empirical Critique*, in 2 *ADVANCES IN CRIMINOLOGICAL THEORY* 39, 65 (William S. Laufer & Freda Adler eds., 1990).

II. COLVIN AND PAULY

A. A STATEMENT OF THE THEORY

Colvin and Pauly rely on the neo-Marxist theory developed by Marxist economists and sociologists to describe advanced capitalist societies, to distinguish between traditional Marxian class categories (*e.g.*, capitalist, working class, and petty bourgeoisie), and also to point out differences within these categories.⁹ Colvin and Pauly's theory of delinquency production rests on the way in which different control structures within certain fractions of the working class "solicit and compel certain types of behavior from individuals and shape an ideological orientation for the individual in relation to the agents and apparatuses of social control."¹⁰

Fraction I, which is primarily composed of workers who labor in competitive capitalist industries and are subject to the vicissitudes of supply and demand, is characterized by "simple control."¹¹ These workers are relatively unskilled and non-unionized, and are employed in service, agriculture, small-scale manufacturing, and low-level clerical and sales positions.¹² Borrowing from Amitai Etzioni's compliance theory,¹³ Colvin and Pauly suggest that "simple control" is coercive and produces intense negative bonds (*i.e.*, alienative involvement) toward the employer and the workplace.¹⁴

Fraction II workers have much more protection from direct competition than workers in Fraction I.¹⁵ Unionization and protective contracts insulate them from direct competition.¹⁶ Employed in the steel, auto, mining, and other extractive and basic manufacturing industries, capitalist control over these workers is primarily technical. It is "machine paced and impersonal and relies on the worker calculating his or her material self-interest for pay raises and job security."¹⁷ This kind of control structure produces calculative bonding to work and authority, a bonding which is precarious, because it depends on

⁹ In general, Colvin and Pauly rely on the work of PAUL BARAN & PAUL M. SWEETZ, *MONOPOLY CAPITAL* (1966); STUART BOWLES & HERBERT GINTIS, *SCHOOLING IN CAPITALIST AMERICA* (1976); HARRY BRAVERMAN, *LABOR AND MONOPOLY* (1974); RICHARD EDWARDS, *CONTESTED TERRAIN: THE TRANSFORMATION OF THE WORKPLACE IN THE TWENTIETH CENTURY* (1979); ERIC OLIN WRIGHT, *CLASS, CRISIS AND STATE* (1979).

¹⁰ Colvin & Pauly, *supra* note 7, at 513-14.

¹¹ *Id.* at 532.

¹² *Id.*

¹³ Amitai Etzioni, *Compliance Theory*, in *THE SOCIOLOGY OF ORGANIZATIONS* 103 (Oscar Grusky & George A. Miller eds., 1970).

¹⁴ Colvin & Pauly, *supra* note 7, at 532.

¹⁵ *See id.*

¹⁶ *Id.*

¹⁷ *Id.*

continual remuneration and job advancement.¹⁸

Finally, Fraction III consists of self-paced laborers who work in an environment that allows a great amount of independence.¹⁹ Fraction III workers can be either blue or white collar supervisors, technical staff, salaried professionals, or government workers.²⁰ Because their tasks are complex, greater work skills are required and replacement is difficult and costly.²¹ In this kind of work environment, discipline and control take a bureaucratic, normative form.²² Capitalism manipulates worker rewards through symbols and statuses.²³ Consequently, an ideological bond is formed toward work and the organization, which is intense and positive.²⁴

Worker bonds to authority in the workplace (alienative, calculative, and moral) are reproduced in parent-child relationships in the home.²⁵ Colvin and Pauly expect that Fraction I workers will be inconsistent, coercive, and sporadic in disciplining their children, and that their offspring will develop initial alienative bonds toward authority.²⁶ The steady, consistent, calculating workers of Fraction II will reproduce these tendencies in their children,²⁷ resulting in initial calculative bonds to authority.²⁸ For parents in Fraction III, who experience flexibility, self-direction, and positive bonds in the workplace, Colvin and Pauly expect that a more normative family compliance structure will be enforced, producing positive initial bonds between children and authority structures.²⁹

At school, children exhibit the initial bonds to authority which develop at home.³⁰ Teacher discipline and evaluation, school resources, rigid tracking systems, and other school characteristics, can strengthen and reinforce juvenile bonds to authority.³¹ Colvin and Pauly also believe that school experiences promote like-group peer associations. Because alienated youths are often put in remedial tracks and are subject to coercion in school, they tend to associate

¹⁸ *Id.* at 533.

¹⁹ *Id.*

²⁰ *Id.*

²¹ *See id.*

²² *Id.* at 533-34.

²³ *Id.*

²⁴ *Id.* at 534.

²⁵ *Id.* at 535.

²⁶ *Id.* at 536.

²⁷ *Id.*

²⁸ *Id.*

²⁹ *Id.*

³⁰ *See id.* at 537.

³¹ *Id.* at 538.

with one another.³² This is true for calculative and normative youths as well, but the theorists believe that delinquent outcomes for these students are less likely, or, in the case of the calculative youths, a function of subcultural influences and exposure to illegitimate opportunities.³³

Colvin and Pauly's theory posits two paths to delinquency: patterned violent delinquency in which alienated youths are expected to engage,³⁴ and the less apparent patterned instrumental delinquency in which youths who have formed calculative bonds to authority may, because of the strain between legitimate and illegitimate rewards, engage.³⁵

B. TESTS OF COLVIN AND PAULY

Only two studies have empirically examined Colvin and Pauly's theory. One, by Messner and Krohn,³⁶ tests several of the key hypotheses delineated in Colvin and Pauly's theory by using the Richmond data set.³⁷ The other, by Paternoster and Tittle, evaluates the logic and veracity of the theory's predictions, using empirical evidence drawn from assorted sources.³⁸ It is important to note that Messner and Krohn, and Paternoster and Tittle recognize the potential for gender differences in how social control processes (whether in the workplace, family, or schools) affect juveniles' bonds to authority. For example, Paternoster and Tittle review evidence that parental controls/discipline over children vary by gender.³⁹ Messner and Krohn justify examining the theory separately for males and females because "previous research has suggested that some variables, including bonding measures, may operate differently for male and female adolescents."⁴⁰ On the whole, they find few differences between males and females except that the class effects on delinquency are somewhat *larger* for females than for males.⁴¹ Neither study seems particularly concerned that race may also affect these relationships. Messner and Krohn exclude blacks from their analysis because of missing data and

³² *Id.* at 540.

³³ *See id.* at 540-41.

³⁴ *Id.* at 540.

³⁵ *Id.*

³⁶ *See* Steven Messner & Marvin Krohn, *Class Compliance Structures and Delinquency: Assessing Integrated Structural-Marxist Theory*, 96 *AM. J. SOC.* 300 (1990).

³⁷ For a copy of the questionnaire used in the Richmond Youth Study, see TRAVIS HIRSCHI, *CAUSES OF DELINQUENCY* 247-99 (1969).

³⁸ Paternoster and Tittle, *supra* note 8.

³⁹ *Id.* at 56.

⁴⁰ Messner and Krohn, *supra* note 36, at 309.

⁴¹ *Id.* at 321.

rationalize the exclusion by claiming that the theory "should not work any differently for blacks than for whites."⁴² Paternoster and Tittle simply ignore the issue.

Both studies are more supportive of the predicted relationships between intervening variables and delinquency than they are of social class effects on familial and educational control structures or of social class influences on delinquency.⁴³ In explaining their findings, Paternoster and Tittle suggest that Colvin and Pauly's theory rests on problematic assumptions, lacks a theoretical structure, and is not readily testable.⁴⁴ Messner and Krohn suggest that their own measures of social class (based in occupational classifications) do not capture truly Marxian conceptions of relational class fractions.⁴⁵ They also recognize that their own cross-sectional data are inappropriate for testing what are explicitly processes over time.⁴⁶

Several other criticisms can be made of the Messner and Krohn study. First, while Colvin and Pauly are clear that their theory explains chronic delinquency ("serious patterned delinquency"), Messner and Krohn measure delinquency in terms of prevalence, not frequency.⁴⁷ Also, Colvin and Pauly differentiate the path to violent crime from that which leads to instrumental offending, while Messner and Krohn use a summary measure of delinquency that is comprised of both instrumental and violent crime types.

III. CURRENT RESEARCH

A. DATA AND METHODS

The study which led to this article (Study) relied on data extracted from the National Longitudinal Survey of Youth. This national probability sample consisted of youths aged fourteen to twenty-one, and over-sampled blacks, Hispanics, and economically disadvantaged whites.⁴⁸ The primary purpose of the survey was to examine the labor market experiences of youths over time. Researchers interviewed the youngsters in 1979 and have been tracking them through yearly inquiries pertaining to factors which include job training, em-

⁴² *Id.* at 309.

⁴³ See Paternoster and Tittle, *supra* note 8, at 52-64; Messner and Krohn, *supra* note 36, at 316.

⁴⁴ Paternoster and Tittle, *supra* note 8, at 65.

⁴⁵ Messner and Krohn, *supra* note 36, at 325.

⁴⁶ *Id.* at 323 n.7.

⁴⁷ Prevalence measures dichotomize delinquency involvement into yes and no categories, while frequency measures count the actual number of delinquent acts.

⁴⁸ NLS HANDBOOK (1987).

ployment/unemployment, wages, job satisfaction.⁴⁹ In 1980, the researchers also asked the youths about their involvement in delinquent and criminal acts as well as experiences with the criminal/juvenile justice system.⁵⁰ Therefore, the variables which the Study used are from the 1979 and 1980 data sets.

The original sample, in 1978, consisted of 5578 females and 5828 males. An additional 1280 young persons serving in the military were also sampled.⁵¹ This latter group is dropped from the current analysis, as are youths nineteen years or older, leaving a total sample of 4577 juveniles (2347 males and 2230 females). Sampling weights are incorporated to adjust for disproportionate sampling of the disadvantaged.⁵²

These data improve on the Richmond data, which Messner and Krohn used, in several ways. First, they allow the appropriate temporal ordering of dependent (criminality) and independent variables.⁵³ Second, they control for the effects of race which is important, given the large number of blacks and Latinos in the sample. Third, the Study measures "serious patterned delinquency" instead of crime prevalence, by asking subjects how often they have participated in a number of delinquent/criminal acts. Lastly, violent and instrumental delinquency are analyzed separately as predicted by the theory.

B. INDEPENDENT VARIABLES

For a strict test of the theory, the Study constructed variables that correspond to the three structures of social control and ideological bonding which Colvin and Pauly identify. Like the study completed by Messner and Krohn, the indicators of social class do not neatly parallel Marxist class fractions, but Colvin and Pauly's job descriptions provide some guidance in the approximations of the different fractions. Parents' social class position is determined by the kind of employment or occupation held by one or both parents. If the occupational designations assigned to the parents fall into different fractions, the higher class position is recorded. Class categories are based on the degree of authority that parents have over others in the workplace, the level of skills required for a particular job, and whether or not jobs are unionized.

⁴⁹ *Id.* at 1.

⁵⁰ *Id.* at 57.

⁵¹ *Id.* at 11.

⁵² *Id.* at 8-9.

⁵³ Unfortunately, the other longitudinal dimensions implied by the theory *among* independent variables (*i.e.*, workplace location, parental authority, school experience, and peer socialization) cannot be approximated with these data.

Under the above classification scheme, FRACTION 1 contains laborers, farm laborers, service workers, and private household workers. FRACTION 2 contains clerical and kindred workers, sales workers, operatives and kindred, and crafts-workers. Finally, FRACTION 3 consists of professionals, technical and kindred workers, managers, officials, and proprietors. According to the theory, juveniles located in Fraction 1 should show greater signs of serious patterned violence than juveniles from other class fractions. However, as noted above, Fraction 2 juveniles may be more involved in instrumental crime.

The above coding scheme has a few exceptions. For example, some of the occupational codes in the NLS data do not fit neatly into one fraction or another. For instance, the occupational category of "sales" includes both low level retail clerks and stock-brokers. Because Fraction 1 labor is the group most likely to experience coercive workplace controls, to develop alienative bonds to authority, and, consequently, to be more involved in delinquency, placing juveniles whose parents are from a higher class fraction (and thus are predicted to have lower offending levels) into Fraction 1 would contaminate this high delinquency group. Thus, as Colvin and Pauly suggest, sales and clerical workers are in Fraction 2, unless the Duncan occupational score associated with the sales/clerical position was lower than 30—in which case a Fraction 1 coding was assigned.⁵⁴ Similarly, stockbrokers and real estate agents were reassigned to Fraction 3.

The dummy code measure of youth bonds to parental authority (PARENINF) is captured by respondents' responses to the following question: "Who has influenced you the most on how you feel about things like school, marriage, jobs and having children." If respondents selected their mother, father, or step-parent, they were coded as parentally-bonded. Obviously, this is not the best proxy of Colvin and Pauly's family compliance measure. Perhaps all this variable illustrates is that youths who select their parents as most influential over important life decisions are apt to have positive bonds toward them. According to the theory's predictions, youths who are positively bonded to their parents should be less involved in delinquency.

The Study constructed three measures of educational compliance structures from the data. First, it identified economically disadvantaged schools (DISAD) by assessing the percentage of disadvantaged students who attend the respondent's current school. Students who attend disadvantaged schools should be subjected to more coercive

⁵⁴ The Duncan classification of occupations reflects an ordering of Census occupational categories from 0 to 100 by age adjusted income, educational, and prestige rankings. See Otis Dudley Duncan, *A Socioeconomic Index for All Occupations*, in *OCCUPATIONS AND SOCIAL STATUS*, 109, 122-23 (Albert Reiss, Jr. ed., 1977).

controls which, in turn, should reinforce negative bonds to authority and result in greater involvement in delinquency. Second, the Study indicated whether or not the youth was placed in a remedial math course (RMATH) with the expectation that students who have been placed in lower educational tracks will exhibit greater crime chronicity than other students. Finally, the study created a scale measure of school alienation (SCHALIEN) from Likert attitudinal responses to questions about: (1) the degree of teacher knowledge and assistance; (2) whether school is boring, challenging, or flexible in the learning process; and (3) general levels of school satisfaction. Higher scores on this item reflect greater school alienation which is expected to be positively linked to delinquency.⁵⁵

The influence of peers is captured by two dummy variables. Referring back to the Study's construction of PARENINF, the study defines those youths who pick other youths as most influential over important life decisions as peer influenced (PEERINF). Second, given that Colvin and Pauly suggest that peer influences manifest themselves in school, the Study dummy codes whether the respondent's best friend has aspirations to complete high school or go on to college versus having no plans to complete high school (PEERSCH).

To the extent that the above measures do not capture youths' alienative bonds, the Study also includes a scaled item of general alienation (GENALIEN). Youths who score high on this scale feel that they have little power over their own lives and that what happens to them is more a function of luck or bad fortune, not of planning or conscious design.

C. DEPENDENT VARIABLES

The Study constructs delinquency measures from respondent estimations of how many times in the previous year they: (1) physically fought in school, seriously threatened or hit someone, used force to obtain things, attacked someone with the intent to injure or kill; or (2) stole belongings worth more than fifty dollars, committed auto theft, burglarized a residence. Respondent estimates of offense frequency (*e.g.*, 4-6, 7-10) are re-coded to their means and analyzed separately or in summary scale measures of violent and instrumental delinquency.

D. CONTROL VARIABLES

The Study expands upon Colvin and Pauly's theoretical analysis by including the following measures: (1) gender; (2) race (white,

⁵⁵ Factor loadings for the scale items and scale reliability are listed in Appendix A.

black, Hispanic); (3) surplus population (a class measure based on Marx's conception of the stagnant reserve labor force which includes youths whose parents were unemployed for the entire year prior to the interview, and youths who are living in public housing or youths whose household receives AFDC payments or both). Following Marx's reasoning, membership in the surplus population should produce higher alienative bonds to authority. However, these bonds will result from negative relations with the capitalist state (*e.g.*, welfare) and exclusion from the productive sphere, and not because of parental experiences in the labor market *per se*.

Missing data are handled by creating dummy independent variables whenever a variable exceeds four percent missing cases. Missocc (parental job information was missing), Disadmis (disadvantaged school data was missing), and Surmiss (of the three variables used to construct surplus population, at least one exceeds four percent missing data) are added to the analysis in this manner.⁵⁶

IV. FINDINGS⁵⁷

A. TESTING COLVIN AND PAULY

Table 1 presents the results from a strict test of Colvin and Pauly's integrated structural Marxist theory. Ordinary Least Squares regression is used to estimate variable effects. Equations are weighted to adjust for over-sampling disadvantaged populations. An examination of preliminary Pearson correlation coefficients shows that multicollinearity in the equations is not a problem.⁵⁸

Because Colvin and Pauly's theory posits somewhat different paths to violent and instrumental delinquency, in the first equation the Study examines class effects relative to Fraction 1, and in the second equation, Fraction 2 is the excluded category.⁵⁹ Later, when crime types are analyzed separately, Fraction 2 is treated as the excluded category in the case of robbery—an offense that can be classified as sharing the characteristics of both instrumental and violent

⁵⁶ While there are many different strategies for coping with missing data (*e.g.*, dropping the cases; using pairwise deletion of cases), this approach introduces less bias than these strategies by retaining relevant information on the other independent variables. Descriptive statistics for these and other variables used in the Study appear in Appendix B.

⁵⁷ See Appendix C for Tables 1 through 6.

⁵⁸ Results available upon request.

⁵⁹ Colvin and Pauly, *supra* note 7, are less than clear on this point. They suggest that educational strain and intermediate track placement may thrust a child toward "occasional involvement in less serious types of instrumental delinquency," but that students in lower educational tracks will be more open to associating with similarly alienated youths, reinforcing a tendency toward serious patterned delinquency. *Id.* at 539-40. They do not specify if they are referring to property offending or violent crime.

crime—as well as for auto theft and burglary/theft.

As Table 1 illustrates, neither set of variables explains much variance in offending frequency (only 3% for violent crime and 1% for property offending). Yet, both equations provide some support for Colvin and Pauly's predictions. In the case of violent crime, relative to Fraction 1 (the excluded class category), juveniles whose parents comprise Fraction 2 labor do not differ significantly in offending levels ($b=.07$, *insig.*). However, Fraction 3 youths commit significantly less violence than Fraction 1 youths ($b=.32$, $p<.001$). The Study's indicator of parental influence (PARENINF) shows effects in the direction predicted by Colvin and Pauly, *i.e.*, juveniles who identify their parents as most influential over important life decisions are significantly less involved in violent offending than those youths who identify other influential persons ($b=.20$, $p<.01$). Measures of school compliance structures show similar support for the theory. The more disadvantaged a youth's school, the higher the involvement in violent crime ($b=.07$, $p<.001$). Similarly, evidence of low tracking (placement in remedial math) and high educational alienation produce higher levels of violence ($b=1.02$, $p<.001$, $b=.26$, $p<.001$ respectively). Finally, there is some evidence that peer influences matter. Youths whose best friends have low educational ambitions are more involved in violent crime than youths whose friends aspire to high school and college degrees ($b=3.75$, $p<.001$).

Shifting to the second equation in Table 1, involvement in property offenses is more clearly supportive of the class effects predicted by Colvin and Pauly's theory than involvement in violent crime. Relative to Fraction 2 workers (who are more remunerative and calculating in their bonds to authority), the children of both Fraction 1 ($b=.09$, $p<.05$) and Fraction 3 ($b=.22$, $p<.001$) workers are less frequently involved in property crime. Intriguingly, however, youths influenced by their parents are significantly more involved in property crime than those who report other sources of influence in their lives ($b=.21$, $p<.001$). Since the coding of this variable does not reveal much about the quality of the parent-child relationship, it is difficult to interpret what this finding may mean or what may be driving the relationship.

Low educational tracking no longer has the significant effect that was observed for violent offending ($b=.08$, *insig.*). However, attending a disadvantaged school remains influential ($b=.06$, $p<.001$) as do both measures of peer influences (Peerinf, $b=.28$, $p<.001$; Peerasp, $b=.76$, $p<.001$). The fact that low school tracking (*i.e.*, alienative educational bonding) is unrelated to property crime, while factors such as disadvantaged schools and influential peers show significant effects, is expected by the theory. Colvin and Pauly argue that students holding

calculative bonds to authority are "likely to form peer relations oriented around the pursuit of extrinsic rewards" and that the strains between school rewards and peer pressures are apt to produce occasional property offending.⁶⁰

In sum, a strict test of Colvin and Pauly's hypothesized relationships between social class, familial and school bonding, peer influences, and serious patterned delinquency shows consistent, although not robust, support for most of the theory's predictions. A refinement of Colvin and Pauly's theory should yield stronger models and more consistent relationships between social class and crime. The next section breaks down the dependent variable into specific crime types to see whether the theory performs in predictable ways, controlling for race and possible gender-social class interaction effects.

B. EXPANDING THE THEORY

In Tables 2 and 3, OLS regression of specific types of property and violent offending are regressed on the original variables while controlling for gender, race, and surplus population. Additionally, gender and social class interactions are modeled to see whether the class effects predicted by Colvin and Pauly are, in fact, gender neutral. If the effects of class do not vary by gender, interactions between gender and social class fractions should be insignificant.

Looking first at the non-class variables across crime types, it is clear from the results listed in Table 2 that parental influence still shows important influences on violent crime chronicity (3 of 4 equations) as do school alienation (4 of 4 equations), low educational tracking (3 of 4 equations), and peer school aspirations (4 of 4 equations). However, attending a disadvantaged school and selecting peers as most influential in one's life now show mixed or less consistent effects. Regarding race, blacks commit significantly less threatening/hitting behavior than whites ($b=.24$, $p<.001$), while Latinos are less frequently involved than whites in all crime types.

Gender-class interactions reveal intriguing patterns. On the whole, gender differences are obvious within most class fractions, but with somewhat inconsistent effects. For instance, the strong negative gender-surplus population interactions (GenSur) in three of four equations suggest that among marginalized youths, the tendency for males to be more criminally involved is minimized among the children of marginalized labor. Gender differences in offending levels for school/work fights are similarly lessened in Fraction 3 ($b=.18$, $p,.001$). Differences between males and females are attenuated, how-

⁶⁰ See Colvin and Pauly, *supra* note 7, at 540.

ever, in Fraction 2 for all types of violence (except robbery) and in Fraction 3 for threatening behavior.

These findings indicate that the influence of social class location on violent delinquency does not operate in a consistent manner for males and females. Being a member of the surplus population tends, for the most part, to produce greater gender similarities in violence. That is, marginalized males and females exhibit more similar offending levels. On the other hand, while the data seem to show some support for the predicted directional effects of social class location on violence, in that most offending occurs within the lower reaches of the class system, apparently the inhibitory effect of positive bonds to authority (as expected in Fraction 3) has a greater effect on females.

In Table 3, two categories of property offending are regressed on the same set of independent variables modeled in Table 2. As in earlier analyses, Fraction 2 is the excluded category. These equations offer little support for Colvin and Pauly's class predictions, although with interactions in the equation, class main effects are difficult to interpret. The other relationships predicted by Colvin and Pauly—*i.e.*, those between family authority structures and crime, educational alienation and crime, and peer bonding and crime—receive mixed support. Youths who indicate that their lives are influenced by parents and peers commit more property crime than youths influenced by others. While the latter is predicted by the theory, the former is counter to predictions. One indicator of educational alienation, placement in remedial math, is unrelated to offending, while other measures of coerciveness and alienation (*e.g.*, school alienation and disadvantaged school) operate in a theoretically predictable manner.

Overall, Latinos are less involved in burglary and felony theft than whites, and blacks report lower levels of auto theft than whites. Although males more frequently commit both kinds of offenses than females, the negative class-gender interaction terms make it clear that female offenders in Fraction 1 and Fraction 3 are becoming more similar to males in their burglary and theft activities. Similarly, auto theft among Fraction 1 juveniles demonstrates fewer gender effects than in other class fractions.

Findings from Tables 2 and 3 indicate that the highest rates of violence fall not in Fraction 1, as predicted by the theory, but in the surplus population. Further, the theory, overall, does a better job explaining violent crime than property crime. Finally, while males overall tend to be more involved in both property and violent crimes, gender differences within social class locations are most acute among Fraction 2 and Fraction 3 youths in the violent crime area.

In the last set of equations, independent variables are modeled separately for males and females, to see whether social class and other theoretically derived variables operate similarly on crime. As a first step to addressing possible gender differences, Chow tests are conducted. A Chow test compares models broken down by gender to a model for the whole sample to see whether there are significant differences, in the aggregate, between males and females in how independent variables affect delinquency production.⁶¹ Looking specifically at the crime types depicted in Tables 4, 5, and 6, Chow tests yield significant F statistics for fighting at school/work ($F=44.87$, $p<.001$), seriously threaten/hit ($F=25.65$, $p<.001$), strong arm ($F=25.35$, $p<.001$), attack with intent to injure/kill ($F=30.68$, $p<.001$), burglary/theft ($F=27.72$, $p<.001$), and auto theft ($F=31.78$, $p<.001$).⁶² These findings exhibit important differences between males and females in how the independent variables affect crime, which warrants separate analyses by gender.

FEMALES VERSUS MALES

Tables 4 and 5 show that while the differences between the independent variables which have the potential to influence crime affect males differently than females, the difference is primarily one of magnitude, not direction. Thus, this article will not discuss these variations in detail. However, there are important exceptions to this pattern. For instance, in contrasting fighting behavior as shown in Table 4, females show negative signs for class Fractions 2 and 3 relative to Fraction 1, as the theory would predict (even though only Fraction 2 differs significantly from the excluded category). For males, however, juveniles from Fraction 2 are significantly more involved in fighting behavior than those from Fraction 1, contrary to theoretical expectations.

Similarly, Table 4 illustrates that for females the class variables operate in a theoretically consistent manner regarding threats and assaults, but not for males. For instance, female juveniles in higher class fractions tend to be less frequently involved in these acts than those in lower fractions. However, contrary to Colvin and Pauly's predictions,

⁶¹ A Chow test examines the null hypothesis that the slope and intercept coefficients from separate (*i.e.*, male and female) regression equations are equal. If the hypothesis of equality is rejected, it is correct to model separate regression equations. See Gregory C. Chow, *Tests of Equality Between Sets of Coefficients in Two Linear Regressions*, 28 *ECONOMETRICA* 591 (1960).

⁶² The Chow test is based on a test statistic that is distributed as F in large samples. When produced by the Chow test, the F statistic is used to test the null hypothesis that the two regression models are the same. See Chow, *supra* note 61, at 594-95.

males in higher class fractions are significantly more involved in assaultive and threatening acts than males in Fraction 1. T-test comparisons of slopes show that the male and female coefficients differ significantly from one another ($p < .001$).⁶³

Different class effects by gender are also noted in Table 5 for more serious kinds of violence. For females, attacking with the intent to injure or kill occurs most frequently among juveniles in the lowest class fractions (Fraction 1 and surplus population). Yet, for males, only Fraction 3 differs significantly in a negative direction from the excluded category (Fraction 1). Comparison of slopes show the class differences to be significantly different by gender ($p < .001$). Thus, in the case of violent delinquency production, Colvin and Pauly's expectation of a gender-neutral class process is not supported. Like the findings revealed by Messner and Krohn,⁶⁴ these data show social class to be a better predictor of female than male violence.

Tables 4 and 5 show that gender also affects the operation of non-class variables on crime including race, peer aspirations, and general alienation. For instance, as is apparent from the significant t-value contrasting female and male coefficients ($t = 5.86$, $p < .001$), black females are significantly more involved in fighting behavior than white females ($b = .14$, $p < .01$); but more white males are involved in fighting behavior than black males ($b = .27$, $p < .001$). Also, more females than males participate in strong arm/robbery crimes if their best friend has low educational aspirations (see Table 5, equation #1). Finally, as the second equation in Table 5 illustrates, males who experience high levels of alienation are more apt to engage in assaultive behavior ($b = .006$, $p < .001$), while alienation has a significant and negative relationship with aggravated assault for females ($b = .02$, $p < .01$).

The last set of equations, depicted in Table 6, shows coefficients, significance levels, and slope comparisons for auto theft and burglary/theft by gender. Like the findings described above, there is evidence that class effects on crime are different for males and females. In the case of auto theft, class variables operate in a theoretically consistent manner—especially for females, *i.e.*, relative to the deleted category (Fraction 2), other class groupings show less criminal involvement (*e.g.*, Fraction 1, $b = .14$; Fraction 3, $b = .06$). Yet, even though the t-statistic is significant across males and females for Fraction 1 and Fraction 3 ($t = 3.43$, $p < .001$ and $t = 2.35$, $p < .01$ respectively, indicating magnitude differences), the findings for males are gener-

⁶³ A t-test comparison across regression coefficients examines whether coefficients from two equations are significantly different. See Ayala Cohen, *Comparing Regression Coefficients Across Subsamples*, 12 SOC. METHODS & RES. 77 (1983).

⁶⁴ See Messner & Krohn, *supra* note 36.

ally consistent with the theory as well.

The data for burglary, however, demonstrate that the class predictions of the theory are more predictive of male than female chronicity. In fact, for males, the negative signs on the coefficients for Fractions 1, 3, and the surplus population are consistent with the theory. For instance, Fraction 2 males are consistently more involved in burglary and felony theft than other class fractions, including the surplus population. However, both Fraction 1 females ($b=.23$, $p<.001$) and females in the surplus population ($b=.62$, $p<.001$) are more involved in burglary than those in Fraction 2.

Except for the category of peer educational aspirations, gender does not affect other characteristics in Table 6 associated with higher offending levels. But variables play a more or less important role depending on the crime type. For the most part, however, these variables affect the dependent variable in a theoretically consistent manner and do not differ in any substantial way from findings discussed earlier. The exceptional variable, peer aspiration, shows significantly different effects for males and females in the case of auto theft. The sign for this variable is positive and significant ($b=.64$, $p<.001$) for males (as expected), but negative and significant for females ($b=.47$, $p<.001$). These findings imply that girls with more educationally ambitious friends are more involved in auto theft relative to those whose friends have few aspirations, while the converse is true for boys. If the educational aspirations of friends are similar to those of respondents, then it may be that engaging in auto theft represents different things to boys and girls. For males, auto theft may be a way to make money (stripping the car after stealing it) or to go joy riding with friends. Females, however, may see it as a risky and rebellious behavior—something which challenges traditional gender stereotypes for working class girls. The fact that auto theft exhibits different patterns by social class across the sexes offers some support for this interpretation. Among females, respondents whose parents fall in Fraction 1 and Fraction 3 are significantly less involved in these kinds of acts than those in Fraction 2 (renumerative control that produces calculative bonding to authority). For boys, however, only Fraction 3 respondents report significantly less involvement in auto theft than those in Fraction 2.

V. SUMMARY AND CONCLUSIONS

The relationship between social class and crime is structured by gender. The processes of discipline and control in the workplace that are identified by Colvin and Pauly do not consistently work in similar

ways for males and females. Overall, regardless of class fraction, males tend to be more involved in delinquent acts than females. However, gender differences are minimized in the surplus population across most crime types and, in the case of burglary/theft, across all class fractions.

These findings suggest that underclass males and females may be subjected to similar coercive control mechanisms, but that these mechanisms lie with the state and not the workplace. For instance, AFDC mothers are subjected to intrusive state policies in order to qualify for welfare, to remain on welfare, or both. Qualifications for unemployment benefits, public housing, and other governmental subsidies are bureaucratic, impersonal, and often rigid. The discipline and control exerted by a not so benevolent capitalist state can also produce alienative bonds to authority—in conjunction with school and peer reinforcement—that result in greater levels of violence. The consistent relationship between surplus population “class membership” and increased involvement in most types of crime suggests that structural Marxist theories of crime should more carefully consider how coercive relations with the state can produce alienative bonds to authority separate from workplace experiences—especially for females.

The fact that crime shows greater gender differences across the other class fractions suggests that the mechanisms of control exerted over males and females in the workplace are distinct. It may be that, among other factors, the discipline and control processes identified by Colvin and Pauly are tempered by occupational segregation, the restricted mobility of women in the labor market, or by gender differences in socialization acquired long before men and women enter the labor force. It is clear that either the kinds of controls exerted over males and females in the workplace or the ways in which men and women respond to them (*i.e.*, how one bonds to authority) diverge.

Direct comparisons between males and females (Tables 4-6), regarding how social class structures delinquency, reveal gender differences both in direction and magnitude. The class effects predicted by the theory tend to be more applicable to females than to males, although the inclusion of a measure for surplus population confounds the theoretical predictions. There is no doubt, however, that females in the lower class fractions and surplus population are more prone to serious violence and burglary/theft. For males, however, the patterns are more ambiguous. For instance, strong arm activity is significantly less frequent in the surplus population relative to Fraction 2, but other class fractions do not differ significantly from the excluded category. This finding suggests few real class differences for this type of

offending. In fact, for males, class structures delinquency in the manner predicted by Colvin and Pauly only in the case of burglary/theft. For other crime types, class variables offer only partial support for the theory.

The finding that social class is a better predictor of female than male delinquency has support in previous literature. Messner and Krohn, in their test of Colvin and Pauly's theory, uncover similar results. A possible interpretation of these findings is that workplace controls interact with traditional gender controls in the home in such a way that girls receive stricter discipline and control than boys. Consequently, girls may be less bonded to parents in these homes than their male counterparts. The fact that attachment to parents mitigates violent crime involvement for males but not females offers some support for this interpretation.

While parental attachment shows some inhibitory effects on violent delinquency, it tends to increase involvement in burglary/theft for males and auto theft for both sexes. A substantive interpretation of these differences is not possible because the Study did not capture the distinct kinds of home discipline and control hypothesized by Colvin and Pauly. However, given that violent crime is generally male dominated, perhaps parental control is a more salient force in shielding males from becoming involved in violence. Inhibitory mechanisms found in traditional gender socialization and other sources of informal social control may render parental controls redundant for females.

Most other explanatory factors identified by Colvin and Pauly tend to operate in a theoretically consistent manner across the models. This was especially true of the school alienation variables. In general, attending a disadvantaged school, being placed in remedial math, and having negative feelings toward the school experience increase both violent and property offending. Peer influences also play an important role in the production of serious patterned delinquency.

Finally, none of the regression equations explain much variance in offending. Although the model for fighting shows an R^2 statistic of .12, most equations explain only two to six percent of the variance in the dependent variable. One explanation for the low R^2 statistics rests with the problematic measurement of some of the theory's key concepts. However, it is equally likely that the variables considered in Colvin and Pauly's theory do not tell the whole story of delinquency production.

Appendix A

ITEMS USED TO CONSTRUCT INDEPENDENT AND DEPENDENT VARIABLES

Class Variables

Assignment to class categories were based on occupations for both parents in a two parent family, and the remaining parent in a single parent family. The class category was based on the parent located in the higher class category.

Fraction 1

Occupational categories include: 1) Laborers, 2) farm laborers, 3) service workers, and 4) private household workers.

Fraction 2

Category includes: 1) Clerical and kindred workers, 2) sales workers, 3) operatives and kindred and 4) craftworkers.

Fraction 3

Category includes: 1) Professional, technical and kindred workers and 2) managers, officials and proprietors.

Surplus (Burgess scale item. Cronbach's alpha of .54)

Category includes: 1) Individuals unemployed for the previous year and/or

2) respondents living in public housing and/or 3) receiving AFDC payments.

MissOcc

Category includes respondents whose parental occupations were missing.

SurMiss

Category includes missing public housing, and AFDC.

Educational tracking variables

School alienation scale (SCHALIEN, $\alpha=.62$; factor loadings follow items)

- | | |
|---|-----|
| 1) Most of the teachers are willing to help with personal problems. | .50 |
| 2) Most of my classes are boring. | .41 |
| 3) Most of my teachers really know their subjects well. | .48 |
| 4) My schoolwork requires me to think to the best of my ability. | .38 |
| At this school, a person has the freedom to learn what interests | |
| 5) him or her. | .42 |
| How satisfied are you with this school—very satisfied, somewhat | |
| 6) satisfied, somewhat dissatisfied, or very dissatisfied. | .60 |

Percentage of students classified as economically disadvantaged (DISAD)

0 = 0%	4 = 30 to 39%	8 = 70 to 79%
1 = 1 to 9%	5 = 40 to 49%	9 = 80 to 89%
2 = 10 to 19%	6 = 50 to 59%	10 = 90 to 99%
3 = 20 to 29%	7 = 60 to 69%	11 = 100+%

(DISADMIS)

Missing school disadvantaged.

Placement in a remedial math course (RMATH)

Student is registered for remedial math course.

Bonding variables

Parental bonds (PARENINF)

There are individuals in a person's life who influence how a person feels about things like school, marriage, jobs and having children. Who has influenced you the most on how you feel about things like school, marriage, jobs and having children.

0 = Either a teacher, sibling, spouse, other relative, male or female peer, older friend, guidance counselor, co-worker, other person, or no one.

1 = Either father (stepfather) or mother (stepmother) or mother and father.

Peer influence (PEERINF)

There are individuals in a person's life who influence how a person feels about things like school, marriage, jobs and having children. Who has influenced you the most on how you feel about things like school, marriage, jobs and having children.

0 = Either father, mother, both parents, teacher, sibling, spouse, other relative, older friend, guidance counselor, co-worker, other person, or no one.

1 = Male or female peer.

Peer school aspiration (PEERASP)

What is the highest grade or year of school your best friend would like to complete?

0 = 12th grade or above

1 = 1st through 11th grades

General alienation (GENALIEN, $\alpha=.25$; factor loadings follow items)

- 1) What happens to me is my own doing. .35
- 2) It is not always wise to plan too far ahead, because many things turn out to be a matter of good or bad fortune anyhow. .17
- 3) In my case, getting what I want has little or nothing to do with luck. .23
- 4) It is impossible for me to believe that chance or luck plays an important role in my life. .37

*Dependent variables***Violent delinquency**

Violent crimes were classified either as an additive variable including all violent crimes (VIOLENT), or individually. Categories were recoded to their means, and received a score of 0, 1, 2, 4 or 8.

- 1) The number of times in the past year the respondent has physically fought in school.
- 2) The number of times the respondent seriously threatened or hit someone.
- 3) The number of times in the past year the respondent attacked someone with the intent to injure or kill.
- 4) The number of times in the past year the respondent used force to get money or things.

Instrumental Delinquency

Instrumental crimes were classified either as an additive variable including all crimes (PROPERTY), or as an additive variable containing theft > \$50 and burglary (BurgStl) and auto theft. Categories were recoded to their means, and received a score of 0, 1, 2, 4 or 8.

- 1) The number of times the respondent has stolen belongings worth more than \$50 in the past year.
- 2) The number of times the respondent committed auto theft in the past year.
- 3) The number of times the respondent has burglarized a place of residence with intent to look around or steal.

Appendix B
WEIGHTED DESCRIPTIVE STATISTICS

	FEMALES (19,861)			MALES (20,832)		
	% or Mean	S.D.	N	% or Mean	S.D.	N
Black (1=yes, 0=no)	12%	.33	19,861	12%	.32	20,832
Hispanic (1=yes, 0=no)	3%	.17	19,861	2%	.15	20,832
White (1=yes, 0=no)	83%	.37	19,861	84%	.36	20,832
Fraction 1 (1=yes, 0=no)	27%	.45	19,861	27%	.44	20,832
Fraction 2 (1=yes, 0=no)	25%	.43	19,861	25%	.43	20,832
Fraction 3 (1=yes, 0=no)	30%	.46	19,861	29%	.45	20,832
Surplus (1=yes, 0=no)	10%	.31	19,861	11%	.31	20,832
SurMiss (1=missing AFDC, public housing 0=AFDC, public housing known)	2%	.15	19,861	3%	.17	20,832
MissOcc (1=occupation missing 0=occupation known)	7%	.25	19,861	8%	.28	20,832
Schalien (range 0 to 24)	11.25	2.77	18,741	11.28	2.60	19,409
Rmath (1=yes, 0=no)	6%	.24	19,861	11%	.31	20,832
Disad (range=0 to 11)	2.62	1.64	19,861	2.70	1.69	20,832
DisadMis (1 = % disadvantaged students missing 0 = % disadvantaged students known)	.39	.49	19,861	.41	.49	20,832
Genalien (range=0 to 8)	5.59	1.05	19,814	5.47	1.03	20,811
Parainf (1=parent, 0=nonparent)	68%	.47	19,861	71%	.45	20,832
Peerasp (1= < high school, 0=at least high school)	2%	.15	19,861	3%	.16	20,832
Peerinf (1=peer, 0=other)	15%	.35	19,861	10%	.30	20,832
Violent (range=0 to 32)	1.89	4.75	19,861	4.29	6.33	20,832
Fight (range=0 to 8)	.47	1.42	19,861	1.54	2.36	20,832
Threat (range=0 to 8)	.97	2.06	19,861	1.88	2.59	20,832
Strong (range=0 to 8)	.18	1.09	19,861	.34	1.40	20,832
Attack (range=0 to 8)	.27	1.24	19,861	.52	1.64	20,832
Property (range=0 to 24)	.63	3.02	19,861	1.35	3.95	20,832
Car (range=0 to 8)	.28	1.27	19,861	.52	1.63	20,832
BurgSt1 (range=0 to 8)	.34	1.98	19,861	.84	2.71	20,832

Appendix C

Table 1. REGRESSION OF LEVEL OF INVOLVEMENT IN SERIOUS VIOLENT AND PROPERTY CRIME ON SOCIAL CLASS, PARENTAL, EDUCATIONAL, AND PEER BONDS; AND DEGREE OF GENERAL ALIENATION.

Independent Variables	Violent ^a Crime		Property ^b Crime	
	B	t-score	B	t-score
Fraction 1			-.09	-2.08*
Fraction 2	.07	1.00		
Fraction 3	-.32	-4.64***	-.22	-5.37***
Parentinf	-.20	-2.56**	.21	4.44***
Schalien	.26	23.89***	.11	16.85***
Rmath	1.02	8.69***	.08	1.15
Disad	.07	3.69***	.06	5.07***
DisadMis	.44	7.32***	.20	5.31***
Genalien	-.20	-7.22***	.01	.32
Peerinf	.03	.29	.28	4.43***
Peerasp	3.75	17.25***	.76	5.78***
Constant	.96	4.49***	-.65	-5.09***
R ²	.03		.01	

* $P \leq .05$

** $P \leq .01$

*** $P \leq .001$

Notes:

^a Fraction 1 is the excluded category.

^b Fraction 2 is the excluded category.

Table 2. REGRESSION OF LEVEL OF INVOLVEMENT IN VIOLENT CRIME ON SOCIAL CLASS, PARENTAL, EDUCATIONAL, AND PEER BONDS, DEGREE OF GENERAL ALIENATION, INCLUDING SURPLUS POPULATION, GENDER, RACE AND INTERACTION TERMS.

Independent Variables	Fighting at school/work		Seriously threaten or hit		Strong Arm ^a		Attack with intent to injure/kill	
	B	t-score	B	t-score	B	t-score	B	t-score
Fraction 1					.06	2.40*		
Fraction 2	-.10	2.84**	-.20	-4.54***			-.08	-2.97**
Fraction 3	-.05	-1.56	-.10	-2.31*	-.02	-.94	-.13	-5.09***
Surplus	.40	6.26***	.47	6.03***	.25	6.11***	.17	3.59***
Surmiss	.27	4.39***	-.10	-1.27	.04	.97	.08	1.80
Missocc	-.20	-4.96***	.05	1.07	.00	.18	-.03	-.95
Parentinf	-.05	-2.04*	-.08	-2.60**	-.01	-.40	-.06	-2.89**
Schalien	.09	25.09***	.09	19.16***	.03	11.59***	.04	13.60***
Rmath	.37	9.14***	-.03	-.61	.13	5.09***	.10	3.37***
Disad	.03	3.86***	.04	4.49***	-.00	-.92	-.01	-1.09
DisadMis	.27	12.90***	-.01	-.33	.06	4.48***	.10	6.61***
Genalien	.02	1.74	-.08	-6.59***	.00	.00	-.04	-6.21***
Peerinf	.10	2.70**	.15	3.48***	-.06	-2.54**	.04	1.67
Peerasp	1.17	15.84***	1.47	16.17***	.20	4.17***	.93	17.08***
Gender	1.10	31.89***	.62	14.63***	.17	8.15***	.17	6.74***
Black	-.09	-1.86	-.24	-4.15***	.04	1.34	-.01	-.22
Hispanic	-.33	-4.10***	-.72	-7.22***	-.18	-3.36***	-.26	-4.45***
GenSur	-.35	-4.04***	-.13	-1.25	-.43	-7.75***	-.21	-3.34***
GenFrac1					-.05	-1.51		
GenFrac2	.26	5.25***	.67	10.92***			.17	4.59***
GenFrac3	-.18	-3.81***	.28	4.82***	.02	.75	.04	1.15
Constant	-.85	-11.23***	.45	4.76***	-.17	-3.47***	.13	2.28*
R ²	.12		.06		.01		.03	

* P ≤ .05

** P ≤ .01

*** P ≤ .001

Notes:

^a Fraction 2 is the excluded category.

Table 3. REGRESSION OF FREQUENT INVOLVEMENT IN INSTRUMENTAL CRIME ON SOCIAL CLASS, PARENTAL, EDUCATIONAL, AND PEER BONDS, DEGREE OF GENERAL ALIENATION, INCLUDING SURPLUS POPULATION, GENDER, RACE AND INTERACTION TERMS.

Independent Variables	Burglary and Theft > \$50 ^a		Auto Theft	
	B	t-score	B	t-score
Fraction 1	.23	5.26***	-.03	-1.02
Fraction 3	-.01	-.33	-.10	-3.87***
Surplus	.57	7.61***	-.02	-.38
Surmiss	.01	.17	-.07	-1.45
Missocc	.19	4.02***	-.03	-1.10
Parentinf	.13	4.25***	.08	3.90***
Schalien	.07	16.17***	.04	12.60***
Rmath	.04	.90	-.05	-1.67
Disad	.05	5.64***	.01	2.51**
DisadMis	.08	3.09**	.11	7.01***
Genalien	-.01	-.93	.04	5.83***
Peerinf	.17	4.01***	.17	6.21***
Peerasp	.71	8.09***	.07	1.23
Gender	.60	15.39***	.25	9.80***
Black	-.10	-1.82	-.09	-2.52**
Hispanic	-.21	-2.16*	.04	.68
Gensur	-.85	-8.30***	.07	1.12
GenFrac1	-.35	-5.84***	-.11	-2.76***
GenFrac3	-.14	-2.52**	.05	1.28
Constant	-.76	-8.53***	-.45	-7.90***
R ²	.02		.02	

* P ≤ .05

** P ≤ .01

*** P ≤ .001

Notes:

^aSeparate regressions for burglary and theft greater than \$50 indicated similar coefficients and t-values across equations. Thus, dependent variables were combined into one category.

Table 4. REGRESSION OF FREQUENT INVOLVEMENT IN VIOLENT CRIMES BY GENDER ON SOCIAL CLASS, PARENTAL, EDUCATIONAL, AND PEER BONDS, DEGREE OF ALIENATION, INCLUDING SURPLUS POPULATION AND RACE.

Independent Variables	Fighting at school/work			Seriously threaten or hit		
	B ^a	B	t-value	B	B	t-value
Fraction 2	-.06*	.12***	-4.50***	-.14***	.41***	-11.00***
Fraction 3	-.03	-.27***	6.00***	-.03	.11*	-3.50***
Surplus	.39***	.09	4.29***	.52***	.34***	2.40*
Surmiss	-.18**	.59***	-8.56***	-.08	-.13	.45
Missocc	-.01	-.28***	4.77***	.35***	-.12	-6.71***
Parentinf	-.00	-.10*	2.40*	-.01	-.14**	2.60**
Schalien	.03***	.15***	-24.00***	.05***	.12***	-11.67***
Rmath	.50***	.35***	2.72	-.06	.02	-1.00
Disad	.05***	.00	5.22***	.08***	-.00	8.20***
DisadMis	.02	.48***	-18.40***	-.15***	.10**	-6.25***
Genalien	.02*	.01	.65	-.08***	-.06**	-1.00
Peerinf	.09**	.14*	-1.05	.23***	.06	2.83**
Peerasp	1.48***	.97***	5.10***	2.39***	.63***	13.54***
Black	.14**	-.27***	5.86***	-.17*	-.28**	1.38
Hispanic	-.10	-.73***	5.08***	-.65***	-.96***	2.07*
Constant	-.26***	-.41***		.67	.73	
R ²	.05	.06		.04	.03	

^a Slopes for the female regression equations are first. To obtain the t-value, the slopes for the male equations were subtracted from the female.

* P ≤ .05

** P ≤ .01

*** P ≤ .001

Table 5. REGRESSION OF FREQUENT INVOLVEMENT IN VIOLENT CRIMES BY GENDER ON SOCIAL CLASS, PARENTAL, EDUCATIONAL, AND PEER BONDS, DEGREE OF ALIENATION, INCLUDING SURPLUS POPULATION AND RACE.

Independent Variables	Strong Arm ^a			Attack with intent to injure/kill		
	B ^b	B	t-value	B	B	t-value
Fraction 1	.08***	-.02	3.96***			
Fraction 2				-.05*	.07*	-4.71***
Fraction 3	.00	-.03	1.61	-.10***	-.12***	.78
Surplus	.29***	-.21***	12.95***	.22***	-.07	6.29***
Surmiss	-.18**	.20***	-6.13***	-.12*	.22***	-5.21***
Missocc	.17***	-.10**	7.71***	.15***	-.12**	6.92***
Parentinf	.01	-.02***	1.22	-.02	-.09**	2.90**
Schalien	.01***	.04***	6.44***	.01***	.06***	-1.26
Rmath	.17***	.16***	.43	.18***	.12**	1.74
Disad	.00	-.01	1.50	.00	.01	1.23
DisadMis	-.08***	.19***	-13.25***	-.12***	-.30***	21.06***
Genalien	.01	-.01	1.62	-.02**	.06***	-8.32***
Peerinf	.02**	-.17***	5.20***	.14***	.09*	1.40
Peerasp	.60***	-.19**	12.10***	1.39***	.52***	11.54***
Black	-.03	-.13**	-3.62***	-.05	.07	-2.57*
Hispanic	-.15**	-.26**	1.33	-.29***	.25*	-.60
Constant	-.04	-.13		.25***	.13	
R ²	.02	.02		.04	.03	

^a Fraction 2 is the excluded category for strong arm robbery.

^b Regression slopes for the female equation are listed first. To obtain the t-value, the slopes for the males were subtracted from the females.

* P ≤ .05

** P ≤ .01

*** P ≤ .001

Table 6. REGRESSION OF FREQUENT INVOLVEMENT IN PROPERTY CRIMES BY GENDER ON SOCIAL CLASS, PARENTAL, EDUCATIONAL, AND PEER BONDS, DEGREE OF ALIENATION, INCLUDING SURPLUS POPULATION AND RACE.

Independent Variables	Burglary and Steal > \$50			Auto Theft		
	B ^a	B	t-value	B	B	t-value
Fraction 1	.23***	-.15**	8.40***	-.14***	-.04	-3.43***
Fraction 3	-.02	-.15**	2.74**	-.06*	-.11***	-2.35**
Surplus	.62***	-.28***	11.86***	.06	-.02	-1.69
Surmiss	-.20*	.17	-3.57**	-.07	-.11	.65
Missocc	.32***	.15*	2.57*	-.02	-.01	-.20
Parentinf	.07	.20***	-2.85**	.09**	.20**	-3.83***
Schalien	.02***	.12***	-.07	.07***	.01*	14.50***
Rmath	-.01	.16*	-2.53*	-.00	-.00	-.01
Disad	.01	.07***	-5.60***	-.00	.03***	-4.61***
DisadMis	-.11***	.26***	-9.13***	.33***	-.13***	22.86***
Genalien	-.02	.00	.94	.07***	.02*	5.21***
Peerinf	.17**	.14*	.46	.10*	.20***	-2.86**
Peerasp	1.44***	.01	11.35***	-.47***	.64***	-13.75***
Black	-.11	.04	1.89	-.07	.08	-2.81**
Hispanic	-.03	-.49**	3.47***	-.10	.15*	-2.71**
Constant	.03	-1.00***		-.74***	.03	
R ²	.02	.02		.03	.01	

^a Slopes for the female equation are listed first. To obtain the t-scores, slopes from the male equation were subtracted from the female equation.

* P ≤ .05

** P ≤ .01

*** P ≤ .001