Impacts of Childhood Abuse on Juvenile Violence and Domestic Violence

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I. Executive Summary

Child maltreatment takes many forms and involves children of various ages. The current research project addresses the question of whether one specific form of child abuse—parental beatings of adolescent children—contributes to juvenile violence and/or domestic violence among young adults. While much current literature suggests a strong connection between experiencing abuse as a child and becoming involved in violence later in life, this project looks at a very specific type of abuse within a very critical age group to contribute to our understanding of this relationship. We were interested in examining the nuances of this situation more closely—specifically, to look at the effect of attitudes towards violence on juvenile violence and on domestic violence, and to look at racial differences in these attitudes as well.

Also, previous empirical research has focused exclusively upon either victims or perpetrators of domestic violence. We found it useful to simultaneously consider both victims and perpetrators and to distinguish impacts of child abuse on subsequent victimization and subsequent perpetration of violence—either as juveniles or as young adults.

We conducted a regression analysis to isolate various demographic factors and their effects on juvenile violence and domestic violence. In this way we can discover which factors actually affect involvement in violence. We use the residual difference method to measure race effects.

The data used was the National Survey of Youth (NYS), a longitudinal data set of 11- to 17-year-olds begun in 1976. It includes information on respondents' experiences with violence as they mature into young adulthood and enter into intimate partnerships. Childhood abuse is measured by whether children self-report having been beaten by their parents. Methodological innovations of our research include focusing on vintages of 15- to 18-year-olds to measure impacts of early childhood beatings by parents on juvenile violence. By accounting for possible censoring in the data we correct for one of the potential biases in previous studies.

Another innovation of the research is the special attention paid to the potential problem of sample selection bias in the measurement of domestic violence. There is a heavy dropout of males

in the sample from year to year. If males who have been abused as children are more likely to become perpetrators of domestic violence, and if these males disproportionately drop out of the sample, estimates of the impacts of childhood abuse on domestic violence will be biased. We test for this possible bias.

Violence begets violence, or so it's said by the media and popular wisdom. However, the results of our study do not provide unequivocal support for this widely held belief. While in some instances, for some age groups, and at some pathways to adulthood, our research findings offer limited support for the contention that childhood abuse contributes to subsequent juvenile violence or violence in intimate partner relationships, overall they do not show a uniform pattern of violence leading from childhood to adulthood. Taking into account censoring and acknowledging the possibility of sample selection bias, we find little support for the generalization that children who are victims of beatings by their parents are more likely to be perpetrators of juvenile or domestic violence.

Instead, we find that attitudes towards violence are a strong influence on whether a person becomes a juvenile or adult perpetrator of violence. What limited evidence of the impacts of childhood beatings we find is centered around female victims of domestic violence, and then most of that evidence is concentrated among the youngest of young adults in intimate partnerships. Although there are not substantial differences in childhood abuse by race, we do find large racial differentials in attitudes towards violence, with blacks much more likely to tolerate it. Interestingly, we found virtually no impact of childhood abuse on attitudes towards violence. Thus we conclude that these attitudes are an independent influence and should be taken seriously by policy makers.

II. The Problem

Policy makers everywhere are concerned about the costs and consequences of childhood abuse. On one hand, there are substantial costs of investigating, intervening and mediating allegations of child abuse. On the other hand, there are unknown consequences of experiencing or

witnessing violence as a child. These consequences may well accumulate later in life to contribute to heightened violence among juveniles or even heightened violence in intimate partnerships as young adults. Understanding and measuring these consequences is important for policy making.

But, much of the connection between childhood abuse and subsequent violence is more a matter of professional intuition than documented empirical fact. For example, in a recent professional report on the health and well-being of Minnesota youth, authors asserted:

> "Experiencing or witnessing abuse damages adolescents' emotional well-being and increases the likelihood that they will repeat the same behavior with others around them and eventually, with their own children" (Disparities Begin Here: The Health and Well-Being of Youth in Minnesota, June 2001, Urban Coalition, p. 16)

The basis for this assertion appears to be that on virtually every measure of health and well-being—suicide attempts, violent victimization, hopelessness teenage pregnancy, unwanted sexual touching—respondents of color reported more adverse outcomes than whites. Clearly, though, one cannot conclude from this correlation that any one of the outcomes—say, unwanted sexual touching—causes any other of the outcomes—say, unwanted teenage pregnancies. The finding that whites are less likely to experience unwanted sexual touching than nonwhites coupled with the finding that whites are less likely than nonwhites to become pregnant, simply does not lead logically to the conclusion that unwanted sexual touching causes teenage pregnancies. Similarly, evidence of racial disparities in childhood abuse coupled with evidence of racial disparities in juvenile violence or domestic violence cannot lead logically to the conclusion that childhood abuse causes domestic violence or juvenile violence.

The problem that this research confronts is disentangling the pathways from childhood abuse to juvenile violence to domestic violence and the various intersections with race. If childhood abuse leads to subsequent violence, then this should be evident even after one accounts for plausible intervening influences. It should be evident across different groups. It should be evident across different time periods. It should be evident across different measures of violence. It should be evident across different ways of experiencing violence.

The conventional wisdom that violence begets violence is easily understandable from a superficial look at time trends: the number of abused children has increased; juvenile victimization has soared; domestic violence has escalated.

Abused Children

In 1980, approximately 650,000 children nationwide were abused or seriously injured by their parents or caretakers (U.S. Department of Health and Human Services, 1981). By 1986, this number jumped to over one million children (U.S. Department of Health and Human Services, 1988). By 1992, nearly 2.9 million children—or 43 for every 1000 children in the U.S.—were reported to child protective services (CPS) as victims of maltreatment (U.S. Department of Health and Human Services, 1994). These children suffered physical, sexual, emotional, and psychological abuse as well as medical neglect.

Victims of Juvenile Violence

In 1995 and 1996, for every 1000 juveniles (12 to 17-year-olds), 16 were victims of aggravated assault and 65 were victims of simple assault. By way of contrast, the assault rates for adults 35 years of age and older were 4 and 13 per 1,000. The juvenile assault victimization rates then were 4 to 5 times higher than the rates for mature adults (U.S. Department of Justice, May 2000). Most of these victimizations came at the hands of other juveniles.

Domestic Violence Victims

In 1987 there were about 405,000 female victims of violent crimes at the hands of intimates such as boyfriends or ex-spouses. By 1992, that number rose to almost 600,000, a nearly 50-percent increase over the 1987 level (Craven, 1996; U.S. Department of Justice, 1994). Most of these victims were young adults.

Thus, taken together, one sees a connection that permits one to speculate that violence begets violence: the increase in childhood abuse may lie behind the rise in juvenile violence, which

may explain the dramatic increase in domestic violence. The purpose of this study is to unravel these connections.

In our study we explore the connection between the violence that children suffered in the 1980s and the subsequent juvenile violence and domestic violence of the 1990s. We wondered whether a pattern of violence followed from childhood abuse to the teenage years and subsequently to young adulthood. The research addresses the following questions:

1. Does a history of childhood abuse significantly affect the probability of becoming a juvenile victim or perpetrator of violence?
2. Does childhood abuse and/or a subsequent history of juvenile violence predict whether either one ultimately becomes a young adult victim or perpetrator of domestic violence?
3. How are the effects of childhood victimization upon future victim and offender status mediated?
4. Does the experience of childhood abuse contribute to the development of attitudes toward violence that can lead to higher risks of becoming an adult victim or offender?
5. How do race and poverty intervene as predictors?

This report first discusses, as a backdrop, the research on links between child abuse, juvenile violence, and domestic violence. The next section describes the data set we used, followed by the results of our analysis. Finally, we present our conclusions, emphasizing the policy implications for formulating strategies to help reduce violence among young adults and juveniles.

III. Background

Existing research shows that children who have been abused later show symptoms of maladjustment, such as low self-esteem, anxiety, depression, poor social skills, learning disabilities, lower academic achievement, aggressiveness, inappropriate sexual behavior and alcohol and

substance abuse (Browne and Finkelhor, 1986; Conte and Schuerman, 1987; Edwall, Hoffmann and Harrison, 1989; Friedrich, Urquiza and Beilke, 1986; Perez and Widom, 1994; Urquiza and Goodlin-Jones, 1994; White and Strange, 1993). These sequelae of childhood abuse are virtually identical to significant correlates of victimization and perpetration of violence identified by Magdol et al. (1997). Perpetrators or victims of severe violence had significantly lower levels of employment and education than individuals who were not involved in severe violence. They were also found to have significantly higher levels of depression, anxiety, and drug and alcohol dependence. Magdol et al. found male perpetrators of severe physical violence had significantly more extreme values for all of these correlates of violence.

Previous studies exploring the relationship between child abuse and subsequent juvenile delinquency and criminality, based largely upon criminal justice or clinical samples, have found that child abuse is associated with higher rates of subsequent violence (Maxfield and Widom, 1996; Spaccarelli, Coatsworth and Bowden, 1995; Widom, 1989). Studies of the effects of childhood abuse upon incarcerated male adolescents have suggested that familial abuse may be associated with beliefs that support aggressive behavior (Barahal, Waterman, and Martin, 1981; Hinchey and Gavalek, 1982). Spaccarelli et al. (1995) found that the effects upon violent offenders of exposure to family violence were mediated by attitudes that were more supportive of aggression, of increased use of aggressive control as a coping strategy, and of lower self-reported competence.

What is not clear from previous research is whether there is a direct influence of early childhood abuse on violence in adolescence or whether there is an intermediate pathway towards violence via attitudes formed as a result of abuse. Identifying such attitudes as a mediating pathway to these effects may help us to discover avenues for effective intervention (Collings, 1995; Hanson, Cadsky, Harris and LaLonde, 1997; Silverman and Williamson, 1997; Urquiza and Goodlin-Jones, 1994).

Additionally, the previous research findings of an impact of childhood abuse on subsequent violence in adolescence may arise from methodological flaws. One such flaw, of potential significance in longitudinal data sets, is the failure to control for differing vintages of teenagers. This problem arises when one attempts to compare, say, teenage victims or offenders without taking into account the fact that they may reach teen age at different points in time. They are in effect, different vintages—the product perhaps of differing times and circumstances—that are inadequately accounted for by measures of age or characteristics of the victims or offenders themselves.

The intersecting influences of race and childhood abuse also pose complications. Official data seem to show that blacks are overrepresented among the child welfare population. There is a clear racial disparity in child homicides, the most reliable indicator of disproportionality. Black children constitute more than 40 percent of all infant and toddler (under age 5) homicide victims. Yet, only about 15 percent of children under 5 are black. Thus, black children are two and two-thirds as likely to be victims of homicide as they are likely to be found in the population of young children. Other data are less clear. Data collected from mandated professionals, including data that are not reported to child protection agencies, appear to reveal no racial differences in the incidence of child abuse (Sedlak and Broadhurst, 1996). Numerous accounts document a tendency of law enforcement and related agencies to report black and other minority children to child protective services (CPS) more frequently than they report white children (Gil, 1970; Coleman, 1995). In a recent series of papers, Ards, Chung, and Myers (1998) conclude, however, that reporting bias does not exist in these cases and thus that the overrepresentation of black abused children may be due to higher abuse rates in black families.

Nevertheless, there are substantial racial differences in reported rates of juvenile violence. Black juvenile offenders are found in disproportionate numbers in the criminal justice system. Blacks youth are more likely than white youth to be victims of assault. Thus, it is possible—assuming that black children are more likely to be abused than white children—that the higher juvenile offending

rates for blacks can be explained by the higher child abuse rates for blacks. This impact may be direct, or it may be indirect, a result of racially different attitudes towards violence. These attitudes may be influenced by the experience of child abuse. Thus, one important way to understand how child abuse affects juvenile violence is to examine the potential pathways from childhood abuse to juvenile victimization or offense. These pathways would be examined separately for different races that are known (or believed) to have different rates of perpetration and/or victimization.

Several studies exploring predictors of male battering have found significant associations between male battering behavior and childhood experience, or witnessing, of familial violence (Caesar 1988; Dodge, Bates and Pettit, 1990; Hanson, Cadsky, Harris, and LaLonde, 1997; Walker, 1984; Silverman and Williamson, 1997). Hanson et al. (1997) found that abusive men were significantly more likely to have experienced childhood physical abuse and other forms of family violence than non-abusive male controls. Straus and Kantor (1994) showed "that individuals who received corporal punishment during adolescence and early adulthood are more likely to physically abuse their spouses and children." Attitudes based on tolerance of wife assault were the single largest group difference between abusive men and non-abusive men (Hanson et al., 1997). Silverman and Williamson (1997) found that childhood witnessing of paternal battering, belief that battering women is justified, and male peer support of these attitudes all had significant effects on the probability that a college-aged male would use violence against a female partner.

A study of child victimizers showed:

- "Inmates with child victims were more than twice as likely as inmates with adult victims to report having suffered prior instances of physical or sexual abuse. The differences were particularly striking with respect to sexual abuse. While an estimated 22% of child victimizers reported having been sexually abused, less than 6% of adult victimizers reported such backgrounds."

- "Among all violent offenders with a history of having been sexually abused, nearly half had child victims. Among all violent offenders with a history of having been physically abused, nearly 30% had child victims. Among violent offenders with no history of physical or sexual abuse, 15.5% had child victims." (Greenfeld, 1996)

Previous empirical research has focused exclusively upon either victims or perpetrators of domestic violence. It is useful, as we do below, to simultaneously consider both victims and perpetrators. Such an analysis allows us to assess the relationship between partner behavior and beliefs and the probabilities of becoming either a victim or an offender. The estimated models focus specifically upon the effects of childhood abuse upon attitudes toward violence and aggression. The identification of attitudes as a mediating pathway for these effects contributes to further knowledge of potential avenues for effective intervention (Collings, 1995; Hanson et al., 1997; Silverman and Williamson, 1997; Urquiza and Goodlin-Jones, 1994).

Defining Child Abuse

It is important to note that childhood abuse is very specifically defined in this study as a type of physical abuse by parents. It does not include all forms of abuse and specifically excludes sexual or other forms of abuse by persons other than parents. More importantly, the measure captures adolescent beatings, not beatings during early childhood or infancy. Moreover, these are beatings that could occur among relatively mature teenagers—16- or 17-year-olds.

Other studies have a broader definition. Some studies define childhood abuse in a category called child maltreatment. For instance, The National Incidence Studies define an act of child maltreatment as:

> One where, through purposive acts or marked inattention to the child's basic needs, behavior of a parent/substitute or other adult caretaker caused foreseeable and avoidable injury or impairment to a child or materially contributed to unreasonable prolongation or worsening or an existing injury or impairment (U.S. Department of Health and Human Services, 1981, p.4).

Others seek to define child abuse according to professional, community, and neighborhood norms. Giovannoni and Becerra (1979) used vignettes to examine differences in professionals' and

the lay community's definition of child abuse. They saw agreement among different professionals in what would be labeled as child abuse. Professionals did disagree, however, on the relative seriousness of different types of maltreatment. For instance, "social workers saw emotional mistreatment as less serious than three other kinds of mistreatment . . ." (p. 156). The lay community, on the other hand, "may not have distinguished between physical and emotional realms in basic child-caring responsibilities, [but] they clearly did distinguish between these responsibilities and other kinds of deviant parental behavior" (p. 187).

These differences in defining "what is abuse" are also evident across state legal definitions. To date, there is no uniform definition across state or across professional groups of what constitutes child abuse. However, the research community has identified four general categories of child maltreatment: 1) physical abuse, 2) sexual abuse, 3) neglect, and 4) emotional maltreatment (National Research Council, 1993). Each category is then defined by acts of violence; however, these acts are not consistently used by researchers.

Higgins and MaCabe (2000) examined multiple types of maltreatment to estimate the relative impact of each on later adult adjustment. They examined five specific types—sexual abuse, physical abuse, psychological maltreatment, neglect, and witnessing family violence. They concluded that one should "assess all forms of maltreatment when looking at relationships of maltreatment to adjustment" (p. 261). Shipman, Rossman, and West (1999) found "children exposed to one or more types of family violence demonstrated more socioemotional and behavioral problems than their peers in nonviolent families, with exposed abused children demonstrating more significant difficulties with regulating emotional experience than their nonexposed peers." Other studies suggest that physically abused or neglected children have a higher likelihood than others of committing violence later in life (Widom, 1989; Zingraff, Leiter, Myers, and Johnsen, 1993; Smith and Thornberry, 1995). Still, this research does not address the differences in definitions of what constitutes an act of maltreatment.

To overcome this problem, researchers usually are careful to delineate their concept of maltreatment. Dubowitz, Klockner, Starr, and Black (1998) examined the community's and professionals' definitions of only one type of maltreatment: child neglect. They found differences by class, race, and background of respondent.

Previous studies linking child abuse to later adult outcomes have been specific in the types of maltreatment investigated. For instance, Arata (2000) examines only adults and adolescents who have experienced child sexual abuse to model its predictive implication of sexual revictimization as an adult. West, Williams, and Siegel (2000) examined only black women with a history of child sexual abuse.

Measuring child abuse is complicated by first defining what is child abuse. This study examines a specific type of child abuse—beatings of a juvenile between the age of 11 and 17 by a parent. This is an age where spankings, whippings and other physical abuse are usually uncommon. Thus, the occurrence of physical abuse of a child of this age could leave substantial psychological scars.

IV. Approach and Data Description

Data Description

We estimated the models in this study using the National Youth Survey (NYS), a prospective longitudinal study based on a probability sample of households in the continental United States. The NYS began in 1976 with a sample of 1,725 youth ranging from 11 to 17 years of age (wave I). Subsequent data was collected in 1977 (wave II), 1978 (wave III), 1979 (wave IV), 1980 (wave V), 1983 (wave VI) and 1987 (wave VII). Thus, the NYS provide data for both potential victims and offenders through their early adulthood until they are between 21 and 27 years of age.

As often happens in longitudinal designs, some cases dropped out of the sample. The dropout rates were 4.1, 5.7, 10.6, and 13.4 percent for the first five waves. For the sixth and seventh waves the dropout rates were 13.3 and 19.8 percent. The dropouts in all waves were

disproportionately male. In waves 2, 3 and 7, the dropouts were disproportionately black. In waves II through V, the dropouts were disproportionately Hispanic.

Measurement of Key Variables

Childhood Abuse

Recognizing differences in implications of abuse on later adult adjustments, our study examines only one type of maltreatment—physical abuse. In particular, the respondents were asked in the first five waves of surveys (from 1976 to 1980) *to report the number of times they were beaten up by parents in the previous year.* The child abuse variable was constructed in two ways. First, within each wave, a dummy variable—child abuse in the previous year—was created. If the respondents were beaten up by their parents in the previous year when they were under 18 years old, then child abuse equals to 1. Second we created, across five waves, a summary dummy variable—whether the respondents were ever beaten by their parents when they were under 18 years old. The summary dummy variable takes on the value 1 when the respondents who were under 18 years old reported the abuse in any of the waves. Both the summary dummy variable and separate dummy variable in each year are used as the independent variables in the analysis.

It is important to note, therefore, that the childhood abuse variable is actually a limited measure of physical abuse by parents. It is not a direct measure of all forms of abuse and specifically excludes sexual or other forms of abuse by persons other than parents. More importantly, the measure captures beatings in adolescence and not beatings during early childhood or infancy. Moreover, these beatings could occur among relatively mature teenagers—16- or 17-year-olds.

Offense of Juvenile Violence

In each of the first five waves of the survey, the respondents were asked to report the frequency of their delinquent behaviors in the previous year. From the delinquent behaviors listed on the survey, we used the crimes against persons to create a summary dummy variable called

Offense of Juvenile Violence. In each wave, these violent behaviors include "involved in gang fights," "attacked someone," "hit parent," "hit teacher," "hit other students," "used force on students," "used force on teachers, " "used force on others, " "had sexual relations against someone's will," (only in waves 3, 4 and 5) "physical threats for sexual relations," (only in waves 3, 4 and 5). Within each year, a summary dummy variable of juvenile violence offense is created. If the respondents were involved in any of the above-listed behaviors, the offense of juvenile violence variable will take on the value of 1. Otherwise, it is 0. The variable is later used as one of the dependent variables.

Juvenile Violence Victimization Rate

In each of the first five waves of the survey, the respondents were asked to report the frequency of being subjected to violent behaviors, such as being "attacked with weapons," "beaten up by others," "sexually attacked," and "sexually assaulted" (only in wave IV and wave V). An incidence measure of victimization as a juvenile was created. If the respondents had experienced any of the above-listed violence, the variable takes the value of 1. Otherwise, the incidence measure equals 0. The variable is also used as one of the dependent variables. Excluded from the computations are measures of being beaten by parents, so as to avoid a tautological relationship between the child abuse rate and the juvenile victimization rate.

Attitudes toward Violence

To measure their tolerance of violence, respondents were asked to indicate the level of their agreement with nine statements. Responses were given on a 5-point scale, where 1 equals strongly disagree and 5 equals strongly agree. The statements were:

1 It is all right to beat someone up.
2. Fighting doesn't solve problems (reverse coded).
3. You can beat up someone who calls you names.
4 It is ok to hit someone.
5. Physical force prevents people from walking over you.
6. Television violence is effective.
7. It is all right to beat up another person if he started.
8. There is no good reason for beating (reverse coded).
9. It is sometimes necessary to fight.

The nine items were asked in four waves of the survey—1977, 1978, 1979, 1980. The wording was the same each time. The reliability tests on the nine items showed that they were consistently measured across years (=.96 in 1980; =.95 in 1979; =.92 in 1978; =.87 in 1977). In each wave of the data, an attitudes-toward-violence variable was created by first summing up the nine items (the second and the eighth items were reverse coded) and then dividing the sum by 45, the maximum value of the sum score. The outcome variable is continuous, ranging from 0 to 1 and is denoted by *y*. Because this is a continuous variable, we are able to transform it into a log-odds ratio, ln (y/(1-y)). The variable *y* and its transformation are used as dependent variables in the subsequent analysis, and represent tolerance towards violence. Theoretically, the maximum value of *y* is 1, indicating full tolerance of violence. A measure of 0 indicates intolerance of violence.

The violence tolerance odds ratio, y/(1-y), measures how much more likely a person is to be tolerant of violence than intolerant. Thus, if a person has a tolerance-of-violence rate of .5, the odds ratio is equals 1: the person is just as likely to be tolerant of violence as he is likely to be intolerant of violence. A person who has a violence tolerance rate of .75 is three times as likely to be tolerant of violence as he is to be intolerant (.75/.25 = 3). In this way, the odds ratio of the tolerant rates conveniently measures attitudes towards violence. The equation estimated is the log of the odds ratio. The coefficients obtained on the independent variables can be transformed to yield a straightforward measure of the impacts on the tolerance of violence, when those variables are dichotomous. The exponential of the coefficient is interpreted as the multiple of the odds ratio attributable to a given variable. Thus, if a statistical coefficient on say, black, is equal to .078, that means that blacks are more likely than whites to be tolerant of violence. The exponential of .078 is 1.08. That means that the odds that a black is tolerant of violence are 1.08 times the odds of a white. Stated otherwise, there is an eight percent difference in the odds in favor of tolerance of violence between blacks and whites, after controlling for other factors.

Domestic Violence

By waves VI and VII, respondents had matured enough to be involved in a domestic partnership. Respondents were 18 to 24 years old in wave VI and 22 to 28 years old in wave VII. Thus, they were young adults. We defined intimate partnerships broadly to include persons who were living together, persons who were married, and persons who answered the intimate partnership questions.

We considered three categories of domestic violence: severe physical abuse, moderate verbal and physical abuse, and moderate or severe physical abuse. We created separate measures of victimization and perpetration.

Domestic Violence Victimization

- *Severe Physical Abuse*: Classified the respondent as a victim of domestic violence if their partner engaged in *one* of the following behaviors at least one time in the year of the survey: kicked/bit/hit respondent, hit respondent with something, beat up respondent, threatened respondent with a gun, or used a knife or a gun. (wave VI = 15.4%; wave VII = 17.8%)
- *Moderate Verbal and Physical Abuse*: Described the respondent as a victim if the partner engaged in *all* of the following behaviors at least once in the year of the survey: insulted/swore at respondent, threatened to hit or throw something at respondent, threw something at respondent, pushed/grabbed/shoved respondent, and slapped respondent. (wave VI = 7.8%; wave VII = 9.1%)
- *Moderate or Severe Physical Abuse*: Classified domestic violence victimization according to whether the partner engaged in *one* of the following behaviors at least one time in the year of the survey: if they threw something at the respondent, pushed/grabbed/shoved respondent, slapped respondent, kicked/bit/hit respondent, hit

respondent with something, beat respondent up, threatened respondent with gun, or used knife or gun. (wave VI = 38.7%; wave VII = 36.2%)

Domestic Violence Perpetration

- *Severe Physical Abuse*: Classified the respondent as a perpetrator of domestic violence (offender) if they engaged in *one* of the following behaviors at least one time in the year of the survey: kicked/bit/hit partner, hit partner with something, beat up partner, threatened partner with a gun, or used a knife or a gun. (wave VI = 17.1%; wave VII = 14.5%)
- *Moderate Verbal and Physical Abuse*: Described the respondent as a perpetrator if he engaged in *all* of the following behaviors at least once in the year of the survey: insulted/swore at partner, threatened to hit or throw something at partner, threw something at partner, pushed/grabbed/shoved partner, and slapped partner. (wave VI = 7.6%; wave VII = 5.5%)
- *Moderate or Severe Physical Abuse*: Classified domestic violence perpetration according to whether the respondent engaged in *one* of the following behaviors at least one time in the year of the survey: threw something at the partner, pushed/grabbed/shoved partner, slapped partner, kicked/bit/hit partner, hit partner with something, beat partner up, threatened partner with gun, or used knife or gun. (wave VI = 46.2%; wave VII = 36.5%)

Our findings showed that nearly half of the respondents in intimate partnerships were either victims or perpetrators of moderate or severe physical abuse in the relationship. About one quarter was either perpetrators or victims of severe physical abuse. For details of the data see the appendix.

The data set contains measurements of an array of victim and perpetrator characteristics in early childhood and through adolescence and young adulthood. The variables we include in our analyses are:

Ethnicity

Respondents were asked to indicate their ethnic backgrounds. Among 1,725 subjects, 1,361 of them are whites; 260 are blacks; 104 are from other backgrounds including Hispanic, Asian, Native American and others. In the regression analyses we use the white group as the comparison group. Thus, the coefficient on black is interpreted as the difference between blacks and whites; the coefficient on Other is interpreted as the difference between Hispanic, Asians, Native Americans and whites.

Peer Disapproval

In each wave, the respondents were asked to indicate, using a 5-point scale (5=strongly approve; 1=strongly disapprove), the extent to which their peers would disapprove of specific behaviors if the respondent engaged in them. They were asked if peers would disapprove if they: cheated; stole something worth less than $5; sold hard drugs; used marijuana; stole something worth more than $50; hit someone; used alcohol; pressured someone sexually; destroyed property; broke into a vehicle; had sexual intercourse. The variable was created by first summing up the scores of all items. Then the summary score was standardized into a continuous variable ranging from 0 to 1, by first subtracting the minimum score and then dividing the difference by range. A higher value of the variable indicates peers' high tolerance of the respondent's misconduct. Mean scores for the variable by year are .3392 in 1977, .3662 in 1978, .3296 in 1979, and .3522 in 1980.

Labeling by Parents

The respondents were asked to indicate how strongly their parents would agree with each of the 12 descriptive labels that could be applied to respondents: well-liked; need help; bad kid; often upset; good citizen; get along well with others; messed up; break rules; personal problems; get into trouble; likely to succeed; do things against the law. A five-point scale, where 5 equals strongly agree and 1 equal strongly disagree, was used. After reverse coding all the items except for the 1st, the 4th, the 5th and the 11th items, we summed the scores of all items, then standardized the summary score to range from 0 to

1. The standardized score was used in the regression analysis. The mean scores for the variable by year are .6480 in 1977, .6529 in 1979, .6673 in 1979, and .6688 in 1980. Higher scores indicate a good labeling of the respondent from the parents.

Exposure to Delinquent Peers

In each of the four waves of the surveys, the respondents were also asked about how many of the respondents' close friends have engaged in each of the thirteen deviant behaviors in the past year: cheated on school tests; destroyed property; used marijuana; stolen something (worth less than $5); hit someone; used alcohol; broke into a vehicle; sold hard drugs; stole something (worth more than $50); suggested you break the law; gotten drunk; used prescription drugs; given or sold alcohol. Responses were made on a 5-point scale, where 5=all of them (friends); 4=most of them; 3=some of them; 2=very few of them; 1=none of them. We first summarized the scores of all 13 items, and then subtracted the minimum summary score and divided the difference by the range of the summary score. The resulting variable is a continuous variable ranging from 0 to 1, with higher value indicating a wider exposure to delinquent peers. The mean scores for the variables by year are .1774 in 1977, .2190 in 1978, .2094 in 1979, and .2238 in 1980.

Drug Abuse

The respondents reported the number of times in the previous year that they used each of six drugs: marijuana, hallucinogens, amphetamines, heroine, cocaine, and barbiturates. If the respondent's use of any one of the drugs is above that of the upper quartile of the sample, the drug abuse variable will be 1. Otherwise, it will be 0. The dichotomous variable was later used as the independent variable in the subsequent analyses.

Education

In each wave (wave II to wave V), the respondents were asked to indicate the highest grade or level of education they completed in the year of the survey. The variable ranges from 5 (5th

grade) to 22 (college education), with the mean of 9.30 in 1977, 10.26 in 1978, 10.99 in 1979, and 11.22 in 1980.

Age

The respondents were asked to self-report their age. Since the respondents were interviewed four times from 1977 to 1980, the mean age increased over years. In 1977, ages ranged from 12 to 18; in 1978, from 13 to 19; from 14 to 20 in 1979; and 15 to 21 in 1980. The mean age in 1977 is 14.87; 15.87 in 1978; 16.87 in 1979; and 17.87 in 1980.

Gender

A dichotomous variable where 1= female and 0=male.

Parent Income in 1976

This variable was only measured in 1976, but was used in subsequent waves as an independent variable. In 1976, the respondents' parents were asked to indicate their family income by choosing an income category ranging from 1 ($500) to 10 (above $50,000). Then, we created a dichotomous variable of parent income by using quartile split, 0=lower 25% of income group and 1=higher 75% of income group. The dichotomous variable was then used in the subsequent analysis. The interpretation of this variable is *not in the lowest quartile of income.*

Job

In each wave, the respondents were asked to indicate whether they had a job in the previous year. The variable is a dichotomous one where 0=had no job in previous year and 1= had job in the previous year. About 69% of the respondents had a job in 1977, 77% in 1978, 82% in 1979, and 81% in 1980.

Childhood Poverty

In the first wave, parents were asked about their total family incomes. A variable was created that was equal to 1 if the parent respondent indicated income less than $10,000. The variable equals 0 otherwise. The values equal 24.7% in 1983 and 23.6% in 1987.

The Problem of Censoring

The question "ever abused as a child" that determines our measure of child abuse is restricted in the survey to persons under 18. The longitudinal nature of the data set, however, means that although at the start of the panel in 1976 all respondents met this age criterion, successive waves result in portions of the sample being excluded. Thus, the measure of "ever abused as a child" is based on a censored sample of respondents in all waves except the first. A person who was 11 in 1976 had more opportunities to respond to the question than someone who was 17 in 1976. To overcome this problem of censoring, we compare our measures of abuse across different vintages of older teenagers: those who are 15 to 18 years old. Everyone (within a given age) within the vintage has the same opportunity to respond to the question of abuse as a child. The first vintage has only one chance, in the first interview. The fifth vintage has five times as many opportunities to respond to the question "abused last year," the backbone for our computation of the measure of "ever abused." The attractive feature of looking at – 15 to 18-year-old vintages is that all persons in a given vintage could in fact have been abused as a child (all were no more than 17 years old in the previous year) and none are excluded preemptively.

We are unable to form completely non-overlapping vintages for the analysis of tolerance of violence and juvenile victimizations/offending because violence tolerance questions were not asked in 1976 (the first wave) and there is no 15- to 18-year-old vintage after 1980. We do, however, come close to producing two non-overlapping vintages: 15- to 18-year-olds in 1977 (wave II) and 15- to 18-year-olds in 1980 (wave V). The 15- to 18-year-olds in wave II were 14 to 17 years old in 1976. The 15- to 18-year-olds in wave V were 11 to 14 years old in 1976. Thus, the latest vintage (15- to 18-year-olds in 1980) has more changes to "ever have been abused" than the earliest vintage (15- to 18-year-olds in 1976) and this largely without double counting individuals.

By comparing the first and last vintages of 15- to 18-year-olds we can assess the degree of censoring that might occur had we used all of the observations. If the measure of "ever abused" was

greater for the last wave than for the first wave, this might indicate censoring, since persons in the first wave have fewer opportunities to respond to whether they had been abused. Of course, it could also indicate vintage effects: namely, that the later vintages of 15- to 18-year-olds were more likely to be abused than the earlier ones.

A smaller measure of "ever abused" for the later vintages would indicate a pure vintage effect, which could be underestimated by the presence of censoring, but cannot be the result of censoring. If there are no differences in the measures of "ever abused," one can speculate that there is neither censoring nor vintage effects (or any vintage effects are overwhelmed by censoring). Without knowing which direction these two effects go, we focus primarily on our separate estimations by vintage.

In summary, we recognize that using the measure "ever abused" allows potential censoring. Asking the question more times increases the chances of a "yes" response (since the probability is a cumulative one) while the limiting restriction on the earliest vintage is that these respondents were not surveyed prior to 1976 and thus only has one opportunity to respond. The 1977 vintage has two opportunities, the 1978 vintage has three, and so on. Thus, a convenient first step in attempting to control for censoring is to compute "ever-abused rates" within vintages where all have the same chances to respond.[1]

Understanding Race Effects

Previous models attempt to capture race effects via dummy variables and interaction terms. This analysis focuses on structural equations that may differ across races and thus requires the estimation of separate equations for each portion of the model. When there are sufficient observations, one can decompose racial gaps in observed violence into two portions: those that are explained by relevant offender or victim characteristics and those that are unexplained. The unexplained portion may capture such phenomena as labeling and racial bias within the child

[1]Note that "ever abused" only relates to the periods in the survey and not abuse in periods prior to the survey. As a result, these measures reflect whether persons were abused when they were over 11 years of age.

welfare system or law enforcement systems. This method, also known as the residual difference method, is used to measure race effects. Myers (1985, 1993) has shown that when applied to criminal justice issues, the residual difference approach makes a real difference. The approach decomposes racial gaps in criminal justice outcomes into two sets: those that are due to racial differences in individual, family, and background characteristics of the offender and those that are due to differences in the effects of those characteristics on criminal justice outcomes. The latter differences permit the measurement of "differential treatment" indices and provide a better way of capturing race effects than that provided by dummy variables. When applied to issues of racial disparities in child abuse reporting, the method produces results that challenge conventional wisdom. Ards, Chung, and Myers (1998), for example, apply the method to the analysis of racial disparities in child abuse reporting and observe that there does not appear to be racially biased reporting, thus concluding that the observed racial disparities in reported abuse must be related to actual racial disparities in abuse.

V. Model Specification and Estimation

We hypothesize that juvenile offending or victimization derive from attitudes towards violence and that these attitudes stem in part from experiences of childhood abuse. We predict that juveniles who have been physically abused as children are more likely to have permissive attitudes towards physical violence and thus are either more likely to be juvenile victims or offenders. The underlying model is provided in Figure 1.

Race is seen as an intervening variable, both in the incidence of childhood abuse and in the determination of attitudes towards violence and the determination of juvenile violent victimizations or offending. Figure 1 shows three key relationships linking race and childhood abuse to attitudes towards violence and violent offending/victimizations. These three relationships can be expressed as the equations described below.

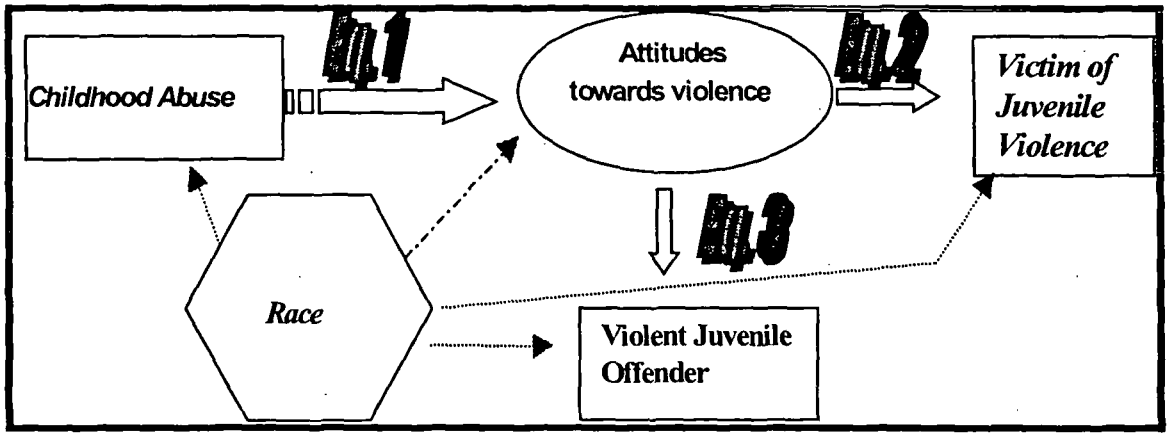

Figure 1. The Conceptual Model Predicting Juvenile Offending and Victimization

The first equation describes the impact of previous abuse as a child (C_{t-1}) on a measure of attitudes toward violence ($h(y_t)$):

Equation 1

$$h(y_t) = \beta_{ti} X_{ti} + \gamma c_{t-1}$$

Other factors that determine these attitudes towards violence are given by the vector *X*. The coefficient γ provides the measure of the impact of childhood abuse on these attitudes. The coefficients β provide the impacts of other factors on violence attitudes. The dependent variable, *h(y)*, is a continuous variable measuring acceptance of violence. It is constructed from summated rating scales for attitudes toward interpersonal violence and sexual assault. Although the functional form can be considered very general, in our analysis we consider a log-odds ratio formulation. The variable *X* is a vector of socio-demographic and behavioral variables such as sex, age, educational attainment, access to counseling, and peer relationships. The independent variable for childhood abuse, designated as variable *c* within equation 1, is a dichotomous variable constructed from response in the NYS data to the question of how many times in the past year have you been beaten up by your mother or father.

The coefficient for the estimated effect of child abuse upon attitudes toward violence is represented by γ in equation 1. The estimated effects of the socio-demographic and behavioral variables upon attitudes are represented by the β coefficients in this equation.

A second equation assesses the impacts of attitudes towards violence on violent victimizations. Logistic structural models and a nested reduce form model of a) the probability of violent victimization as a juvenile and b) the probability of being a victim of spousal or partner abuse will be estimated to assess the direct effect of prior childhood abuse upon risk of victimization.

Equation 2

$$Prob(\ v_t) = \frac{1}{1 + e^{-\Sigma \alpha_i z_i - \delta h(\ y_t)}}$$

where:

v_t = Whether respondents had been victims of juvenile violence

$h(y_t)$= Respondents' attitude toward violence

z_t= Background variables of the respondents

The dependent variable for these models is a dichotomous variable for being a victim of juvenile violence or, later in life, of partner or spousal abuse. This variable will equal 1 if one or more of the categories of abuse are answered affirmatively.

Finally, a third equation details the impacts of attitudes towards violence on self-reported offending.

Equation 3

$$Prob(O_t) = \frac{1}{1 + e^{-\Sigma \phi_i w_i - \delta h(y_t)}}$$

O_t= Whether respondents had been offenders in cases of juvenile violence

$h(y_t)$ = Respondents' attitude toward violence

w_t = Background variables of the respondents

This relationship is also estimated using a logistic specification, given the dichotomous nature of the dependent variable.

To assess whether there is a direct impact of childhood abuse on juvenile violence, we also estimate variations on equations 2 and 3:

Equation 4

$$Prob(\ v_t) = \frac{1}{1 + e^{-\Sigma \alpha_i z_i - \mu c_{t-1}}}$$

Equation 5

$$Prob(O_t) = \frac{1}{1 + e^{-\Sigma \phi_i w_i - \mu c_{t-1}}}$$

or, where we replace attitudes towards violence with measures of child abuse. Finally, these models can be estimated with both attitudes towards violence and with measures of childhood abuse.

These estimated models enable us to compare the respective marginal impacts of childhood abuse upon victims' and perpetrators' attitudes toward violence and aggression. We also assess the direct and indirect effects of childhood abuse and attitudes toward violence upon future risk of victimization and perpetration of domestic violence.

VI. Results

Vintage of 15- to 18-Year Olds

Table 1, Vintages of 15- to 18-Year Olds, 1976-1980, provides details on the subsamples of 15- to 18-year-old vintages of youth across five waves: 1976 (wave I), 1977 (wave II), 1978 (wave

III), 1979 (wave IV) and 1980 (wave V). Technically speaking, these are not mutually exclusive vintages. Because of the range of ages within a wave, some overlap occurs. For example, a person who is 15 in 1976 would be included among the 15- to 18-year-olds in wave I (while 15), wave II (while 16), wave III (while 17) and wave IV (while 18), but would not be included in wave V (while 19). In contrast, someone 11 years old in 1976 would only appear in wave V (while 15) and someone 18 years old in 1976 would only appear in wave I.

The main conclusion we reach from Table 1 is that, with the exception of wave II, there are no black-white differences in the probability of ever having been abused and no black- white differences in having been abused in the past year. With the exception of waves IV and V, there are no differences in risks of abuse for the "other" and "white" categories. From wave I to wave V we find no statistically significant difference in the overall abuse rates among the 15- to18-year-old vintages. The average across those years is about 8 percent for "ever abused" and around 3 percent for "abused last year."

We find no statistically significant racial differences in the probability of being a victim of violence in a given wave for any of the vintages. We find that the overall average of violent victimization rates was about 24 percent across waves and was not statistically different from one wave to the next. Although black 15- to 18-year-olds were more likely than white 15- to 18-year-olds to be offenders in wave IV, generally there were neither racial differences nor across-wave differences in violent offending rates, which averaged about 40 percent.

The only consistent racial difference in an outcome measure found in our analysis was a higher tolerance for violence among blacks than among whites. For each wave, black vintages of 15- to 18-year-olds consistently showed higher violence tolerance rates than the white vintages did. Over all four waves measured (waves II to V), the black tolerance of violence rate averaged 41 percent, while the white tolerance rate averaged 35 percent.

If we define a consistent effect as one that is statistically significant for every wave and exhibits no differences between vintages, then the only consistent finding is that blacks have higher tolerance of violence in this data set. We cannot conclude that blacks are more violent (since we find a statistically significant black-white difference in only one wave); we cannot conclude that blacks are more likely to be victimized (since there are no statistically significant differences between blacks and whites or for that matter between whites and others in violent victimization rates). Neither can we conclude that blacks or others are consistently more likely to be abused (since we find in only one wave that black abuse rates are higher than white abuse rates and in two waves that other abuse rates are higher than white abuse rates). Figure 2, Tolerance of Violence among Vintages of 15-18 Year Olds, graphically shows the pattern of higher tolerance of violence among blacks. The values of "others" are not statistically different from those for whites in waves III, IV or V. In every wave, however, the black tolerance of violence exceeds the white violence tolerance rate.

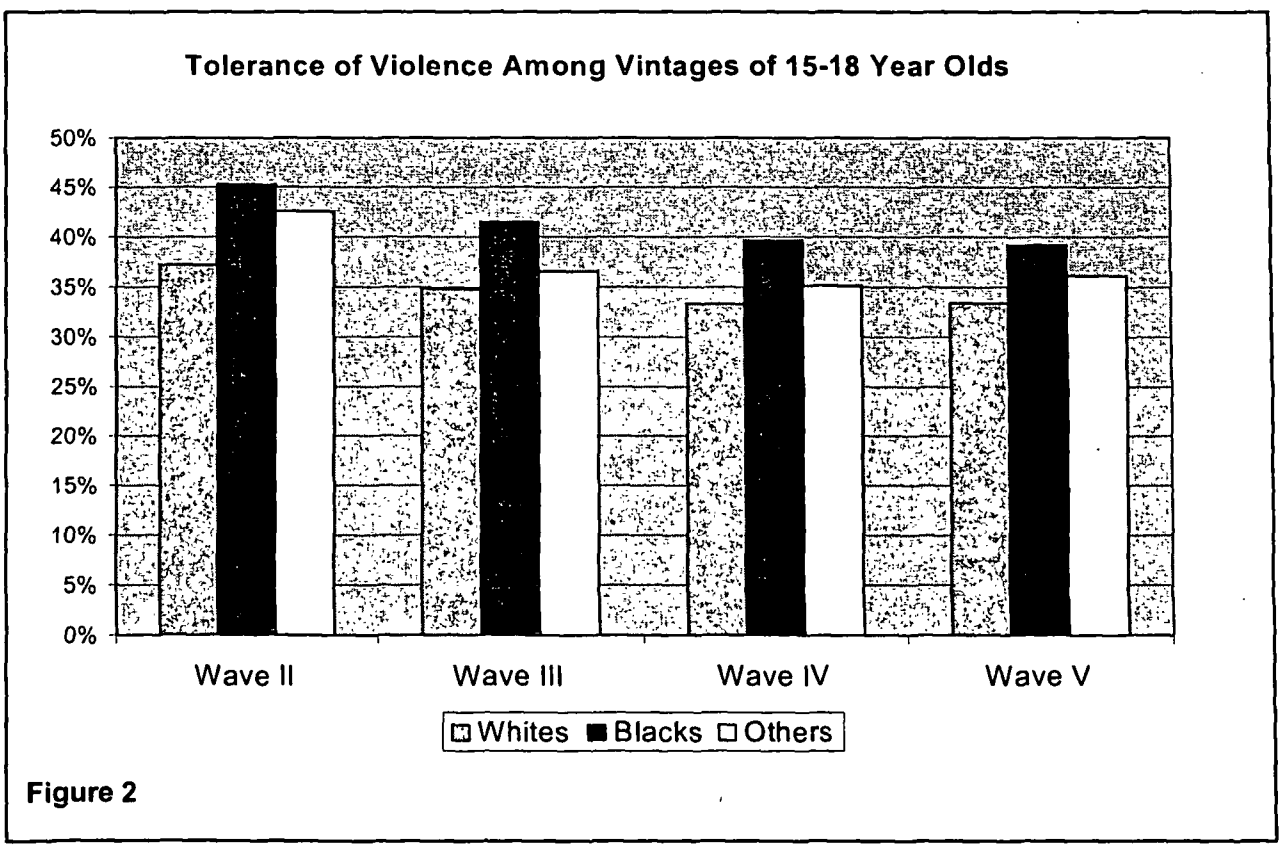

Figure 2

Table 2, Coefficients of Models Estimating Log Odds Ratio of Attitude toward Violence, Vintages of 15-8 Year Olds from 1977 to 1980, reveals that the higher-than-average tolerance for violence among blacks remains even after we control for other relevant factors such as education, age, gender, poverty, employment, peer approval of misconduct, labeling by parents, drug abuse and whether the teenager was ever abused as a child. The odds that a 15- to 18-year-old has positive attitudes towards violence are 1.19 to 1.31 times higher if the teenager is black as opposed to white. This effect is statistically significant at the 1-percent level. The odds that a 15- to18 year-old has positive attitudes towards violence are 4 to 11 times higher for teenagers whose peers approve of misconduct; these rates are cut by 17 to 39 percent when parents label their children. Once other factors are taken into account, we find no statistically significant impact of ever having been abused on attitudes towards violence, as reported in Table 3.

Table 4 reports the results of estimation of a logistic model of juvenile violence victimization while Table 5 presents the results of estimation of a logistic model of juvenile violence perpetration. In each model, independent variables include: race, education, age, gender, poverty, employment, peer approval of misconduct, labeling by parents, exposure to delinquent peers, drug abuse, attitudes towards violence and whether the teenager was ever abused as a child. The models were alternatively estimated with "tolerance of violence" omitted and "ever abused" omitted and were also estimated separately by race. Table 6 reports (a) the effects of tolerance of violence and (b) the effects of childhood abuse on juvenile violence victimization across different model specifications and different waves. Table 7 reports these effects on juvenile violence perpetration.

Again, defining a consistent finding as one where the estimated effect is statistically significant across all waves and all model specifications, we cannot conclude that tolerance of violence or ever having been abused as a child consistently affects juvenile violence victimization. We do find these effects in three of the four waves for all races. In waves II and III, there are large and statistically significant impacts of higher tolerance of violence and ever having been abused as a

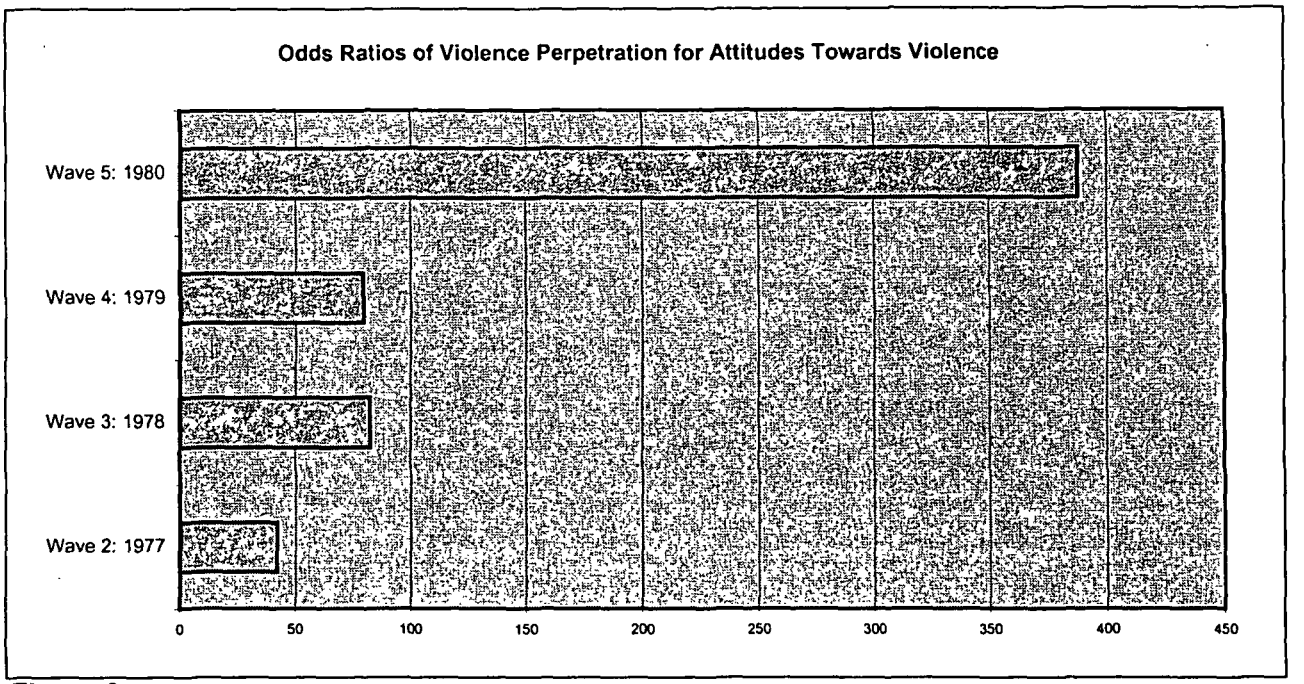

Figure 3

child on the risk of violent victimization among 15- to 18-year-olds. There is no statistically significant impact of tolerance of violence on juvenile violent victimization rates in wave V, and there is no statistically significant impact of childhood abuse on juvenile violent victimization rates in wave IV.

A weaker finding, however, is that for some races and some waves we find higher victimization rates among those who were abused as children and those who have positive views towards violence. Such results are not deemed consistent, however, since in many instances these effects are statistically insignificant.

Using the aforementioned criterion of consistency, we can nonetheless conclude that there are strong statistically significant impacts of attitudes towards violence on violence perpetration. Figure 3, Odds Ratios of Violence Perpetration for Attitudes toward Violence, reproduces the impacts found in Table 7.

Basic Patterns

To understand the modeling estimates relating childhood abuse to domestic violence, we must look closely at the data used in the analysis. Tables 18a to 18c depict the breakdown of the samples. In wave VI, for example, there were 1,496 respondents, of whom 770 were males and 726 were females. To be considered in this part of the analysis, respondents must have responded to the questions about domestic violence involving boyfriends, girlfriends, husbands, or wives. In the case of severe physical abuse, respondents are asked to:

- Tell me how many times in the past 12 months [your spouse/boyfriend/girlfriend] kicked, bit or hit you with a fist?
- Tell me how many times in the past 12 months [your spouse/boyfriend/girlfriend] hit you or tried to hit you with something?
- Tell me how many times in the past 12 months [your spouse/boyfriend/girlfriend] beat you up?
- Tell me how many times in the past 12 months [your spouse/boyfriend/girlfriend] threatened you with a knife or gun?
- Tell me how many times in the past 12 months [your spouse/boyfriend/girlfriend] used a knife or fired a gun?

We have determined that not all those who responded to these questions were currently in an intimate partnership. Also, not all those who were in intimate partnerships responded to these questions. The cases omitted are few, though.

Table 17a shows that 23 percent of the males responded to the victimization questions. Of those, 22 percent claimed to be victims of severe physical violence at the hands of their spouse, girlfriend, (or boyfriend). Table 17c shows that 42.9 percent of males reported being victims of either moderate or severe physical domestic violence. These tables also show that females report lower probabilities of being victims. Of the 41 percent of females who responded to the questions about victimization, 11.4 percent said they had been victimized by a spouse or lover. A larger share of those who said they had been victims also reported being offenders than those who did not say they had been victims.

Table 18a shows that 22.9 percent of the males in the sample responded to the offender questions. Forty-one percent of the females responded to these questions. This difference is statistically significant.

With such a large share of males not responding—either because they were not in an intimate partnership or because they simply did not wish to respond—it is not surprising then that few (7.4 percent) admitted to be perpetrators of violence against their girlfriends (boyfriends) or spouses. More than one-fifth of females reported being perpetrators of violence. Of the males who reported being perpetrators of violence, the vast majority claimed that they were also victims. Of the females who admitted to violent offending, most denied also being victims. Still, female offenders were more likely to be victims than non-offenders for the most severe type of physical abuse.

When one looks at verbal and moderate physical abuse, there are no statistically significant differences between males and females in offending. There are differences among female offenders and non-offenders, however. Those who are offenders are far more likely to also be victims than those who are non-offenders. There is no difference in victimization between males who are offenders and those who are non-offenders. These results are found in Table 18b.

Turning now to severe or moderate abuse, we find that males are less likely than females to report being offenders. Males who are offenders are more likely to report to being victims than are males who are not offenders. Females who are offenders are more likely to report being victims than females who are non-offenders. These results are evident in Table 18c.

Tables 19 and 20 report the same information about victims and offenders for wave VII. Although the response rates are higher, the results are qualitatively the same: males are more likely to report being victims than females. Among victims, females are more likely than males to report being offenders. Looked at in another way (Table 20s), females are more likely than males to report being offenders and among offenders, females are less likely than males to report being victims (although offenders of either gender are more likely to be victims than are non-offenders).

At first blush these findings appear at odds with the conventional wisdom that females are victims and males are offenders and that offenders and victims are mutually exclusive groups. Clearly offenders and victims are often the same persons, whether male or female. And, at least in this data set, there is an extremely high rate of non-response to the domestic violence questions.

Thus, it is important to understand that our analysis—based only on respondents to the domestic violence questions—provides an incomplete picture of the domestic violence that occurs in relationships. For that reason, we are careful in our analysis to perform estimates separately for males and females wherever possible. One can speculate that the direction of the potential bias is to underrepresented male offenders and to underrepresented female victims.

Race and Ethnicity

The number of nonwhites in the sample is low, and not many responded to the domestic violence questions. Table 16 shows that 76 nonwhites responded to the domestic violence questions in wave VI and 105 responded in wave VII. With so few observations, it is surprising how large and statistically significant the racial gap is in domestic violence victimization. In wave VI, for example, the severe physical abuse victimization rate for African Americans is 30 percent while for whites it is only 13 percent. In wave VII, the rates are 29 percent for blacks and 12.5 percent for whites. Sixty percent of African Americans admitted to being perpetrators of severe or moderate physical abuse in wave VI, and 55.7 percent in wave VII. In comparison, the rates for those waves were 43 and 33 percent for whites. These racial gaps in violence victimization and violence perpetration rates are all statistically significant at the 5 percent level. Only in the instance of verbal and moderate physical abuse are the differences between whites and nonwhites statistically insignificant for perpetration of domestic violence. In the case of victimization, even the verbal and moderate abuse rates are significantly different between whites and nonwhites. Thus, it is extremely important to control for race and where possible look separately at whites and nonwhites when examining the effects of childhood abuse on domestic violence.

To estimate the effects of childhood abuse on domestic violence we have specified equations that consider males and females together and equations that consider them separately. We have estimated equations for waves VI and VII separately, and we have estimated equations that combine the observations between the two waves to ask whether a person was a victim of domestic violence in either wave. We have extracted a non-overlapping sample of 18- to 24-year-olds and explored whether they have been victims of domestic violence. In addition, we have estimated separate equations for severe physical violence, verbal and moderate violence, and moderate or severe violence, both with and without controls for tolerance for violence and with and without controls for juvenile violence perpetration or victimization. These results are presented in Tables 8 through 15. For convenience we summarize the main findings of these estimations in one chart (Figure 4).

Is the Impact of Childhood Abuse on Domestic Violence Statistically Significant?

	Severe Physical Abuse		Verbal and Moderate Physical Abuse		Moderate or Severe Abuse	
Wave VI	***Females***	***Males***	***Females***	***Males***	***Females***	***Males***
Controls for Tolerance of Violence						
Victimization	Yes	Yes	Yes	Yes	Yes	No
Perpetration	Yes	Yes	Yes	No	Yes	No
Wave VII						
Controls for Tolerance of Violence						
Victimization	No	No	No	No	Yes	No
Perpetration	Yes	No	No	No	No	No
Wave VI						
Controls for Tolerance of Violence and Juvenile Violence						
Victimization or Perpetration	Yes	Yes	Yes	Yes	No	No
Wave VII						
Controls for Tolerance of Violence and Juvenile Violence						

Victimization or Perpetuation	No	No	No	No	No	No
Waves VI or VII						
Controls for Tolerance of Violence						
Any Victimization	Yes	No	Yes	No	Yes	No
Victimization at Age 18 to24	Yes	No	Yes	No	Yes	No

Figure 4

The most apparent conclusion from this table is that the impacts of childhood abuse on subsequent domestic violence are not consistent between males and females or between the two waves. In wave VI, females consistently exhibit higher rates of domestic violence—whether as victims or as offenders—as a result of having been abused as children. Having been beaten by a parent raises an 18- to 24–year-old female's odds of being a victim or perpetrator of severe physical abuse, verbal or moderate abuse, and severe or moderate abuse at the hands of a spouse or lover. These impacts are not consistently found among males in wave VI.

In wave VII, however, when the respondents were 21 to 27 years old, the impacts of childhood abuse nearly vanish for females and remain statistically insignificant for males. Combining victimization and perpetration and controlling for juvenile violence (either as an offender or as a victim) confirms that wave VII uncovers little or no impacts for either males or females of childhood abuse on domestic violence.

Thus, there appears to be a gender impact in wave VI, when respondents were 18 to 24 years old, and a victimization impact when alternative measures of domestic violence are considered. Is the issue that of the *year (1983)* or the *age* of the respondents? We suspect the latter, and consider two ways of capturing this. One is to look at whether a person was ever abused in either wave and then we control for age. Another is to focus on the non-overlapping sample of 18- to 24-year-olds in the two waves. In both instances we confirm that female childhood abuse increases the odds of being a victim of domestic violence. The odds are 2 to 4 times higher that a female will be a victim of domestic violence if she has been beaten by her mother or father as a

child. These estimates are fairly robust across different model specifications and estimation procedures once age is taken into account. That these results do not translate to males or to older couples suggests that early childhood abuse mainly influences women who enter marriage or intimate partnerships at an early age. The mediating influence, we believe, is tolerance for violence. Those who have grown up witnessing or experiencing violence may be more tolerant of it and as a consequence are more likely to enter relationships where they can become victims of violence. To underscore our point, we produce the female domestic violence odds ratios resulting from childhood abuse and tolerance of violence in Figure 5.

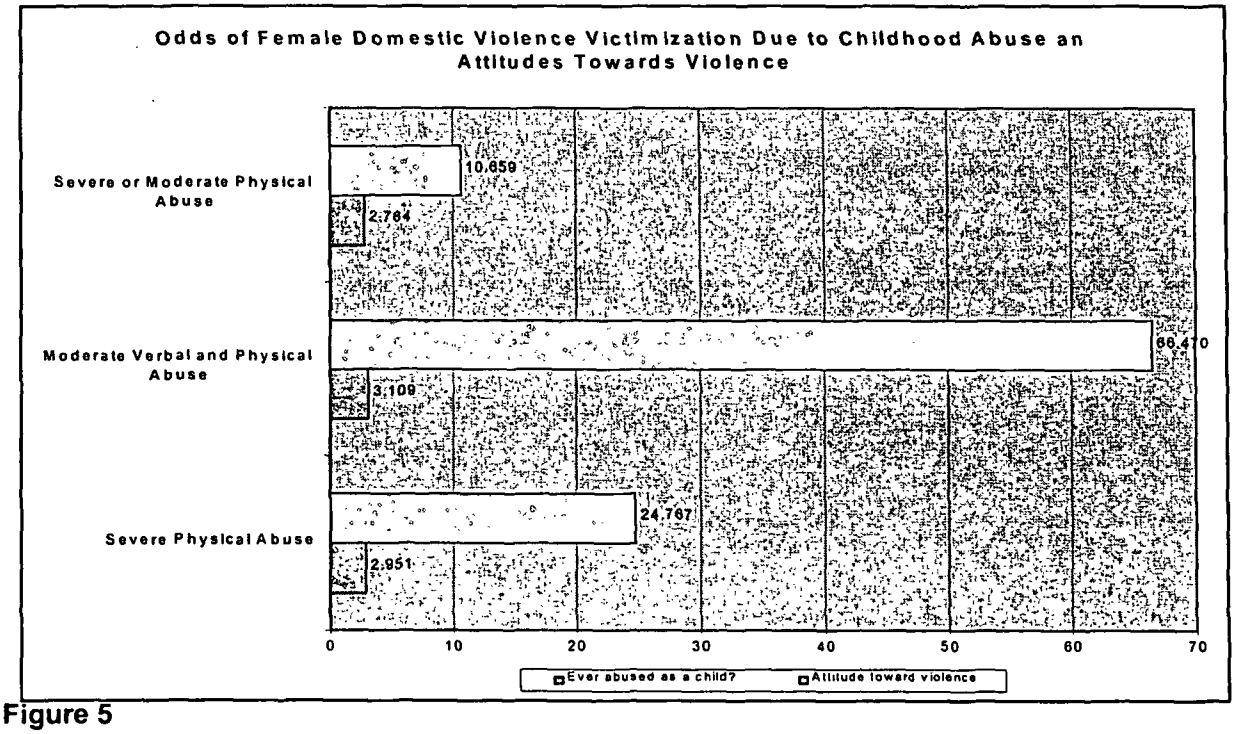

Figure 5

Although in each instance combining waves VI and VII the domestic violence victimization odds for females are two to three times higher for those who were abused as children than for those who were not abused, the tolerance for violence effects are larger. Persons with high tolerance for violence are 10.7 to 66.5 times as likely to be a victim of domestic violence as those who have low tolerance of violence. Since we previously found virtually no impact of childhood abuse on attitudes towards violence (Tables 2 and 3), we conclude that these attitudes are an independent and

exogenous influence—an influence that should be as great a policy concern, if not greater, than whether a female was abused as a child. That we do not find evidence across both waves that whether a male was abused as a child affects male perpetration of domestic violence further thwarts the generalization that violence begets violence, at least in this data set. Perhaps more appropriately we should say that *tolerance for violence begets violence.*

Attitudes towards Violence

Recall that our measure of attitudes toward violence captures respondents' agreement with sentiments such as: "it is all right to beat someone up," "fighting solves problems," "you can beat up someone who calls you names," "it is ok to hit someone," "physical force prevents people from walking over you," "television violence is effective," "it is all right to beat up another person if he started," "there are good reasons for beating," and "it is sometimes necessary to fight." The measure in the first wave also includes such sentiments as: "Women who are sexually assaulted have generally asked for it by the way they dress and act," or "A woman cannot really be sexually assaulted against her will unless a weapon is used or more than one attacker is involved." Nonetheless, the means of the constructed variables are remarkably stable across waves. The means for these measures are also consistently higher for blacks than for whites. Figure 6 reproduces the findings from Table 1.

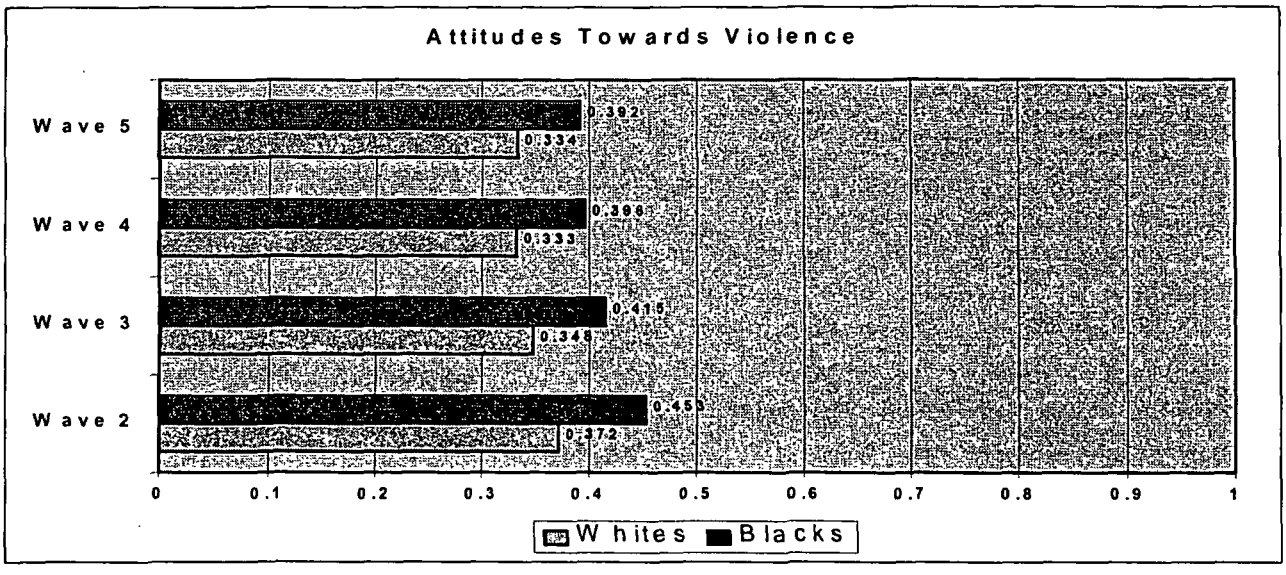

Figure 6

Two things are noteworthy in this figure. The first is that the values are consistently below the 50-percent mark for both blacks and whites across all waves. That mark would be achieved if on average every person strongly agreed with half of the statements about tolerating violence, but strongly disagreed with the rest. Alternatively, this mark would be achieved if on average every person neither agreed nor disagreed with any of the statements. Still, even a 33 percent mark could be consistent with a considerable amount of agreement—even if it is only slight agreement—with the sentiments expressed. For example, in Wave II, which has nine components of the attitudes-towards-violence variable, some possible combinations that would generate a 33-percent mark include:

- Strongly agree (3), strongly disagree (6)
- Strongly agree (1), disagree (8)
- Agree (4), strongly disagree (5)
- Agree (2), disagree (6), strongly disagree (1)

Of course, it is also possible to generate a 33-percent mark by largely not agreeing or disagreeing with any of the statements:

- Neither agree nor disagree (6), strongly disagree (3) Or, possibly disagreeing (but not strongly) with most of the sentiments but neither agreeing nor disagreeing with the rest:
- Neither agree nor disagree (3), disagree (6)

In other words, there is most likely some form of either agreement or non-disagreement with some of the sentiments in order to generate the average score of 33 percent. The white respondents scored from 33 to 37 percent across the waves. The black respondents scored from 39 to 45 percent. That means in this sample there is some mild agreement or at least non-disagreement with violent sentiments.

How do these sentiments towards violent attitudes affect subsequent violence? Figure 7 reproduces the odds ratios estimated from the juvenile violence equations and the domestic violence equations. Waves II through V represent the effects on juvenile violence; waves VI and VII represent the effects on domestic violence. The huge impact in wave V of tolerance of violence on juvenile perpetration is suppressed in the graph to conserve space. Nonetheless, the graph reveals that the size of the effect of violence tolerance is much larger in the case of juvenile violence perpetration than it is for juvenile violence victimization and that the effects on juvenile violence are larger than the effects on domestic violence.

One reason why the effects on juvenile violence may be larger than the effects on domestic violence is the timing of the questions on attitudes towards violence. In the juvenile violence equations, the tolerance-of-violence questions refer to the current year. In the domestic violence equations, the tolerance-of-violence questions refer to Wave V. In both instances the tolerance-of-violence questions refer to respondents' views while they were adolescents. In the juvenile violence equations, the measure is contemporaneous with the measurement of violence. In the domestic violence equations, the measure is an antecedent to the measurement of violence. It is not surprising then that contemporaneous measures are larger than antecedent measures. It is

reassuring to know, moreover, that violent attitudes as youth can be tempered as respondents mature.

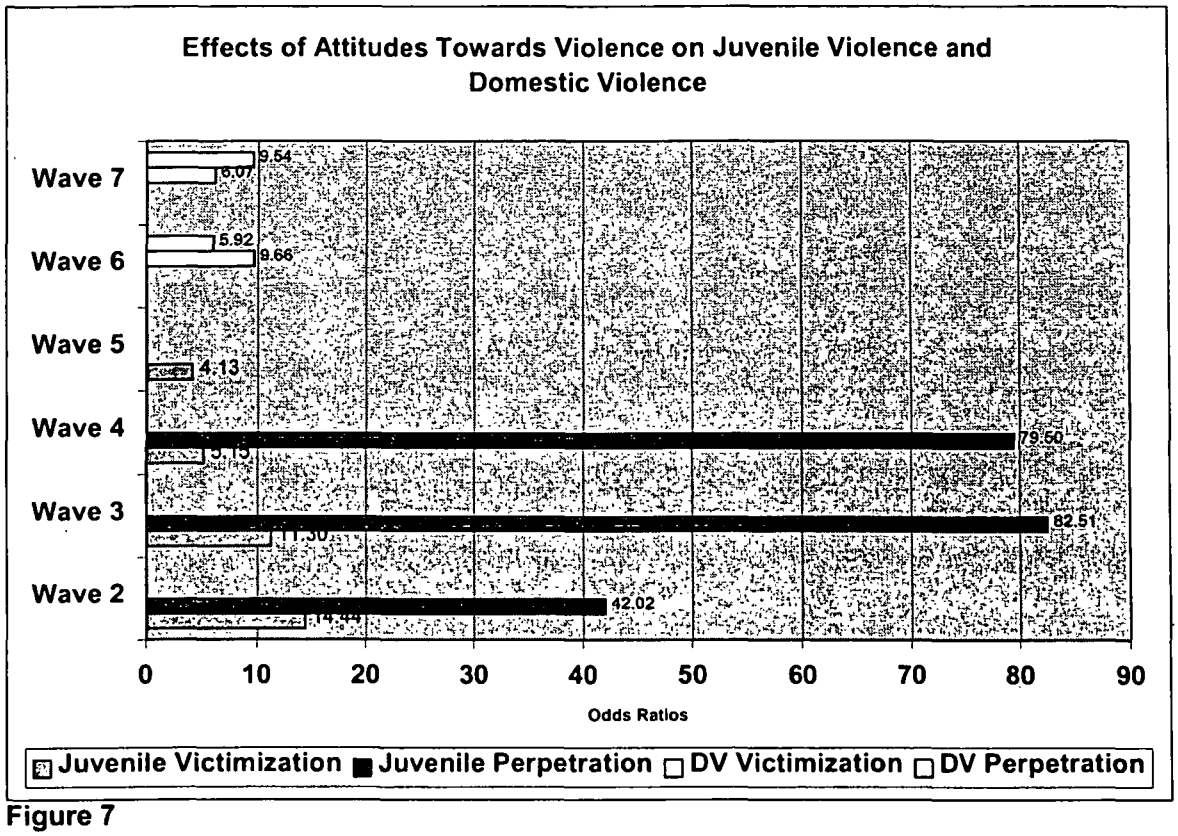

Figure 7

Race Effects

We have assembled two sets of results from all of the main regressions relating race to juvenile violence and to domestic violence. In the case of juvenile violence, eight equations are represented for juvenile victimization and juvenile perpetration of violence among 15- to 18-year-olds in waves II through V. Each equation has a dummy variable denoting black. Other controls include measures of education, age, gender, child poverty, employment, peer approval of misconduct, labeling by parents, exposure to delinquent peers, drug abuse, ever abused as child, and attitudes toward violence. Thus, the estimated odds ratios show the difference in juvenile violence attributed to race. When these are less than one, blacks have lower juvenile violence rates than whites; when these are greater than one, blacks have higher juvenile violence rates than whites; when these are

equal to one, there are no differences in juvenile violence rates between blacks and whites. Tables 4 and 5 confirm that there are no statistically significant differences in the juvenile violence rates between blacks and whites once account for these other variables—such as attitudes towards violence—is made. But more importantly, the values of the odds ratios are generally not much different from one. As Figure 8 shows, there is no apparent, independent influence of race on juvenile violence, as measured in the National Youth Survey.

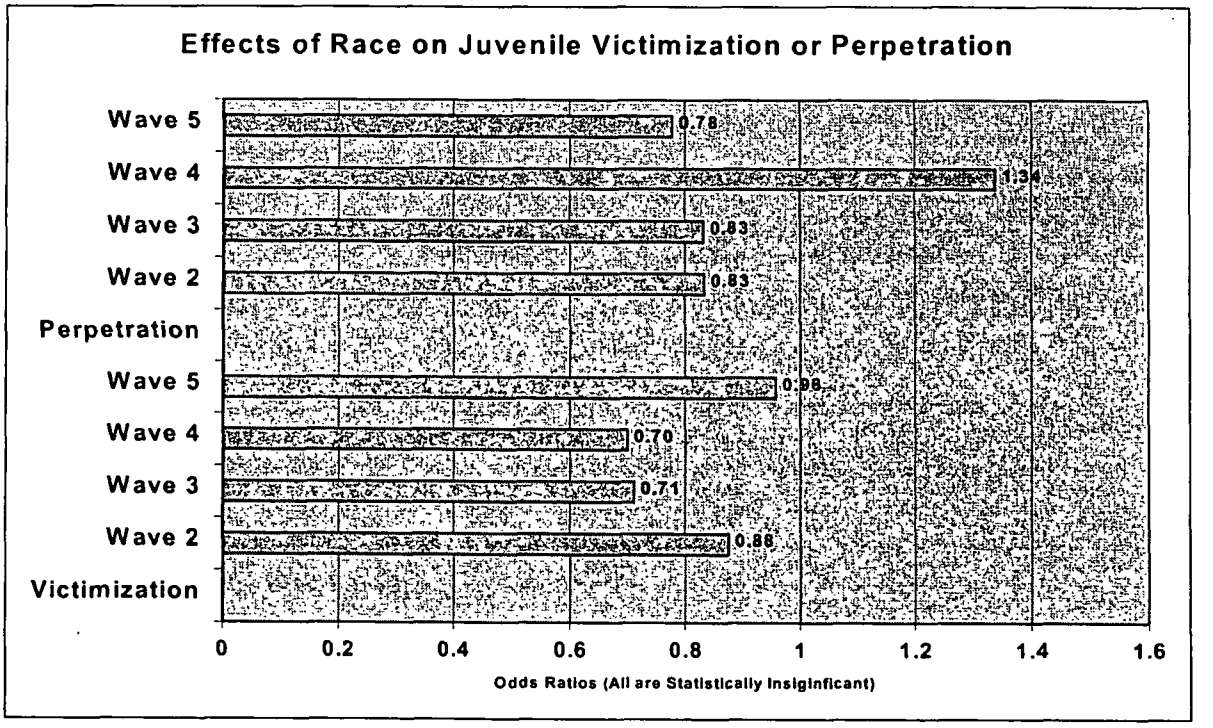

Figure 8

In the case of domestic violence, 36 equations are represented: 18 for females, 18 for males. Of the 18 equations for each gender, there are nine for wave VI and nine for wave VII. The nine equations comprise three measures of domestic violence for three different combinations of victims or perpetrators (victims, perpetrators, and victims or perpetrators). The three domestic violence measures are: severe physical violence; verbal and moderate physical violence; and severe or moderate physical violence.

Of the 36 equations, 16 have statistically significant coefficients. The entries in the Figure 9 are the exponentials of the coefficients, which has the interpretation of being the factor by which one must multiply the white odds ratio to obtain the black odds ratio. An entry of one means that there is no difference in the odds of domestic violence between blacks and whites. An entry of two means that the blacks have odds of domestic violence twice that of whites, once other factors have been controlled for. Thus, one way of interpreting these results is that in 56 percent of the estimations, there is no statistically significant difference in the odds of domestic violence between blacks and whites.

Impacts of Race on Domestic Violence

	Males	*Females*
Perpetration		
Severe Physical Abuse, Wave VI	5.185	
Severe Physical Abuse, Wave VII	2.832	2.655
Moderate Verbal and Physical Abuse, Wave VI		
Moderate Verbal and Physical Abuse, Wave VII		3.783
Severe or Moderate Physical Abuse, Wave VI		
Severe or Moderate Physical Abuse, Wave VII		2.304
Victimization		
Severe Physical Abuse, Wave VI	7.009	
Severe Physical Abuse, Wave VII	3.395	
Moderate Verbal and Physical Abuse, Wave VI	6.676	
Moderate Verbal and Physical Abuse, Wave VII		
Severe or Moderate Physical Abuse, Wave VI	6.078	
Severe or Moderate Physical Abuse, Wave VII		2.330
Victimization or Perpetration		
Severe Physical Abuse, Wave VI	6.092	
Severe Physical Abuse, Wave VII	3.518	2.938
Moderate Verbal and Physical Abuse, Wave VI	4.368	
Moderate Verbal and Physical Abuse, Wave VII		
Severe or Moderate Physical Abuse, Wave VI	5.142	
Severe or Moderate Physical Abuse, Wave VII		2.775

Figure 9

Another way of looking at the estimates, however, is to observe that out of 18 equations estimated for males, 10 have statistically significant impacts of race. The black male odds of domestic violence are three to seven times the white male odds, depending on the wave and the measure of violence. Note that these results pertain not just to violent offenders; the equations also consider violent victimizations. Of course, as we have seen earlier, victims and offenders are often the same persons. Nonetheless, these race effects are substantial enough to raise fundamental

questions about previous research results that claim that there are none. Since we find for both waves higher odds of *severe physical abuse* among black male victims and offenders than among white male victims or offenders, this finding is worth further exploration. One plausible explanation of this consistent race effect on severe physical abuse is that race is highly correlated with attitudes towards violence. We have included attitudes towards violence in these equations.

Isolating race from the attitudes towards violence (and other explanatory variable) effects may be done by performing a residual difference test. This test requires estimation of equations separately for each race. Because of the small number of cases, we have combined all nonwhites (recognizing, nonetheless, that the vast majority of nonwhites in the data set are blacks). We decompose the domestic violence victimization rates between whites and nonwhites into portions due to variables in our model and portions that are unexplained by factors other than race. In essence, then, the unexplained portion is a measure of the race effect. More specifically, the unexplained portion captures the differential returns or impacts that the other factors in the model have on domestic violence. If the returns or impacts were identical between whites and nonwhites, all of the difference in the domestic violence rates could be explained by the differences in characteristics of whites and nonwhites. But, when these characteristics have differing impacts on domestic violence—or when they result in differing degrees of domestic violence for the same increment in a given factor—we sometimes term the resulting unexplained gap "discrimination." This race effect, whether due to how people of color are treated or how they respond to exogenous influences, rarely measures the whole gap in measured outcomes. That is why it is important to decompose the observed gap into portions attributed to measured characteristics and the residual.

We have performed the residual difference analysis on moderate to severe physical violence victimization. Table 16 confirms that in both waves VI and VII there are statistically significant differences in these rates between whites and nonwhites. The differences in moderate to severe physical domestic violence rates for whites and nonwhites are statistically significant for both waves

whether the measurement is for victims or perpetrators, who are often the same persons in our data set. Thus, it is useful to explore the explanations for a gap that at the outset is statistically significant.

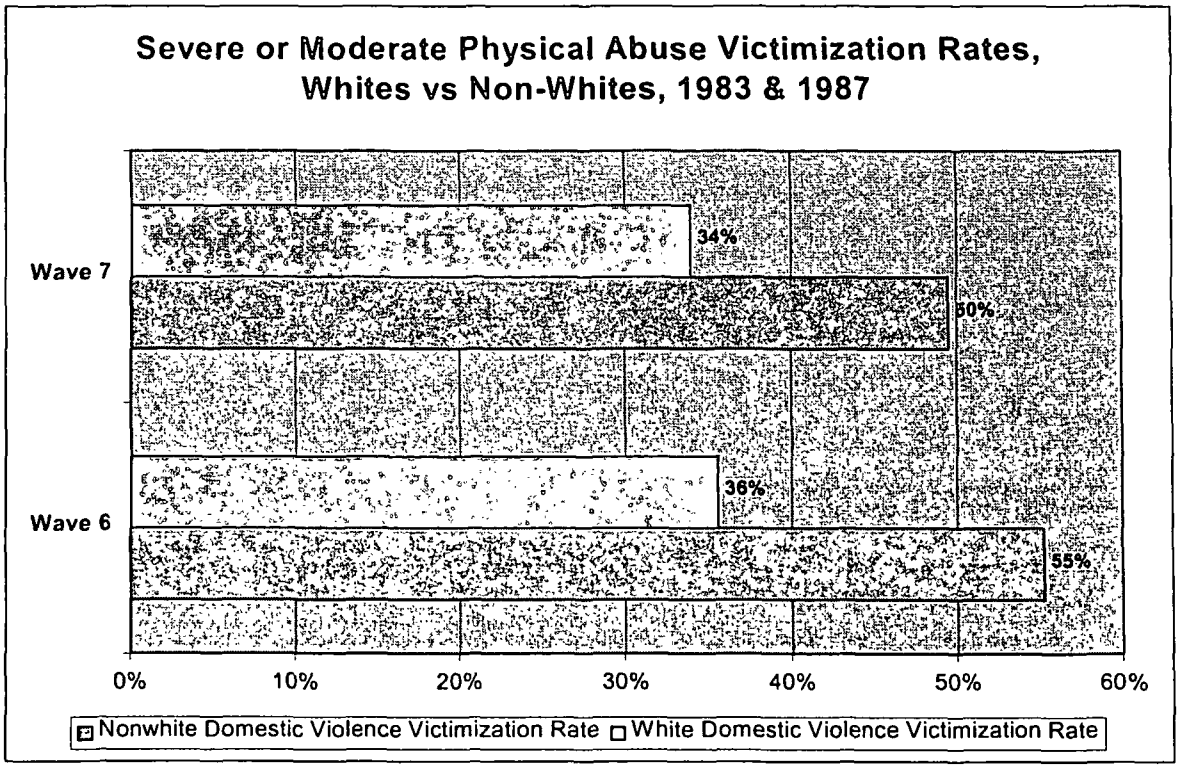

Figure 10

Just how large is this gap? First we observe in Figure 10 that without controlling for any possible explanatory variables, nonwhites have higher domestic violence victimization rates than whites. The white victimization rate for moderate to severe physical domestic violence ranges from 34 to 36 percent. The nonwhite rate ranges from 50 to 55 percent. For both whites and nonwhites, the rate is higher in 1983 (wave VI), than it is in 1987 (wave VII). Thus, with no controls for possible intervening variables, we find that the nonwhite violent victimization rate is 46 to 55 percent higher than the white rate.

But the picture does not account for possible explanations for the gap. The explained portions consist of those caused by the poverty, gender, childhood abuse, and attitudes towards

violence variables. Tables 21 and 22 show the full decomposition of the racial gap in domestic violence victimization rates for the two waves, focusing only on severe to moderate physical violence. We find that 56 percent of the racial gap is unexplained in 1983 while 60 percent is unexplained in 1987. Thus, the race effect is quite substantial. More than half of the gap in domestic violence victimization rates between whites and nonwhites cannot be explained by childhood poverty, gender, childhood abuse, or attitudes towards violence.

However, much of the *explained gap* is accounted for by childhood abuse and attitudes towards violence. In wave VI, 52 percent of the explained portion of the racial gap in domestic violence victimization can be attributed to racial differences in childhood abuse. In wave VII, only 9 percent of the explained portion of the racial gap can be attributed to childhood abuse, and the largest part of the explained gap is the result of racial differences in attitudes towards violence. Thus, by 1987, there is an independent and large contributing factor explaining racial gaps in domestic violence. This factor is "attitudes towards violence," which we previously observed is central in explaining juvenile violence. Put differently, by the time whites and nonwhites enter their twenties, the observed racial differences in domestic violence can be more directly traced to attitudes towards violence than to childhood abuse. And even though childhood abuse affects domestic violence among younger adults (those 18 to 24 in wave VI), the impacts do not provide a generalized explanation for racial gaps as those persons mature.

Caveats

As in any research and analysis of secondary data sources, there are many caveats to our findings. We list them below under 3 categories.

1. Cohorts VS. Vintages of Youth

We attempt to control primarily for the problem that different respondents have different opportunities to be abused by creating vintages of 15- to 18-year-olds. While there is some overlap of the vintages, the intent was to assure that persons who had many more years of observations on

the abuse question were not combined with persons who had limited potential exposure to abuse. Within a vintage there is some comparability of respondents. Across vintages, however, this solution is not perfect for creating comparisons. Comparing the wave II and wave V vintages, for example, entails comparing 15- to 18-year-olds who have had two opportunities to be beaten by their parents (in wave I or wave II) with persons who have had five opportunities (waves 1 through V). It is surprising, therefore, that we don't see much of an upward trend in the "ever abused" variable across vintages. Indeed, the black ever-abused rate for the 15 to 18 age group vintage in wave II has nearly the same ever-abused rate as the 15 to 18 age group vintage in wave V. A test of the hypothesis that these rates vary across vintages was rejected. Still, it is clear that the cohort of youth represented may be very unlike other cohorts. This cohort was born in the years 1959 to 1965. It is entirely possible that the social changes and cultural transformations that occurred, make the findings of this study less relevant to contemporary youth and young adults than for the previous generation.

2. Selection Bias

Looking at our domestic violence probability trees one sees a substantial dropout of persons on whom we have information on victimization or perpetration of domestic violence. Two forms of dropouts exist that must be distinguished. One is due to respondents not having been or currently being involved in an intimate partnership, the prerequisite for answering questions about domestic violence. The second is due to persons withdrawing from the sample. Such withdrawal might be selective—and possibly related to prior abuse—or it might be random.

To test for the possibility of non-random sample selection, we have computed the means of various variables in the first wave and made two comparisons. The first comparison is between valid cases in waves VI or VII and those who had dropped out by waves VI or VII. The second comparison is between valid domestic violence cases in waves VI or VII and those who either dropped out or who did not answer the domestic violence questions. Table 23 presents the results

for men and women combined, and also separately. Quite clearly, there are age and gender differences between the valid cases and the dropouts and/or nonrespondents in wave VI. Dropouts from the overall sample are older and more likely to be males. Nonrespondents/dropouts in the domestic violence sample, however, are younger males. In wave VII, there are no statistically significant differences in ages between the dropouts and valid cases in the whole sample, but again males are underrepresented in both the whole sample and the domestic violence sample. As for age, nonrespondents/dropouts are younger than valid cases in the domestic violence sample of Wave VII.

Thus, there are significant differences in the age and gender characteristics of the original sample and the domestic violence sample used to perform our analysis. But, are the omitted cases different in their child abuse rates? We find whether measured by beatings by parents in wave I or beatings by parents across waves I through V, no differences in child abuse rates between males with valid observations and males who dropped out and/or did not respond in Wave VI. This finding is not true for females. While there are differences in ever-abused rates among females, the nonrespondents have lower abuse rates than the respondents, although there are no statistically significant differences in the wave I abuse rates. Thus, for wave VI, at least, we do not conclude that the results are biased by the selective withdrawal of persons who were abused.

In wave VII, again there are no differences in child abuse rates among males who had valid cases and those included in either the overall sample or those included in the domestic violence sample. There is no evidence of selection bias on the abuse variable among males. Among females, we do observe a difference in the wave I abuse rates between respondents and nonrespondents to the domestic violence questions. Non-respondents have higher wave I child abuse rates than respondents. This suggests some bias in estimates of the impacts of child abuse on female domestic violence in wave VII data. Any finding of an effect is likely to be downward biased. No finding of an effect may obscure a real impact. We do not find, however, any statistically

significant difference in the "ever abused" variable. Thus, we conclude that the general failure to find a consistent effect of childhood abuse on female victimization or perpetration of domestic violence in wave VII is at best weakened by the recognition that females who were abused in wave I are disproportionately dropouts/nonrespondents in wave VII.

3. Endogeniety of Attitudes towards Violence

We have assumed throughout that attitudes of violence are exogenous with respect to victimization and perpetration of violence. While this is appropriate in the case of domestic violence, wherein the measurement of these attitudes precedes the observation of victimization or perpetration of domestic violence, it need not be so with respect to juvenile victimization or perpetration. In that instance, attitudes are measured contemporaneously with observations on juvenile victimization or perpetration of violence. Although we have not attempted to test specifically for this form of bias, we have presented equation estimates with and without controls for attitudes towards violence and the equations are remarkably stable across alternative model specifications, something one would not expect had there been endogeniety problems.

Conclusion

We began this study by trying to understand the significance of childhood abuse on a victim becoming a victim of juvenile violence and domestic assault. As we have seen, the results from this study do not overwhelmingly confirm existing research that shows a trail of victimization from childhood to adolescence (see, for example, Wiebush, Freitag and Baird, 2001). Among 15 to 18 year olds, Our results do not show a strong race effect differentiating victimization or perpetration among those involved in juvenile violence. Although conventional research shows blacks having a higher rate of victimization in each category, after we took into account other demographic and social variables, the race effect of becoming a victim and/or perpetrator of juvenile violence vanished. We found no race effect on ever having been abused (by a parent); no race effect on being abused in the past year; no race effect on risks of abuse, and no race difference in probability

of being a victim. The only consistent racial difference we found in an outcome measure regarding juvenile violence was that of the higher tolerance of violence among blacks than among whites. This finding proved significant for our investigation of juvenile violence and domestic violence.

On the other hand, we did find substantial race effects in the probability of being involved in domestic violence. Blacks who were victims of child abuse were more likely than whites to be involved in domestic violence. The black male odds of domestic violence are three to seven times the white male odds, depending on the wave and the measure of violence. Note that these results pertain not just to violent offenders; the equations also consider violent victimizations. However, we attribute this racial gap to attitudes towards violence rather than to childhood abuse. By the time whites and nonwhites enter their twenties, the observed racial differences in domestic violence can be more directly traced to attitudes towards violence than to childhood abuse.

Our study also showed gender effects. Contrary to conventional wisdom, males are more likely to report being victims of domestic violence than females. Females are more likely than males to report being offenders and among offenders, females are less likely than males to report being victims (although offenders of either gender are more likely to be victims than are non-offenders).

While overall we did not find that a person victimized as a child had a significantly higher probability of being a victim as an adult, there was one exception—the cohort of 18- to 24-year-old females. Having been beaten by a parent raises their odds of being a victim or perpetrator of severe physical abuse, verbal or moderate abuse, and severe or moderate abuse at the hands of a spouse or lover by 2 to 4 times. This finding was quite disturbing because it suggests that young females who are abused as children enter into violent relationships when they begin looking for partners. Some of our results even suggest that a victimized child was more likely to grow up to become a perpetrator, although no finding was consistent across years.

The one finding that showed strong statistical significance was the impact of attitudes toward violence on violence *perpetration*. Those with an acceptance attitude towards violence were more

likely to become a perpetrator of domestic violence later. This result suggests that children who lived in an environment where violence was accepted or even condoned were more likely to be in a violent relationship.

Although this research does not confirm that violence begets violence consistently across age and by race, we did find strong evidence that attitudes about abuse greatly affects the actualization of violence.

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Appendix

APPENDIX TABLE 1: Description of Sample
National Youth Survey, Waves I through V (Juvenile Violence)

			Wave I (1976)	Wave II (1977)	Wave III (1978)	Wave IV (1979)	Wave V (1980)
Characteristics of All Respondents							
1.	Age		11-17	12-18	13-19	14-20	15-21
2.	Gender	Male	918 (53.2%)	879 (51.0%)	863 (53.1%)	805 (52.2%)	783 (52.4%)
		Female	807 (46.8%)	776 (45.0%)	763 (46.9%)	738 (47.8%)	711 (47.6%)
3.	Race	Anglo	1361 (78.9%)	1314 (79.4%)	1297 (79.8%)	1222 (79.2%)	1182 (79.1%)
		Black	260 (15.1%)	243 (14.7%)	239 (14.7%)	232 (15.0%)	226 (15.1%)
		Hispanic	76 (4.4%)	70 (4.2%)	64 (3.9%)	64 (4.1%)	61 (4.1%)
		American Indian	8 (.5%)	8 (.5%)	8 (.5%)	7 (.5%)	8 (.5%)
		Asian	17 (1.0%)	17 (1.0%)	15 (.9%)	15 (1.0%)	14 (.9%)
		Other	3 (.2%)	3 (.2%)	3 (.2%)	3 (.2%)	3 (.2%)
4.	Child Poverty		428 (25.4%)	398 (24.0%)	391 (24.0%)	379 (24.6%)	361 (24.2%)
5.	Job in Previous Year		1075 (62.3%)	1146 (69.2%)	1262 (77.6%)	1265 (82.0%)	1207 (80.8%)
6.	Probability of Being in School		1692 (98.1%)	1565 (94.6%)	1526 (93.8%)	1325 (85.9%)	1166 (78.0%)
7.	Use of Illegal Drugs		303 (17.6%)	447 (27.0%)	589 (36.2%)	633 (41.0%)	656 (43.9%)
8.	Child Abuse in Current Year		98 (5.7%)	38 (4.0%)	40 (2.5%)	24 (1.6%)	17 (1.1%)
9.	Ever Abused as a Child		98 (5.7%)	116 (6.7%)	136 (7.9%)	146 (8.5%)	152 (8.8%)
10.	Juvenile Violence Victimization		552 (32.0%)	376 (22.7%)	331 (20.4%)	341 (22.1%)	315 (21.1%)
11.	Juvenile Violence Perpetration		913 (52.9%)	740 (44.7%)	614 (37.8%)	491 (31.8%)	359 (24.0%)
12.	Grade in School		8.4058	9.3240	10.2949	10.9510	11.6698
13.	Interact. Term: in School & Grade		8.27	8.8169	9.6617	9.4044	9.107
14.	Peer Approval of Misconduct		.2685	.2793	.2924	.2847	.2879
15.	Parent Labeling		.6569	.7280	.7461	.7511	.7613
16.	Peer Delinquency		.1676	.1594	.2001	.2084	.2090
17.	Tolerance of Violence		N/A	.4020	.3549	.3402	.3349
18.	Drop-Out Cases		N/A	70 (4.1%)	99 (5.7%)	182 (10.6%)	231 (13.4%)
Characteristics of Drop-Out Cases							
1.	Gender	Male		39 (55.7%)	55 (55.6%)	113 (62.1%)	135 (58.4%)
		Female		31 (44.3%)	44 (44.4%)	69 (37.9%)	96 (41.6%)
2.	Race	Anglo		47 (67.1%)	64 (64.6%)	139 (76.4%)	179 (77.5%)
		Black		17 (24.3%)	21 (21.2%)	28 (15.4%)	34 (14.7%)
		Hispanic		6 (8.6%)	12 (12.1%)	12 (6.6%)	15 (6.5%)
		American Indian		0 (0.0%)	0 (0.0%)	1 (0.5%)	0 (0.0%)
		Asian		0 (0.0%)	2 (2.0%)	2 (1.1%)	3 (1.3%)
		Other		0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)

APPENDIX TABLE 1 (Continued): Description of Sample National Youth Survey, Waves VI and VII (Domestic Violence)

			Wave VI (1983)	Wave VII (1987)
Characteristics of All Respondents				
1.	Age		18-24	21-27
2.	Gender	Male	770 (51.5%)	701 (50.7%)
		Female	726 (48.5%)	683 (49.3%)
3.	Race	Anglo	1177 (78.7%)	1125 (81.3%)
		Black	233 (15.6%)	190 (13.7%)
		Hispanic	60 (4.0%)	48 (3.5%)
		American Indian	7 (.5%)	6 (.4%)
		Asian	16 (1.1%)	13 (.9%)
		Other	3 (.2%)	2 (.1%)
4.	Severe Physical Abuse (Victimization)		73 (15.4%)*	129 (17.8%)*
5.	Moderate Verbal & Physical Abuse (Victimization)		37 (7.8%)*	66 (9.1%)*
6.	Severe or Moderate Physical Abuse (Victimization)		184 (38.7%)*	262 (36.2%)*
7.	Severe Physical Abuse (Perpetration)		81 (17.1%)*	105 (14.5%)*
8.	Moderate Verbal & Physical Abuse (Perpetration)		36 (7.6%)*	40 (5.5%)*
9.	Severe or Moderate Physical Abuse (Perpetration)		219 (46.2%)*	264 (36.5%)*
10.	Severe Physical Abuse (Perp or Victim)		122 (25.7%)*	180 (24.9%)*
11.	Moderate Verbal & Physical Abuse (Perp or Victim)		58 (12.2%)*	82 (11.3%)*
12.	Severe or Moderate Physical Abuse (Perp or Victim)		260 (54.7%)*	332 (45.9%)*
13.	Child Poverty		370 (24.7%)	326 (23.6%)
14.	Ever Abused as a Child (Waves 1-5)		135 (9.0%)	115 (8.3%)
15.	Juvenile Violence Victim or Perpetrator		1156 (77.3%)	1062 (76.7%)
16.	Attitude Toward Violence (from Wave V)		.3344	.3307
17.	Drop out cases		229 (13.3%)	341 (19.8%)
Characteristics of Drop-Out Cases				
1.	Gender	Male	148 (64.6%)	217 (63.6%)
		Female	81 (35.4%)	124 (36.4%)
2.	Race	Anglo	184 (80.3%)	236 (69.2%)
		Black	27 (11.8%)	70 (20.5%)
		Hispanic	16 (7.0%)	28 (8.2%)
		Asian	1 (.4%)	2 (.6%)
		American Indian	1 (.4%)	4 (1.2%)
		Other	0 (0%)	1 (.3%)

* Percentage = (Number of cases with domestic violence / Number of cases responding to dv questions) * 100

APPENDIX TABLE 2: Description of Variables

1. **Child Poverty**

Original Variables Used:

Wave I: v19

Child Poverty =1 if answer among the bolded options. Otherwise, child poverty =0. The child poverty variable was asked of parents of respondents during the first wave of the survey; the answer was used in subsequent waves.

- What would you say was the approximate total family income last year (including all sources before taxes)?

1-$6,000 or less
2-$6,001 to $10,000
3-$10,001 to $14,000
4-$14,001 to $18,000
5-$18,001 to $22,000
6-$22,001 to $26,000
7-$26,001 to $30,000
8-$30,001 to $34,000
9-$34,001 to $38,000
10-$38,001 or more

2. **Job in Previous Year**

Original Variables Used:

Wave I: v204
Wave II: v43
Wave III: v113
Wave IV: v63
Wave V: v76

Job in Previous Year =1 if answer among the bolded options. Otherwise, job in previous year =0.

- Between Christmas a year ago and the Christmas just past, have you had a job or jobs, such as being in the military, working at a store, office, or service station, or babysitting for pay?

1-No
2-Yes

3. **a) Probability of Being in School**

Original Variables Used:

Wave I: v170
Wave II: v8
Wave III: v83
Wave IV: v26
Wave V: v39

Probability of Being in School = 1 if answer among the bolded options. Otherwise, variable = 0.

- What grade are you in at school? (For Waves I & II)
  4-Grade School
  5-Grade School
  6-Grade School
  7-Grade School
  8-Grade School
  9-High School
  10-High School
  11-High School
  12-High School
  13-College
  14-College
  15-College
  16-College
  17-Not in School
  18-Other (ex., trade or business school)

- Now let's talk about school. Did you attend any school program between Christmas a year ago and the Christmas just past? (Waves III-V)
  1-No
  2-Yes

b) Educational Attainment

Original Variables Used:

Wave I: v170
Wave II: v8
Wave III: v84
Wave IV: v28
Wave V: v41

Educational attainment variable = grade in school for grades 5-16.
Educational attainment variable is missing if grade = 17.
Educational attainment variable = 13 if grade = 18 (ex., tech school or business school)

- What grade are you in at school?
  5-Grade School
  6-Grade School

7-Grade School
8-Grade School
9-High School
10-High School
11-High School
12-High School
13-College
14-College
15-College
16-College
17-Not in School
18-Other (ex., trade or business school)

c) Interaction Term: Probability of Being in School and Educational Attainment

Interaction term = Probability of Being in School * Educational Attainment

4. Use of Illegal Drugs

Original Variables Used:

Wave I: v479, v481, v489, v492
Wave II: v566, v615, v724, v735, v749, v760
Wave III: v531, v547, v631, v644, v658, v671
Wave IV: v591, v600, v615, v618, v621, v624
Wave V: v572, v575, v590, v593, v596, v599

If any item shown below has an answer among the bolded options, the use of illegal drugs variable = 1. Otherwise, the variable = 0. The survey inquired about each drug separately.

- In the past year, how often have you used
  - marijuana-hashish ("grass", "pot", "hash")
  - hallucinogens/psychedelics ("LSD", "mescaline", "peyote", "acid")
  - heroin ("horse", "smack")
  - cocaine ("coke")
  - glue, other inhalants (except Wave I)
  - angel dust (except Wave I)

1-Never
2-Once or Twice a Year
3-Once Every 2-3 Months
4-Once a Month
5-Once Every 2-3 Weeks
6-Once a Week
7- 2-3 Times a Week
8-Once a Day
9- 2-3 Times a Day

5. Ever Abused as a Child

Original Variables Used:

Wave I: v469
Wave II: v819
Wave III: v743
Wave IV: v659
Wave V: v635

Child abuse=1 if answer among the bolded options. Otherwise, child abuse=0.
Ever abused as a child=1 if child abuse in current or any previous wave=1.

- How many times in the past year have you been beaten up by your mother or father?

  1-No
  2-Yes

(The dataset translates this open-ended question to a yes-no coding.)

6. **Juvenile Violence Victimization**

Original Variables Used:

Wave I: v474, v475, v476
Wave II: v824, v825, v826
Wave III: v749, v750, v760
Wave IV: v661, v671, v683
Wave V: v637, v647, v6622

If any item shown below has an answer among the bolded options, the juvenile violence victimization variable = 1. Otherwise, the variable = 0. Scale follows list of questions.

- Have you been sexually attacked, or raped (or an attempt to do so)?
- Have you been attacked with a weapon, such as a gun, knife, bottle or chair by someone other than your mother or father?
- Have you been beaten up (or threatened with being beaten up) by someone other than your mother or father?

  1-Yes
  2-No

7. **Juvenile Violence Perpetration**

Original Variables Used:

Wave I: v402, v408, v420, v422, v424, v436, v438, v440, v444
Wave II: v283, v289, v301, v303, v305, v317, v319, v321, v325
Wave III: v390, v396, v408, v410, v412, v414, v428, v430, v434
Wave IV: v402, v419, v452, v455, v463, v471, v505, v514, v525, v566
Wave V: v466, v472, v486, v488, v490, v492, v508, v510, v514, v532

The following items inquired about the frequency of occurrence. If any item occurred one or more times during the past year, the juvenile violence perpetration variable = 1. Otherwise, the variable = 0.

- How many times in the past year have you attacked someone with the idea of seriously hurting or killing him/her?
- How many times in the past year have you been involved in gang fights?
- How many times in the past year have you hit (or threatened to hit) a TEACHER or other adult at school?
- How many times in the past year have you hit (or threatened to hit) one of your PARENTS?
- How many times in the past year have you hit (or threatened to hit) other STUDENTS?
- How many times in the past year have you had (or tried to have) sexual relations with someone against their will?
- How many times in the past year have you used force (strong-arm methods) to get money or things from other STUDENTS?
- How many times in the past year have you used force (strong-arm methods) to get money or things from a TEACHER or other adult at school?
- How many times in the past year have you used force (strong-arm methods) to get money or things from OTHER PEOPLE (not teachers or students)?
- How many times in the past year have you physically hurt or threatened to hurt someone to get them to have sex with you? (Waves IV and V)

8. **Peer Approval of Misconduct**

Original Variables Used:

Wave I: v329, v330, v331, v332, v333, v334, v335, v336, v337, v338, v339, v340, v341, v342
Wave II: v170, v171, v172, v173, v174, v175, v176, v177, v178, v179, v180, v181, v182, v183
Wave III: v266, v267, v268, v269, v270, v271, v272, v273, v274, v275, v276, v277, v278, v279, v280, v281
Wave IV: v263, v264, v265, v266, v267, v268, v269, v270, v271, v272, v273
Wave V: v281, v282, v283, v284, v285, v286, v287, v288, v289, v290, v291

Peer approval of misconduct is a continuous variable from 0 to 1. The respondent's value was calculated using the following formula:
Peer approval of misconduct = ((Q1 + Q2 + Q3 + Q4 + Q5 + Q6 + Q7 + Q8 + Q9 + Q10 + Q11 + Q12 + Q13 + Q14) – 14)/56) (formula listed for Wave I)
Bolded questions were reverse coded (1=5, 2=4 and so on). Scale follows list of questions.

- How would your close friends react if you kept promises you made to others? (Waves I, II, III)
- **How would your close friends react if you cheated on school tests?** (Waves I, II, III,I V, V)
- **How would your close friends react if you stole something worth less than $5?** (Waves I, II, III, IV, V)

- How would your close friends react if you were friendly with people who are of a different race, religion, or color than you? (Waves I, II, III)
- **How would your close friends react if you sold hard drugs such as heroin, cocaine, and LSD?** (Waves I, II, III, IV, V)
- How would your close friends react if you returned money you found or any extra change a cashier gave you? (Waves I, II, III)
- **How would your close friends react if you used marijuana or hashish?** (Waves I, II, III, IV, V)
- **How would your close friends react if you stole something worth more than $50?** (Waves I, II, III, IV, V)
- **How would your close friends react if you hit or threatened to hit someone without any reason?** (Waves I, II, III, IV, V)
- How would your close friends react if you gave some of your time to someone or some group who was in need? (Waves I, II, III)
- **How would your close friends react if you used alcohol?** (Waves I, II, III, IV, V)
- How would your close friends react if you did a favor for someone without being asked? (Waves I, II, III)
- **How would your close friends react if you pressured or forced someone to do more sexually than they wanted to do?** (Wave III, IV, V)
- **How would your close friends react if you purposely damaged or destroyed property that did not belong to you?** (Waves I, II, III, IV, V)
- **How would your close friends react if you broke into a vehicle or building to steal something?** (Waves I, II, III, IV, V)
- **How would your close friends react if you had sexual intercourse with a person of the opposite sex (if married, add "other than your husband or wife")?** (Wave III, IV, V)

1-Strongly Approve
2-Approve
3-Neither Approve nor Disapprove
4-Disapprove
5-Strongly Disapprove

9. Parent Labeling

Original Variables Used:

Wave I: v281, v282, v283, v284, v285, v286, v287, v288, v289, v290, v291
Wave II: v120, v121, v122, v123, v124, v125, v126, v127, v128, v129, v130, v131
Wave III: v217, v218, v219, v220, v221, v222, v223, v224, v225, v226, v227, v228
Wave IV: v231, v232, v233, v234, v235, v236, v237, v238, v239, v240, v241, v242
Wave V: v237, v238, v239, v240, v241, v242, v243, v244, v245, v246, v247, v248

Parent labeling is a continuous variable from 0 to 1. The respondent's value was calculated using the following formula:
Parent labeling = ((Q1 + Q2 + Q3 + Q4 + Q5 + Q6 + Q7 + Q8 + Q9 + Q10 + Q11) – 11)/44)
(formula listed for Wave I)
Bolded questions were reverse coded (1=5, 2=4 and so on). Scale follows list of questions.

- How much would your parents agree that you are well-liked?
- **How much would your parents agree that you need help?**
- **How much would your parents agree that you are a bad kid?**
- **How much would your parents agree that you are often upset?**
- How much would your parents agree that you are a good citizen?
- How much would your parents agree that you get along well with other people?
- **How much would your parents agree that you are messed up?**
- **How much would your parents agree that you break rules?**
- **How much would your parents agree that you have a lot of personal problems?**
- **How much would your parents agree that you get into trouble?**
- How much would your parents agree that you are likely to succeed? (Waves II-V)
- **How much would your parents agree that you do things that are against the law?**

1-Strongly Disagree
2-Disagree
3-Neither Agree nor Disagree
4-Agree
5-Strongly Agree

10. Peer Delinquency

Original Variables Used:

Wave I: v365, v366, v367, v368, v369, v370, v371, v372, v373, v374
Wave II: v208, v209, v210, v211, v212, v213, v214, v215, v216, v217, v218, v219, v220
Wave III: v306, v307, v308, v309, v310, v311, v312, v313, v314, v315, v316, v317, v318
Wave IV: v286, v287, v288, v289, v290 ,v291, v292, v293, v294, v295, v296, v297, v298
Wave V: v131, v314, v315, v316, v317, v318, v319, v320, v321, v322, v323, v324, v325

Peer delinquency is a continuous variable from 0 to 1. The respondent's value was calculated using the following formula:
Peer delinquency = ((Q1 + Q2 + Q3 + Q4 + Q5 + Q6 + Q7 + Q8 + Q9 + Q10) – 10)/40)
(formula listed for Wave I)
Scale follows list of questions.

- During the past year, how many of [your close friends] have cheated on school tests?
- During the past year, how many of [your close friends] have purposely damaged or destroyed property that did not belong to them?
- During the past year, how many of [your close friends] have used marijuana or hashish?
- During the past year, how many of [your close friends] have stolen something worth less than $5?
- During the past year, how many of [your close friends] have hit or threatened to hit someone without any reason?
- During the past year, how many of [your close friends] have used alcohol?
- During the past year, how many of [your close friends] have broken into a vehicle or building to steal something?
- During the past year, how many of [your close friends] have sold hard drugs such as heroin, cocaine, and LSD?

- During the past year, how many of [your close friends] have stolen something worth more than $50?
- During the past year, how many of [your close friends] have suggested you do something that was against the law?
- During the past year, how many of [your close friends] have gotten drunk once in a while? (Waves II-V)
- During the past year, how many of [your close friends] have used prescription drugs such as amphetamines or barbiturates when there was no medical need for them? (Waves II-V)
- During the past year, how many of [your close friends] have sold or given alcohol to kids under 18? (Wave II-V)

1-None of them
2-Very few of them
3-Some of them
4-Most of them
5-All of them

11. Tolerance of Violence

Original Variables Used:

Wave I: [not asked]
Wave II: v238, v239, v240, v241, v242, v243, v244, v245, v246
Wave III: v332, v333, v334, v335, v336, v337, v338, v339, v340
Wave IV: v311, v312, v313, v314, v315, v316, v317, v318, v319
Wave V: v338, v339, v340, v341, v342, v343, v344, v345, v346

Tolerance of violence is a continuous variable from 0 to 1. The respondent's value was calculated using the following formula:
Tolerance of violence = ((Q1 + Q2 + Q3 + Q4 + Q5 + Q6 + Q7 + Q8 + Q9) – 9)/36)
Bolded questions were reverse coded (1=5, 2=4 and so on). Scale follows list of questions.

Wave II Questions (included both physical and sexual violence):
- It is all right to physically beat up another person if he/she called you a dirty name.
- Women who are sexually assaulted have generally asked for it by the way they dress and act.
- Hitting another person is an acceptable way to get him/her to do what you want.
- **Other than self-defense there are few situations which justify physically attacking another person.**
- **Sexual assault has little to do with sexual desires; it is an act of force and violence.**
- It is all right to beat up another person if he/she started the fight.
- A woman cannot really be sexually assaulted against her will unless a weapon is used or more than one attacker is involved.
- It is sometimes necessary to get into a fight to uphold your honor or "put someone in his/her place."
- While women appear to be afraid of being sexually assaulted, they have a curiosity and excitement about sexual assault.

1-Strongly Disagree
2-Disagree
3-Neither Agree nor Disagree
4-Agree
5-Strongly Agree

Wave III, IV and V questions (included only physical questions):

- It is all right to beat up people if they started the fight.
- **Fighting doesn't solve problems, it just creates them.**
- It is all right to physically beat up people who call you names.
- Since the people on TV often get what they want by using violence, it's probably all right for you to use it too.
- **There is no good reason to hit anyone.**
- If people do something to make you really mad, they deserve to be beaten up.
- It's ok to hit someone to get them to do what you want.
- **You should never beat up another person unless someone's life is at stake.**
- If you don't physically fight back, people will walk all over you.

1-Strongly Disagree
2-Disagree
3-Neither Agree nor Disagree
4-Agree
5-Strongly Agree

12. Domestic Violence Victimization

Brief explanation of domestic violence victimization:

- Severe Physical Abuse: classified the respondent as a victim of domestic violence if their partner engaged in *one* of the following behaviors at least one time in the year of the survey: kicked/bit/hit respondent, hit respondent with something, beat respondent up, threatened respondent with a gun, or used a knife or a gun.
- Moderate Verbal and Physical Abuse: described the respondent as a victim if their partner engaged in *all* of the following behaviors at least once in the year of the survey: insulted/swore at respondent, threatened to hit or throw something at respondent, threw something at respondent, pushed/grabbed/shoved respondent, and slapped respondent.
- Severe or Moderate Physical Abuse: classified domestic violence victimization according to whether the partner engaged in *one* of the following behaviors at least one time in the year of the survey: if they threw something at the respondent, pushed/grabbed/shoved respondent, slapped respondent, kicked/bit/hit respondent, hit respondent with something, beat respondent up, threatened respondent with gun, or used knife or gun.

Detailed description:

12a. Domestic Violence Victimization – Severe Physical Abuse

If any item shown below has an answer among the bolded options (scale follows questions), the domestic violence variable = 1. Otherwise, the variable = 0.

Original variables used:

Wave VI: v1420 v1421 v1422 v1423 v1424
Wave VII: Y7_1373 Y7_1374 Y7_1375 Y7_1376 Y7_1377

- Tell me how many times in the past 12 months [your spouse/boyfriend/girlfriend] kicked, bit or hit you with a fist?
- Tell me how many times in the past 12 months [your spouse/boyfriend/girlfriend] hit you or tried to hit you with something?
- Tell me how many times in the past 12 months [your spouse/boyfriend/girlfriend] beat you up?
- Tell me how many times in the past 12 months [your spouse/boyfriend/girlfriend] threatened you with a knife or gun?
- Tell me how many times in the past 12 months [your spouse/boyfriend/girlfriend] used a knife or fired a gun?

0 = Never
1 = Once
2 = Twice
3 = 3-5 Times
4 = 6-10 Times
5 = 11-20 Times
6 = More Than 20 Times

12b. Domestic Violence Victimization – Moderate Verbal and Physical Abuse

If **every** item shown below has an answer among the bolded options (scale follows questions), the domestic violence variable = 1. Otherwise, the variable = 0.

Original variables used:

Wave VI: v1415 v1416 v1417 v1418 v1419
Wave VII: Y7_1368 Y7_1369 Y7_1370 Y7_1371 Y7_1372

- Tell me how many times in the past 12 months [your spouse/boyfriend/girlfriend] insulted or swore at you?
- Tell me how many times in the past 12 months [your spouse/boyfriend/girlfriend] threatened to hit or throw something at you?
- Tell me how many times in the past 12 months [your spouse/boyfriend/girlfriend] threw something at you?
- Tell me how many times in the past 12 months [your spouse/boyfriend/girlfriend] pushed, grabbed, or shoved you?
- Tell me how many times in the past 12 months [your spouse/boyfriend/girlfriend] slapped you?

0 = Never
1 = Once
2 = Twice

3 = 3-5 Times
4 = 6-10 Times
5 = 11-20 Times
6 = More Than 20 Times

12c. Domestic Violence Victimization – Severe or Moderate Physical Abuse

If any item shown below has an answer among the bolded options (scale follows questions), the domestic violence variable = 1. Otherwise, the variable = 0.

Original variables used:

Wave VI: v1417 v1418 v1419 v1420 v1421 v1422 v1423 v1424
Wave VII: Y7_1370 Y7_1371 Y7_1372 Y7_1373 Y7_1374 Y7_1375 Y7_1376 Y7_1377

- Tell me how many times in the past 12 months [your spouse/boyfriend/girlfriend] threw something you?
- Tell me how many times in the past 12 months [your spouse/boyfriend/girlfriend] pushed, grabbed, or shoved you?
- Tell me how many times in the past 12 months [your spouse/boyfriend/girlfriend] slapped you?
- Tell me how many times in the past 12 months [your spouse/boyfriend/girlfriend] kicked, bit or hit you with a fist?
- Tell me how many times in the past 12 months [your spouse/boyfriend/girlfriend] hit or tried to hit you with something?
- Tell me how many times in the past 12 months [your spouse/boyfriend/girlfriend] beat you up?
- Tell me how many times in the past 12 months [your spouse/boyfriend/girlfriend] threatened with a knife or gun?
- Tell me how many times in the past 12 months [your spouse/boyfriend/girlfriend] used a knife or fired a gun?

0 = Never
1 = Once
2 = Twice
3 = 3-5 Times
4 = 6-10 Times
5 = 11-20 Times
6 = More Than 20 Times

13. Domestic Violence Perpetration

Brief explanation of domestic violence perpetration:

- Severe Physical Abuse (Severe physical abuse): classified the respondent as a perpetrator/offender of domestic violence if they engaged in *one* of the following behaviors at least one time in the year of the survey: kicked/bit/hit partner, hit partner with something, beat partner up, threatened partner with a gun, or used a knife or a gun.
- Moderate Verbal and Physical Abuse (Moderate verbal and physical abuse): described the respondent as a perpetrator if they engaged in *all* of the following behaviors at least

once in the year of the survey: insulted/swore at partner, threatened to hit or throw something at partner, threw something at partner, pushed/grabbed/shoved partner, and slapped partner.

- Severe or Moderate Physical Abuse (Severe or moderate physical abuse): classified domestic violence perpetration according to whether the respondent engaged in *one* of the following behaviors at least one time in the year of the survey: if they threw something at their partner, pushed/grabbed/shoved partner, slapped partner, kicked/bit/hit partner, hit partner with something, beat partner up, threatened partner with gun, or used knife or gun.

Detailed description:

13a. Domestic Violence Perpetration – Severe Physical Abuse

If any item shown below has an answer among the bolded options (scale follows questions), the domestic violence variable = 1. Otherwise, the variable = 0.

Original variables used:

Wave VI: v1410 v1411 v1412 v1413 v1414
Wave VII: Y7_1363 Y7_1364 Y7_1365 Y7_1366 Y7_1367

- Between Christmas a year ago and Christmas just past, how many times have you personally kicked, bit or hit you spouse/partner with a fist?
- Between Christmas a year ago and Christmas just past, how many times have you personally hit or tried to hit your spouse/partner with something?
- Between Christmas a year ago and Christmas just past, how many times have you personally beat up your spouse/partner?
- Between Christmas a year ago and Christmas just past, how many times have you personally threatened your spouse/partner with a knife or gun?
- Between Christmas a year ago and Christmas just past, how many times have you personally used a knife or fired a gun?

0 = Never
1 = Once
2 = Twice
3 = 3-5 Times
4 = 6-10 Times
5 = 11-20 Times
6 = More Than 20 Times

13b. Domestic Violence Perpetration – Moderate Verbal and Physical Abuse

If **every** item shown below has an answer among the bolded options (scale follows questions), the domestic violence variable = 1. Otherwise, the variable = 0.

Original variables used:

Wave VI: v1405 v1406 v1407 v1408 v1409
Wave VII: Y7_1358 Y7_1359 Y7_1360 Y7_1361 Y7_1362

- Between Christmas a year ago and Christmas just past, how many times have you personally insulted or swore at your spouse/partner?
- Between Christmas a year ago and Christmas just past, how many times have you personally threatened to hit or throw something at your spouse/partner?
- Between Christmas a year ago and Christmas just past, how many times have you personally threw something at your spouse/partner?
- Between Christmas a year ago and Christmas just past, how many times have you personally pushed, grabbed, or shoved your spouse/partner?
- Between Christmas a year ago and Christmas just past, how many times have you personally slapped your spouse/partner?

0 = Never
1 = Once
2 = Twice
3 = 3-5 Times
4 = 6-10 Times
5 = 11-20 Times
6 = More Than 20 Times

13c. Domestic Violence Perpetration – Severe or Moderate Physical Abuse

If any item shown below has an answer among the bolded options (scale follows questions), the domestic violence variable = 1. Otherwise, the variable = 0.

Original variables used:

Wave VI: v1407 v1408 v1409 v1410 v1411 v1412 v1413 v1414
Wave VII: Y7_1360 Y7_1361 Y7_1362 Y7_1363 Y7_1364 Y7_1365 Y7_1366 Y7_1367

- Between Christmas a year ago and Christmas just past, how many times have you personally threw something at your spouse/partner?
- Between Christmas a year ago and Christmas just past, how many times have you personally pushed, grabbed, or shoved your spouse/partner?
- Between Christmas a year ago and Christmas just past, how many times have you personally slapped your spouse/partner?
- Between Christmas a year ago and Christmas just past, how many times have you personally kicked, bit or hit your spouse/partner with a fist?
- Between Christmas a year ago and Christmas just past, how many times have you personally hit your spouse/partner with something?
- Between Christmas a year ago and Christmas just past, how many times have you personally beat up your spouse/partner?
- Between Christmas a year ago and Christmas just past, how many times have you personally threatened your spouse/partner with a knife or gun?
- Between Christmas a year ago and Christmas just past, how many times have you personally used a knife or fired a gun?

0 = Never
1 = Once
2 = Twice
3 = 3-5 Times

4 = 6-10 Times
5 = 11-20 Times
6 = More Than 20 Times

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Residual Difference Analysis:

Table 1: Vintages of 15 to 18 Year Olds, 1976-1980

Subsample Selected	Wave I (1976) Age at time of survey: 15-18; Age in 1976: 15-18 (N=689)	Wave II (1977) Age at time of survey: 15-18; Age in 1976: 14-17 (N=902)	Wave III (1978) Age at time of survey: 15-18; Age in 1976: 13-16 (N=950)	Wave IV (1979) Age at time of survey: 15-18; Age in 1976: 12-15 (N=927)	Wave V (1980) Age at time of survey: 15-18; Age in 1976: 11-14 (N=918)
Ever Abused[1]					
Whole subsample[##]	.057	.064	.088	.103	.097
Whites	.044	.050	.076	.089	.087
Blacks	.108	.119*	.106	.128	.102
Others	.125	.137	.167	.206*	.208*
Abused Last Year					
Whole subsample[##]	.057	.019	.025	.019	.019
Whites	.044	.015	.023	.020	.020
Blacks	.108	.024*	.028	.026	.007
Others	.125	.063	.056	.000**	.032
Violent Victim					
Whole subsample[##]	.322	.228	.204	.233	.210
Whites	.319	.218	.204	.235	.208
Blacks	.366	.285	.199	.225	.207
Others	.250	.250	.222	.224	.242
Violent Offender					
Whole subsample[##]	.499	.434	.390	.365	.299
Whites	.493	.420	.385	.347	.289
Blacks	.559	.504	.433	.457*	.333
Others	.438	.458	.333	.345	.323
Tolerance of Violence					
Whole subsample[##]	/	.386	.359	.344	.345
Whites	/	.372	.348	.333	.334
Blacks	/	.453**	.415**	.396**	.392**
Others	/	.425**	.365	.351	.361

[1]Ever abused variable measured over current and prior waves

Difference in means tests for racial subgroups within each wave, using whites as base
* p< .05 (two-tailed test)
** p< .01 (two-tailed test)

Testing H_0: All waves are equal for whole subsample across all waves. Chi-Square test used for ever abused, abused last year, violent victim and violent offender, Analysis of Variance F-test used for tolerance of violence.
[#] p<.05 (two-tailed test) [##] p<.01 (two-tailed test)

Table 2: Coefficients of Models Estimating Log Odds Ratio of Attitude toward Violence Vintages of 15-18 Year Olds from 1977 to 1980

	Wave 2, 1977 15-18 (N=902)		Wave 3, 1978 15-18 (N=950)		Wave 4, 1979 15-18 (N=927)		Wave 5, 1980 15-18 (N=918)	
	B	Exp(B)	B	Exp(B)	B	Exp(B)	B	Exp(B)
Constant	-.303	0.7386	1.155	3.1740	1.154	3.1709	.988	2.6859
Black	.177**	1.1936	.190**	1.2092	.219**	1.2448	.270**	1.3100
Other	.135	1.1445	.04941	1.0507	.06883	1.0713	.04670	1.0478
In school dummy	.941*	2.5625	-.09871	0.9060	.230	1.2586	.424	1.5281
Education	-.08605**	0.9175	-.002953	0.9971	-.03548	0.9651	-.04248	0.9584
Age	.02386	1.0241	-.06509	0.9370	-.05690	0.9447	-.04145	0.9594
Gender (female)	-.358**	0.6991	-.376**	0.6866	-.373**	0.6887	-.424**	0.6544
Child poverty dummy	.04073	1.0416	-.01033	0.9897	-.002335	0.9977	.03107	1.0316
Job in previous year?	-.04156	0.9593	.02916	1.0296	-.04453	0.9564	.004108	1.0041
Peer approval of misconduct	1.404**	4.0715	2.422**	11.2684	2.145**	8.5420	1.739**	5.6916
Labeling by parents	-1.188**	0.3048	-1.613**	0.1993	-1.736**	0.1762	-1.745**	0.1746
Drug abuse	-.101*	0.9039	-.141**	0.8685	-.104	0.9012	-.101	0.9039
Ever abused as child?	-.01217	0.9879	-.06773	0.9345	-.07402	0.9287	.04201	1.0429
Overall R^2	.328		.405		.367		.360	

*: p< .05
**: p< .01
Based on 2-tailed test

Source: National Youth Survey

Table 3: The Effect of Child Abuse on the Attitude toward Tolerance of Violence Vintages of 15-18 Year Olds from 1977 to 1980

	Wave 2, 1977			Wave 3 1978			Wave 4, 1979			Wave 5, 1980		
	B	Exp (B)	N	B	Exp (B)	N	B	Exp (B)	N	B	Exp (B)	N
Total Sample	.012	1.01	902	-.068	0.93	950	-.074	0.93	927	.042	1.04	918
White	-.078	0.92	731	-.151	0.86	755	-.137	0.87	718	-.043	0.96	706
Black	.107	1.11	123	.038	1.04	141	-.011	0.99	151	.181	1.20	150
Other	.300	1.35	48	.442*	1.56*	54	.156	1.17	58	.341	1.41	62

*: p< .05
**: p< .01
Based on 2-tailed test

Table 4: Logit Models Estimating Juvenile Violence Victimization Vintages of 15-18 Year Olds from 1977 to 1980

	Wave 2, 1977 15-18 (N=902)		Wave 3, 1978 15-18 (N=950)		Wave 4, 1979 15-18 (N=927)		Wave 5, 1980 15-18 (N=918)	
	B	Exp(B)	B	Exp(B)	B	Exp(B)	B	Exp(B)
Black	-.133	.875	-.339	.712	-.357	.700	-.043	.958
Other	-.171	.843	.013	1.013	-.280	.756	-.056	.946
In school dummy	3.420*	30.577*	1.370	3.935	2.197	8.998	1.591	4.908
Education	-.358**	.699**	-.163	.850	-.226*	.797*	-.127	.880
Age	.209	1.233	-.037	.964	.074	1.077	.342*	1.407*
Gender (female)	-.813**	.443**	-1.094**	.335**	-.488*	.614*	-.541**	.582**
Child poverty dummy	.354	1.425	.309	1.362	.394	1.483	.294	1.341
Job in previous year?	.276	1.318	.245	1.278	.057	1.058	.892**	2.439**
Peer approval of misconduct	-1.551	.212	-.122	.885	1.087	2.965	3.198**	24.483**
Labeling by parents	-.296	.744	.490	1.633	-.786	.456	-.098	.907
Exposure to delinquent peers	2.048**	7.754**	1.118	3.058	2.190**	8.939**	1.066	2.902
Drug abuse	.397	1.488	.695**	2.004**	.719**	2.053**	.251	1.286
Ever abused as child?	1.397**	4.043**	1.173**	3.232**	.146	1.158	.746**	2.109**
Attitude toward violence	2.670**	14.443**	2.425**	11.300**	1.640*	5.154*	1.417	4.126
Constant	-5.421*	.004*	-2.220	.109	-3.285	.037	-9.610**	.000**
-2 log likelihood	836.297		814.437		853.937		789.978	
Percent correctly predicted	78.8%		79.5%		79.9%		81.3%	
Chi-Square (df=14)	133.016		147.313		152.577		154.229	

*: p< .05
**: p< .01
Based on 2-tailed test

Source: National Youth Survey

Table 5: Logit Models Estimating Juvenile Violence Perpetration Vintages of 15-18 Year Olds from 1977 to 1980

	Wave 2, 1977 15-18 (N=902)		Wave 3, 1978 15-18 (N=950)		Wave 4, 1979 15-18 (N=927)		Wave 5, 1980 15-18 (N=918)	
	B	Exp(B)	B	Exp(B)	B	Exp(B)	B	Exp(B)
Black	-.181	.834	-.184	.832	.291	1.338	-.252	.778
Other	-.180	.835	-.482	.618	-.127	.881	-.177	.838
In school dummy	3.350*	28.513*	1.980	7.245	2.830*	16.942*	3.680**	39.661**
Education	-.254*	.775*	-.161	.852	-.146	.864	-.207	.813
Age	-.146	.864	-.208	.812	-.289*	.749*	.124	1.132
Gender (female)	-1.406**	.245**	-.974**	.378**	-.998**	.369**	-.812**	.444**
Child poverty dummy	.215	1.239	.129	1.138	.138	1.148	.811**	2.250**
Job in previous year?	.420*	1.522*	.442*	1.556*	-.129	.879	-.020	.980
Peer approval of misconduct	2.306*	10.038*	1.616	5.032	-.103	.902	1.298	3.663
Labeling by parents	-.391	.676	-1.966*	.140*	-.318	.728	1.100	3.004
Exposure to delinquent peers	3.906**	49.703**	2.318**	10.157**	4.741**	114.538**	3.067**	21.473**
Drug abuse	-.253	.777	.237	1.267	.269	1.308	.278	1.321
Ever abused as child?	-.219	.803	.882**	2.416**	.497	1.644	.277	1.319
Attitude toward violence	3.738**	42.023**	4.413**	82.505**	4.376**	79.499**	5.960**	387.560**
Constant	-.852	.427	1.381	3.980	.931	2.538	-8.299**	.000**
-2 log likelihood	911.816		944.127		905.974		846.526	
Percent correctly predicted	75.1%		75.7%		75.3%		78.2%	
Chi-Square (df=14)	322.610		326.046		310.302		272.638	

*: p< .05
**: p< .01
based on 2-tailed test

Source: National Youth Survey

Table 6: Effect of Child Abuse and Tolerance of Violence on Juvenile Violence Victimization Logit Models for Vintages 15-18, 1977-1980

	Effect of Tolerance of Violence on Juvenile Violence Victimization				Effect of Ever Abused as a Child on Juvenile Violence Victimization			
	Model 1: (Tolerance of Violence only)		Model 2: (with Ever Abused)		Model 2: (with Tolerance of Violence)		Model 3: (Ever Abused only)	
	B	Exp (B)	B	Exp (B)	B	Exp (B)	B	Exp (B)
Wave 2: 1977								
Total Sample (N=902)	2.587**	13.284**	2.670**	14.443**	1.397**	4.043**	1.378**	3.965**
White (N=731)	2.740**	15.493**	2.957**	19.245**	1.206**	3.339**	1.118**	3.059**
Black (N=123)	.461	1.586	-.276	.759	1.992**	7.328**	1.983**	7.264**
Other (N=48)	5.584	266.101	5.945	381.732	3.055	21.222	2.820	16.780
Wave 3: 1978								
Total Sample (N=950)	2.143**	8.528**	2.425**	11.300**	1.173**	3.232**	1.110**	3.034**
White (N=755)	2.999**	20.055**	3.477**	32.350**	1.194**	3.299**	1.017**	2.764**
Black (N=141)	-2.110	.121	-2.191	.112	2.000**	7.386**	1.996**	7.359**
Other (N=54)	1.675	5.341	.868	2.381	.363	1.438	.465	1.592
Wave 4: 1979								
Total Sample (N=927)	1.623*	5.067*	1.640*	5.154*	.146	1.158	.124	1.132
White (N=718)	1.600	4.955	1.608	4.992	.052	1.053	.018	1.018
Black (N=151)	3.131	22.903	3.307	27.291	.660	1.934	.597	1.816
Other (N=58)	-22.880	.000	-21.923	.000	-.319	.727	-1.076	.341
Wave 5: 1980								
Total Sample (N=918)	1.473	4.364	1.417	4.126	.746**	2.109**	.760**	2.138**
White (N=706)	1.618	5.043	1.675	5.338	.964**	2.622**	.951**	2.588**
Black (N=150)	-1.252	.286	-1.394	.248	.410	1.506	.372	1.450
Other (N=62)	9.645*	15451.726*	9.486*	13173.889**	.251	1.286	.631	1.879

*: p< .05
**: p< .01
Based on 2-tailed test

Source: National Youth Survey

Table 7: Effect of Child Abuse and Tolerance of Violence on Juvenile Violence Perpetration Logit Models for Vintages 15-18, 1977-1980

	Effect of Tolerance of Violence on Juvenile Violence Perpetration				Effect of Ever Abused as a Child on Juvenile Violence Perpetration			
	Model 1: (Tolerance of Violence only)		Model 2: (with Ever Abused)		Model 2: (with Tolerance of Violence)		Model 3: (Ever Abused only)	
	B	Exp (B)	B	Exp (B)	B	Exp (B)	B	Exp (B)
Wave 2: 1977								
Total Sample (N=902)	3.731**	41.719**	3.738**	42.023**	-.219	.803	-.197	.821
White (N=731)	3.370**	29.079**	3.353**	28.577**	-.398	.671	-.440	.644
Black (N=123)	4.591	98.557	4.685	108.363	-.267	.766	-.132	.877
Other (N=48)	30.004	1.07E+13	35.064	1.69E+15	4.932	138.604	.008	1.008
Wave 3: 1978								
Total Sample (N=950)	4.270**	71.552**	4.413**	82.505**	.882**	2.416**	.805**	2.237**
White (N=755)	4.415**	82.677**	4.664**	106.033**	.983**	2.671**	.829*	2.291*
Black (N=141)	4.049*	57.360*	4.047*	57.204*	-.134	.875	-.132	.877
Other (N=54)	5.358	212.224	-.665	.514	4.336*	76.363*	4.269*	71.459*
Wave 4: 1979								
Total Sample (N=927)	4.336**	76.405**	4.376**	79.499**	.497	1.644	.452	1.572
White (N=718)	4.931**	138.529**	4.970**	144.064**	.495	1.640	.439	1.551
Black (N=151)	3.393	29.754	3.362	28.839	-.312	.732	-.341	.711
Other (N=58)	-4.132	.016	-4.876	.008	1.940	6.959	1.819	6.169
Wave 5: 1980								
Total Sample (N=918)	5.995**	401.410**	5.960**	387.560**	.277	1.319	.349	1.418
White (N=706)	6.869**	961.961**	6.868**	961.196**	.117	1.124	.097	1.102
Black (N=150)	2.949	19.091	2.969	19.467	-.046	.955	.075	1.078
Other (N=62)	4.145	63.145	3.073	21.599	1.837	6.276	1.945*	6.966*

*: p< .05
**: p< .01
Based on 2-tailed test

Source: National Youth Survey

Table 8a: Logit Models Estimating Domestic Violence Victimization Severe Physical Abuse

Wave VI, 1983	Model 1 Excluding tolerance of violence (n=475)		Model 2 Including tolerance of violence (n=475)		Model 3 Females only (n=298)		Model 4 Males only (n=177)	
	B	Exp (B)	B	Exp (B)	B	Exp (B)	B	Exp (B)
Black	**0.947**	2.578	**0.945**	2.572	-0.454	0.635	**1.947**	7.009
	0.011		*0.011*		*0.508*		*0.000*	
Hispanic	0.319	1.376	0.298	1.347	0.920	2.508	-1.437	0.238
	0.586		*0.610*		*0.182*		*0.268*	
Other	0.621	1.861	0.617	1.853	1.113	3.043	-3.839	0.022
	0.611		*0.619*		*0.396*		*0.863*	
Child poverty dummy	0.209	1.233	0.161	1.175	**0.978**	2.659	-0.682	0.506
	0.474		*0.586*		*0.018*		*0.151*	
Ever abused as a child?	1.273	3.57	1.215	3.371	**1.377**	3.963	**2.111**	8.259
	0.066		*0.081*		*0.003*		*0.011*	
Attitude toward violence			1.298	3.663	1.567	4.790	1.851	6.368
			0.262		*0.378*		*0.265*	
Gender (female)	**-1.021**	0.360	**-0.898**	0.407				
	0.001		*0.005*					
Interaction term:	0.425	1.529	0.361	1.435				
gender & child abuse	*0.595*		*0.653*					
Constant	**-1.605**		**-2.075**		**-3.174**		**-2.193**	
	0.000		*0.000*		*0.000*		*0.001*	
Mean of dependent variable	0.1537		0.1537		0.1141		0.2203	
-2 Log Likelihood	369.814		368.538		185.300		165.298	
Concordance	84.2%		85.1%		88.9%		82.5%	
Chi-Square	**37.781**		**39.057**		**26.274**		**21.380**	

Coefficient & Chi-Square in bold if significant at 95% significance level, based on 2-tailed test

Source: National Youth Survey

Table 8b: Logit Models Estimating Domestic Violence Victimization Moderate Verbal and Physical Abuse

Wave VI, 1983	Model 1 Excluding tolerance of violence (n=475)		Model 2 Including tolerance of violence (n=475)		Model 3 Females only (n=298)		Model 4 Males only (n=177)	
	B	Exp (B)	B	Exp (B)	B	Exp (B)	B	Exp (B)
Black	**1.152**	3.163	**1.152**	3.164	0.481	1.617	**1.899**	6.676
	0.011		*0.011*		*0.507*		*0.004*	
Hispanic	0.458	1.581	0.459	1.582	1.282	3.603	-7.892	0.000
	0.520		*0.519*		*0.097*		*0.803*	
Other	1.412	4.102	1.412	4.104	1.888	6.609	-5.736	0.003
	0.253		*0.252*		*0.150*		*0.954*	
Child poverty dummy	0.267	1.306	0.269	1.309	0.807	2.242	-0.683	0.505
	0.484		*0.485*		*0.111*		*0.327*	
Ever abused as a child?	1.521	4.576	1.524	4.589	**1.702**	5.484	**2.651**	14.167
	0.056		*0.056*		*0.002*		*0.006*	
Attitude toward violence			-0.056	0.946	-0.521	0.594	0.958	2.607
			0.971		*0.807*		*0.679*	
Gender (female)	-0.483	0.617	-0.487	0.614				
	0.250		*0.268*					
Interaction term: gender & child abuse	0.246	1.279	0.249	1.282				
	0.790		*0.788*					
Constant	**-2.830**		**-2.811**		**-3.323**		**-3.051**	
	0.000		*0.000*		*0.000*		*0.001*	
Mean of dependent variable	0.0779		0.0779		0.0705		0.0904	
-2 Log Likelihood	234.477		234.476		131.832		91.973	
Concordance	92.4%		92.4%		93.6%		91.5%	
Chi-Square	**25.440**		**25.442**		**20.060**		**15.449**	

Coefficient & Chi-Square in bold if significant at 95% significance level, based on 2-tailed test

Source: National Youth Survey

Table 8c: Logit Models Estimating Domestic Violence Victimization Severe or Moderate Physical Abuse

Wave VI, 1983	Model 1 Excluding tolerance of violence (n=475)		Model 2 Including tolerance of violence (n=475)		Model 3 Females only (n=298)		Model 4 Males only (n=177)	
	B	Exp (B)	B	Exp (B)	B	Exp (B)	B	Exp (B)
Black	**0.713**	2.040	**0.673**	1.960	-0.254	0.775	**1.805**	6.078
	0.027		*0.038*		*0.577*		*0.001*	
Hispanic	0.301	1.352	0.243	1.275	0.281	1.324	0.081	1.085
	0.518		*0.602*		*0.632*		*0.921*	
Other	0.337	1.401	0.377	1.458	-0.512	0.599	6.330	560.986
	0.743		*0.719*		*0.688*		*0.639*	
Child poverty dummy	**0.461**	1.585	0.387	1.473	**0.925**	2.521	-0.257	0.773
	0.041		*0.091*		*0.003*		*0.484*	
Ever abused as a child?	0.989	2.689	0.914	2.494	**0.882**	2.415	1.216	3.375
	0.174		*0.216*		*0.022*		*0.118*	
Attitude toward violence			**2.268**	9.662	2.013	7.489	**3.544**	34.592
			0.010		*0.089*		*0.012*	
Gender (female)	-0.319	0.727	-0.089	0.915				
	0.129		*0.699*					
Interaction term:	0.126	1.134	-0.010	0.990				
gender & child abuse	*0.876*		*0.990*					
Constant	**-0.609**		**-1.427**		**-1.48**		**-1.863**	
	0.001		*0.000*		*0.000*		*0.001*	
Mean of dependent variable	0.3874		0.3874		0.3624		0.4294	
-2 Log Likelihood	603.748		596.865		363.066		218.883	
Concordance	66.3%		65.1%		68.1%		66.1%	
Chi-Square	**30.430**		**37.314**		**27.192**		**22.948**	

Coefficient & Chi-Square in bold if significant at 95% significance level, based on 2-tailed test

Source: National Youth Survey

Table 9a: Logit Models Estimating Domestic Violence Victimization
Severe Physical Abuse

Wave VII, 1987	Model 1 Excluding tolerance of violence (n=723)		Model 2 Including tolerance of violence (n=723)		Model 3 Females only (n=402)		Model 4 Males only (n=321)	
	B	Exp (B)	B	Exp (B)	B	Exp (B)	B	Exp (B)
Black	**1.036**	2.818	**0.972**	2.643	0.500	1.649	**1.222**	3.395
	0.000		*0.001*		*0.326*		*0.001*	
Hispanic	-1.290	0.275	-1.320	0.267	-6.052	0.002	-0.768	0.464
	0.221		*0.212*		*0.727*		*0.494*	
Other	-0.255	0.775	-0.309	0.734	-6.563	0.001	6.168	477.119
	0.819		*0.780*		*0.769*		*0.648*	
Child poverty dummy	**0.582**	1.789	**0.561**	1.752	0.294	1.342	**0.666**	1.946
	0.014		*0.018*		*0.479*		*0.024*	
Ever abused as a child?	0.509	1.664	0.406	1.501	0.590	1.804	0.386	1.472
	0.284		*0.399*		*0.246*		*0.430*	
Attitude toward violence			**2.319**	10.164	**3.512**	33.525	**2.213**	9.148
			0.007		*0.025*		*0.038*	
Gender (female)	**-1.247**	0.287	**-1.013**	0.363				
	0.000		*0.000*					
Interaction term:	0.385	1.470	0.246	1.279				
gender & child abuse	*0.564*		*0.716*					
Constant	**-1.325**		**-2.198**		**-3.375**		**-2.255**	
	0.000		*0.000*		*0.000*		*0.000*	
Mean of dependent variable	0.1784		0.1784		0.0995		0.2773	
-2 Log Likelihood	604.660		597.362		242.908		345.751	
Concordance	82.4%		82.2%		90.0%		73.5%	
Chi-Square	**73.506**		**80.803**		**17.579**		**33.251**	

Coefficient & Chi-Square in bold if significant at 95% significance level, based on 2-tailed test

Source: National Youth Survey

Table 9b: Logit Models Estimating Domestic Violence Victimization
Moderate Verbal and Physical Abuse

Wave VII, 1987	Model 1 Excluding tolerance of violence (n=723)		Model 2 Including tolerance of violence (n=723)		Model 3 Females only (n=402)		Model 4 Males only (n=321)	
	B	Exp (B)	B	Exp (B)	B	Exp (B)	B	Exp (B)
Black	0.191	1.211	0.088	1.092	-0.319	0.727	0.221	1.247
	0.628		*0.824*		*0.641*		*0.654*	
Hispanic	-0.508	0.601	-0.549	0.577	0.147	1.158	-7.053	0.001
	0.631		*0.605*		*0.892*		*0.850*	
Other	0.040	1.041	-0.092	0.912	-6.568	0.001	10.926	55595.129
	0.971		*0.935*		*0.761*		*0.913*	
Child poverty dummy	0.539	1.714	0.508	1.662	0.017	1.017	0.745	2.106
	0.072		*0.090*		*0.972*		*0.062*	
Ever abused as a child?	-6.304	0.002	-6.513	0.001	0.683	1.980	-7.383	0.001
	0.614		*0.594*		*0.199*		*0.712*	
Attitude toward violence			**3.477**	32.362	**6.927**	1019.716	1.862	6.435
			0.002		*0.000*		*0.217*	
Gender (female)	**-0.659**	0.517	-0.278	0.757				
	0.020		*0.370*					
Interaction term:	7.510	1826.677	7.351	1557.086				
gender & child abuse	*0.548*		*0.548*					
Constant	**-2.172**		**-3.517**		**-4.713**		**-2.985**	
	0.000		*0.000*		*0.000*		*0.000*	
Mean of dependent variable	0.0913		0.0913		0.0746		0.1121	
-2 Log Likelihood	422.206		412.683		190.157		208.423	
Concordance	90.9%		90.9%		92.3%		89.1%	
Chi-Square	**19.553**		**29.076**		**23.262**		**16.910**	

Coefficient & Chi-Square in bold if significant at 95% significance level, based on 2-tailed test

Source: National Youth Survey

Table 9c: Logit Models Estimating Domestic Violence Victimization
Severe or Moderate Physical Abuse

Wave VII, 1987	Model 1 Excluding tolerance of violence (n=723)		Model 2 Including tolerance of violence (n=723)		Model 3 Females only (n=402)		Model 4 Males only (n=321)	
	B	Exp (B)	B	Exp (B)	B	Exp (B)	B	Exp (B)
Black	**0.734**	2.083	**0.664**	1.942	**0.846**	2.330	0.531	1.700
	0.005		*0.011*		*0.032*		*0.135*	
Hispanic	-0.158	0.853	-0.182	0.833	0.182	1.200	-0.708	0.493
	0.762		*0.728*		*0.776*		*0.430*	
Other	-0.623	0.536	-0.707	0.493	-1.336	0.263	5.412	224.025
	0.462		*0.406*		*0.236*		*0.689*	
Child poverty dummy	0.300	1.350	0.270	1.310	-0.117	0.889	**0.578**	1.782
	0.129		*0.173*		*0.696*		*0.035*	
Ever abused as a child?	0.762	2.143	0.698	2.009	**0.847**	2.332	0.710	2.034
	0.092		*0.126*		*0.028*		*0.130*	
Attitude toward violence			**1.804**	6.073	1.915	6.789	**1.986**	7.288
			0.008		*0.056*		*0.036*	
Gender (female)	**-0.451**	0.637	-0.250	0.779				
	0.007		*0.173*					
Interaction term:	0.169	1.184	0.042	1.042				
gender & child abuse	*0.771*		*0.943*					
Constant	**-0.544**		**-1.209**		**-1.44**		**-1.347**	
	0.000		*0.000*		*0.000*		*0.001*	
Mean of dependent variable	0.3624		0.3624		0.3134		0.4237	
-2 Log Likelihood	911.971		904.745		480.655		417.333	
Concordance	65.3%		65.4%		68.4%		62.3%	
Chi-Square	**34.833**		**42.059**		**19.288**		**20.158**	

Coefficient & Chi-Square in bold if significant at 95% significance level, based on 2-tailed test

Source: National Youth Survey

Table 10a: Logit Models Estimating Domestic Violence Perpetration Severe Physical Abuse

Wave VI, 1983	Model 1 Excluding tolerance of violence (n=474)		Model 2 Including tolerance of violence (n=474)		Model 3 Females only (n=298)		Model 4 Males only (n=176)	
	B	Exp (B)	B	Exp (B)	B	Exp (B)	B	Exp (B)
Black	0.525	1.691	0.473	1.605	-0.225	0.799	**1.646**	5.185
	0.188		*0.239*		*0.650*		*0.019*	
Hispanic	-0.286	0.751	-0.308	0.735	-0.064	0.938	-7.724	0.000
	0.644		*0.619*		*0.924*		*0.807*	
Other	0.102	1.107	0.070	1.072	0.080	1.083	-6.253	0.002
	0.934		*0.956*		*0.953*		*0.950*	
Child poverty dummy	**0.635**	1.887	0.561	1.752	**0.742**	2.099	-0.049	0.952
	0.031		*0.061*		*0.028*		*0.945*	
Ever abused as a child?	**1.779**	5.923	**1.685**	5.390	**1.080**	2.945	**2.880**	17.811
	0.025		*0.035*		*0.006*		*0.004*	
Attitude toward violence			1.764	5.834	**3.658**	38.772	-2.725	0.066
			0.132		*0.010*		*0.273*	
Gender (female)	**1.384**	3.991	**1.557**	4.743				
	0.000		*0.000*					
Interaction term:	-0.327	0.721	-0.397	0.672				
gender & child abuse	*0.705*		*0.649*					
Constant	**-3.077**		**-3.705**		**-2.667**		**-2.143**	
	0.000		*0.000*		*0.000*		*0.021*	
Mean of dependent variable	0.1709		0.1709		0.2282		0.0739	
-2 Log Likelihood	381.197		378.883		287.853		77.164	
Concordance	83.5%		83.3%		78.5%		93.8%	
Chi-Square	**52.313**		**54.627**		**32.246**		**15.595**	

Coefficient & Chi-Square in bold if significant at 95% significance level, based on 2-tailed test

Source: National Youth Survey

Table 10b: Logit Models Estimating Domestic Violence Perpetration
Moderate Verbal and Physical Abuse

Wave VI, 1983	Model 1 Excluding tolerance of violence (n=474)		Model 2 Including tolerance of violence (n=474)		Model 3 Females only (n=298)		Model 4 Males only (n=176)	
	B	Exp (B)	B	Exp (B)	B	Exp (B)	B	Exp (B)
Black	-0.504	0.604	-0.514	0.598	-0.770	0.463	0.091	1.096
	0.445		*0.435*		*0.343*		*0.936*	
Hispanic	0.134	1.143	0.127	1.135	-0.096	0.909	0.297	1.346
	0.854		*0.861*		*0.917*		*0.821*	
Other	-5.276	0.005	-5.370	0.005	-5.470	0.004	-3.527	0.029
	0.762		*0.755*		*0.785*		*0.923*	
Child poverty dummy	**0.784**	2.189	0.722	2.058	**1.168**	3.217	-0.446	0.640
	0.046		*0.071*		*0.013*		*0.591*	
Ever abused as a child?	1.411	4.099	1.329	3.779	**2.097**	8.145	1.711	5.533
	0.12		*0.148*		*0.000*		*0.105*	
Attitude toward violence			1.357	3.884	1.164	3.202	2.021	7.549
			0.398		*0.561*		*0.482*	
Gender (female)	0.265	1.304	0.405	1.500				
	0.584		*0.430*					
Interaction term:	0.841	2.320	0.799	2.223				
gender & child abuse	*0.402*		*0.429*					
Constant	**-3.369**		**-3.86**		**-3.527**		**-3.791**	
	0.000		*0.000*		*0.000*		*0.002*	
Mean of dependent variable	0.0760		0.0760		0.0906		0.0511	
-2 Log Likelihood	216.666		215.944		145.518		67.191	
Concordance	92.8%		93.0%		90.9%		94.9%	
Chi-Square	**38.122**		**38.844**		**35.626**		3.860	

Coefficient & Chi-Square in bold if significant at 95% significance level, based on 2-tailed test

Source: National Youth Survey

Table 10c: Logit Models Estimating Domestic Violence Perpetration Severe or Moderate Physical Abuse

Wave VI, 1983	Model 1 Excluding tolerance of violence (n=474)		Model 2 Including tolerance of violence (n=474)		Model 3 Females only (n=298)		Model 4 Males only (n=176)	
	B	Exp (B)	B	Exp (B)	B	Exp (B)	B	Exp (B)
Black	0.604	1.830	0.576	1.779	0.311	1.364	0.819	2.269
	0.065		*0.082*		*0.507*		*0.083*	
Hispanic	0.003	1.003	-0.044	0.957	-0.249	0.779	0.303	1.354
	0.995		*0.924*		*0.665*		*0.699*	
Other	1.094	2.986	1.165	3.207	5.932	376.888	-4.242	0.014
	0.356		*0.332*		*0.635*		*0.753*	
Child poverty dummy	0.283	1.327	0.219	1.244	0.502	1.652	-0.081	0.922
	0.213		*0.343*		*0.110*		*0.820*	
Ever abused as a child?	0.908	2.478	0.843	2.323	**0.899**	2.456	0.833	2.301
	0.186		*0.223*		*0.027*		*0.245*	
Attitude toward violence			**1.777**	5.915	1.515	4.548	2.153	8.609
			0.036		*0.175*		*0.112*	
Gender (female)	**0.548**	1.730	**0.737**	2.090				
	0.008		*0.001*					
Interaction term:	0.174	1.190	0.074	1.076				
gender & child abuse	*0.825*		*0.926*					
Constant	**-0.754**		**-1.393**		**-0.624**		**-1.469**	
	0.000		*0.000*		*0.046*		*0.007*	
Mean of dependent variable	0.4620		0.4620		0.5134		0.3750	
-2 Log Likelihood	625.677		621.195		391.308		224.576	
Concordance	61.4%		62.4%		62.1%		60.8%	
Chi-Square	**28.690**		**33.171**		**21.593**		8.294	

Coefficient & Chi-Square in bold if significant at 95% significance level, based on 2-tailed test

Source: National Youth Survey

Table 11a: Logit Models Estimating Domestic Violence Perpetration Severe Physical Abuse

Wave VII, 1987	Model 1 Excluding tolerance of violence (n=723)		Model 2 Including tolerance of violence (n=723)		Model 3 Females only (n=402)		Model 4 Males only (n=321)	
	B	Exp (B)	B	Exp (B)	B	Exp (B)	B	Exp (B)
Black	**1.065**	2.899	**0.984**	2.676	**0.977**	2.655	**1.041**	2.832
	0.001		*0.002*		*0.018*		*0.032*	
Hispanic	-0.384	0.681	-0.393	0.675	-0.109	0.896	-5.970	0.003
	0.619		*0.611*		*0.891*		*0.807*	
Other	0.874	2.396	0.787	2.197	0.216	1.241	10.835	50770.965
	0.261		*0.317*		*0.808*		*0.858*	
Child poverty dummy	0.383	1.467	0.346	1.414	0.273	1.313	0.414	1.514
	0.144		*0.186*		*0.404*		*0.362*	
Ever abused as a child?	0.749	2.115	0.668	1.951	**0.845**	2.328	0.701	2.016
	0.218		*0.273*		*0.039*		*0.267*	
Attitude toward violence			**1.882**	6.566	1.837	6.275	2.514	12.358
			0.048		*0.128*		*0.122*	
Gender (female)	**0.936**	2.550	**1.137**	3.116				
	0.000		*0.000*					
Interaction term:	0.252	1.286	0.134	1.143				
gender & child abuse	*0.726*		*0.853*					
Constant	**-2.728**		**-3.422**		**-2.250**		**-3.745**	
	0.000		*0.000*		*0.000*		*0.000*	
Mean of dependent variable	0.1452		0.1452		0.1891		0.0903	
-2 Log Likelihood	555.411		551.452		368.936		176.917	
Concordance	85.8%		85.8%		81.6%		91.3%	
Chi-Square	**43.728**		**47.686**		**20.883**		**17.821**	

Coefficient & Chi-Square in bold if significant at 95% significance level, based on 2-tailed test

Source: National Youth Survey

Table 11b: Logit Models Estimating Domestic Violence Perpetration
Moderate Verbal and Physical Abuse

Wave VII, 1987	Model 1 Excluding tolerance of violence (n=723)		Model 2 Including tolerance of violence (n=723)		Model 3 Females only (n=402)		Model 4 Males only (n=321)	
	B	Exp (B)	B	Exp (B)	B	Exp (B)	B	Exp (B)
Black	**1.281**	3.602	**1.133**	3.105	**1.330**	3.783	0.804	2.235
	0.003		*0.009*		*0.014*		*0.292*	
Hispanic	0.001	1.001	0.015	1.015	0.462	1.587	-5.317	0.005
	1.000		*0.989*		*0.671*		*0.823*	
Other	-4.554	0.011	-4.791	0.008	-5.853	0.003	-4.007	0.018
	0.719		*0.699*		*0.791*		*0.947*	
Child poverty dummy	-0.189	0.828	-0.260	0.771	-0.327	0.721	-0.147	0.863
	0.650		*0.530*		*0.521*		*0.838*	
Ever abused as a child?	**1.577**	4.841	1.433	4.192	0.775	2.170	1.465	4.327
	0.029		*0.050*		*0.182*		*0.054*	
Attitude toward violence			**3.649**	38.439	3.317	27.574	3.856	47.283
			0.011		*0.075*		*0.094*	
Gender (female)	**0.854**	2.349	**1.253**	3.502				
	0.036		*0.004*					
Interaction term:	-0.505	0.604	-0.718	0.487				
gender & child abuse	*0.574*		*0.428*					
Constant	**-3.693**		**-5.099**		**-3.788**		**-5.119**	
	0.000		*0.000*		*0.000*		*0.000*	
Mean of dependent variable	0.0553		0.0553		0.0697		0.0374	
-2 Log Likelihood	289.883		283.289		188.287		93.878	
Concordance	94.5%		94.5%		93.0%		96.3%	
Chi-Square	**19.425**		**26.018**		**14.913**		8.544	

Coefficient & Chi-Square in bold if significant at 95% significance level, based on 2-tailed test

Source: National Youth Survey

Table 11c: Logit Models Estimating Domestic Violence Perpetration Severe or Moderate Physical Abuse

Wave VII, 1987	Model 1 Excluding tolerance of violence (n=723)		Model 2 Including tolerance of violence (n=723)		Model 3 Females only (n=402)		Model 4 Males only (n=321)	
	B	Exp (B)	B	Exp (B)	B	Exp (B)	B	Exp (B)
Black	**0.659**	1.934	**0.576**	1.778	**0.835**	2.304	0.378	1.459
	0.011		*0.029*		*0.036*		*0.293*	
Hispanic	-0.254	0.776	-0.283	0.753	-0.268	0.765	-0.188	0.829
	0.623		*0.584*		*0.673*		*0.834*	
Other	0.267	1.306	0.167	1.182	-0.137	0.872	6.023	412.919
	0.715		*0.822*		*0.864*		*0.656*	
Child poverty dummy	0.287	1.333	0.249	1.282	-0.005	0.995	0.499	1.647
	0.148		*0.215*		*0.986*		*0.081*	
Ever abused as a child?	0.710	2.034	0.628	1.873	0.551	1.735	0.585	1.795
	0.111		*0.164*		*0.149*		*0.203*	
Attitude toward violence			**2.255**	9.535	**2.031**	7.624	**2.684**	14.648
			0.001		*0.032*		*0.008*	
Gender (female)	**0.453**	1.573	**0.716**	2.047				
	0.007		*0.000*					
Interaction term:	-0.020	0.981	-0.179	0.836				
gender & child abuse	*0.973*		*0.758*					
Constant	**-1.013**		**-1.852**		**-1.049**		**-2.073**	
	0.000		*0.000*		*0.000*		*0.000*	
Mean of dependent variable	0.3651		0.3651		0.4055		0.3146	
-2 Log Likelihood	922.666		911.398		525.419		381.243	
Concordance	65.3%		64.9%		61.9%		69.2%	
Chi-Square	**26.374**		**37.643**		**17.416**		**18.572**	

Coefficient & Chi-Square in bold if significant at 95% significance level, based on 2-tailed test

Source: National Youth Survey

Table 12a: Logit Models Estimating Presence of Domestic Violence (Victimization or Perpetration) Severe Physical Abuse

Wave VI, 1983	Model 1 Excluding juvenile violence (n=475)		Model 2 Including juvenile violence (n=475)		Model 3 Females only, without juvenile violence(n=298)		Model 4 Females only, with juvenile violence(n=298)		Model 5 Males only, without juvenile violence(n=177)		Model 6 Males only, with juvenile violence(n=177)	
	B	Exp (B)	B	Exp (B)	B	Exp (B)	B	Exp (B)	B	Exp (B)	B	Exp (B)
Black	**0.695**	2.004	**0.715**	2.045	-0.399	0.671	-0.379	0.685	**1.810**	6.108	**1.807**	6.092
	0.039		*0.036*		*0.408*		*0.436*		*0.000*		*0.000*	
Hispanic	-0.516	0.597	-0.514	0.598	-0.404	0.667	-0.309	0.734	-1.416	0.243	-1.561	0.210
	0.361		*0.372*		*0.549*		*0.656*		*0.268*		*0.229*	
Other	0.909	2.483	0.719	2.052	1.364	3.912	1.124	3.076	-4.097	0.017	-4.196	0.015
	0.398		*0.501*		*0.293*		*0.381*		*0.854*		*0.850*	
Child poverty dummy	0.374	1.454	0.306	1.358	**0.968**	2.632	**0.893**	2.442	-0.491	0.612	-0.563	0.569
	0.140		*0.230*		*0.003*		*0.007*		*0.279*		*0.217*	
Ever abused as a child?	1.277	3.585	1.367	3.923	**1.195**	3.304	**1.041**	2.831	**1.993**	7.335	**2.105**	8.210
	0.071		*0.051*		*0.002*		*0.008*		*0.015*		*0.010*	
Attitude toward violence	1.864	6.446	1.416	4.122	**2.853**	17.341	2.361	10.598	1.374	3.949	0.749	2.115
	0.057		*0.152*		*0.031*		*0.074*		*0.397*		*0.658*	
Gender (female)	0.379	1.461	**0.548**	1.730								
	0.154		*0.044*									
Interaction term:	0.084	1.088	-0.157	0.855								
gender & child abuse	*0.915*		*0.842*									
Victim or offender of			**1.115**	3.051			**1.116**	3.053			1.196	3.307
juvenile violence			*0.001*				*0.003*				*0.184*	
Constant	**-2.263**		**-3.115**		**-2.210**		**-2.883**		**-1.993**		**-2.845**	
	0.000		*0.000*		*0.000*		*0.000*		*0.003*		*0.004*	
Mean of dependent variable	0.2568		0.2568		0.2752		0.2752		0.2260		0.2260	
-2 Log Likelihood	500.019		487.916		313.112		303.215		169.845		167.671	
Concordance	76.0%		76.2%		75.8%		75.8%		81.9%		81.4%	
Chi-Square	**41.223**		**53.325**		**37.534**		**47.430**		**19.327**		**21.501**	

Coefficient & Chi-Square in bold if significant at 95% significance level, based on 2-tailed test

Source: National Youth Survey

Table 12b: Logit Models Estimating Presence of Domestic Violence (Victimization or Perpetration)
Moderate Verbal and Physical Abuse

Wave VI, 1983	Model 1 Excluding juvenile violence (n=474)		Model 2 Including juvenile violence (n=474)		Model 3 Females only, without juvenile violence(n=298)		Model 4 Females only, with juvenile violence(n=298)		Model 5 Males only, without juvenile violence(n=176)		Model 6 Males only, with juvenile violence(n=176)	
	B	Exp (B)	B	Exp (B)	B	Exp (B)	B	Exp (B)	B	Exp (B)	B	Exp (B)
Black	0.513	1.669	0.529	1.697	-0.272	0.762	-0.272	0.762	**1.475**	4.370	**1.474**	4.368
	0.223		*0.209*		*0.665*		*0.667*		*0.015*		*0.015*	
Hispanic	0.061	1.063	0.048	1.050	0.258	1.295	0.394	1.484	-0.741	0.477	-0.744	0.475
	0.924		*0.940*		*0.740*		*0.627*		*0.565*		*0.566*	
Other	0.604	1.829	0.461	1.586	0.959	2.609	0.731	2.077	-3.182	0.041	-3.185	0.041
	0.629		*0.709*		*0.467*		*0.574*		*0.886*		*0.886*	
Child poverty dummy	0.621	1.861	0.566	1.761	**1.270**	3.559	**1.199**	3.315	-0.454	0.635	-0.455	0.634
	0.053		*0.078*		*0.002*		*0.004*		*0.430*		*0.430*	
Ever abused as a child?	**1.517**	4.557	**1.620**	5.054	**1.846**	6.335	**1.672**	5.324	**2.146**	8.552	**2.148**	8.571
	0.038		*0.027*		*0.000*		*0.000*		*0.011*		*0.012*	
Attitude toward violence	0.969	2.635	0.547	1.728	0.420	1.521	-0.118	0.889	2.435	11.421	2.423	11.277
	0.449		*0.670*		*0.806*		*0.945*		*0.242*		*0.260*	
Gender (female)	-0.076	0.927	0.085	1.088								
	0.837		*0.820*									
Interaction term:	0.361	1.435	0.111	1.117								
gender & child abuse	*0.663*		*0.894*									
Victim or offender of			**1.205**	3.337			1.780	5.930			0.021	1.022
juvenile violence			*0.030*				*0.019*				*0.981*	
Constant	**-2.865**		**-3.824**		**-2.937**		**-4.213**		**-3.240**		**-3.254**	
	0.000		*0.000*		*0.000*		*0.000*		*0.000*		*0.002*	
Mean of dependent variable	0.1224		0.1224		0.1242		0.1242		0.1193		0.1193	
-2 Log Likelihood	313.571		307.604		187.489		179.177		116.230		116.229	
Concordance	88.8%		88.8%		89.3%		89.9%		89.2%		89.2%	
Chi-Square	**38.712**		**44.679**		**36.091**		**44.404**		12.449		12.449	

Coefficient & Chi-Square in bold if significant at 95% significance level, based on 2-tailed test

Source: National Youth Survey

Table 12c: Logit Models Estimating Presence of Domestic Violence (Victimization or Perpetration) Severe or Moderate Physical Abuse

Wave VI, 1983	Model 1 Excluding juvenile violence (n=475)		Model 2 Including juvenile violence (n=475)		Model 3 Females only, without juvenile violence(n=298)		Model 4 Females only, with juvenile violence(n=298)		Model 5 Males only, without juvenile violence(n=177)		Model 6 Males only, with juvenile violence(n=177)	
	B	Exp (B)	B	Exp (B)	B	Exp (B)	B	Exp (B)	B	Exp (B)	B	Exp (B)
Black	**0.868**	2.383	**0.891**	2.439	0.133	1.142	0.147	1.159	**1.635**	5.131	**1.638**	5.142
	0.015		*0.014*		*0.785*		*0.767*		*0.003*		*0.004*	
Hispanic	0.170	1.185	0.239	1.270	-0.225	0.799	-0.111	0.895	0.943	2.567	0.897	2.451
	0.722		*0.625*		*0.701*		*0.854*		*0.291*		*0.316*	
Other	5.970	391.396	5.774	321.905	5.664	288.373	5.408	223.291	5.889	360.942	5.803	331.402
	0.576		*0.591*		*0.650*		*0.668*		*0.663*		*0.667*	
Child poverty dummy	0.205	1.228	0.113	1.119	**0.663**	1.941	0.589	1.803	-0.289	0.749	-0.380	0.684
	0.382		*0.638*		*0.044*		*0.081*		*0.423*		*0.299*	
Ever abused as a child?	1.197	3.311	1.228	3.415	**0.919**	2.508	0.725	2.064	1.206	3.341	1.263	3.535
	0.150		*0.137*		*0.035*		*0.102*		*0.158*		*0.136*	
Attitude toward violence	**2.224**	9.242	**1.777**	5.911	2.079	8.000	1.678	5.355	**2.843**	17.165	2.302	9.995
	0.009		*0.041*		*0.067*		*0.149*		*0.036*		*0.097*	
Gender (female)	0.407	1.503	**0.594**	1.811								
	0.071		*0.012*									
Interaction term:	-0.239	0.788	-0.449	0.638								
gender & child abuse	*0.798*		*0.629*									
Victim or offender of			**0.988**	2.685			**0.969**	2.636			1.001	2.720
juvenile violence			*0.000*				*0.000*				*0.096*	
Constant	**-1.008**		**-1.714**	0.180	-0.582		**-1.104**		**-1.195**		**-1.869**	
	0.004		*0.000*		*0.065*		*0.002*		*0.027*		*0.007*	
Mean of dependent variable	0.5474		0.5474		0.5638		0.5638		0.5198		0.5198	
-2 Log Likelihood	616.331		599.772		383.430		370.379		225.730		222.701	
Concordance	63.2%		63.6%		62.4%		63.4%		65.5%		65.0%	
Chi-Square	**37.890**		**54.448**		**24.827**		**37.878**		**19.367**		**22.397**	

Coefficient & Chi-Square in bold if significant at 95% significance level, based on 2-tailed test

Source: National Youth Survey

Table 13a: Logit Models Estimating Presence of Domestic Violence (Victimization or Perpetration) Severe Physical Abuse

Wave VII, 1987	Model 1 Excluding juvenile violence (n=723)		Model 2 Including juvenile violence (n=723)		Model 3 Females only, without juvenile violence(n=402)		Model 4 Females only, with juvenile violence(n=402)		Model 5 Males only, without juvenile violence(n=321)		Model 6 Males only, with juvenile violence(n=321)	
	B	Exp (B)	B	Exp (B)	B	Exp (B)	B	Exp (B)	B	Exp (B)	B	Exp (B)
Black	**1.123**	3.073	**1.157**	3.181	**1.078**	2.938	**1.077**	2.936	**1.169**	3.218	**1.257**	3.516
	0.000		*0.000*		*0.008*		*0.009*		*0.001*		*0.001*	
Hispanic	-0.471	0.624	-0.528	0.590	-0.236	0.790	-0.246	0.782	-0.810	0.445	-0.900	0.407
	0.469		*0.424*		*0.768*		*0.764*		*0.470*		*0.421*	
Other	0.474	1.606	0.357	1.428	0.079	1.083	-0.037	0.964	6.136	462.046	6.986	1081.660
	0.537		*0.647*		*0.929*		*0.967*		*0.650*		*0.753*	
Child poverty dummy	0.361	1.435	0.312	1.366	0.079	1.083	0.015	1.015	**0.580**	1.787	0.544	1.723
	0.091		*0.147*		*0.805*		*0.963*		*0.047*		*0.065*	
Ever abused as a child?	0.346	1.414	0.362	1.437	0.785	2.193	0.585	1.795	0.331	1.392	0.360	1.433
	0.464		*0.439*		*0.051*		*0.149*		*0.496*		*0.458*	
Attitude toward violence	**2.026**	7.581	1.312	3.712	**2.281**	9.785	1.454	4.281	**2.158**	8.652	1.537	4.652
	0.008		*0.089*		*0.048*		*0.205*		*0.039*		*0.155*	
Gender (female)	-0.164	0.849	0.079	1.083								
	0.430		*0.711*									
Interaction term:	0.398	1.490	0.152	1.165								
gender & child abuse	*0.511*		*0.802*									
Victim or offender of			**1.711**	5.535			**1.543**	4.680			**2.653**	14.194
juvenile violence			*0.000*				*0.000*				*0.012*	
Constant	**-1.987**		**-3.306**		**-2.151**		**-3.044**		**-2.121**		**-4.41**	
	0.000		*0.000*		*0.000*		*0.000*		*0.000*		*0.000*	
Mean of dependent variable	0.2490		0.2490		0.2164		0.2164		0.2897		0.2897	
-2 Log Likelihood	757.571		723.009		396.863		373.987		356.564		343.294	
Concordance	75.9%		76.3%		79.1%		78.9%		72.3%		73.5%	
Chi-Square	**53.914**		**88.475**		**23.096**		**45.971**		**29.856**		**43.126**	

Coefficient & Chi-Square in bold if significant at 95% significance level, based on 2-tailed test

Source: National Youth Survey

Table 13b: Logit Models Estimating Presence of Domestic Violence (Victimization or Perpetration) Moderate Verbal and Physical Abuse

Wave VII, 1987	Model 1 Excluding juvenile violence (n=723)		Model 2 Including juvenile violence (n=723)		Model 3 Females only, without juvenile violence(n=402)		Model 4 Females only, with juvenile violence(n=402)		Model 5 Males only, without juvenile violence(n=321)		Model 6 Males only, with juvenile violence(n=321)	
	B	Exp (B)	B	Exp (B)	B	Exp (B)	B	Exp (B)	B	Exp (B)	B	Exp (B)
Black	0.450	1.568	0.438	1.550	0.504	1.655	0.456	1.578	0.324	1.382	0.356	1.428
	0.188		*0.197*		*0.321*		*0.366*		*0.489*		*0.446*	
Hispanic	-0.814	0.443	-0.855	0.425	-0.213	0.808	-0.187	0.830	-5.348	0.005	-7.424	0.001
	0.436		*0.416*		*0.843*		*0.864*		*0.718*		*0.854*	
Other	-0.284	0.752	-0.404	0.668	-5.669	0.003	-5.751	0.003	9.042	8447.876	10.911	54792.841
	0.799		*0.717*		*0.670*		*0.664*		*0.805*		*0.913*	
Child poverty dummy	0.326	1.386	0.274	1.315	-0.084	0.920	-0.138	0.871	0.585	1.795	0.533	1.704
	0.242		*0.321*		*0.841*		*0.739*		*0.133*		*0.169*	
Ever abused as a child?	-0.128	0.88	-0.103	0.902	0.646	1.909	0.479	1.614	-0.058	0.944	-0.044	0.957
	0.847		*0.876*		*0.183*		*0.324*		*0.932*		*0.947*	
Attitude toward violence	**2.954**	19.178	**2.281**	9.785	**4.911**	135.834	**3.980**	53.536	1.822	6.185	1.284	3.611
	0.004		*0.025*		*0.002*		*0.010*		*0.194*		*0.373*	
Gender (female)	0.130	1.139	0.345	1.412								
	0.642		*0.221*									
Interaction term:	0.808	2.243	0.577	1.781								
gender & child abuse	*0.312*		*0.470*									
Victim or offender of			**1.778**	5.920			**1.538**	4.656			7.160	1286.852
juvenile violence			*0.001*				*0.005*				*0.681*	
Constant	**-3.303**		**-4.707**		**-3.677**		**-4.568**		**-2.931**		-9.758	
	0.000		*0.000*		*0.000*		*0.000*		*0.000*		*0.576*	
Mean of dependent variable	0.1134		0.1134		0.1070		0.1070		0.1215		0.1215	
-2 Log Likelihood	490.729		473.653		252.991		242.207		226.211		218.897	
Concordance	88.7%		88.7%		89.3%		89.3%		88.2%		88.2%	
Chi-Square	**20.575**		**37.651**		**20.468**		**31.252**		11.261		**18.575**	

Coefficient & Chi-Square in bold if significant at 95% significance level, based on 2-tailed test

Source: National Youth Survey

Table 13c: Logit Models Estimating Presence of Domestic Violence (Victimization or Perpetration) Severe or Moderate Physical Abuse

Wave VII, 1987	Model 1 Excluding juvenile violence (n=723)		Model 2 Including juvenile violence (n=723)		Model 3 Females only, without juvenile violence(n=402)		Model 4 Females only, with juvenile violence(n=402)		Model 5 Males only, without juvenile violence(n=321)		Model 6 Males only, with juvenile violence(n=321)	
	B	Exp (B)	B	Exp (B)	B	Exp (B)	B	Exp (B)	B	Exp (B)	B	Exp (B)
Black	**0.738**	2.092	**0.752**	2.122	**1.007**	2.738	**1.021**	2.775	0.528	1.696	0.571	1.770
	0.006		*0.006*		*0.016*		*0.018*		*0.137*		*0.114*	
Hispanic	-0.090	0.914	-0.104	0.901	-0.020	0.981	0.003	1.003	-0.063	0.939	-0.141	0.868
	0.855		*0.836*		*0.975*		*0.996*		*0.941*		*0.867*	
Other	-0.043	0.958	-0.151	0.860	-0.304	0.738	-0.414	0.661	5.372	215.386	5.233	187.410
	0.954		*0.841*		*0.711*		*0.617*		*0.691*		*0.698*	
Child poverty dummy	0.081	1.085	0.006	1.006	-0.298	0.742	-0.406	0.666	0.401	1.493	0.344	1.411
	0.679		*0.975*		*0.304*		*0.169*		*0.142*		*0.212*	
Ever abused as a child?	0.523	1.687	0.505	1.657	0.774	2.168	0.608	1.838	0.489	1.631	0.468	1.597
	0.250		*0.264*		*0.052*		*0.132*		*0.289*		*0.309*	
Attitude toward violence	**2.121**	8.344	**1.573**	4.820	**2.372**	10.718	1.841	6.302	**2.070**	7.927	1.457	4.295
	0.001		*0.018*		*0.012*		*0.056*		*0.027*		*0.130*	
Gender (female)	0.220	1.247	**0.432**	1.541								
	0.215		*0.020*									
Interaction term:	0.164	1.178	-0.013	0.988								
gender & child abuse	*0.782*		*0.983*									
Victim or offender of			**1.054**	2.870			**0.966**	2.629			**1.520**	4.573
juvenile violence			*0.000*				*0.000*				*0.003*	
Constant	**-1.109**		**-1.842**		**-0.908**		**-1.369**		**-1.154**		**-2.308**	
	0.000		*0.000*		*0.001*		*0.000*		*0.002*		*0.000*	
Mean of dependent variable	0.4592		0.4592		0.4552		0.4552		0.4642		0.4642	
-2 Log Likelihood	965.076		937.569		531.704		513.624		427.925		416.935	
Concordance	58.9%		61.1%		60.4%		64.7%		59.2%		60.1%	
Chi-Square	**32.395**		**59.902**		**22.358**		**40.438**		**15.426**		**26.416**	

Coefficient & Chi-Square in bold if significant at 95% significance level, based on 2-tailed test

Source: National Youth Survey

Table 14a: Logit Models Estimating Domestic Violence Victimization Severe Physical Abuse

Ever a victim of abuse (Wave VI or Wave VII)	Model 3 Females only (n=441)		Model 4 Males only (n=341)	
	B	Exp (B)	B	Exp (B)
Black	-0.134	0.875	**1.484**	**4.490**
	0.763		*0.000*	
Hispanic	0.125	1.133	-0.925	0.397
	0.843		*0.263*	
Other	-0.952	0.386	6.067	431.505
	0.395		*0.653*	
Age	0.063	1.065	-0.089	0.915
	0.406		*0.209*	
Child poverty dummy	**0.672**	**1.958**	0.529	1.697
	0.036		*0.060*	
Ever abused as a child?	**1.082**	**2.951**	0.581	1.788
	0.003		*0.191*	
Attitude toward violence	**3.210**	**24.767**	1.715	5.557
	0.015		*0.101*	
Constant	**-4.335**		0.079	
	0.014		*0.962*	
Mean of dependent variable	0.1498		0.3269	
-2 Log Likelihood	347.594		388.869	
Concordance	85.5%		72.1%	
Chi-Square	**31.593**		**42.887**	

Coefficient & Chi-square in bold if significant at 95% significance level, based on 2-tailed test

Source: National Youth Survey

Table 14b: Logit Models Estimating Domestic Violence Victimization Moderate Verbal and Physical Abuse

Ever a victim of abuse (Wave VI or Wave VII)	Model 3 Females only (n=441)		Model 4 Males only (n=341)	
	B	Exp (B)	B	Exp (B)
Black	-0.078	0.925	0.739	2.094
	0.879		*0.074*	
Hispanic	0.704	2.021	-6.499	0.002
	0.272		*0.731*	
Other	-0.440	0.644	10.056	23302.905
	0.698		*0.868*	
Age	0.068	1.070	-0.174	0.840
	0.453		*0.058*	
Child poverty dummy	0.366	1.441	0.328	1.388
	0.325		*0.377*	
Ever abused as a child?	**1.134**	**3.109**	-0.344	0.709
	0.005		*0.602*	
Attitude toward violence	**4.197**	**66.470**	0.211	1.235
	0.008		*0.880*	
Constant	**-5.117**		1.587	
	0.014		*0.461*	
Mean of dependent variable	0.1057		0.1357	
-2 Log Likelihood	270.771		256.871	
Concordance	90.0%		86.5%	
Chi-Square	**28.489**		**16.614**	

Coefficient & Chi-square is bold if significant at 95% significance level, based on 2-tailed test
Source: National Youth Survey

Table 14c: Logit Models Estimating Domestic Violence Victimization Severe or Moderate Physical Abuse

Ever a victim of abuse (Wave VI or Wave VII)	Model 3 Females only (n=441)		Model 4 Males only (n=341)	
	B	Exp (B)	B	Exp (B)
Black	0.207	1.230	**1.002**	**2.725**
	0.569		*0.006*	
Hispanic	-0.249	0.779	0.106	1.112
	0.628		*0.877*	
Other	-1.524	0.218	5.260	192.476
	0.076		*0.697*	
Age	0.031	1.032	-0.071	0.932
	0.561		*0.280*	
Child poverty dummy	**0.529**	**1.697**	**0.545**	**1.725**
	0.046		*0.042*	
Ever abused as a child?	**1.024**	**2.784**	0.780	2.183
	0.004		*0.089*	
Attitude toward violence	**2.366**	**10.659**	1.595	4.926
	0.011		*0.099*	
Constant	-1.788		0.506	
	0.139		*0.747*	
Mean of dependent variable	0.4295		0.4903	
-2 Log Likelihood	568.150		442.102	
Concordance	63.5%		63.3%	
Chi-Square	**36.329**		**30.481**	

Coefficient & Chi-square in bold if significant at 95% significance level, based on 2-tailed test

Source: National Youth Survey

Table 15a: Logit Models Estimating Domestic Violence Victimization Severe Physical Abuse

Victim of abuse between ages 18 & 24	Model 3 Females only (n=398)		Model 4 Males only (n=276)	
	B	**Exp (B)**	**B**	**Exp (B)**
Black	-0.272	0.762	**1.586**	**4.883**
	0.595		*0.000*	
Hispanic	0.463	1.589	-0.808	0.446
	0.472		*0.336*	
Other	-0.636	0.530	-3.875	0.021
	0.591		*0.774*	
Age	-0.094	0.911	-0.142	0.868
	0.281		*0.082*	
Child poverty dummy	0.605	1.831	0.291	1.338
	0.083		*0.363*	
Ever abused as a child?	**1.323**	**3.754**	0.820	2.271
	0.001		*0.125*	
Attitude toward violence	2.317	10.147	2.051	7.777
	0.101		*0.092*	
Constant	-1.011		0.935	
	0.601		*0.619*	
Mean of dependent variable	0.1337		0.3090	
-2 Log Likelihood	283.615		304.737	
Concordance	87.2%		73.9%	
Chi-Square	**32.429**		**34.469**	

Coefficient & Chi-square in bold if significant at 95% significance level, based on 2-tailed test

Source: National Youth Survey

Table 15b: Logit Models Estimating Domestic Violence Victimization Moderate Verbal and Physical Abuse

Victim of abuse between ages 18 & 24	Model 3 Females only (n=398)		Model 4 Males only (n=276)	
	B	**Exp (B)**	**B**	**Exp (B)**
Black	-0.140	0.869	0.625	1.868
	0.817		*0.185*	
Hispanic	0.608	1.836	-6.570	0.001
	0.402		*0.729*	
Other	-0.119	0.888	-6.244	0.002
	0.921		*0.918*	
Age	-0.093	0.911	-0.201	0.818
	0.379		*0.055*	
Child poverty dummy	0.497	1.645	0.272	1.313
	0.225		*0.507*	
Ever abused as a child?	**1.482**	**4.404**	0.059	1.061
	0.001		*0.932*	
Attitude toward violence	2.159	8.665	0.190	1.210
	0.199		*0.903*	
Constant	-1.517		2.145	
	0.521		*0.371*	
Mean of dependent variable	0.0916		0.1389	
-2 Log Likelihood	214.621		210.540	
Concordance	91.2%		86.2%	
Chi-Square	**27.031**		10.664	

Coefficient & Chi-Square in bold if significant at 95% significance level, based on 2-tailed test

Source: National Youth Survey

Table 15c: Logit Models Estimating Domestic Violence Victimization Severe or Moderate Physical Abuse

Victim of abuse between ages 18 & 24	Model 3 Females only (n=398)		Model 4 Males only (n=276)	
	B	**Exp (B)**	**B**	**Exp (B)**
Black	0.072	1.075	**1.415**	**4.117**
	0.844		*0.001*	
Hispanic	-0.212	0.809	-0.150	0.861
	0.691		*0.825*	
Other	-1.045	0.352	5.666	288.861
	0.247		*0.675*	
Age	-0.079	0.924	-0.133	0.876
	0.165		*0.072*	
Child poverty dummy	**0.701**	**2.016**	0.342	1.408
	0.009		*0.251*	
Ever abused as a child?	**0.871**	**2.390**	0.609	1.838
	0.014		*0.267*	
Attitude toward violence	1.727	5.624	**2.296**	**9.939**
	0.073		*0.038*	
Constant	0.509		1.471	
	0.686		*0.392*	
Mean of dependent variable	0.3985		0.4792	
-2 Log Likelihood	503.463		350.682	
Concordance	63.8%		64.9%	
Chi-Square	**32.092**		**31.414**	

Coefficient & Chi-Square in bold if significant at 95% significance level, based on 2-tailed test

Source: National Youth Survey

Table 16: NYS - Domestic Violence Rates by Race

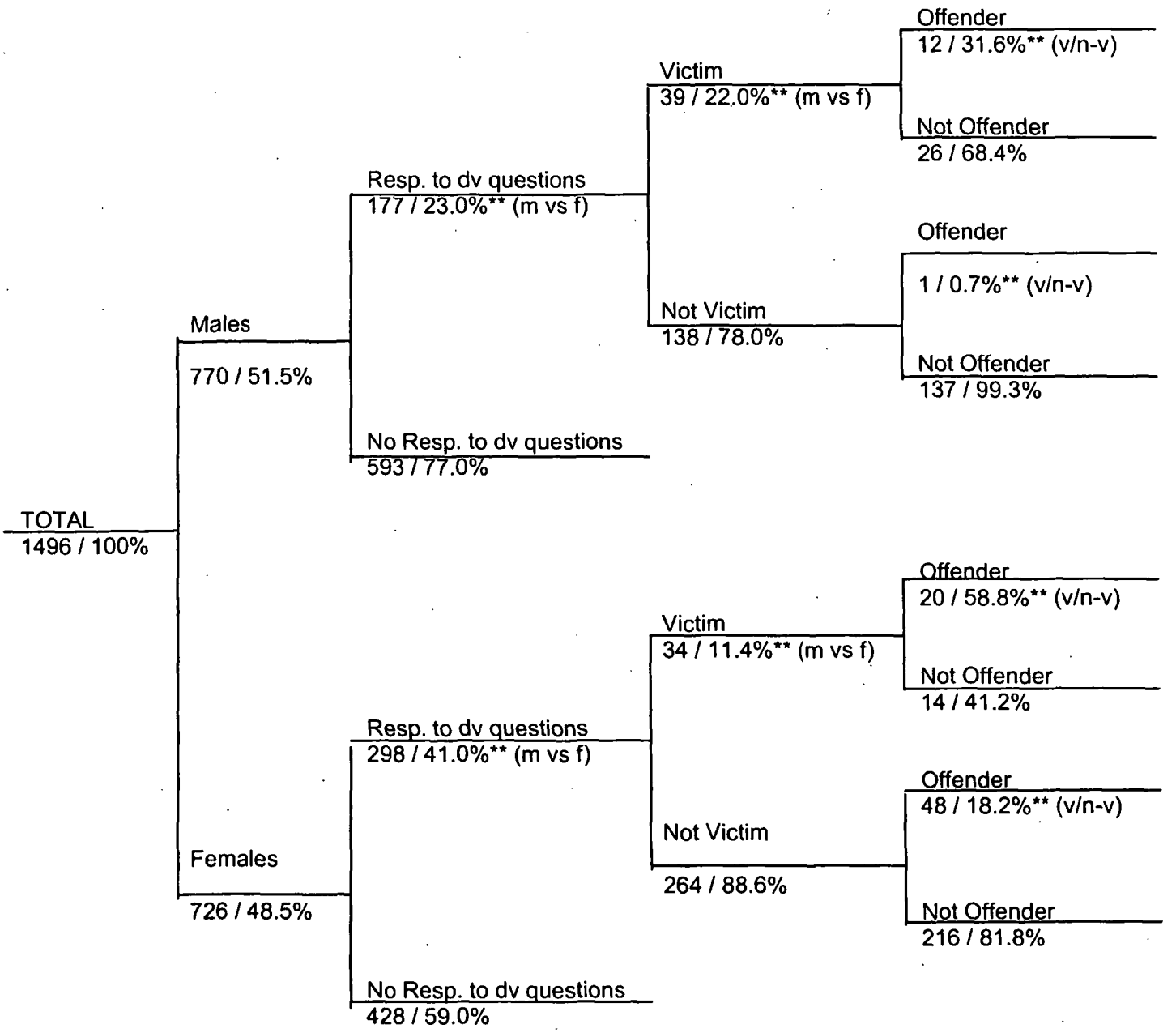
Wave VI	Race								t-statistics	
	Total (n=475)	White (n=399)	African American (n=50)	Hispanic (n=22)	Asian (n=1)	American Indian (n=3)	Unknown (n=0)	All Non-White (n=76)	White vs. African-American	White vs. Non-White
Domestic Violence Victimization										
Severe Physical Abuse	0.1537	0.1303	0.3000	0.2273	0.0000	0.3333	N/A	0.2763	**-2.510**	**2.687**
Moderate Verbal and Physical Abuse	0.0779	0.0602	0.1800	0.1364	0.0000	0.3333	N/A	0.1711	**-2.134**	**2.460**
Severe or Moderate Physical Abuse	0.3874	0.3559	0.5800	0.5000	1.0000	0.3333	N/A	0.5526	**-3.102**	**3.162**
Domestic Violence Perpetration										
Severe Physical Abuse	0.1709	0.1583	0.2600	0.1818	0.0000	0.3333	N/A	0.2368	-1.558	1.499
Moderate Verbal and Physical Abuse	0.0760	0.0754	0.0600	0.1364	0.0000	0.0000	N/A	0.0790	0.392	0.107
Severe or Moderate Physical Abuse	0.4620	0.4397	0.6000	0.5000	0.0000	1.0000	N/A	0.5789	**-2.151**	**2.238**

Wave VII	Race								t-statistics	
	Total (n=723)	White (n=618)	African American (n=79)	Hispanic (n=18)	Asian (n=3)	American Indian (n=4)	Unknown (n=1)	All Non-White (n=105)	White vs. African-American	White vs. Non-White
Domestic Violence Perpetration										
Severe Physical Abuse	0.1784	0.1537	0.4051	0.0556	0.3333	0.0000	0.0000	0.3238	**-4.375**	**3.534**
Moderate Verbal and Physical Abuse	0.0913	0.0874	0.1266	0.0556	0.3333	0.0000	0.0000	0.1143	-0.997	0.884
Severe or Moderate Physical Abuse	0.3624	0.3398	0.5570	0.3333	0.6667	0.0000	0.0000	0.4952	**-3.656**	**2.955**
Domestic Violence Victimization										
Severe Physical Abuse	0.1452	0.1246	0.2911	0.1111	1.0000	0.0000	0.0000	0.2667	**-3.135**	**3.132**
Moderate Verbal and Physical Abuse	0.0553	0.0469	0.1266	0.0556	0.0000	0.0000	0.0000	0.1048	**-2.064**	1.853
Severe or Moderate Physical Abuse	0.3651	0.3447	0.5190	0.3333	1.0000	0.2500	0.0000	0.4857	**-2.919**	**2.681**

t-statistic is bold if significant at 95% level, based on 2-tailed test

Table 17a: Domestic Violence Offending by Victimization Status, Wave VI

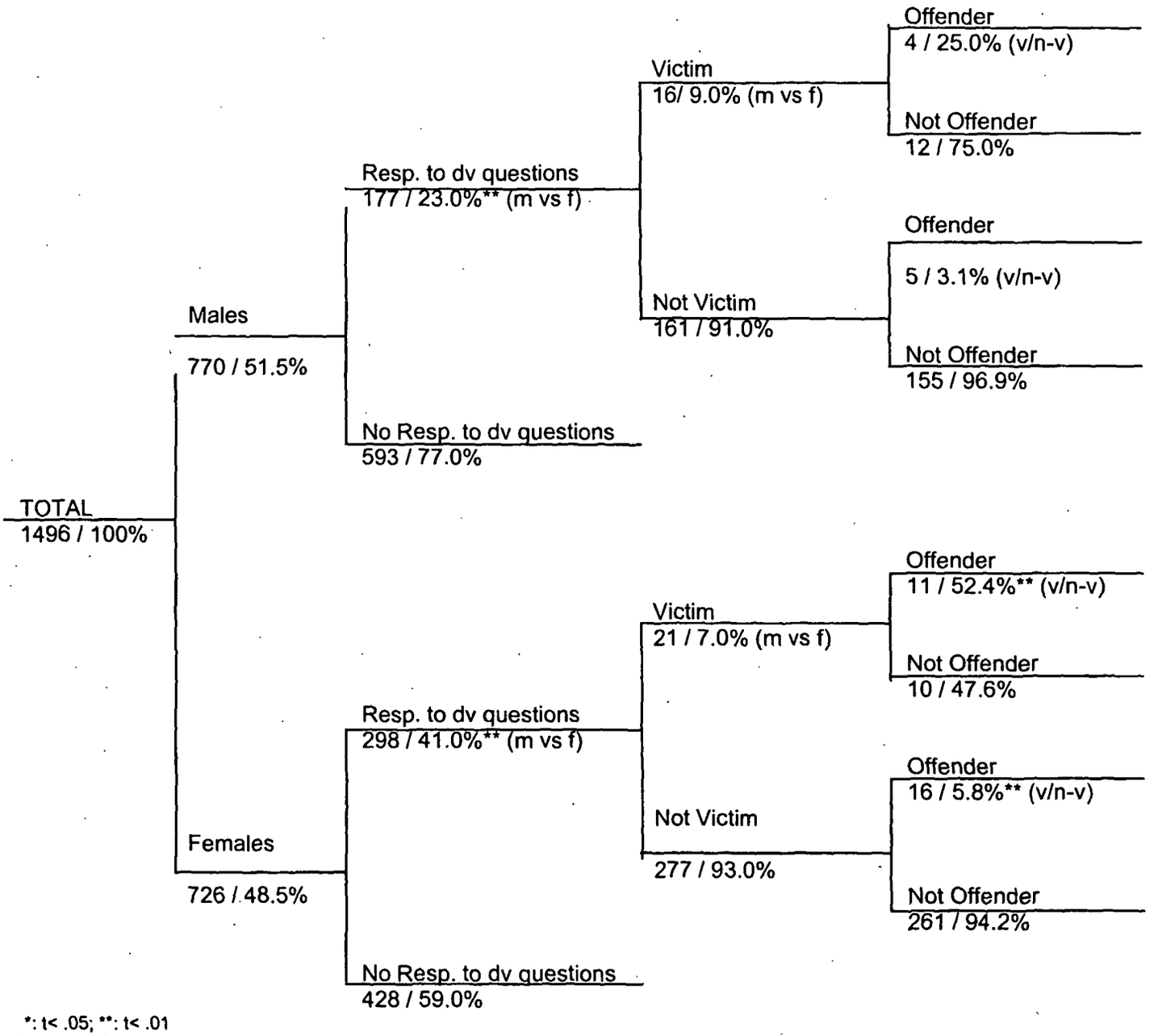
Severe Physical Abuse: If partner kicked/bit/hit OR hit with something OR beat you up OR threatened with gun OR used knife or gun



*: t< .05; **: t< .01
based on 2-tailed test

Table 17b: Domestic Violence Offending by Victimization Status, Wave VI

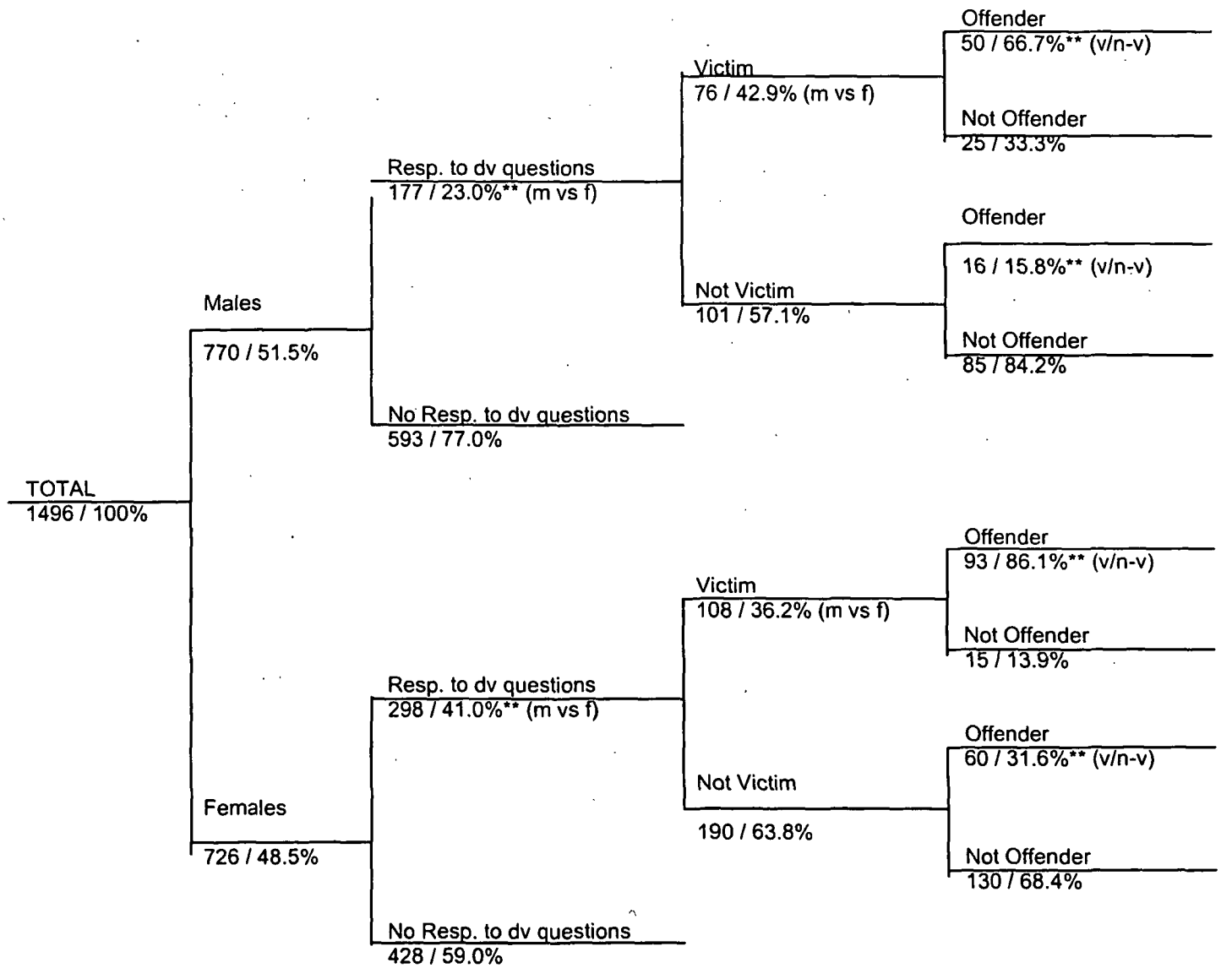
Moderate Verbal and Physical abuse: If partner insulted/swore at AND threatened to hit/throw something AND threw something AND pushed/grabbed/shoved AND slapped



*: t< .05; **: t< .01
based on 2-tailed test

Table 17c: Domestic Violence Offending by Victimization Status, Wave VI

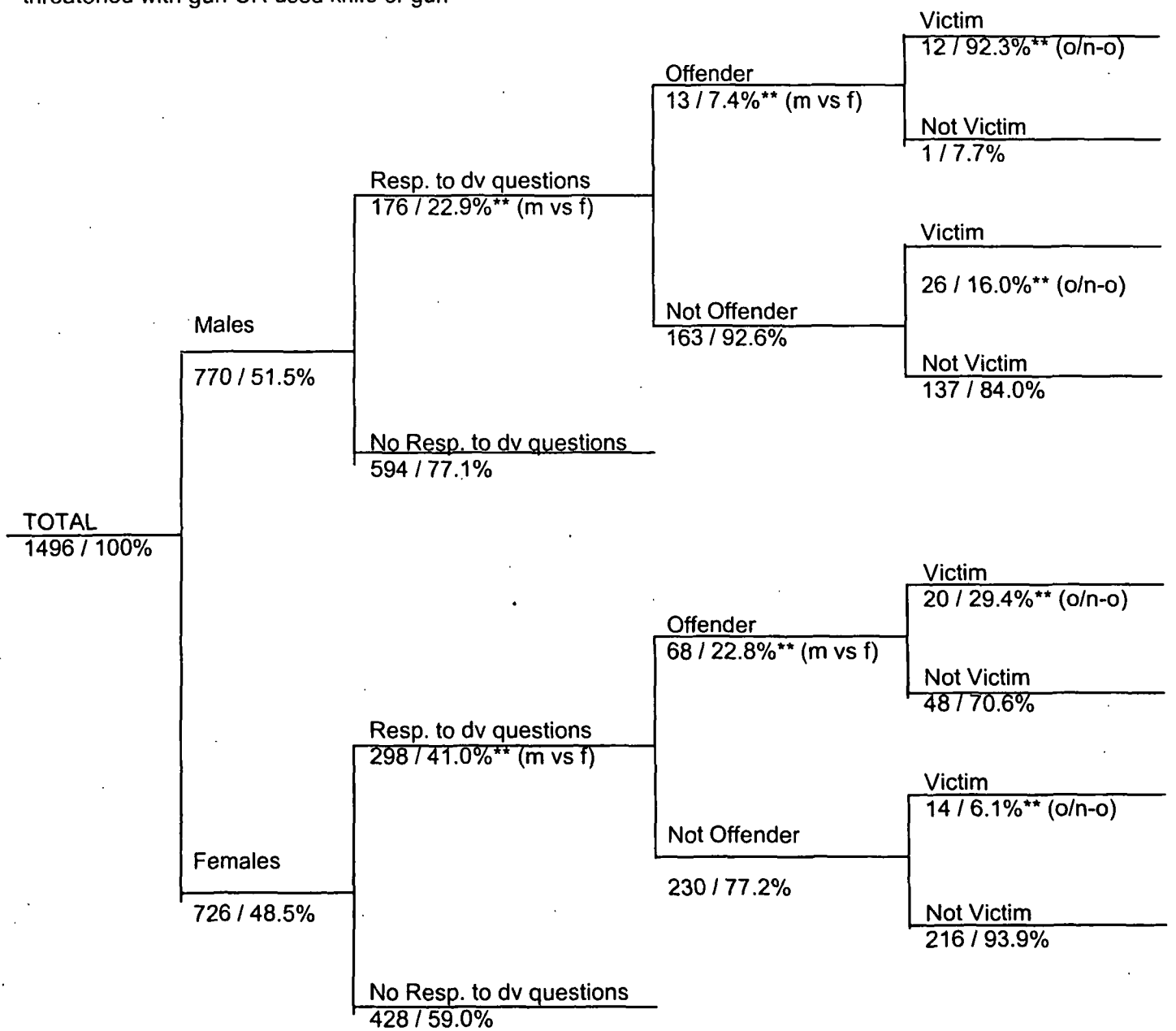
Severe or Moderate Physical Abuse: If partner threw something OR pushed/grabbed/shoved OR slapped OR kicked/bit/hit OR hit with something OR beat you up OR threatened with gun OR used knife or gun



*: t< .05; **: t< .01
based on 2-tailed test

Table 18a: Domestic Violence Victimization by Offending Status, Wave VI

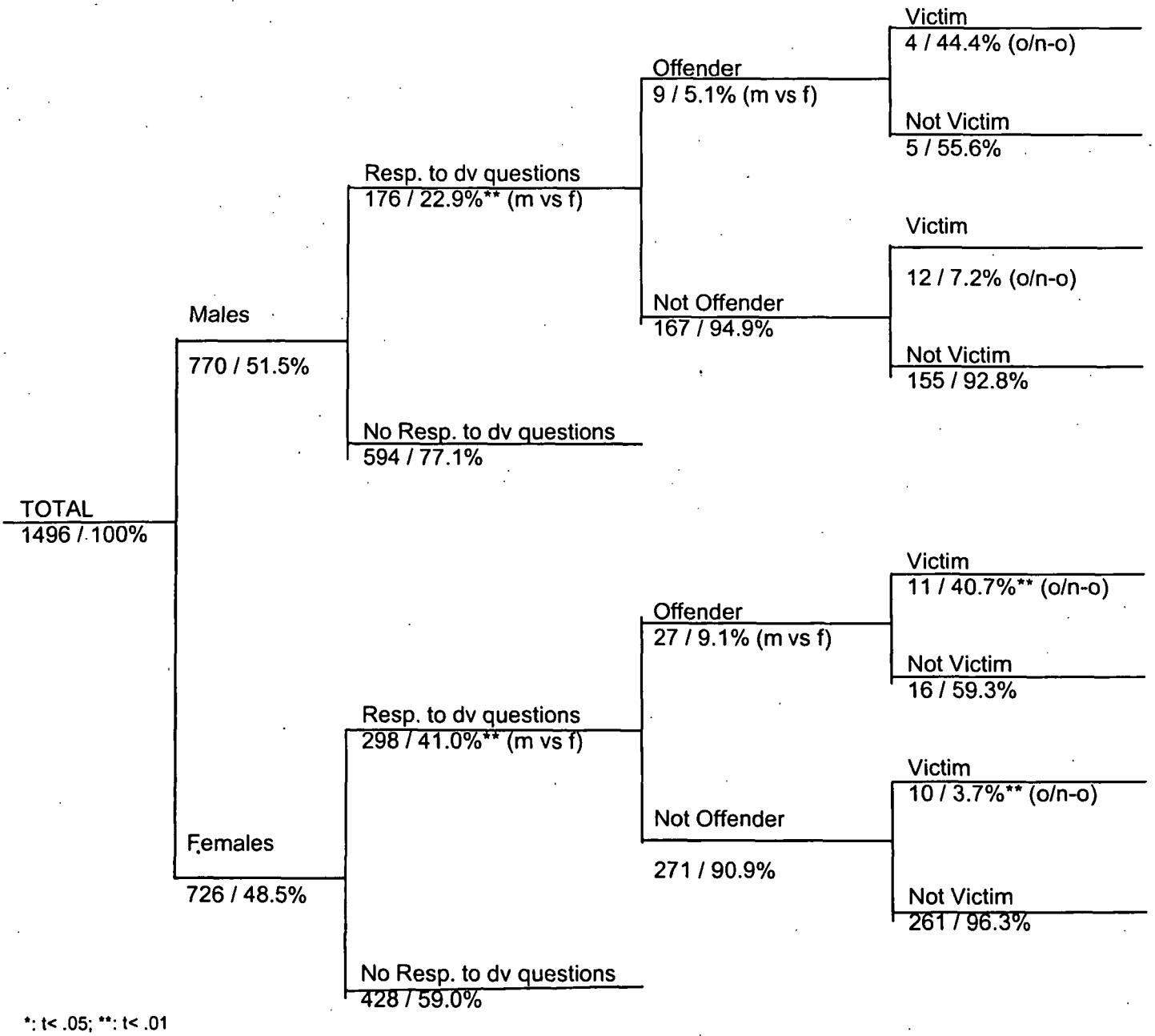
Severe Physical Abuse: If partner kicked/bit/hit OR hit with something OR beat you up OR threatened with gun OR used knife or gun



*: t< .05; **: t< .01
based on 2-tailed test

Table 18b: Domestic Violence Victimization by Offending Status, Wave VI

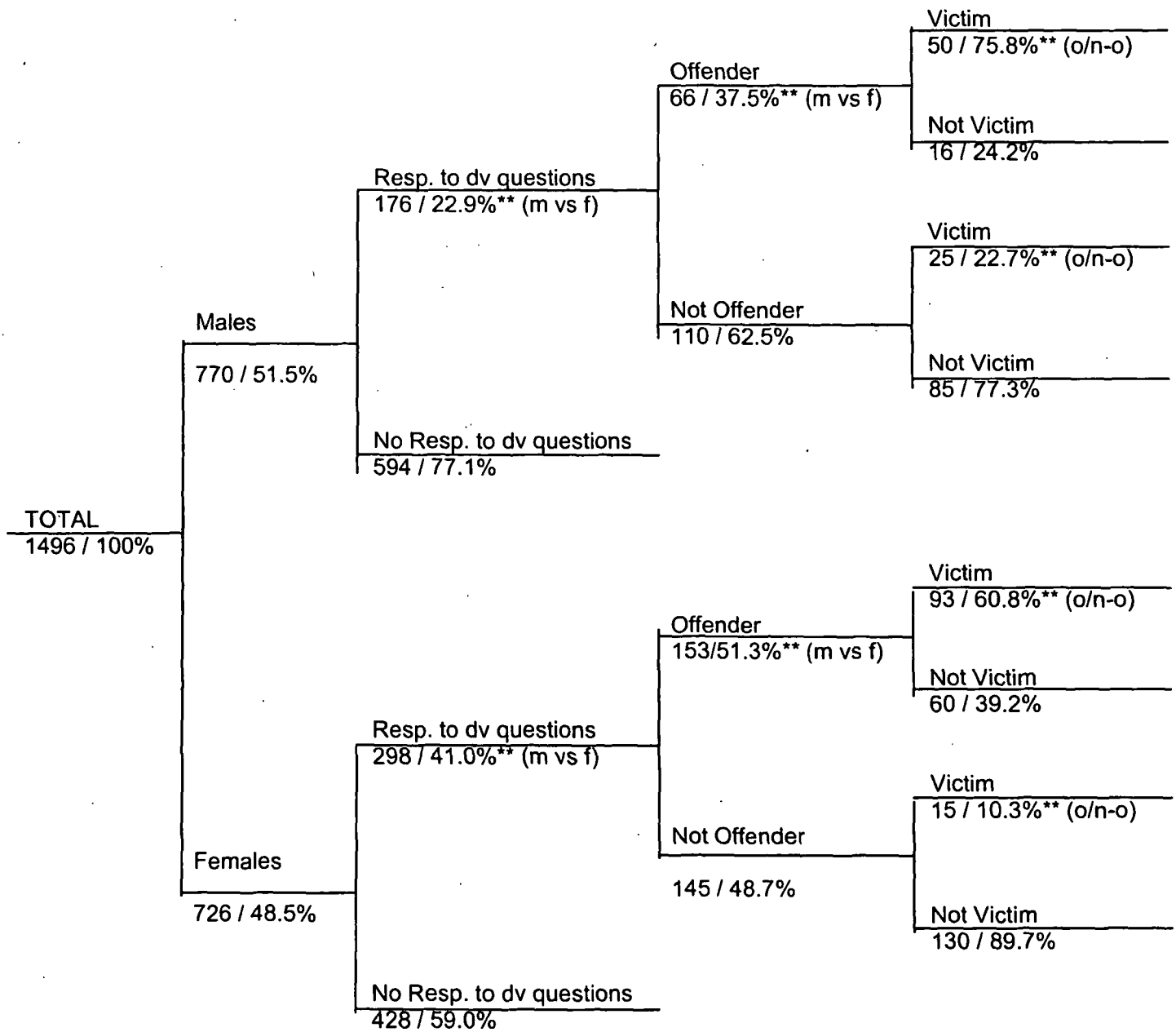
Moderate Verbal and Physical abuse: If partner insulted/swore at AND threatened to hit/throw something AND threw something AND pushed/grabbed/shoved AND slapped



*: t< .05; **: t< .01
based on 2-tailed test

Table 18c: Domestic Violence Victimization by Offending Status, Wave VI

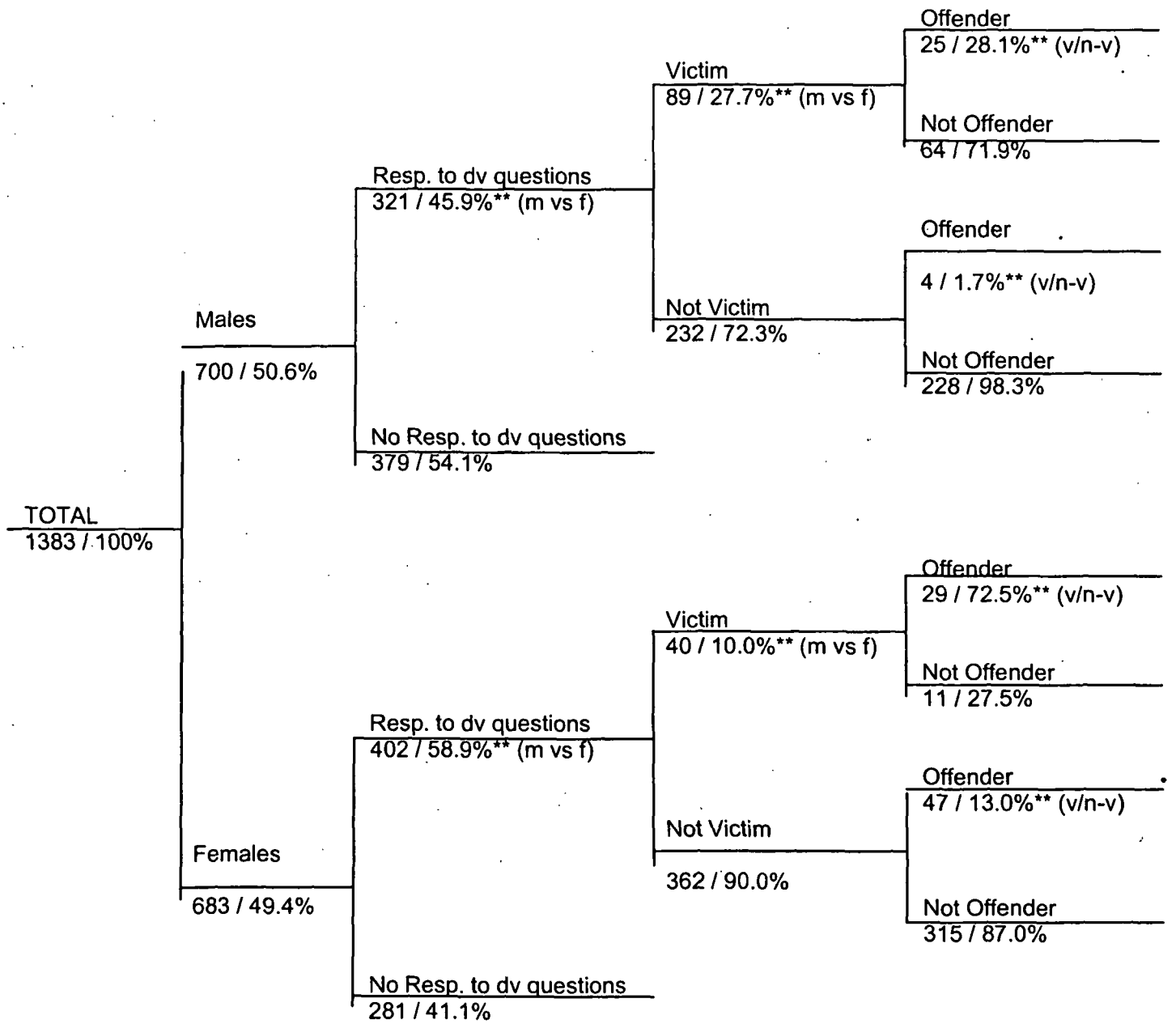
Severe or Moderate Physical Abuse: If partner threw something OR pushed/grabbed/shoved OR slapped OR kicked/bit/hit OR hit with something OR beat you up OR threatened with gun OR used knife or gun



*: t< .05; **: t< .01
based on 2-tailed test

Table 19a: Domestic Violence Offending by Victimization Status, Wave VII

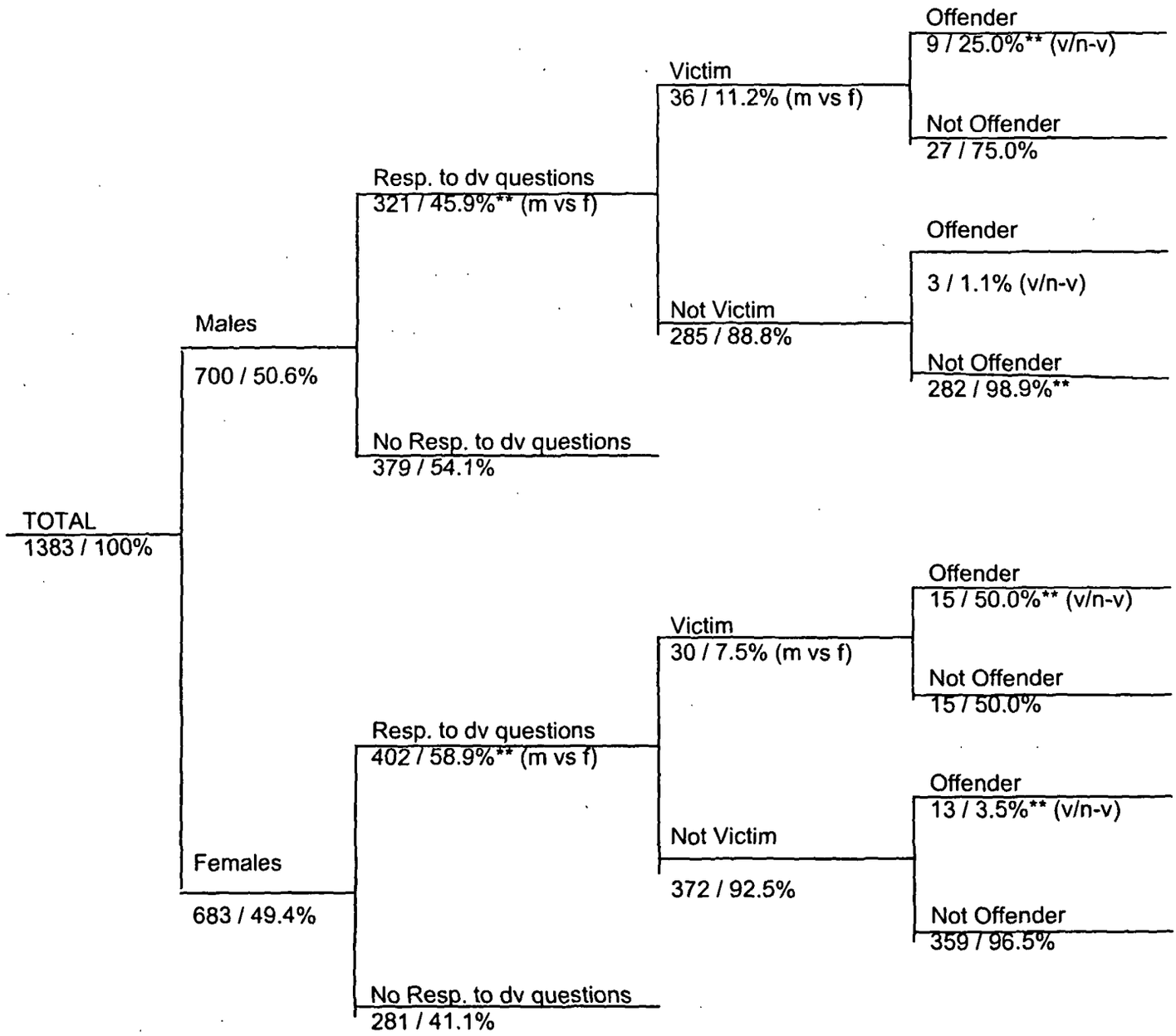
Severe Physical Abuse: If partner kicked/bit/hit OR hit with something OR beat you up OR threatened with gun OR used knife or gun



*: t< .05; **: t< .01
based on 2-tailed test

Table 19b: Domestic Violence Offending by Victimization Status, Wave VII

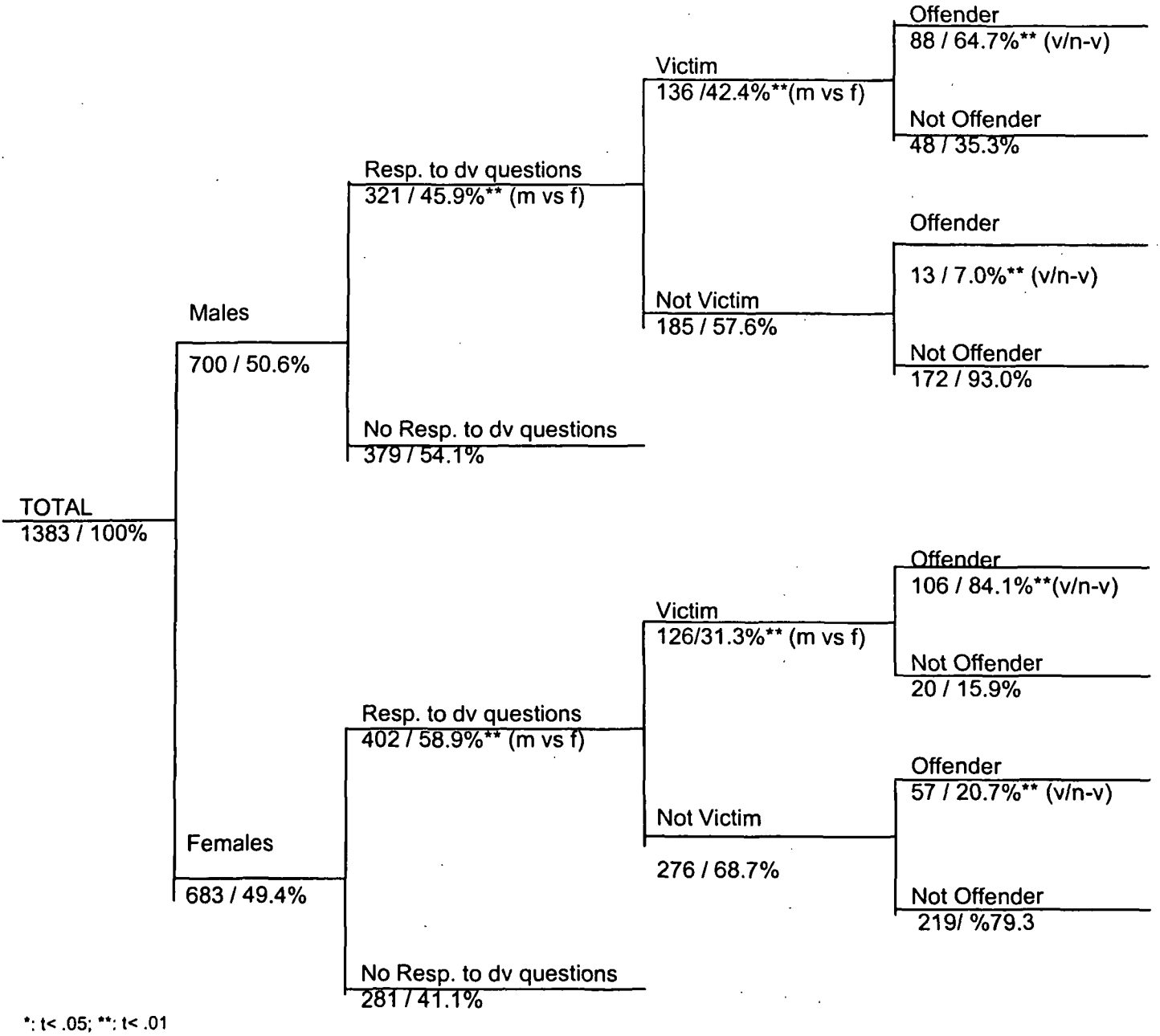
Moderate Verbal and Physical abuse: If partner insulted/swore at AND threatened to hit/throw something AND threw something AND pushed/grabbed/shoved AND slapped



*: t< .05; **: t< .01
based on 2-tailed test
based on 2-tailed test

Table 19c: Domestic Violence Offending by Victimization Status, Wave VII

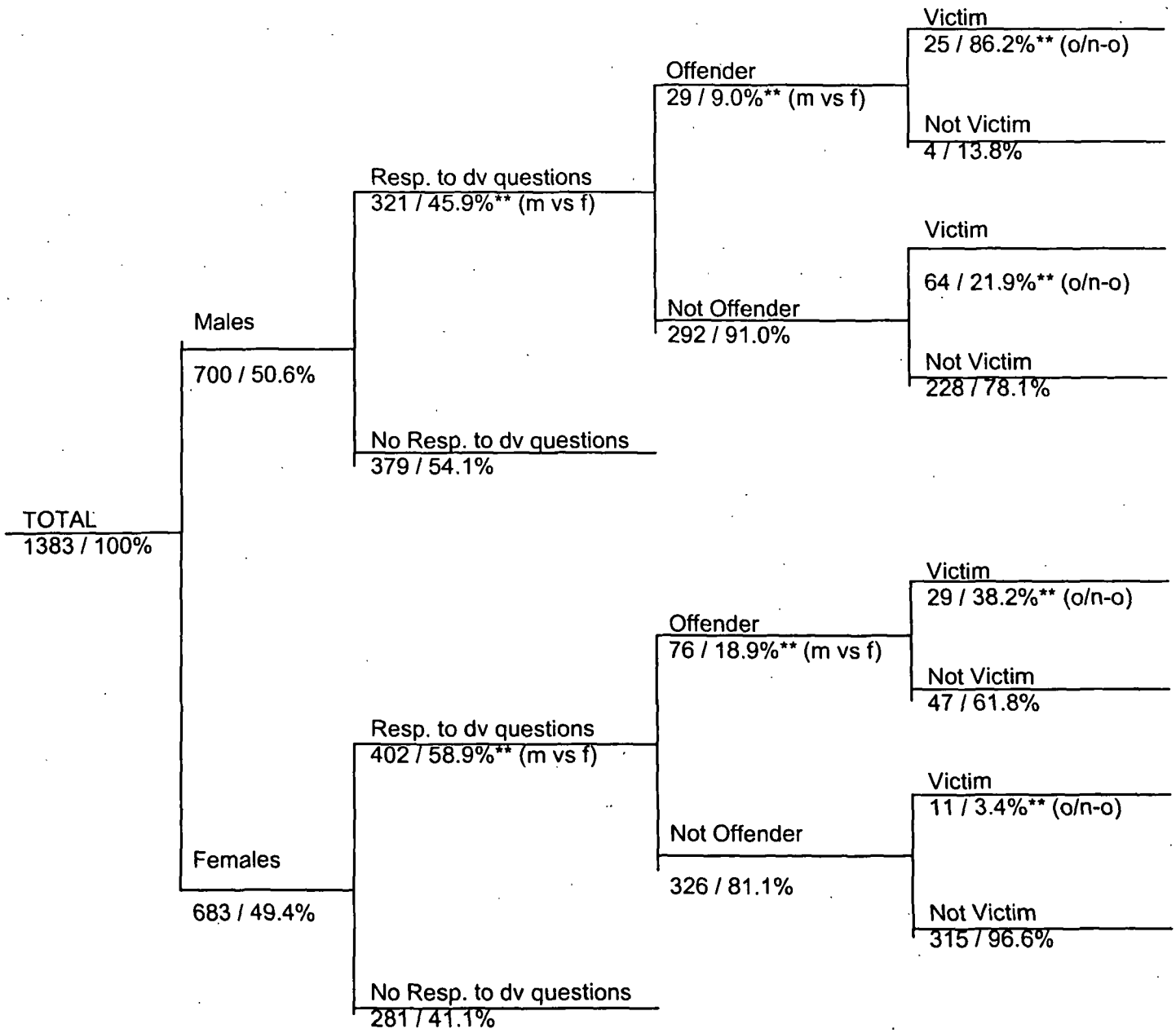
Severe or Moderate Physical Abuse: If partner threw something OR pushed/grabbed/shoved OR slapped OR kicked/bit/hit OR hit with something OR beat you up OR threatened with gun OR used knife or gun



*: t< .05; **: t< .01
based on 2-tailed test

Table 20a: Domestic Violence Victimization by Offending Status, Wave VII

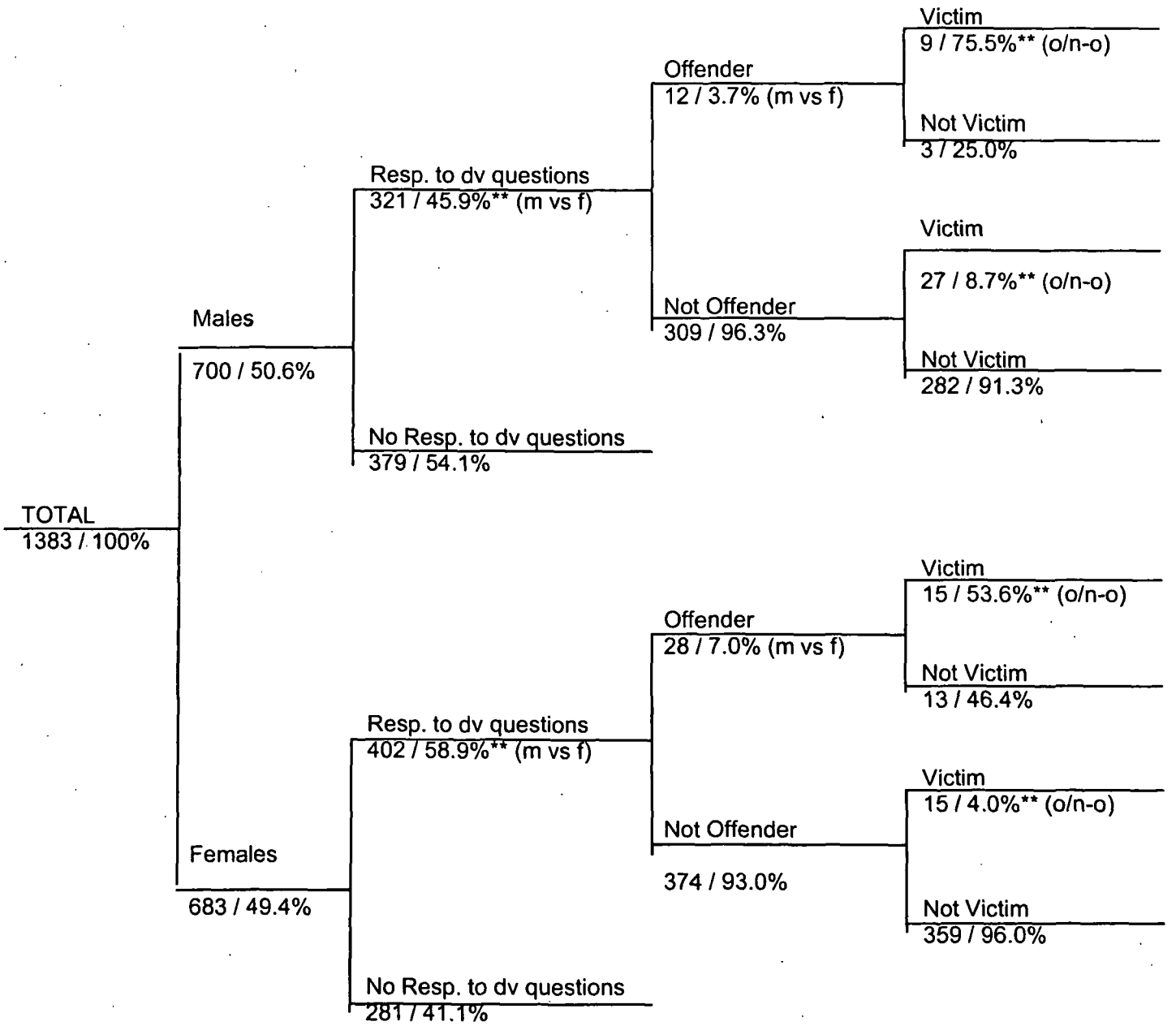
Severe Physical Abuse: If partner kicked/bit/hit OR hit with something OR beat you up OR threatened with gun OR used knife or gun



*: t< .05; **: t< .01
based on 2-tailed test

Table 20b: Domestic Violence Victimization by Offending Status, Wave VII

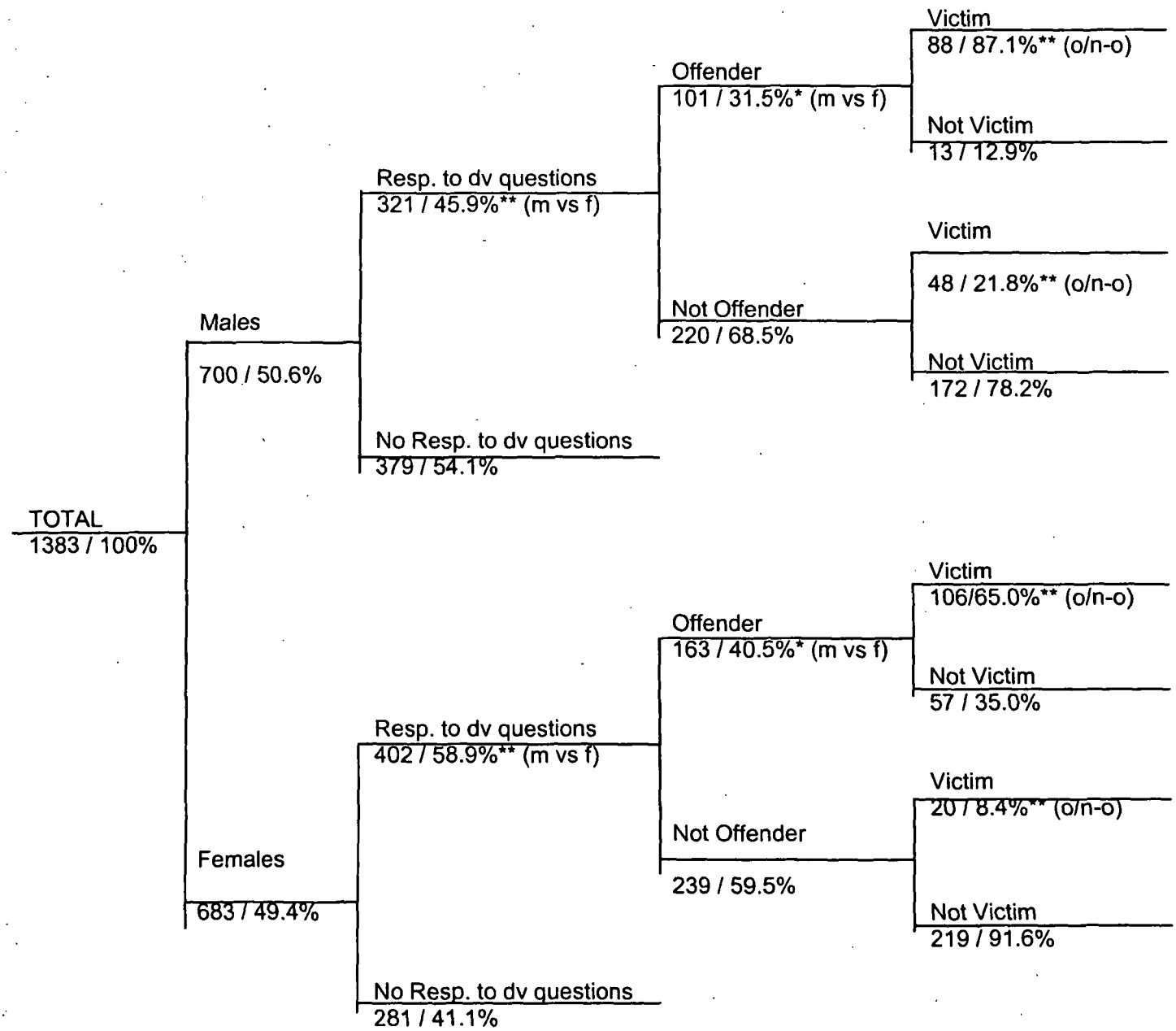
Moderate Verbal and Physical abuse: If partner insulted/swore at AND threatened to hit/throw something AND threw something AND pushed/grabbed/shoved AND slapped



*: t< .05; **: t< .01
based on 2-tailed test

Table 20c: Domestic Violence Victimization by Offending Status, Wave VII

Severe or Moderate Physical Abuse: If partner threw something OR pushed/grabbed/shoved OR slapped OR kicked/bit/hit OR hit with something OR beat you up OR threatened with gun OR used knife or gun



*: t< .05; **: t< .01
based on 2-tailed test

Table 21: Residual Difference Analysis of Domestic Violence Victimization

Severe or Moderate Physical Abuse, Wave VI

	Actual White Rate (P^W)	Predicted White Rate ($P\hat{}^W$)	Actual Non-White Rate (P^N)	Predicted Non-White Rate ($P\hat{}^N$)	Equal Treatment Rate for Non-Whites ($P\sim^N$)
Domestic Violence Rate	0.3559	0.3558	0.5526	0.5526	0.4430

Percentage of Racial Gap Attributable to Difference in Treatment:

$$D=\frac{P\sim N - P\hat{}N}{P\hat{}W - P\hat{}N} = \frac{.4430 - .5526}{.3558 - .5526} = \mathbf{55.69\%}$$

% of Explained Gap per Variable:

	Actual Non-White Rate (P^N)	Non-White Rate with i'th White Characteristic ($P\hat{}_i$)	Difference (P^N) - ($P\hat{}_i$)	% Explained Gap per Variable
Child Poverty dummy	0.5226	0.5243	-0.0017	3.59%
Ever abused as a child?	0.5226	0.5472	-0.0246	51.90%
Attitude toward violence	0.5226	0.5268	-0.0042	8.86%
Gender (female)	0.5226	0.5395	-0.0169	35.65%
			-0.0474	100.00%

Source: National Youth Survey Wave VI

Table 22: Residual Difference Analysis of Domestic Violence Victimization
Severe or Moderate Physical Abuse, Wave VII

	Actual White Rate (P^W)	Predicted White Rate ($P\hat{}^W$)	Actual Non-White Rate (P^N)	Predicted Non-White Rate ($P\hat{}^N$)	Equal Treatment Rate for Non-Whites ($P\sim^N$)
Domestic Violence Rate	0.3398	0.3398	0.4952	0.4952	0.4021

Percentage of Racial Gap Attributable to Difference in Treatment:

$$D = \frac{P\sim N - P\hat{}N}{P\hat{}W - P\hat{}N} = \frac{.4021 - .4952}{.3398 - .4952} = \mathbf{59.91\%}$$

% of Explained Gap per Variable:	Actual Non-White Rate (P^N)	Non-White Rate with i'th White Characteristic ($P\hat{}_I$)	Difference $(P^N) - (P\hat{}_I)$	% Explained Gap per Variable
Child Poverty dummy	0.4952	0.4926	0.0026	7.14%
Ever abused as a child?	0.4952	0.4918	0.0034	9.34%
Attitude toward violence	0.4952	0.4704	0.0248	68.13%
Gender (female)	0.4952	0.4896	0.0056	15.38%
			0.0364	100.00%

Source: National Youth Survey Wave VII

Table 23: Dropout Analysis

	Total			Males			Females		
	Dropped Out	Valid	t-statistic	Dropped Out	Valid	t-statistic	Dropped Out	Valid	t-statistic
Wave VI:									
Everyone:									
Age	14.2489	13.8168	**3.139**	14.4054	13.8714	**3.287**	13.9630	13.7590	*.894*
Child Poverty	0.2533	0.2473	*.194*	0.2568	0.2701	*-.336*	0.2469	0.2231	*.485*
Child Abuse (Wave I)	0.0655	0.0555	*.610*	0.0676	0.0649	*.119*	0.0617	0.0455	*.655*
Child Abuse (WaveI-Wave V)	0.0742	0.0902	*-.795*	0.0492	0.0845	*-1.186*	0.0690	0.0953	*-.475*
Probability of Being in School	0.9782	0.9813	*-.321*	0.9730	0.9844	*-.974*	0.9877	0.9780	*.576*
Gender	0.3537	0.4853	***-3.847***						
DV Respondents:									
Age	13.5720	14.6695	***-11.308***	13.7233	14.9379	***-8.609***	13.3517	14.5101	***-8.509***
Child Poverty	0.2368	0.2779	*-1.724*	0.2510	0.3390	***-2.251***	0.2161	0.2416	*-.836*
Child Abuse (Wave I)	0.0616	0.0442	*1.494*	0.0715	0.0396	*1.829*	0.0472	0.0470	*.011*
Child Abuse (Wave I-Wave V)	0.0824	0.1032	*-1.298*	0.0889	0.0549	*1.603*	0.0668	0.1372	**-2.940**
Probability of Being in School	0.9848	0.9705	*1.678*	0.9852	0.9718	*1.011*	0.9843	0.9698	*1.275*
Gender	0.4072	0.6274	***-8.403***						
Wave VII:									
Everyone:									
Age	14.0293	13.8360	*1.702*	14.1198	13.9073	*1.501*	13.8710	13.7628	*.569*
Child Poverty	0.2991	0.2355	***2.326***	0.2949	0.2596	*1.004*	0.3065	0.2108	***2.153***
Child Abuse (Wave I)	0.0733	0.0528	*1.339*	0.0737	0.0628	*.571*	0.0726	0.0425	*1.223*
Child Abuse (Wave I-Wave V)	0.1085	0.0831	*1.379*	0.1083	0.0769	*1.036*	0.1406	0.0896	*1.127*
Probability of Being in School	0.9707	0.9834	*-1.300*	0.9816	0.9829	*-0.129*	0.9516	0.9839	*-1.619*
Gender	0.3636	0.4935	***-4.425***						
DV Respondents:									
Age	13.6008	14.2531	***-6.968***	13.6985	14.4393	***-5.609***	13.4568	14.1045	***-4.788***
Child Poverty	0.2595	0.2324	*1.294*	0.2647	0.2741	*-0.309*	0.2519	0.1990	*1.798*
Child Abuse (Wave I)	0.0669	0.0429	***2.198***	0.0670	0.0623	*0.274*	0.0667	0.0274	***2.648***
Child Abuse (Wave I-Wave V)	0.0938	0.0802	*0.994*	0.0905	0.0673	*1.187*	0.1018	0.0875	*0.649*
Probability of Being in School	0.9850	0.9751	*1.427*	0.9883	0.972	*1.595*	0.9802	0.9776	*0.260*
Gender	0.4042	0.5560	***-6.291***						