This study examined the associations between household income, race/ethnicity, and exposure to violence in a nationally representative sample of youth. Participants included a national probability sample of adolescents (ages 12–17), who completed a telephone interview that assessed lifetime occurrences of witnessing violence, receipt of physically abusive punishment, physical assault, and sexual assault. Results indicated that as household income increased prevalence of witnessing violence, receipt of physically abusive punishment, physical assault, and sexual assault decreased for Caucasian but not African-American or Hispanic youth. In addition to the interaction of household income with race/ethnicity, a main effect of race/ethnicity across income groups was apparent for witnessing violence. More specifically, African-American and Hispanic youth reported significantly higher rates of witnessing violence at each income level relative to their Caucasian counterparts. Findings from this nationally representative sample of youth suggest that it may be simplistic to interpret high rates of violence exposure among minority youth as due to their disproportionate
An inverse relationship between household income and violence exposure in youth has been reported in numerous studies (e.g., Garbarino & Crouter, 1978; Gelles, 1992; Gelles & Straus, 1979; Steinberg, Catalano, & Dooley, 1981). Findings also suggest that minority children, compared to Caucasian youth, are exposed to higher rates of familial violence (e.g., Hampton & Gelles, 1991) and serious violent crime (e.g., Perkins, 1997). Since minority youth are over-represented among the economically disadvantaged in the United States (Federal Interagency Forum on Child and Family Statistics, 1998), one possible interpretation of these findings is that minority youth experience higher rates of victimization as a correlate of higher rates of poverty. Several studies to date, however, suggest that the interplay of income, race/ethnicity, and violence exposure in youth may be complex.

For example, Spearly and Lauderdale (1983) reported different patterns of predictors for child maltreatment among Caucasian, African-American, and Hispanics in their examination of maltreatment cases as recorded in central registry data. More specifically, an inverse relationship between the proportion of affluent families and rates of child maltreatment was noted for Caucasians, but not African-Americans or Hispanics. Similarly, Korbin, Coulton, Chard, Platt-Houston, and Su (1998) examined characteristics of communities with either high or low rates of official maltreatment reports within census tracts that were either predominantly African-American or Caucasian. Consistent with the Spearly and Lauderdale (1983) results, Korbin et al. reported that within Caucasian census tracts, indicators of community impoverishment were significant predictors of maltreatment report rates. For African-American census tracts, however, the magnitude of the relationship between impoverishment and maltreatment report rates was only modest.

As suggested by Korbin et al. (1998), considerable caution is warranted in interpreting the weaker association between impoverishment and official reports of child maltreatment in African-Americans due to possible study limitations. First, the income distribution within the African-American tracts examined in the Korbin et al. study was significantly skewed, such that their African-American sample was characterized by extreme poverty. Thus, the restricted range for African-Americans on the measure of impoverishment may have diminished the association between impoverishment and maltreatment report rates. Further, the results of both the Spearly and Lauderdale (1983) and Korbin et al. studies are difficult to interpret given the possibility that racial biases may have influenced rates of official reports of maltreatment (e.g., Hampton & Newberger, 1985), which were used as sources of information regarding youth victimization. Thus, data on exposure to violence among youth from sources other than official reports are needed. Further, such information is needed from large samples representative of the diverse experiences characteristic of Caucasian, African-American, and Hispanic families in the United States.
Toward this end, the National Family Violence Surveys (NFVS), conducted in 1976 and 1985, provided opportunities to examine the associations between household income and parental reports of physical violence against children across racial/ethnic groups. Each NFVS involved a telephone survey of parents within a national probability sample of households in the United States. Comparison of NFVS data collected in 1976 and 1985 revealed that rates of severe and very severe violence toward children declined during this period while levels of household income rose for the total sample (Gelles, 1992; Gelles & Straus, 1987). Analyses conducted on the total NFVS 1985 sample revealed significantly higher rates of severe and very severe violence toward children in households at or below, compared to those above, the poverty line (Gelles, 1992). Additional analyses examining only African-American families in the NFVS 1985 survey, however, found that total family income was not significantly associated with parent reported rates of violence toward children (Hampton & Gelles, 1991). Further, rates of violence toward children reported by African-American parents did not decline during the period from 1976 to 1985, despite improvements in some economic indicators (e.g., increased median household income) among African-American families during this period (Hampton, Gelles, & Harrop, 1991).

The NFVS findings add to existing literature (Korbin et al., 1998; Spearly & Lauderdale, 1983) that suggests that the association between household income and rates of violence toward youth varies as a function of race/ethnicity. Across studies, indicators of income levels were inversely related to risk of victimization for youth from Caucasian families. Among African-American families, increases in household income had negligible effects on risk of victimization for youth. Additional information regarding the association between household income and risk of victimization among Hispanic youth is needed. Further, research examining household income as a risk factor for a broader range of violent events (e.g., witnessing violence, physical assault, physically abusive punishment, sexual assault) would further extend this literature. Another limitation of the existing literature is its reliance on official records or parental reports as a means of assessing victimization of youth. As noted above, official reports may be subject to a number of biases (e.g., Hampton & Newberger, 1985), and previous research (Martinez & Richters, 1993) suggests that parents tend to underestimate the level of violence to which their children are exposed. Hence, data based on youth self-reports of victimization experiences, rather than official records of maltreatment or parental reports, are needed.

The purpose of the present study was to extend findings from previous studies by examining the prevalence of a variety of victimization experiences as reported by Caucasian, African-American, and Hispanic youth from lower, middle, and upper income households in a large nationally representative sample of youth. Analyses were conducted to examine whether household income was predictive of victimization experiences within each racial/ethnic (i.e., Caucasian, African-American, Hispanic) group. It was predicted that rates of each type of victimization would decrease as household income increased for Caucasian youth, but not for African-American and Hispanic youth.

A second series of analyses was conducted to discern whether racial/ethnic groups differed in rates of violence exposure at various income levels. More specifically, the second series of analyses assessed whether race/ethnicity was predictive of victimization experiences (i.e., witnessing violence, physically abusive punishment, physical assault, sexual assault) within each income (i.e., lower, middle, and upper) level. In this manner it was possible to examine whether racial/ethnic group differences in rates of violence
exposure existed at each income level, or if differences in prevalence rates between Caucasian, African-American, and Hispanic youth occurred only in the higher income group (e.g., as a result of the hypothesized interaction in which increased household income was associated with decreased risk of victimization for upper income Caucasian but not minority youth).

**METHOD**

**Participants**

Participants were enrolled in the National Survey of Adolescents (NSA), a research project in which a household probability sample of 4,023 adolescents between the ages of 12 and 17 years were interviewed via telephone. Of this total, 3,161 were a national probability household sample of adolescents, and 862 were a probability oversample of adolescents residing in households in areas designated as central cities by the 1990 United States Census. The only adolescents potentially excluded from the study were those residing in institutional settings, in households without a parent or guardian (e.g., emancipated minors or married adolescents living on their own), and those without at least one parent who could converse in English or Spanish. According to the 1990 census, only 5% of US households did not have telephones. Boyle and Kilpatrick (1993) found that less than 2% of parents of adolescents from households with telephones do not speak English or Spanish. Thus, the sampling frame covered approximately 93% of U.S. adolescents living in households.

**Sampling**

Sample selection and interviewing were conducted by Schulman, Ronca, and Bucuvalas, Inc. (SRBI), a New York-based survey research firm. To construct the initial national probability sample, the NSA used a multi-stage, stratified, area probability, Random Digit Dialing (RDD) 4-step sampling procedure. First, the U.S. was stratified geographically by census region, and a population-based subsample allocation was developed for each geographic stratum. The estimated population distribution by stratum was calculated on the basis of Projections of the Population of States by Age, Sex and Race: 1988 to 2010 (Current Population Reports, P25, No. 1017, 1988). Second, telephone banks within each geographic stratum were systematically selected utilizing a comprehensive database of working telephone banks. Third, RDD was used to sample telephone households within the telephone banks selected in the second stage by locating currently working, residential household telephone numbers with eligible respondents. Nonworking numbers and nonhousehold (e.g., business) numbers were immediately replaced by other RDD numbers selected within the same stratum in the same fashion as the initial number. Nonanswering numbers were called four times before being replaced. An adult respondent in each residential household was screened to determine: (a) if there were any adolescents aged 12-17 currently living in the household, and (b) if any other adolescents had lived in the household (for at least 4 months) in the previous year. Fourth, in households with multiple eligible adolescents, a systematic selection method (i.e., by the most recent birthday) was used to determine which eligible individual would be designated as the respondent. These procedures yielded a relatively unbiased sample of 3,161 adolescents from which generalizations can be made to the total population, within specified limits of expected sampling variability.
Construction of the central city oversample followed the same procedures except for the initial geographical stratification step. This step was replaced by using the Census classification of counties by types of place (i.e., central city) and specifying the target population as households located within these urban counties. Households then were systematically sampled within the selected urban counties. The RDD step was limited to the exchanges and banks within the selected urban counties. The third and fourth stages of the sampling procedure (for eligible households and adolescents) for the central city oversample were the same used in the national probability sample.

A parent or guardian in each household was interviewed briefly prior to each adolescent interview. Hence, the recruitment strategy required completing interviews with parents, obtaining permission to interview the adolescent, obtaining permission from the adolescent, and then interviewing the adolescent. Of 5,367 eligible households (i.e., households with at least one adolescent between the ages of 12 and 17): (1) 4,836 parents completed interviews (90.1% of eligible households); (2) 4,236 parents gave permission for their adolescent to be interviewed (78.9% of eligible households and 87.6% of cases with completed parent interviews); and (3) 4,023 adolescents agreed to participate and completed interviews (75.0% of eligible households; 83.2% of households with completed parent interviews, and 95.0% of household with parent permission). The latter participation and completion rate of 95% for adolescents whose parents gave permission suggests that almost all adolescents were willing to be interviewed if they were given an opportunity to do so.

To improve the generalizability to the U.S. adolescent population, the full sample was weighted to conform to 1995 Census estimates for American adolescents on gender, age, and race. Demographically, the weighted NSA sample included approximately equal numbers of male (n = 2,065) and female (n = 1,958) adolescents. The age breakdown was as follows: 12-year-olds (n = 682), 13-year-olds (n = 685), 14-year-olds (n = 673), 15-year-olds (n = 682), 16-year-olds (n = 652), and 17-year-olds (n = 641). Age data were missing for eight respondents. Of the 4,023 participants, 2,825 were White, non-Hispanic (70.2%); 590 were African-American, non-Hispanic (14.7%); 314 were Hispanic (7.8%); 139 were Native American (3.5%); 46 were Asian (1.1%), 28 were members of other racial/ethnic groups (0.7%); and 81 (2.0%) adolescents were not sure of their ethnicity or refused to answer this question. The prevalence of youth in lower income (less than $20,000 annual household income), middle income ($20,000 to $50,000 annual household income), and upper income (greater than $50,000 annual household income) households was 16.4%, 44.0%, and 33.9%, respectively. Information regarding household income was not available for 232 (5.8%) of the youth. Chi-square analyses revealed that the 232 youth for whom information on household income was not available (and thus were not included in subsequent analyses) did not differ from the remainder of the sample with regard to gender, \( \chi^2(1, N = 4,023) = .44, p > .05 \), age, \( \chi^2(5, N = 4,023) = 9.02, p > .05 \), or race/ethnicity, \( \chi^2(5, N = 3,940) = 10.84, p > .05 \).

Procedure

Highly structured interviews were used to gather all data. Interviews were conducted in English or Spanish, based on the interviewee’s preference. Interviews with both parents and adolescents were conducted using Computer-Assisted Telephone Interviewing (CATI) technology. This technology has several advantages over standard interviewing techniques. CATI is better able to handle complex skip patterns and question ordering.
in complicated interview schedules, such as those used in the NSA. CATI also insures that all questions are asked because interviewers cannot proceed without entering responses. Finally, CATI interviews typically take less time and result in less respondent fatigue, increasing compliance and reducing premature termination rates.

Two steps were taken to increase the likelihood that adolescents answered questions in an open and honest manner, with a reasonable degree of privacy. First, the interviewer specifically asked if the adolescent was in a situation where they could be assured of privacy and could answer freely. If the adolescent indicated they could not, the interviewer offered to call back at another time when privacy was more likely. Second, the interview schedule was designed primarily with closed-ended questions. Therefore, the adolescent could respond to questions with a simple “yes” or “no,” a number (as in age), the role of a person (e.g., “a neighbor”), or other one word or phrase answers. Terminated interviews were very rare, and, consistent with rates found with nonsensitive topics, over 99% of the adolescents agreed to answer the most sensitive questions (e.g., sexual assault history). Adolescent participants received a certificate of participation in the “National Survey of Adolescents” and a check for five dollars as compensation for their time.

Measures

Demographic variables were measured using standard questions employed by the United States Census Bureau. A highly structured telephone interview was used to collect information about several topics, including witnessing violence, physically abusive punishment, physical assault, and sexual assault.

Race/Ethnicity. Consistent with procedures used in the collection of U.S. Census data, two questions were used to assess adolescents’ racial/ethnic classification. Adolescents were asked first to indicate whether they were of Spanish/Hispanic origin. Next adolescents were asked to indicate in which of the following racial categories they felt they belonged: White/Caucasian, African-American (Black), Asian (Oriental), American Indian or Alaskan Native, or Pacific Islander. For the purpose of the present study, these two questions were used to classify adolescents as Caucasian (White/Caucasian, not of Hispanic origin), African-American (African-American (Black), not of Hispanic origin), or Hispanic (any racial category, of Spanish/Hispanic origin).

Household Income. Information regarding household income was collected during the interview with the parent/primary caregiver. Parent/primary caregivers were asked to indicate which of the following categories best represented their pre-tax household income: less than $20,000, $20,000–$50,000, or more than $50,000. Thus, three categories of household income were created representing lower income (less than $20,000), middle income ($20,000–$50,000), and upper income (more than $50,000) households.

Witnessed Violence. The introduction and screening questions used to determine whether the adolescent had ever witnessed violence are presented in Appendix A. Adolescents responding affirmatively to one or more of these questions were classified as having witnessed violence. Based on this information, participants were categorized as never having witnessed violence or having witnessed violence on at least one occasion.

Physically Abusive Punishment. The introduction and screening questions used to determine receipt of physically abusive punishment are presented in Appendix B. Adolescents
responding affirmatively to one or more of these questions were classified as having received physically abusive punishment. A dichotomous variable was created denoting the presence or absence of lifetime receipt of physically abusive punishment.

**Physical Assault.** The introduction and screening questions used to assess physical assault history are presented in Appendix C. Adolescents who responded affirmatively to any of these questions were classified as having experienced a physical assault. Thus, a dichotomous variable was created to code the presence or absence of lifetime physical assault.

**Sexual Assault.** The introduction and screening questions used to assess sexual assault history are presented in Appendix D. Adolescents responding affirmatively to one or more of these questions were classified as sexual assault victims. Participants were then classified as either having experienced or not experienced a sexual assault during their lifetime.

**RESULTS**

Figure 1 displays the lifetime prevalence rates of witnessing violence, physical assault, physically abusive punishment, and sexual assault across lower, middle, and upper income groups (without regard to racial/ethnic status). As may be seen, prevalence rates of witnessing violence, $\chi^2(2, N = 3791) = 41.67, p < .001$; physically abusive punishment, $\chi^2(2, N = 3791) = 20.42, p < .001$; physical assault, $\chi^2(2, N = 3791) = 26.35, p < .001$; and sexual assault, $\chi^2(2, N = 3791) = 23.26, p < .001$, declined as income increased.

![Figure 1](image-url)

**Figure 1.** Percent of youth from lower, middle, and upper income households who reported witnessed violence, physical assault, physically abusive punishment, and sexual assault.
Lifetime prevalence rates of witnessing violence, physically abusive punishment, physical assault, and sexual assault for Caucasian, African-American, and Hispanic youth are presented in Table 1. As may be seen, the lifetime prevalence rates of witnessing violence, \( \chi^2(2, N = 3728) = 123.97, p < .001 \); physically abusive punishment, \( \chi^2(2, N = 3727) = 34.23, p < .001 \); physical assault, \( \chi^2(2, N = 3729) = 28.43, p < .001 \); and sexual assault, \( \chi^2(2, N = 3730) = 28.24, p < .001 \), varied across Caucasian, African-American, and Hispanic youth.

The distribution of racial/ethnic groups across the lower, middle, and upper income categories was also examined. As was expected, racial/ethnic status was significantly related to household income level, \( \chi^2(4, N = 3516) = 217.97, p < .001 \), in this nationally representative sample. Only 12% of Caucasian youth resided in lower income households, leaving the majority of Caucasian youth to reside in middle (48.0%) to upper (40.0%) income households. In contrast, approximately one out of three (35.7%) African-American adolescents in this sample lived in a lower income household. Of the remaining African-American youth, 41.4% lived in middle income homes, and less than one quarter (23.0%) resided in upper income households. Hispanics were normally distributed across the lower (27.6%), middle (44.4%), and upper (28.0%) income groups.

Figure 2 displays the lifetime prevalence of witnessed violence across income levels for Caucasian, African-American, and Hispanic adolescents. The inverse association between income and prevalence of witnessed violence noted in the total sample was evident for Caucasian youth, \( \chi^2(2, N = 2668) = 12.17, p < .01 \), but not African-American youth, \( \chi^2(2, N = 543) = 1.42, p > .05 \). As shown in Figure 2, rates of witnessed violence reported by Hispanic youth declined as household income increased, although this decrease was not statistically significant, \( \chi^2(2, N = 304) = 2.87, p > .05 \) youth. Chi-square analyses revealed that race/ethnicity was predictive of witnessing violence within the lower, \( \chi^2(2, N = 599) = 16.06, p < .001 \), middle, \( \chi^2(2, N = 1640) = 58.26, p < .001 \), and upper, \( \chi^2(2, N = 1276) = 27.44, p < .001 \), income groups. At each level of income, African-American and Hispanic youth, compared to Caucasian youth, reported significantly higher rates of witnessing violence.

The lifetime prevalence of physically abusive punishment across income levels for racial/ethnic groups is presented in Figure 3. The inverse relationship between income and lifetime prevalence of physically abusive punishment held true for Caucasian youth,
With regard to differences between Caucasian, African-American, and Hispanic youth within each income level, chi-square analyses revealed that the prevalence of physically abusive punishment did not vary by racial/ethnic status within the lower income, $\chi^2(2, N = 597) = 4.82, p = .09$, or middle, $\chi^2(2, N = 1641) = 7.96, p = .02$, income groups, although trends toward higher rates of physically abusive punishment among African-American youth in these income groups were noted. Within the upper income group, $\chi^2(2, N = 1277) = 19.60, p < .001$, African-American youth reported significantly higher rates (16.8%) of physically abusive punishment compared to Caucasian (6.1%) and Hispanic (5.9%) youth.

With regard to physical assaults, the inverse association between income and lifetime prevalence of physical assault noted in the total sample held true for Caucasian youth, $\chi^2(2, N = 2668) = 13.66, p < .01$, but not African-American, $\chi^2(2, N = 543) = .53, p > .05$, and Hispanic, $\chi^2(2, N = 304) = .97, p > .05$, youth. With regard to differences between Caucasian, African-American, and Hispanic youth within each income level, chi-square analyses revealed that the prevalence of physically abusive punishment did not vary by racial/ethnic status within the lower income, $\chi^2(2, N = 597) = 4.82, p = .09$, or middle, $\chi^2(2, N = 1641) = 7.96, p = .02$, income groups, although trends toward higher rates of physically abusive punishment among African-American youth in these income groups were noted. Within the upper income group, $\chi^2(2, N = 1277) = 19.60, p < .001$, African-American youth reported significantly higher rates (16.8%) of physically abusive punishment compared to Caucasian (6.1%) and Hispanic (5.9%) youth.

With regard to physical assaults, the inverse association between income and lifetime prevalence of physical assault noted in the total sample held true for Caucasian youth, $\chi^2(2, N = 2668) = 13.66, p < .01$, but not African-American, $\chi^2(2, N = 543) = .53, p > .05$, and Hispanic, $\chi^2(2, N = 304) = .97, p > .05$, youth. When examining race/ethnicity as a risk factor within income levels, it was found that the prevalence of physical assault did not vary by racial/ethnic status within the lower income, $\chi^2(2, N = 598) = 2.42, p > .05$, or middle income, $\chi^2(2, N = 1641) = 3.68, p > .05$, groups. Across Caucasian, African-American, and Hispanic youth the lifetime prevalence rates of physical assault in the lower and middle income groups were 23.9% and 17.5%, respectively. The prevalence of physical assault did vary by racial/ethnic status in the upper income group, $\chi^2(2, N = 1276) = 14.24, p < .01$, with African-American youth from high income households reporting physical assaults at a rate nearly twice that of Caucasian adolescents in the upper income group (see Figure 4).
Figure 3. Percent of Caucasian, African-American, and Hispanic youth from lower, middle, and upper income households who reported receipt of physically abusive punishment.

Figure 4. Lifetime prevalence rates of physical assault and sexual assault for Caucasian, African-American, and Hispanic youth from upper income households.
With regard to sexual assaults, the inverse relationship between income and lifetime prevalence of sexual assault was evident for Caucasian youth, \( \chi^2(2, N = 2667) = 18.94, p < .001 \), but not for African-American, \( \chi^2(2, N = 543) = 3.23, p > .05 \), and Hispanic, \( \chi^2(2, N = 303) = 1.68, p > .05 \) youth. The lifetime prevalence of sexual assault did not vary by racial/ethnic status within the low, \( \chi^2(2, N = 597) = .22, p > .05 \), or middle, \( \chi^2(2, N = 1641) = 1.38, p > .05 \), income groups. Across Caucasian, African-American, and Hispanic youth the lifetime prevalence rates of sexual assault in the lower and middle income households were 11.7% and 7.7%, respectively. Within the upper income group, \( \chi^2(2, N = 1275) = 23.30, p < .001 \), however, African-American youth reported significantly higher rates of sexual assault compared to Caucasian adolescents with Hispanics reporting an intermediate prevalence rate (see Figure 4).

**DISCUSSION**

Results from this nationally representative sample revealed a complex interplay between household income, race/ethnicity, and prevalence of violence exposure among youth in the United States. Analyses based on the total sample revealed an inverse association between household income and rates of witnessing violence, physical assault, physically abusive punishment, and sexual assault. A central question in the present study was whether the protective effects associated with increased income would generalize to Caucasian, African-American, and Hispanic youth within the sample. Given that 70% of the sample was Caucasian, it was expected that results based on analyses of the total sample would be roughly representative of this majority group. Indeed, risk of each form of victimization decreased among Caucasian youth as household income increased. Consistent with previous findings (e.g., Hampton & Gelles, 1991; Hampton, Gelles, & Harrop, 1991; Korbin et al., 1998; Spearly & Lauderdale, 1983), increased household income was not associated with reduced rates of witnessing violence, receipt of physically abusive punishment, physical assaults, and sexual assaults for African-American or Hispanic youth.

The absence of protective effects associated with higher household income levels among minority youth in this nationally representative sample warrants considerable attention. These findings suggest that it may be simplistic to interpret high rates of violence exposure among minority youth as merely correlates of their disproportionate representation among the lower income in this county. As a result of their overrepresentation among lower income households, it is true that many young minority victims live among the economically disadvantaged. The present findings, however, indicate that the prevalence of violence exposure among minority youth does not decline as a function of increasing household income, and suggest that other risk factors need to be considered when attempting to understand the etiology of various forms of victimization for children of color. Further, violence prevention efforts that focus on lower income families may systematically exclude African-American and Hispanic youth from higher income households who may be as much at risk as their lower income counterparts for witnessing violence, receiving physically abusive punishment, and/or being physically or sexually assaulted.

Examination of the risk for victimization across racial/ethnic groups within lower, middle, and upper income households revealed two distinct patterns of associations between household income, racial/ethnic status, and violence exposure in youth. The first pattern involved the presence of not only the interaction effect (i.e., household income
decreasing risk for violence exposure for Caucasians but not minority youth), but also a main effect of racial/ethnic status across income levels. The interaction plus main effect pattern was evident for rates of witnessing violence and to a lesser extent for receipt of physically abusive punishment. More specifically, African-American and Hispanic youth were significantly more likely than their Caucasian counterparts to witness violent events at each income level. With regard to physically abusive punishment, African-American youth trended toward higher rates of receiving physically abusive punishment as compared to Caucasian and Hispanic youth from the lower and middle income levels. African-American youth residing in upper income households reported significantly higher rates of physically abusive punishment compared to their Caucasian and Hispanic counterparts.

Thus, results from this nationally representative sample of youth are consistent with previous reports of high rates of witnessing violent events among lower income minority youth (e.g., Shakoor & Chalmers, 1991). Further, these results extend previous findings to suggest that lifetime prevalence rates of witnessing violence among minority youth may not attenuate as household income increases. Across each income level, minority youth were significantly more likely than Caucasian youth to report having witnessed violence, with over half of the African-American and Hispanic youth in this sample reporting at least one incident of witnessing a serious violent event.

A different pattern was evident in the lifetime prevalence rates for physical and sexual assaults as reported by the Caucasian, African-American, and Hispanic youth in this sample. This second pattern involved an interaction of race/ethnicity and household income (i.e., household income decreasing risk for assault for Caucasian but not minority youth) in the absence of a main effect for race/ethnicity. More specifically, race/ethnicity did not influence prevalence rates of physical assault and sexual assault in the lower and middle income groups. In the higher household income group, however, African-American youth reported dramatically higher rates of physical and sexual assault relative to their Hispanic and Caucasian counterparts.

The present findings add to a growing number of studies (e.g., Hampton & Gelles, 1991; Hampton, Gelles, & Harrop, 1991; Korbin et al., 1998; Spearly & Lauderdale, 1983) suggesting that lifetime prevalence of violence exposure for minority youth may not attenuate as household income increases. Much remains to be learned regarding the risk and resiliency factors that contribute to the overall higher rates of witnessing violence experienced by African-American and Hispanic youth, and the relatively higher rates of physically abusive punishment reported by African-American youth. Further, additional research is needed to clarify why risk for a variety of types of violence does not lessen for minority youth as their families gain in household income.

Although not directly tested in the present study, several possible interpretations of this study’s findings remain to be tested. One possibility is that levels of certain proximal risk factors for violence exposure may interact with household income across racial/ethnic groups. For example, living in urban and high crime areas has been found to increase risk for violence exposure (e.g., Bell & Jenkins, 1993; Farrell & Bruce, 1997; Galdston, Rusonis, & Heald, 1992). Thus, residential mobility may be a protective factor with regard to violence exposure, and under conditions of equality residential mobility may vary directly with household income. However, continued segregation and discriminatory economic practices (see Farley & Frey, 1994) may produce an interaction such that increased household income results in increased residential mobility for Caucasian but not minority families. Thus, increased household income may not serve to decrease cer-
tain community risk factors for violence exposure for children of color. Another possibility is that as economic factors improve minority families may exercise a certain degree of residential mobility (e.g., move from the city to the suburbs), only to find themselves faced with a different set of stresses (e.g., less community support, lower proportions of same race/ethnicity neighbors, increased personal exposure to prejudice, etc.). Thus, risk factors for violence exposure may remain high within the family and community despite improved economic conditions for minority families. The present study did not attempt to test these or any of a number of other possibilities that may help explain why increased household income does not decrease risk for violence exposure among minority youth. The present study, however, does underscore the need to ensure that risk models for violence exposure among youth generalize across racial/ethnic groups. Further risk factor models should be developed that are specific to each type of violence exposure (e.g., witnessing violence, receipt of physical assault, etc.), as the interactions among risk and protective factors may vary not only across racial/ethnic groups but also by type of violent event.

Several limitations of the present study warrant consideration. Income levels in this sample were somewhat higher than that seen in the general population (which may be related to the necessity of having a phone to participate). For example, according to child welfare data almost 20% of youth in the U.S. were living in households below the poverty level (i.e., $16,000 for family of four). Using a more liberal cutoff for low income ($20,000), only about 12% of the NSA sample was classified as low income. Although the income levels in the total sample were higher than that of the general population, the proportions of Caucasians, African-Americans, and Hispanics in the lower income group is similar to the patterning seen in data from other sources on children and poverty. The U.S. Census Bureau data on children living in poverty suggested that in 1996, 10% of Caucasian children, 40% of African-American children, and 40% of Hispanic children lived in households where the annual income was below the poverty line. The proportions of Caucasian, African-American and Hispanic youth in the present sample (i.e., 12.0%, 35.7%, and 27.6%, respectively) roughly approximated the Census Bureau data on the distribution of children living in poverty across racial/ethnic groups.

Further the present study utilized a rather gross system for classifying racial/ethnic status. Although the format of the questions regarding race and ethnicity are consistent with that employed by the U.S. Census Bureau, the categories derived in the present study did not take into consideration the heterogeneity that exists within Caucasian, African-American, and Hispanic populations. More specifically, subgroups within each racial/ethnic group (e.g., Hispanics may have included Puerto Ricans, Mexicans, Cubans, etc.) were not taken into consideration. Further, other significant racial/ethnic groups (e.g., Asian Americans, Native Americans, etc.) were not included in these comparative analyses due to inadequate sample sizes.

Other limitations of the present study should also be considered. The retrospective self-reports of victimization examined in the present study are subject to an unknown degree of attenuation. For families of victimized youth, it also is possible that household income at the time of the interview may not have been the same as the income for the family at the time the youth was exposed to violence. Further, it is possible that some victimized youth (e.g., those already in institutions or homeless) were not represented in this telephone survey. Also, little is known about the characteristics of those youth from eligible households who were contacted but chose (for whatever reason) not to participate. It was encouraging that of the eligible youth contacted, 75% participated and this
completion rate was actually somewhat higher than that obtained in other major studies of adolescents (e.g., National Youth Survey, Finkelhor & Dziuba-Leatherman, 1994).

These limitations notwithstanding, the results from this nationally representative sample of adolescents extend previous research by examining the relationships between household income and multiple forms of victimization experiences as reported by Caucasian, African-American, and Hispanic youth. The present findings suggest that the nature of the association between household income and exposure to violence may vary across racial/ethnic groups. Findings suggest that violence exposure among minority youth may not decrease as a function of improving economic indicators (i.e., household income). Research examining the cultural, community, and familial factors that maintain risk for minority youth despite increasing household income is needed to inform prevention efforts aimed at reducing risk for violent experiences in youth.

APPENDIX A

Witnessed Violence Screening Questions

Some young people tell us they have seen one person violently attack another person. By seeing a violent attack, we mean when you have actually seen someone beat up, rob, sexually assault, cut or stab with a knife, shoot at, actually shoot, or even kill another person. The people involved in the attack may have been strangers, friends, neighbors, or even family members. We would like to find out about any violent attacks you have actually seen, whether it happened at school, in your neighborhood, somewhere else, or even in your home. We mean seeing violent attacks in real life, not on TV or in the movies.

1. Have you ever seen someone actually shoot someone else with a gun?
2. Have you ever seen someone actually cut or stab someone else with a knife?
3. Have you ever seen someone being sexually assaulted or raped?
4. Have you ever seen someone being mugged or robbed?
5. Have you ever seen someone threaten someone else with a knife, a gun, or some other weapon?
6. Have you ever seen someone beaten up, hit, punched, or kicked such that they were hurt pretty badly?"

APPENDIX B

Physically Abusive Punishment Screening Questions

Families have different ways of punishing young people if they think they have done something wrong. Some families spank young people as a form of punishment.

1. Has a parent or some adult in charge of you ever spanked you so hard that you had to see a doctor because you were hurt so bad?
2. Has a parent or someone in charge of you ever spanked you so hard that you got bad marks, bruises, cuts or welts?
3. Has a parent or someone in charge of you ever punished you by burning you, cutting you, or tying you up?
APPENDIX C

**Physical Assault Screening Questions**

Sometimes young people get hit, beat up, or physically assaulted by another person. The person who hits, attacks or beats up a young person isn’t always a stranger, but can be someone who the young person knows well, even a family member or friend. The person doing the hitting can be older than the young person, about the same age, or even younger than the young person. Young people tell us they sometimes get hit, attacked, or beat up at school, in their neighborhood, or even at home. These types of attacks can even happen to small children sometimes. Many times, young people never tell anyone about these events.

1. Has anyone including family members or friends ever attacked you with a gun, knife, or some other weapon, regardless of when it happened or whether you ever reported it or not?
2. Has anyone including family members and friends ever attacked you without a weapon, but you thought they were trying to kill or seriously injure you?
3. Has anyone including family members and friends ever threatened you with a gun or knife, but didn’t actually shoot or cut you?
4. Has anyone including family members and friends ever beat you up, attacked you, or hit you with something like a stick, club, or bottle so hard that you were hurt pretty bad?
5. Has anyone including family members and friends ever beat you up with their fists so hard that you were hurt pretty bad?

APPENDIX D

**Sexual Assault Screening Questions**

Sometimes a person may do sexual things to a young person that the young person doesn’t want. These unwanted sexual things can happen to boys as well as girls and to young men as well as young women. People who try to do unwanted sexual things to young people are not always strangers, but can be someone you know well like a neighbor, teacher, coach, counselor, boss, baby-sitter, minister, or priest. They can even be a family member. People who try to make young people do unwanted sexual things aren’t always men or boys—they can also be women or girls. I am talking about any experiences you’ve had where someone tried to make you do something sexual you didn’t want to do, no matter who did it, how long ago it happened, or whether it was reported to police.

1. Has a man or boy ever put a sexual part of his body inside your private sexual parts, inside your rear end, or inside your mouth when you didn’t want them to?
2. Has anyone, male or female, ever put fingers or objects inside your private sexual parts or inside your rear end when you didn’t want them to?
3. Has anyone, male or female, ever put their mouth on your private sexual parts when you didn’t want them to?
4. Has anyone, male or female, ever touched your private sexual parts when you didn’t want them to?
5. Has anyone ever made you touch their private sexual parts when you didn’t want them to?

6. (For Boys) Has a woman or girl ever put your private sexual part in her mouth or inside her body when you didn’t want her to?

REFERENCES


