Truancy in the United States: Examining Temporal Trends and Correlates by Race, Age, and Gender

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Abstract

Background—Truancy has long been regarded a common problem in urgent need of effective intervention. Knowledge about factors associated with truancy can guide the development and implementation of interventions.

Method—This paper examined trends in truancy rates between 2002–2014 and correlates of truancy across racial/ethnic groups. Variables of interest included sociodemographic factors (e.g., age, gender, socio-economic background), behavioral factors (e.g., substance use, violence), and psychosocial factors (e.g., academic engagement, grades, parental control). Using data from a large sample of adolescents (n=209,393; 12–17 years) we estimated truancy prevalence rates and examined trends and correlates via regression analyses.

Results—Truancy rates remained constant between 2002 (10.8%) and 2014 (11.1%). Rates were highest among older youth, females, and Hispanic youth. For all racial/ethnic groups, truancy was significantly correlated with alcohol and marijuana use, fighting, the propensity to take risks, and lower academic engagement and school grades. Other factors were differentially associated with racial/ethnic groups. This divergence in risk patterns for different racial/ethnic groups points to some heterogeneity amongst truant youth.

Discussion—Despite truancy reduction efforts, truancy rates have remained stable. Efforts to prevent truancy and to intervene with truant youth may need to target risk factors more prevalent in specific racial/ethnic groups.

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Keywords

truancy; delinquency; substance use; school attendance problems; school engagement

Truancy is a type of absenteeism often labeled 'skipping', 'ditching', 'cutting class', and 'wagging' (Lawrence, Lawther, Jennison, & Hightower, 2011). It is characterized by youths' intentional, unexcused absence from school (Gentle-Genitty, Karikari, Chen, Wilka, & Kim, 2015) without parent knowledge or consent (e.g., Galloway, 1982; Huffington & Sevitt, 1989). Truancy is differentiated from other types of absenteeism such as school refusal which is characterized by emotional distress associated with school attendance (Heyne et al., in press). Support for the differentiation comes from Egger and colleagues' (2003) study of psychosocial vulnerabilities associated with school refusal and truancy. For example, truancy alone was significantly associated with lax parental supervision and an impoverished home environment, and school refusal alone was significantly associated with worries about leaving home to go to school and shyness with peers.

A myriad of negative immediate and short-term risks have been associated with truancy. Youth[1] who are absent from school three days in a month are missing 15% of their instructional time. Unsurprisingly, truancy has been associated with poorer school performance and dropout (Henry et al., 2012; National Center for Education Statistics, 2012; Vaughn et al., 2013). Indeed, average academic achievement has been shown to continue to decline as absence rates increase (Hancock, Shepherd, Lawrence, & Zubrick, 2013). In addition to educational outcomes, truancy has been linked to behavioral and health indicators, such as substance abuse (Best et al., 2006; Henry, 2010; Vaughn et al., 2013), delinquency, and other externalizing behaviors (Hirschfield & Gasper, 2011; Lochner & Morietti, 2004; Vaughn et al., 2013). Research findings suggest that those who are absent more frequently are at higher risk for and report more serious levels of substance use and externalizing behavior than youth who are absent less frequently (Maynard et al., 2012, 2013).

In addition to the negative outcomes experienced by truant youth, truancy also negatively impacts schools and society. Schools can be faced with loss of funds when students miss "count day" and may be at risk for failure to meet state and federal standards for school attendance rates, which can result in a number of consequences for schools including turning over operations of the school to the state or private company. At the community level, truancy is associated with higher rates of criminal activity, fewer productively contributing citizens, and higher government spending for social services (Baker, Simon, & Nugent, 2001).

The high prevalence of truancy across the U.S. compounds the negative impacts of this problem. Studies examining truancy prevalence rates with nationally representative samples found that approximately 11% of youth reported skipping school during the prior month (Henry, 2007; Vaughn et al., 2013). Data from the National Center for Education Statistics

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[1]The term 'youth' is used to refer to children and adolescents.

indicate that approximately 19% of fourth graders and 19% of eighth graders were absent from school three days in the prior month (Aud et al., 2012).

Truancy is a ubiquitous problem. However, it should not be assumed that truant youth are a homogenous group. Truants have different risk profiles based on various demographic factors. For example, older youth, minority youth, and youth from lower socioeconomic backgrounds are more likely to be truant than younger youth, youth who are White, and youth from more affluent backgrounds (Henry, 2007; Henry & Huizinga, 2007; MacGillivary & Erickson, 2006; Vaughn et al., 2013). Even though minority youth have higher rates of truancy than White youth, this relationship is more nuanced. For example, Vaughn and colleagues (2013) found that most truant youth participating in the least amount of skipping were White (nearly 80%), while most youth with moderate skipping levels were either African American or Hispanic (nearly 80%), and chronic skippers were evenly split between White, African American, and Hispanic youth. This is consistent with research showing that racial groups have varying levels of participation in risky behavior based on the specific type of behavior (Kann et al., 2014).

Truants also have different risk profiles based on psychosocial indicators. For example, Maynard et al. (2012, 2013) found four distinct classes of truant youth when using latent class analysis to examine heterogeneity in terms of school engagement, participation in school activities, grades, parental academic involvement, and number of days skipped. They identified an achiever class, characterized by higher levels of school engagement and participation in school activities and parental academic involvement; a moderate student class, with a higher level of school engagement, but mean levels for all other academic characteristics; an academically disengaged class, characterized by low levels of school engagement, poor grades, low participation in school activities, low levels of parental involvement; and a chronic skipper class similar to the academically disengaged class with the exception of much higher rates of skipping. The four distinct classes of truant youth were also differentially associated with sociodemographic factors and externalizing behaviors. Members in the chronically truant class were more likely to use marijuana and engage in theft, drug sales and fighting than the other classes.

Research examining truancy rates by gender has been inconsistent. In Egger and colleagues' (2003) study of different types of school attendance problems, truancy was defined as failure to reach school or stay at school in the absence of school permission, a valid excuse, and anxiety, for at least half a day in the previous three months. Among 1,420 youth (9 to 16 years; $M = 12.5$) from North Carolina in the U.S., 6% fulfilled these criteria, with significantly more of the truants being males. Vaughn and colleagues (2013) used a larger, more representative sample comprising 17,480 adolescents (12–17 years; $M = 14.6$) from the 2009 National Survey on Drug Use and Health (NSDUH). The prevalence of truancy, based on the frequency of "skipping" in the past month, was 11% (9% moderate truancy and 2% high truancy), but no gender differences were found for youth reporting moderate or high truancy. An earlier large-scale study of a nationally representative sample similarly reported no difference between genders with respect to truancy rates (Henry, 2007).

Given the prevalence of truancy and the negative implications for youth, schools, and society, the U.S. government, schools and other private institutions have introduced a number of policy and program initiatives to reduce truancy and improve school attendance. For example, the Truancy Reduction Demonstration Program began in 1998 as a cooperative effort between the Office of Juvenile Justice and Delinquency Prevention (OJJDP), the Office of Safe and Drug-Free Schools (U.S. Department of Education), and the Executive Office for Weed and Seed (which later became the Community Capacity Development Office). The goal of this program was to "reduce the number of truant children and adolescents because truancy can be a first step to a lifetime of unemployment, crime, and incarceration" (OJJDP, n.d., paragraph 1). In addition, the No Child Left Behind Act, which took effect in January 2002, included annual yearly progress measures to hold schools accountable for student absenteeism. Schools districts across the United States have implemented various strategies to combat absenteeism, including comprehensive and complex collaborations and policies in their attempts to reduce truancy across the district (Gase et al., 2015).

Despite significant efforts and millions of dollars spent by schools, communities, states, and the U.S. federal government to reduce truancy over the past 20 years, there is little evidence that any positive impact has been made on school attendance (Attwood & Croll, 2006; Davies & Lee, 2006). Despite these efforts, or perhaps due to these efforts, the number of truancy cases petitioned and handled in juvenile courts in the United States increased 69% between 1995 and 2004 (Stahl, 2008). Some insight into the reasons these efforts have not been successful may be found in Maynard and colleagues' (2012) systematic review and meta-analysis of indicated interventions for truancy. They noted the various problems researchers experienced when evaluating truancy interventions, such as families being disengaged from the school system and being reluctant to commence or continue with interventions. These are research confounds but also practical issues that may help explain the continued high rates of truancy, even when there seem to be some effective interventions available (see Maynard et al., 2012).

Purpose of the Present Study

Few studies have examined trends in truancy rates over an extended period of time, and there is a lack of research examining temporal trends by race/ethnicity, age, and gender. Examining trends in truancy over time can provide an indicator as to whether policies and programs that have been implemented are having any impact. Furthermore, examining variation in prevalence by race/ethnicity, age, and gender can provide important information about who benefits most – and least – from the policies and programs. This information can inform prevention and intervention efforts.

We therefore examined trends in truancy between 2002 and 2014 using a large, nationally representative sample of youth aged 12–17 years. Temporal trends were examined by age, gender, and race/ethnicity. We also examined multiple correlates of truancy by race/ethnicity: sociodemographic factors, behavioral factors (substance use, violence and delinquency), and psychosocial factors at the individual level (religiosity, risk propensity), school level (academic engagement, grades, peer substance use), and family level (parent

control, parent affirmation, youth-parent conflict). Considering the significant efforts across multiple government departments to reduce truancy in the U.S. over the past two decades, we hypothesized that there would be a small decrease in truancy rates from 2002 to 2014. Given the racial differences in truant and other externalizing behaviors, we hypothesized that the associations between truancy and demographic, behavioral and psychosocial characteristics will vary across racial groups. We also hypothesized that truancy rates would be higher for older youth than younger youth across time points. Given the inconsistency in the literature regarding gender, we further explored gender-related trends over time.

Method

Sample and Procedures

This study examined public-use data collected between 2002 and 2014 as part of the National Survey on Drug Use and Health (NSDUH). The NSDUH provides population estimates for an array of substance use and health-related behaviors in the U.S. general population. NSDUH participants include household residents; civilians residing on military bases; and residents of shelters and group homes. Multistage area probability sampling methods are used to select a representative sample of the U.S. civilian, non-institutionalized population aged 12 years or older for participation. NSDUH study participants are interviewed in private at their places of residence using a computer-assisted interviewing methodology to increase the likelihood of valid respondent reports (SAMHSA, 2014; Turner et al., 1998). The design and methods are summarized briefly here; however, a detailed description of NSDUH procedures is available elsewhere (see SAHMSA, 2014). Since 2002, a total of 723,283 respondents have completed the NSDUH survey. The current study restricted analyses to non-Hispanic White, African American, and Hispanic respondents between the ages of 12 and 17 ($n = 209,393$). We limited our analyses to youth from the aforementioned racial/ethnic groups in order to ensure stable prevalence estimates (i.e., sufficient sample sizes) for stratified trend analyses.

Measures

Truancy—Truancy was measured on the basis of the following question: "During the past 30 days, how many whole days did you miss (school) because you skipped or 'cut' or just didn't want to be there?" Youth who reported one or more instances of skipping ($n = 19,923$; 11.55%) were coded as 1 and all other youth coded as 0.

Sociodemographic factors—The following sociodemographic variables were used: age, gender (0 = female, 1 = male), race/ethnicity (1 = non-Hispanic White, 2 = African-American, 3 = Hispanic), and total annual family income (1 = less than $20,000; 2 = $20,000 to $49,999; 3 = $50,000 to $74,999; and 4 = $75,000 or more). Additionally, participants were asked about the presence of their father in the household (0 = yes, 1 = no).

Substance use—We examined past 12-month use of tobacco, alcohol (any use [1+ drinks] and binge use [5+ drinks at the same occasion]), marijuana/hashish, and any other illicit drug excluding marijuana (e.g., cocaine/crack, methamphetamine). For each of these

items, participants reporting one or more instances of use were coded as 1 and all others coded as 0.

Violence and delinquency—Violence and delinquency were examined based on self-reports of involvement in fighting, violent attacks, handgun carrying, drug selling, and theft. Sample items include: "During the past 12 months, how many times have you carried a handgun?" and "During the past 12 months, how many times have you sold illegal drugs?" For all items, adolescents reporting one or more instances of involvement were coded as 1 and those reporting no involvement were coded as 0.

Psychosocial factors

Individual factors—We examined two individual-level factors: religiosity and risk propensity. *Religiosity* was examined on the basis of a 4-item scale ($\alpha = 0.77$) tapping both public religious engagement (i.e., religious service attendance, participation in religious groups) and private religious importance (i.e., importance and influence of religious beliefs). These public and private religiosity questions have been widely used and are described in greater detail elsewhere (Ford & Hill, 2012; Salas-Wright, Vaughn, Maynard, Clark, & Snyder, 2014). *Risk propensity* was based on two items ($\alpha = 0.74$) measuring adolescent enjoyment of risky behavior. These items were: "How often do you like to test yourself by doing something a little risky?" and "How often do you get a real kick out of doing things that are a little dangerous?" For each item, youth who responded sometimes/always were coded as 1 and youth who responded never/seldom were coded as 0. These two variables were, in turn, summed and treated as an ordinal variable (0 = low, 1 = medium, 2 = high) in all statistical analyses.

School-related factors—We examined adolescent self-reports of academic engagement, usual grades, and peer-student substance use. *Academic engagement* was based on a 5-item scale ($\alpha = 0.77$) measuring perceived importance and interest in learning and school activities. Sample items include: "During the past 12 months, how often did you feel that the schoolwork you were assigned to do was meaningful and important?" and "How important do you think the things you have learned in school during the past 12 months are going to be for you later in life?" Numerous NSDUH-based studies have utilized these variables and describe them in greater detail (Salas-Wright et al., 2014; Vaughn et al., 2013). To measure *usual grades*, youth were asked to report their average grades for their last completed semester or grading period. Response options included: (1) "an A average", (2) "a B average", (3) "a C average" and (4) "a D average or lower." We also examined perceived *peer-student substance use*. Specifically, participants were asked to report "how many of the students in your grade at school smoke cigarettes, drink alcohol, or use marijuana or hashish". Youth who reported that most or all of their peers use the aforementioned substances were coded as 1 and those who reported that few or none use the substances were coded as 0.

Family factors—We examined three family factors: parental control, parental affirmation, and youth-parent conflict. *Parental control* was based on the following question: "During the past 12 months, how often did your parents limit the amount of time you went out with

friends on school nights?" Responses of always/sometimes were coded as 1 and seldom/never were coded as 0. *Parental affirmation* was based on a 2-item index (α = 0.86) comprised of variables reflecting youth perceptions of parental support and encouragement. The items were: "During the past 12 months, how often did your parents let you know when you'd done a good job?" and "During the past 12 months, how often did your parents tell you they were proud of you for something you had done?" For each item, youth who responded sometimes/always were coded as 1 and youth who responded never/seldom were coded as 0. The resulting coding structure from summing these two items yielded a range of 0 to 2. As such, these two variables were, in turn, summed and treated as an ordinal variable (0 = low, 1 = medium, 2 = high) in all statistical analyses. *Youth-parent conflict* was based on the following question: "During the past 12 months, how many times have you argued or had a fight with at least one of your parents?" Given the lack of normality in the distribution of the variable, we choose to dichotomize at a break point of 10 which according to the distribution appeared to be a natural break. Therefore, youth reporting 10 or more conflicts were coded as 1 and all other youth coded as 0.

Statistical Analyses

We examined temporal trends in truancy between 2002 and 2014 using logistic regression. Specifically, logistic regression analysis was conducted to examine the significance of temporal trends in truancy with adjustment for the survey year and the aforementioned sociodemographic, behavioral, and psychosocial characteristics of non-Hispanic White, African-American, and Hispanic adolescents in the U.S while accounting for the complex survey sampling design of NSDUH. In all analyses, survey year was included as a continuous independent variable to test for statistically significant long-term temporal trends as prescribed by the Centers for Disease Control and Prevention (2014). This approach is also consistent with highly-cited trend studies (Ogden et al., 2006) as well as a recent trend study that utilized NSDUH data (Salas-Wright, Vaughn, Todic, Córdova, & Perron, 2015). Prevalence estimates and regression analyses were computed using survey data functions available in R (R Core Team, 2015). This system implements a Taylor series linearization to adjust standard errors of estimates for complex survey sampling design effects including clustered multistage data. Finally, parameter estimates from the logistic regression models were exponentiated [e.g., $\exp(\beta)$] in order to present odds ratios with their corresponding 95% confidence intervals.

Results

Prevalence of Truancy and Associated Characteristics

The prevalence of truancy and characteristics of the adolescents in this study are presented in Table 1. Overall, the mean annual one-month prevalence of truancy in the sample was 11.55%. Several important differences across racial/ethnic groups are worth mentioning. First, the unadjusted prevalence estimates of truancy were statistically different for all groups (due to the non-overlapping 95% confidence intervals), with Hispanics reporting the highest truancy (13.5%), followed by African-Americans (11.2%) and non-Hispanic Whites (10.4%). Non-Hispanic White youth also reported higher household income, with only 36.2% of White households earning <$50,000 compared to 74.2% of African-American and

70.1% of Hispanic households. Moreover, African-American and Hispanic youth had larger proportions of female-headed households, with 54.1% of African-American and 27.9% of Hispanic households not having a father in the home, compared to 19.0% for non-Hispanic White youth. African-American youth reported tobacco use, alcohol use, binge drinking, and using marijuana and/or other illicit drugs more frequently than Hispanics and non-Hispanic Whites. African-Americans were also more likely to report substance use among their student peers.

Temporal Trends in Truancy by Race/Ethnicity

Examining the temporal trends in truancy prevalence between 2002 and 2014 reveals several important findings. First, truancy remained more-or-less constant across the study period with an overall prevalence of 10.9% in 2002 and 11.1% in 2014. Considering trends by race/ethnicity, it can be seen in Figure 1 that the percentage of truant youth was consistently higher for Hispanic youth compared with African-Americans and non-Hispanic Whites. It is worth noting that prevalence estimates remained relatively constant for non-Hispanic White youth between 2002 and 2014; however, the prevalence among African-Americans decreased considerably after 2008. In 2002, the mean difference in the prevalence of truancy among Hispanic and non-Hispanic White adolescents was 5.0%; by 2014, the mean difference in prevalence decreased to 3.8% but was still significantly different given that the 95% confidence intervals do not overlap.

Temporal Trends in Truancy by Age and Gender

Considering the trends in truancy prevalence by age, it can be seen that truancy was significantly higher for older adolescents compared to younger adolescents (see Figure 2 and Table 2). While prevalence remained stable between 2002 and 2014 for younger adolescents, there appears to be a general downward trend in prevalence for older male adolescents, particularly after 2006. The patterns of truancy are generally similar for both males and females, regardless of age. It should be noted, however, that females reported higher prevalence of truancy at most time points and for both age groups. In addition, the downward trend in prevalence for females appears to be more gradual than males, although these differences are not statistically significant as can be seen by the substantial overlap in the 95% confidence intervals.

Correlates of Truancy by Race/Ethnicity

Results from the logistic regression analysis are presented in Table 2. Overall, when disregarding race/ethnicity, the prevalence of truancy increases significantly for youth that are >15 years old, female, from low-income or female-headed households (e.g., no father present in the home), have a history of substance use, delinquency/violence, risk-taking, are less engaged in academics, and achieve poorer grades. In particular, youth of all races/ethnicities aged 15–17 years reported 1.1 to 2.9 significantly increased odds of truancy compared to 12 year-old youth. However, African-American youth reported significantly increased odds of truancy as early as age 14. Across all racial groups, females had significantly higher odds of truancy compared to males. For all races, truancy was negatively associated with household income; however, this result was not significant among Hispanic youth. Youth of all races who used alcohol, engaged in binge drinking and used marijuana

had increased odds of truancy. Additionally, non-Hispanic White youth who used tobacco or other illicit drugs showed higher odds of truancy, whereas these associations were not significant for African-Americans and Hispanics. Violent behavior, specifically fighting at school/work, was significantly associated with truancy for all racial groups; however, attacking someone with the intent to harm was only significantly associated with truancy among non-Hispanic White youth. Also worth noting is that youth with higher risk propensities had higher odds of truancy, as did students with lower academic engagement and lower grades, irrespective of race/ethnicity.

Discussion

Truancy is a long-established problem in the U.S. A significant amount of money and effort has been invested in policies and programs to reduce truancy over the past two decades. Given the substantial efforts and focus by various federal agencies across the U.S. to improve school attendance, one might expect, or at least hope for, attendance rates to be positively impacted. Given prior findings of an increased likelihood of truancy in some minority and lower socioeconomic groups, these demographic and economic challenges may also impact truancy rates. We therefore examined whether truancy rates have changed over time, by race/ethnicity, in a large and nationally representative dataset. We also examined the correlates of truancy, given the limitations of the extant research in terms of sample sizes and representativeness of the samples.

Overall, truancy rates in the U.S. have been relatively stable over the past decade, with virtually no change in truancy from 2002 (10.9%) to 2014 (11.1%). The fact that there was not substantial change, despite major efforts to reduce truancy, may be explained by the substantial sociodemographic changes that have been occurring in the U.S. over the past several decades (Congressional Research Service, 2011). Specifically, the proportions of immigrant youth and native-born minority youth have increased in the U.S., and economic instability has negatively affected the lower and middle classes (Zong & Balatova, 2015). Consistent with prior research (Vaughn et al., 2013), prevalence of truancy among minority youth was higher than that for non-Hispanic youth overall; however, there was some variation at different times points between 2002 and 2014 by ethnic/racial group. Examining temporal trends in truancy by race/ethnicity revealed that the decline in truancy rates for Hispanic youth was slightly greater than for non-Hispanic White and African American youth. For the latter two groups, truancy rates were relatively unchanged from 2002 to 2014. Notably, there was a slight increase in truancy rates for non-Hispanic White youth between 2002–2007 and for African-American youth between 2002–2003 and 2006–2009, but both groups returned to 2002 prevalence rates by 2014.

Present study findings indicate that older youth (15–17 years) engaged in more truanting than younger youth (12–14 years) at each survey year. These findings are consistent with prior research on truancy (Henry, 2007; Vaughn et al., 2013) and also consistent with prior research findings that older youth are more likely than younger youth to engage in externalizing and delinquent behavior, which truancy is associated with and could be conceptualized as part of the externalizing spectrum (Vaughn et al., 2013). Temporal trends by age and gender were relatively stable between 2002 to 2014. For the older youth,

prevalence for females was relatively stable over time, whereas there was an observed decrease in truancy for older males between 2002–2014, supporting our third hypothesis. Notably, in 2002, the prevalence of truancy was higher for older males, but by 2014, older females reported higher prevalence than their male counterparts, though the difference was not statistically significant. For younger youth, prevalence rates were relatively stable across time, with females reporting slightly higher rates of truancy than males across the entire time period observed. Across all samples between 2002–2014, females were more likely to report skipping school than their male counterparts. The higher prevalence of skipping school among females relative to males is contrary to previous research finding no significant differences in truancy between males and females (Henry, 2007; Vaughn et al., 2013) and previous research finding higher prevalence among males (Egger et al., 2003). On the other hand, the similarity in truancy rates between older males and older females is consistent with Byrnes et al. (1999) who found gender gaps in risky behavior to be shrinking over time.

Examining sociodemographic, psychosocial, and behavioral correlates of truancy across racial/ethnic groups, different risk profiles for truancy emerge for the different groups. This is consistent with a small but growing body of literature pointing to differential risk factors and heterogeneity amongst truant youth (Maynard et al., 2012; Vaughn et al., 2013). All racial groups exhibited increased odds of truancy for youth 16–17 years of age; however, African American and Hispanic youth were more likely than non-Hispanic White youth to be truant at younger ages, beginning at 14. While youth of all races who used alcohol, engaged in binge drinking, or used marijuana were at higher odds for truancy, non-Hispanic White youth who used tobacco or illicit drugs were at higher odds of truancy, whereas African-American and Hispanic youth who used tobacco or illicit drugs were not. Similarly, White youth who reported selling drugs, stealing more than $50, or attacking someone with intent to harm were at higher odds of truancy while African American and Hispanic youth were not. Among African American youth, religiosity appears to be a protective factor, as those reporting to be religious were less likely to be truant. Religiosity was not associated with truancy for either White or Hispanic youth.

Implications for Practice and Research

Thorough understanding of the characteristics of truant youth and the factors that put these youth at risk of truancy is necessary for effective prevention (Henry & Huizinga, 2007). Cultural factors, among others, warrant specific attention in both the prevention and remediation of school attendance problems. Lyon and Cotler (2007) argued for the need to attend to cultural factors including cultural norms regarding the value of education and cultural differences in the structure of family relationships (e.g., the greater influence of extended family relationships in low-income African American families).

The divergent risk patterns between racial/ethnic groups observed in the current study underscore the need for truancy interventions to be culturally informed and to target risk factors unique to or more prevalent in specific racial/ethnic groups. For example, African American and Hispanic youth were found to engage in truancy at an earlier age than Non-Hispanic White youth. Universal preventive interventions may need to commence earlier in communities with higher proportions of African American and Hispanic youth. As another

example, female-headed households were more typical among African-American youth (54.1%) and Hispanic youth (27.9%) relative to non-Hispanic White youth (19.0%). Interventions which involve parents ought to account for the fact that a large proportion of African-American and Hispanic parents are likely to find it taxing to monitor and respond to a child's truancy without additional supports.

Future research could examine effects of truancy interventions by race and ethnicity to explore whether certain interventions that target specific risk factors may be more effective with some racial/ethnic groups than others. To date, race/ethnicity has not been found to moderate the outcomes of indicated interventions (Maynard et al., 2013), but this may be due to a failure to adequately attend to race/ethnicity in intervention studies. In their meta-analysis of studies of indicated intervention for truancy, Maynard et al. (2013) noted that 43% failed to report adequate information on race/ethnicity and 81% failed to report on socioeconomic status. Failure to report sociodemographic characteristics may well signal a failure to account for these factors when conducting an intervention. It may also reflect the lack of diversity in research samples. Indeed, Lyon and Cotler (2007) commented on the lack of ethnic, racial, and economic diversity in researched samples of youth with school attendance problems.

In the current study, truancy was defined by skipping school at least once in the last month. This level of absence would not meet Kearney's (2008) commonly cited criteria for the presence of problematic absenteeism (i.e., 2.5 days absence in the last two weeks or 10 days absence in the last 15 school weeks). Despite the low threshold used to determine the presence of truancy in the current study, significant differences were observed between racial/ethnic groups. It is possible that differences would also have been observed if higher rates or more chronic patterns of truancy were studied, and these differences between racial/ethnic groups may have been even greater. Indeed, Vaughn and colleagues (2013) found that stronger correlates of truancy were found for highly versus moderately truant youth. If greater racial/ethnic differences in truancy correlates are observed as truancy increases (in rate or chronicity), cultural factors may require differential emphasis within a Response to Intervention model (RtI; Kearney & Grazcyk, 2014) for school attendance problems. In other words, Tier 3 interventions for severe truancy may need to take more account of cultural factors than Tier 1 universal interventions to prevent school attendance problems. New research needs to closely examine correlates of truancy in relation to the rate or chronicity of the truancy to better inform policy and practice (Vaughn et al., 2013).

Cultural variables are, of course, also relevant when assessing school attendance problems. Kearney (2016) listed various cultural variables that may be of relevance when developing and delivering Tier 2 targeted early interventions for emerging school attendance problems. For example, parental beliefs about education might impact upon the parents' involvement in their child's education. In a recent discussion of the measurement of school attendance problems, Heyne and colleagues (2016) signaled possible links between cultural influences and the maintenance of these problems. For example, it was proposed that cultural differences in parental demandingness may be associated with a refusal to attend school to rebel against parental authority.

Some factors in the current study were found to be associated with truancy for all racial/ethnic groups. For example, low academic engagement and low school grades were significantly associated with truancy for Non-Hispanic White youth, African American youth, and Hispanic youth. The design of the current study does not permit conclusions about whether low engagement and grades were a cause or consequence of truancy. However, links found in other studies between school absenteeism at one time-point and academic performance at a subsequent time-point (e.g., Carroll, 2010) suggest the importance of helping truant youth cope with academic demands to increase the likelihood that they can remain engaged with the educational experience, despite occasional absenteeism. This would help reduce the likelihood of youth falling further behind academically and dropping out of school altogether.

Limitations

A major strength of the current study lies in its large and nationally representative sample. At the same time, findings should be interpreted within the context of several limitations. First, the assessment of truancy was based on self-report and not school administrative data. Issues of response bias and respondent recall may contribute to under-reporting and over-reporting. Moreover, there was no associated data available to capture specific reasons for skipping school. It is possible that some youth who endorsed missing school 'because [they] just didn't want to be there' did so because of emotional distress associated with school attendance, typical of school refusal rather than truancy. Another major shortcoming is the nature of the survey, which is essentially a series of cross sectional studies. Thus, any causal conclusions regarding the associations with truancy simply cannot be drawn.

Conclusions

Given the serious educational, social, health, and legal ramifications of truancy, the significant ongoing efforts to reduce truancy are certainly well justified. However, present study findings indicate that despite the efforts being made at the local, state, and federal levels, little impact has been made towards reducing truancy. In short, truancy remains a chronic problem that has yet to be ameliorated at the population-level. As observed in this study, a more nuanced story emerges when temporal trends in truancy are stratified by ethnicity/race. Given the variation in trends and correlates of truancy across racial/ethnic groups and the demographic changes occurring in the U.S., truancy reduction efforts may need to move towards a more differentiated approach taking into account cultural and other factors associated with truancy.

Acknowledgments

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Highlights

- Truancy rates remained constant between 2002 (10.8%) and 2014 (11.1%).

- Rates were highest among older youth, females, and Hispanic youth.

- For all racial/ethnic groups, truancy was significantly correlated with alcohol and marijuana use, fighting, the propensity to take risks, and lower academic engagement and school grades.

- Other behavioral and psychosocial factors were differentially associated with racial/ethnic groups, pointing to different risk profiles for different groups

- Truancy reduction efforts may need to move towards a more differentiated approach taking into account cultural and other factors associated with truancy
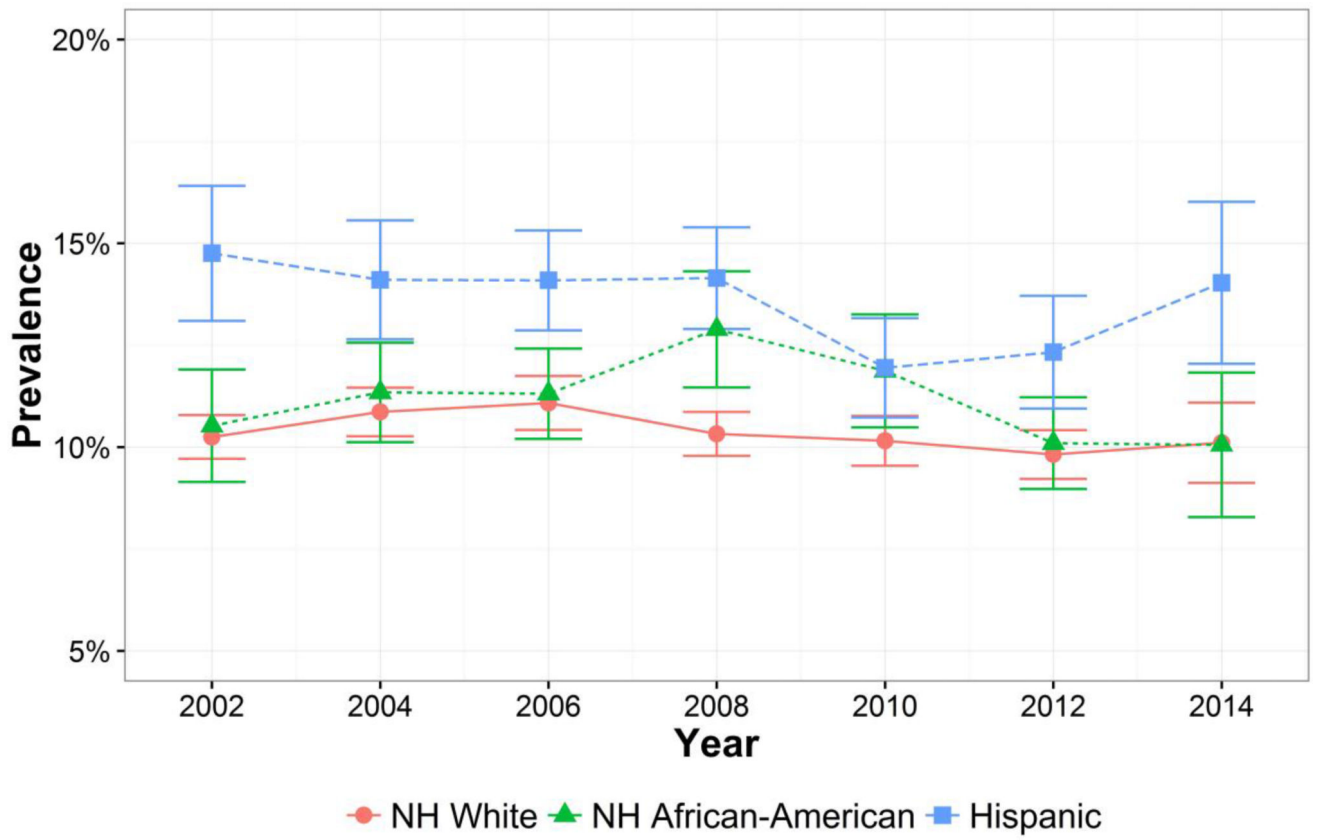
Figure 1.
Prevalence estimates and 95% confidence intervals for prevalence of truancy by race/
ethnicity.
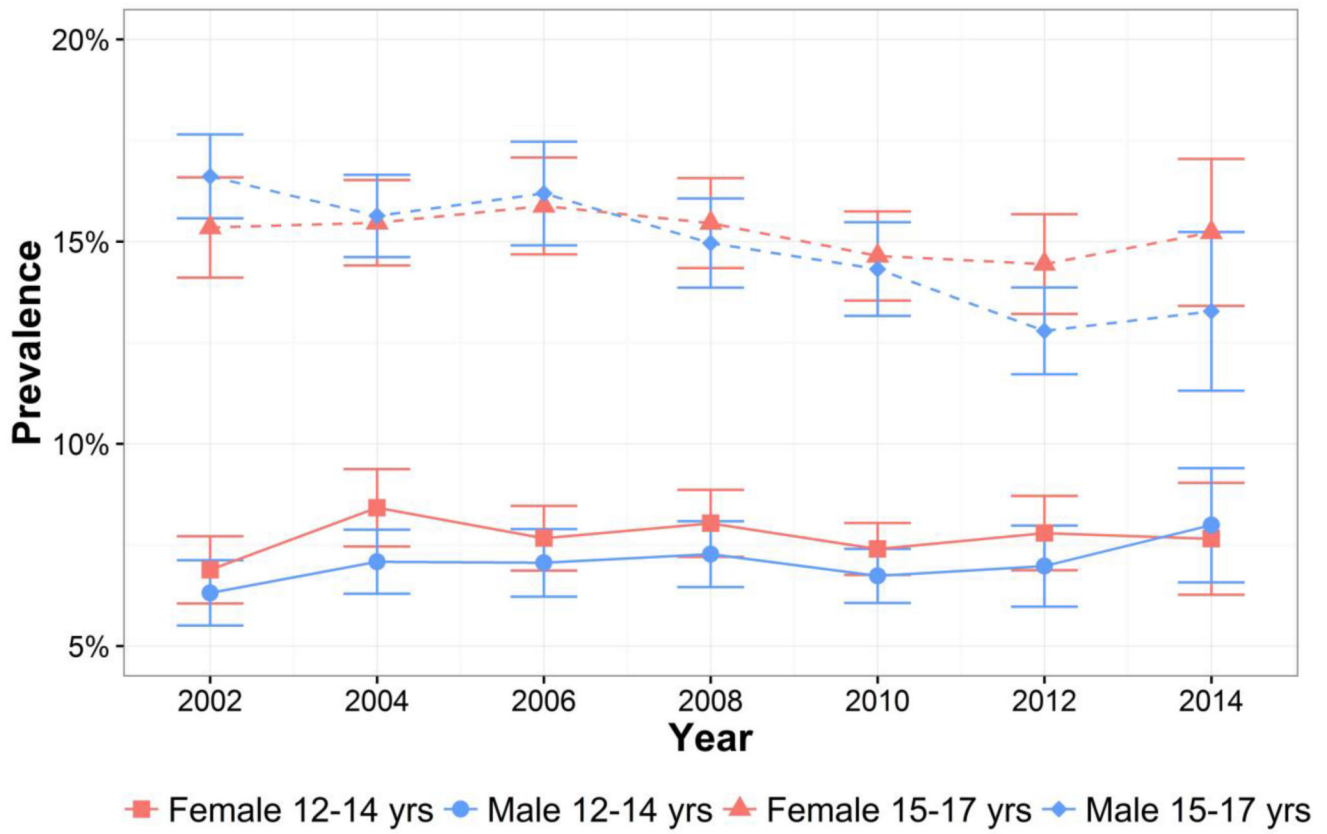
Figure 2.
Prevalence estimates and 95% confidence intervals for truancy by age and gender.

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Table 1

Sociodemographic, Behavioral, and Psychosocial Characteristics of the Adolescents by Race/Ethnicity in the United States: 2002–2014.

	Non-Hispanic White (*n* = 138,152)		African American (*n* = 31,595)		Hispanic (*n* = 39,646)	
	N (%)	(95% CI)	N (%)	(95% CI)	N (%)	(95% CI)
Prevalence of Skipping School						
No	101,025 (89.6)	(89.4–89.8)	23,183 (88.8)	(88.3–89.2)	28,418 (86.5)	(86.0–87.0)
Yes	11,991 (10.4)	(10.2–10.6)	3,206 (11.2)	(10.8–11.7)	4,726 (13.5)	(13.0–14.0)
Sociodemographic Factors:						
Age						
12	21,164 (15.3)	(15.1–15.6)	4,969 (15.8)	(15.2–16.4)	6,360 (16.6)	(16.0–17.2)
13	22,832 (16.4)	(16.2–16.7)	5,158 (16.6)	(16.1–17.1)	6,648 (17.1)	(16.6–17.7)
14	23,142 (16.8)	(16.5–17.1)	5,109 (16.6)	(16.2–17.1)	6,698 (17.2)	(16.6–17.7)
15	23,531 (17.2)	(16.9–17.5)	5,449 (17.1)	(16.6–17.7)	6,761 (16.8)	(16.2–17.4)
16	23,958 (17.3)	(17.0–17.5)	5,519 (17.2)	(16.6–17.8)	6,653 (16.0)	(15.3–16.7)
17	23,525 (17.0)	(16.8–17.3)	5,391 (16.7)	(15.8–17.0)	6,526 (16.4)	(15.8–17.0)
Gender						
Female	67,151 (48.8)	(48.5–49.2)	15,795 (49.5)	(48.7–50.3)	19,482 (48.6)	(47.9–49.3)
Male	71,001 (51.2)	(50.8–51.5)	15,800 (50.5)	(49.7–51.3)	20,164 (51.4)	(50.7–52.1)
Household Income						
< $20,000	54867 (9.3)	(9.1–9.5)	3671 (35.4)	(34.5–36.1)	5806 (28.4)	(27.6–29.1)
$20,000–$49,999	13467 (26.9)	(26.6–27.3)	11638 (38.8)	(37.9–39.6)	11625 (41.7)	(40.8–42.5)
$50,000–74,999	39465 (20.7)	(20.4–21.0)	12392 (13.1)	(12.7–13.6)	17000 (13.2)	(12.6–13.8)
> $75,000	30353 (43.1)	(42.6–43.5)	3894 (12.7)	(12.2–13.3)	5215 (16.8)	(16.0–17.5)
Father in Household						
No	27,622 (19.0)	(18.7–19.4)	17,884 (54.1)	(53.3–54.8)	12,145 (27.9)	(27.3–28.5)
Yes	110,419 (81.0)	(80.6–81.3)	13,664 (45.9)	(45.2–46.7)	27,438 (72.1)	(71.5–72.7)
Behavioral Factors:						
Substance Use						
Tobacco Use						
No	113,370 (82.3)	(82.0–82.6)	28,401 (80.6)	(80.1–81.0)	33,843 (86.6)	(86.1–87.1)

	Non-Hispanic White (n = 138,152)		African American (n = 31,595)		Hispanic (n = 39,646)	
	N (%)	(95% CI)	N (%)	(95% CI)	N (%)	(95% CI)
Yes	24,782 (17.7)	(17.4–18.0)	3,194 (9.4)	(9.0–9.9)	5,803 (13.4)	(12.9–13.9)
Alcohol Use						
No	91,707 (66.8)	(66.5–67.1)	23,872 (76.5)	(75.9–77.1)	27,176 (70.0)	(69.4–70.6)
Yes	46,445 (33.2)	(32.9–33.5)	7,723 (23.5)	(22.9–24.1)	12,470 (30.0)	(29.4–30.6)
Binge Drinking						
No	123,421 (89.5)	(89.3–89.7)	30,075 (95.5)	(95.2–95.8)	35,901 (91.5)	(91.1–91.8)
Yes	14,731 (10.5)	(10.3–10.7)	1,520 (4.5)	(4.2–4.8)	3,745 (8.5)	(8.2–8.9)
Marijuana Use						
No	117,786 (85.4)	(85.2–85.6)	27,256 (87.2)	(86.7–87.8)	33,944 (86.6)	(86.2–87.0)
Yes	20,366 (14.6)	(14.4–14.8)	4,339 (12.8)	(12.3–13.2)	5,702 (13.4)	(13.0–13.8)
Illicit Drug Use						
No	135,412 (98.0)	(97.9–98.1)	31,240 (98.9)	(98.8–99.0)	38,833 (98.0)	(97.8–98.2)
Yes	2,740 (2.0)	(1.9–2.1)	355 (1.1)	(1.0–1.2)	813 (2.0)	(1.8–2.2)
Behavioral Factors:						
Violence and Delinquency						
Fighting at school/work						
No	111,437 (81.3)	(81.0–81.6)	21,977 (71.0)	(70.0–71.7)	29,967 (77.1)	(76.6–77.7)
Yes	26,178 (18.7)	(18.4–19.0)	9,401 (29.0)	(28.3–30.0)	9,459 (22.9)	(22.3–23.4)
Attack with intent to harm						
No	129,578 (94.2)	(94.0–94.3)	27,490 (88.1)	(87.6–88.5)	36,518 (93.2)	(92.9–93.4)
Yes	8,225 (5.8)	(5.7–6.0)	3,905 (11.9)	(11.5–12.4)	2,973 (6.8)	(6.6–7.1)
Carried a handgun						
No	132,596 (96.5)	(96.4–96.6)	30,186 (96.5)	(96.3–96.7)	38,097 (96.7)	(96.5–97.0)
Yes	5,127 (3.5)	(3.4–3.6)	1,214 (3.5)	(3.3–3.7)	1,396 (3.3)	(3.0–3.5)
Sold Drugs						
No	135,239 (99.6)	(99.5–99.7)	30,586 (99.5)	(99.4–99.6)	38,295 (99.5)	(99.4–99.6)
Yes	625 (0.4)	(0.3–0.5)	175 (0.5)	(0.4–0.6)	214 (0.5)	(0.4–0.6)
Stole > $50						
No	132,642 (96.3)	(96.1–96.4)	29,798 (95.1)	(94.9–95.4)	37,440 (95.3)	(95.0–95.6)

	Non-Hispanic White (n = 138,152)		African American (n = 31,595)		Hispanic (n = 39,646)	
	N (%)	(95% CI)	N (%)	(95% CI)	N (%)	(95% CI)
Yes	5179 (3.7)	(3.6–3.9)	1,607 (4.9)	(4.6–5.1)	2,037 (4.7)	(4.4–5.0)
Psychosocial Factors:						
Individual Factors						
Religiosity, *mean*	5.72	(5.70–5.73)	6.22	(6.20–6.25)	5.80	(5.77–5.83)
Risk Propensity						
Low	69,404 (51.4)	(51.1–51.7)	19,365 (62.5)	(61.8–63.2)	22,016 (58.2)	(57.5–58.9)
Medium	26,370 (19.5)	(19.2–19.8)	6,321 (20.8)	(20.2–21.4)	7,715 (19.6)	(19.1–20.1)
High	40,524 (29.1)	(28.8–29.4)	5,329 (16.7)	(16.1–17.4)	8,866 (22.2)	(21.6–22.8)
School-Related Factors						
Academic Engagement, *mean*	9.96	(9.94–9.98)	8.71	(8.66–8.75)	9.17	(9.13–9.21)
Grades						
A	44,408 (35.4)	(35.0–35.7)	4,465 (17.2)	(16.6–17.8)	6,859 (21.1)	(20.5–21.7)
B	51,824 (41.2)	(40.8–41.6)	11,549 (45.1)	(44.4–45.8)	14,561 (45.1)	(44.3–45.9)
C	23,662 (18.2)	(18.0–18.5)	8,364 (30.7)	(30.1–31.3)	8,698 (26.2)	(25.6–26.9)
D or lower	6,827 (5.2)	(5.1–5.4)	1,989 (7.0)	(6.6–7.4)	2,602 (7.6)	(7.2–8.0)
Peer-student substance use						
Few or none	63,892 (50.9)	(50.5–51.3)	11,747 (45.6)	(44.8–46.4)	16,027 (50.4)	(49.7–51.1)
Many or most	61,124 (49.1)	(48.7–49.5)	14,439 (54.4)	(53.6–55.2)	16,935 (49.6)	(48.9–50.3)
Family Factors						
Control, *mean*	14.7	(14.5–15.0)	15.5	(14.9–16.0)	14.3	(13.8–14.8)
Affirmation						
Low	12,397 (8.9)	(8.7–9.1)	3,292 (10.5)	(10.1–10.9)	4,737 (11.6)	(11.2–12.1)
Medium	11,127 (7.9)	(7.7–8.1)	2,804 (8.9)	(8.5–9.3)	4,032 (10.2)	(9.7–10.6)
High	114,012 (83.2)	(83.0–83.5)	25,248 (80.7)	(80.1–81.2)	30,592 (78.2)	(77.7–78.7)
Conflict						
No	53,277 (39.2)	(38.8–39.5)	20,229 (65.0)	(64.3–65.8)	19,702 (51.7)	(50.9–52.4)
Yes	83,122 (60.8)	(60.5–61.2)	10,970 (35.0)	(34.2–35.7)	19,406 (48.3)	(47.6–49.1)

Percentages and 95% confidence intervals are adjusted for the survey sampling design and may not sum to 100%.

Table 2

Associations with Skipping School among Adolescents in the United States: 2002–2014.

	Non-Hispanic White (n = 138,152)		African American (n = 31,595)		Hispanic (n = 39,646)	
	OR	(95% CI)	OR	(95% CI)	OR	(95% CI)
Sociodemographic Factors:						
Age						
12	1		1		1	
13	1.02	(0.90–1.15)	1.27	(0.96–1.68)	1.02	(0.79–1.31)
14	1.13	(0.99–1.29)	**1.32**	**(1.01–1.72)**	1.26	(0.98–1.62)
15	**1.15**	**(1.02–1.30)**	**1.60**	**(1.23–2.08)**	**1.39**	**(1.10–1.75)**
16	**1.39**	**(1.23–1.58)**	**2.15**	**(1.65–2.79)**	**1.77**	**(1.36–2.31)**
17	**1.96**	**(1.72–2.24)**	**2.85**	**(2.17–3.75)**	**2.32**	**(1.82–2.97)**
Gender						
Male	1		1		1	
Female	**1.19**	**(1.12–1.25)**	**1.16**	**(1.03–1.31)**	**1.13**	**(1.01–1.26)**
Household Income						
< $20,000	**1.54**	**(1.39–1.70)**	**1.71**	**(1.37–2.15)**	1.24	(0.99–1.56)
$20,000–$49,999	**1.30**	**(1.20–1.39)**	**1.57**	**(1.26–1.94)**	1.14	(0.95–1.37)
$50,000–75,000	1.08	(0.99–1.16)	**1.41**	**(1.10–1.80)**	0.98	(0.76–1.27)
> $75,000	1		1		1	
Father in Household						
No	**1.19**	**(1.11–1.28)**	1.15	(0.99–1.33)	**1.24**	**(1.10–1.40)**
Yes	1		1		1	
Behavioral Factors:						
Substance Use						
Tobacco Use						
No	1		1		1	
Yes	**1.33**	**(1.23–1.44)**	1.18	(0.98–1.42)	1.10	(0.95–1.27)
Alcohol Use						
No	1		1		1	

	Non-Hispanic White (n = 138,152)		African American (n = 31,595)		Hispanic (n = 39,646)	
	OR	(95% CI)	OR	(95% CI)	OR	(95% CI)
Yes	1.35	(1.25–1.46)	1.57	(1.36–1.82)	1.32	(1.14–1.52)
Binge Drinking						
No	1		1		1	
Yes	1.29	(1.20–1.39)	1.52	(1.23–1.87)	1.42	(1.22–1.67)
Marijuana Use						
No	1		1		1	
Yes	1.29	(1.18–1.41)	1.32	(1.13–1.56)	1.31	(1.13–1.52)
Illicit Drug Use						
No	1		1		1	
Yes	1.17	(1.01–1.34)	1.03	(0.65–1.63)	1.04	(0.75–1.43)
Behavioral Factors:						
Violence and Delinquency						
Fighting at school/work						
No	1		1		1	
Yes	1.27	(1.18–1.35)	1.30	(1.14–1.50)	1.49	(1.32–1.67)
Attack with intent to harm						
No	1		1		1	
Yes	1.10	(1.01–1.21)	1.13	(0.92–1.38)	1.12	(0.92–1.36)
Carried a handgun						
No	1		1		1	
Yes	1.12	(0.97–1.29)	1.26	(0.96–1.66)	0.99	(0.76–1.27)
Sold Drugs						
No	1		1		1	
Yes	1.06	(0.77–1.48)	1.09	(0.63–1.91)	1.10	(0.57–2.12)
Stole >$50						
No	1		1		1	
Yes	1.29	(1.15–1.45)	1.14	(0.90–1.43)	1.20	(0.98–1.48)
Psychosocial Factors:						
Individual Factors						

	Non-Hispanic White (n = 138,152)		African American (n = 31,595)		Hispanic (n = 39,646)	
	OR	(95% CI)	OR	(95% CI)	OR	(95% CI)
Religiosity	1.01	(0.99–1.03)	**0.94**	**(0.90–0.97)**	0.99	(0.96–1.03)
Risk Propensity						
Low	1		1		1	
Medium	**1.16**	**(1.08–1.25)**	**1.16**	**(1.01–1.33)**	**1.23**	**(1.08–1.40)**
High	**1.19**	**(1.11–1.28)**	1.07	(0.93–1.24)	1.10	(0.96–1.27)
School-Related Factors						
Academic Engagement	**0.93**	**(0.93–0.94)**	**0.93**	**(0.91–0.94)**	**0.94**	**(0.93–0.97)**
Grades						
A	1		1		1	
B	**1.33**	**(1.24–1.44)**	0.97	(0.79–1.18)	**1.40**	**(1.17–1.68)**
C	**1.70**	**(1.58–1.83)**	**1.32**	**(1.05–1.66)**	**1.93**	**(1.62–2.31)**
D or lower	**1.89**	**(1.70–2.10)**	**1.70**	**(1.32–2.19)**	**2.13**	**(1.70–2.67)**
Peer-student substance use						
Few or none	1		1		1	
Many or most	**1.16**	**(1.09–1.24)**	**1.20**	**(1.05–1.36)**	**1.35**	**(1.17–1.56)**
Family Factors						
Control	**1.17**	**(1.09–1.25)**	0.89	(0.79–1.02)	**1.32**	**(1.15–1.51)**
Affirmation						
Low	1		1		1	
Medium	1.04	(0.94–1.16)	1.08	(0.89–1.30)	1.08	(0.89–1.31)
High	1.03	(0.95–1.12)	1.01	(0.86–1.19)	1.01	(0.89–1.15)
Conflict						
No	1		1		1	
Yes	**1.09**	**(1.02–1.16)**	**1.14**	**(1.01–1.29)**	1.08	(0.94–1.23)
Survey Year	**1.01**	**(1.01–1.02)**	1.00	(0.99–1.02)	0.99	(0.98–1.01)

Note: Odds ratios (OR) are mutually adjusted for age, gender, household income, father in household, tobacco use, alcohol use, binge drinking, marijuana use, illicit drug use, fighting at school/work, attacking a person with the intent to harm, carrying a handgun, selling drugs, stealing >$50, religiosity, risk propensity, academic engagement, grades, parental control, parental affirmation, youth-parent conflict, and survey year. ORs and 95% CIs in bold are statistically significant (p < .05)