

# TRAJECTORIES OF DELINQUENCY FROM ADOLESCENCE TO ADULTHOOD

Darci Powell  
Department of Sociology  
University of North Carolina at Chapel Hill

Krista M. Perreira  
Department of Public Policy and  
Carolina Population Center  
University of North Carolina at Chapel Hill

Kathleen Mullan Harris  
Department of Sociology and  
Carolina Population Center  
University of North Carolina at Chapel Hill

Please direct correspondence to Krista M. Perreira, Carolina Population Center, 123 W. Franklin St., CB#8120, Chapel Hill, NC 27510. E-mail: [krista\\_perreira@unc.edu](mailto:krista_perreira@unc.edu).

\*We would like to thank the Russell Sage Foundation for their financial support for this research. This research uses data from Add Health, a program project designed by J. Richard Udry, Peter S. Bearman, and Kathleen Mullan Harris, and funded by a grant P01-HD31921 from the National Institute of Child Health and Human Development, with cooperative funding from 17 other agencies. Special acknowledgment is due Ronald R. Rindfuss and Barbara Entwisle for assistance in the original design. Persons interested in obtaining data files from Add Health should contact Add Health, Carolina Population Center, 123 W. Franklin Street, Chapel Hill, NC 27516-2524 ([www.cpc.unc.edu/addhealth/contract.html](http://www.cpc.unc.edu/addhealth/contract.html)).

# **TRAJECTORIES OF DELINQUENCY FROM ADOLESCENCE TO ADULTHOOD**

## **ABSTRACT**

Rising immigration rates to the U.S. have been associated with increased public sentiment against immigrant populations and fears that immigration will lead to escalations in crime and delinquency. However, surprisingly few researchers have studied delinquency among immigrant youth or in comparison with U.S.-born youth. Guided by a life-course perspective, we use three waves of the National Longitudinal Study of Adolescent Health to describe longitudinal variations in delinquency by gender, race-ethnicity, immigrant generation, co-ethnic community concentration, and their interactions. We find the first-generation Asian females and second-generation Hispanic females have the highest risk of delinquency during early adolescence. During late adolescence, Asian and Hispanic 3<sup>rd+</sup> generation youth have the highest risk of delinquency. However, as youth transition to adulthood the rates of delinquency for all population groups converge.

**Key words:** delinquency, adolescence, life-course, ethnicity, immigrant, gender,

Rising immigration rates to the U.S. have been associated with increased public sentiment against immigrant populations and fears that immigration will lead to escalations in crime and delinquency. While we know little about patterns of delinquency among the children of immigrants, delinquency is a critical social problem among youth more generally. Delinquency typically begins in early adolescence and ends when adolescence transition into adulthood. During adolescence, delinquency is associated with early childbearing, leaving the parental household, and decreased success in schoolwork (Smith et al. 2000). Additionally, adolescent delinquency is associated with decreases in social bonding and increases in interactions with delinquent peers that can contribute to persistent criminal activity throughout the life course (Cernkovich & Giordano 2001). Lastly, adolescent delinquency has been associated with negative health, education, and labor market outcomes when it persists into adulthood (Moffitt 1993; Agnew 2003; Hagan 1997).

Recent decades have been shaped by profound changes in the timing of events that mark the end of adolescence and the transition to adulthood in the United States. Over the last two decades, the adolescent transition to adulthood has lengthened considerably in the U.S. and in other postindustrial societies. Events commonly associated with entering adulthood are occurring at older ages, and developmental behaviors normally associated with adolescence now continue into early adulthood (Arnett 2000). As this period of *emerging adulthood* has lengthened, it has also become more variable (Buchmann 1989; Shanahan 2000). Few young people follow the traditional sequence of leaving home, finishing their education, acquiring full-time jobs, marrying, and having children (Rindfuss et al. 1987).

The timing and sequencing of transitions into adulthood can be affected strongly by participation in delinquent activities during adolescence, with delinquency often precipitating

early entry into adult roles such as parenthood and leaving home but potentially delaying entry into employment and marital relationships (Smith et al. 2000). As a result, adolescent researchers must understand trajectories of delinquency and the role these trajectories play from a life-course perspective.

Recent decades have also been shaped by profound demographic changes, most notably the large influx of immigrants to the U.S. In 2005, 12% of the U.S. population was foreign-born and the vast majority of these new immigrants came to the U.S. from Latin America (53%) or Asia (25%) (Pew Hispanic Center 2006). As a result of this rise in immigration, nearly one in five of America's adolescents and young adults (ages 12-25) are immigrants or the children of immigrants (Morse 2004).

As their numbers have increased, so has public sentiment against immigrants (Rumbaut et al. 2006). Forty-five percent of the American public polled in 2007 believed that the number of immigrants in the U.S. should be reduced (Gallup Organization 2007). Many (58%) also believe that immigrants make the crime situation in the U.S worse (The Gallup Organization 2007). In this climate of rising immigration and fear of the impacts of immigration on crime and delinquency, surprisingly few researchers have studied delinquency among immigrant youth (Bachman et al. 1991; Jang 2002; Khondaker 2005; Wong 1997; Le & Stockdale 2005).

This research builds upon previous studies on delinquency and contributes to the literature on immigrant youth. Using data from three waves of the National Longitudinal Study of Adolescent Health (Add Health), this study provides the first national, longitudinal account of delinquency in the transition to adulthood by gender, race-ethnic and immigrant group from the onset of adolescence (age 11-12) through the transition into adulthood (age 25-26). After examining and describing the trajectories of delinquency by gender, race-ethnicity, and

immigrant generation, we consider how the co-ethnic concentration of the residential community context modifies these delinquency trajectories.

## **THEORETICAL PERSPECTIVES AND PRIOR RESEARCH**

Life-course and general delinquency theories provide a framework for this analysis. In this section, we first summarize life course perspectives on delinquency. We then discuss explanations of the causes of delinquency, including social control, social learning and latent trait theories of delinquency. Finally, we evaluate how gender, race, immigration and neighborhood co-ethnic concentrations influence delinquency throughout the life course.

### **LIFE COURSE PERSPECTIVES ON DELINQUENCY**

Scholars increasingly view delinquency as a changing trajectory that varies over time with an individual's accumulated history and with changes in the social environment (Chung et al. 2002; Ayers et al. 1999; Rutter 1996; Sampson & Laub 1993; Elder 2000, 1998). This life-course perspective suggests that researchers should examine changing patterns of behavior, such as delinquency, throughout the lives of individuals rather than at isolated moments (Elder 2000, 1998). According to life course research, delinquent behavior usually begins in early adolescence (ages 11-14), peaks in middle adolescence (ages 15-17) and drops off significantly with approaching adulthood (Agnew 2003; Smith et al. 2000). However, rates of participation in delinquent behavior vary considerably, with some individuals continuing to participate in delinquent activity throughout the life course and others beginning to participate in delinquent activity post-adolescence (Lay et al. 2005; Cernkovich & Giordano 2001).

Adolescence is a time of increased participation in delinquent activities partially because adolescents have some but not all of the freedoms, responsibilities and resources of adults (Agnew 2003). Adolescents experience decreased supervision and support from adults,

increased resources including money, and increased peer influence (Agnew 2003). Delinquency declines when adolescents take on more of the responsibilities of adulthood, which are not compatible with delinquent behavior (Cernkovich & Giordano 2001). However, for some adolescents, delinquent activity early in life may disrupt the traditional life-course. These disruptions can include early entrance into adult roles, such as parenthood, or delayed adoption of adult behaviors including employment and marriage (Smith et al. 2000; Cernkovich & Giordano 2001; Lay et al. 2005; Patterson et al. 1989). While early assumption of adult roles can quickly reduce the rate of delinquency during early and late adolescence, delays in these life-course transitions may retard the reduction in delinquency rates typically observed as adolescents enter into adulthood.

#### **SOCIAL CONTROL, SOCIAL LEARNING, STRAIN AND SELF-CONTROL THEORIES OF DELINQUENCY**

Theories suggest that delinquency results from lack of social control, social learning, social strain, or personal traits such as lack of self-control. Social control theory states that social bonds marked by strong attachment to others, involvement in group social activities and beliefs in broader social norms keep individuals from participating in delinquent behavior (Hirschi 1969; Voss 1970; Wiatrowski 1981; Hoffmann 2003). Individual delinquency is highest in areas of high social disorganization and low social bonding.

Social learning and differential association theories suggest that delinquency is the result, not of low social bonding, but of strong attachments to individuals who participate in delinquent activities (Sutherland 1947; Sutherland & Cressey 1966). Individuals are especially prone to bond with delinquent peers when social control is low (Akers 1998; Hoffman 2003). Moreover, those who associate with delinquent peers do tend to participate in more delinquent activities (Le et al. 2004; Gordon et al. 2005).

Other theorists suggest that delinquency is a response to social strain and stress (Agnew 1992; Hoffman 2004). Originally, strain theory suggested that delinquency, especially among adolescents, resulted when adolescents were unable to reach their academic and economic goals and became frustrated in the process (Agnew 1992). Revised strain theory suggests that the inability to avoid pain-causing and negative stimuli, such as negative family environments, also contributes to delinquent behavior. Sources of strain may be more common in certain community contexts, including neighborhoods with lower socioeconomic status and greater concentrations of ethnic minorities, so that delinquency is likely to be higher in these areas (Aneshensel & Sucoff 2006).

Finally, delinquency can be caused by personal traits that predispose individuals to delinquent behavior, such as mental health disorders, lack of self-control and a propensity toward risk-taking behavior (Gottfredson & Hirschi 1990; Cernkovich & Giordano 2001; Lay et al. 2005; Longshore et al. 2004). Individuals who have characteristics that predispose them to delinquent behavior will have these characteristics throughout the life course. Late-onset delinquency can be caused by persistent psychological disorders that have not been expressed due to high social control during adolescence (LaGrange & Silverman 1999)

These theories help explain variations in delinquency by race-ethnicity, gender and immigrant generation. Females, males and members of different race-ethnicity and immigrant groups are exposed to varying degrees of social control and social strain. Due to these differences, we hypothesize that delinquency rates will be highest among those who experience the greatest strain in their social environments and who have the highest exposure to delinquent others. Delinquency rates will be lowest among those who experience high levels of social

control in their home, school, and community environments. Predictions for specific gender, race-ethnic and immigrant groups are discussed in the next section.

### **GENDER, RACE-ETHNICITY AND IMMIGRANT GENERATION DIFFERENCES**

*Gender.* Delinquency rates vary significantly by gender, with females participating in delinquent activities far less frequently than males (LaGrange & Silverman 1999; Broidy & Agnew 1997). Males and females are said to vary in their delinquency rates because of differences in opportunities, in socialization, and in experiences of strain. Gottfredson and Hirschi (1990), combining latent trait and social control models, suggest that, because females are socialized more closely than males and guarded from participating in delinquent behavior early, they tend to have greater self-control and to participate in delinquent behavior less than males. Scholars have found a smaller gap between male and female delinquent behavior in families with less strict gender norms, suggesting that some of the tendency toward risk-taking behavior in males may be the result of socialization (Grasmick et al. 1996; Cota-Robles & Gamble 2006).

Strain theory has also been used to explain the difference in delinquency between males and females. Although females experience similar amounts of strain as males, they may experience and react to stressors differently (Broidy & Agnew 1997). Females, for example, tend to internalize stress, by becoming depressed or anxious, whereas males tend to externalize stress through violent or aggressive behaviors (Chesney-Lind 1992; Campbell 1993; Broidy & Agnew 1997). These responses can lead to increased delinquency among males versus females.

*Race-Ethnicity.* Previous studies have also found substantial differences in delinquency by race-ethnicity. Black respondents, for example, report lower delinquency than other ethnicities, although scholars suggest this finding results from reporting biases (Hindelang 1981).

Other studies show that both Hispanics and Blacks tend to have higher participation in violent crime than Whites (Kaufman 2005). Thus, delinquency is lower overall but the types of delinquent activities that these youth engage in are more violent. Asians as a whole tend to show lower levels of delinquency than Whites, but this trend varies by ethnic subgroup. Some Southeast Asian groups (e.g., Cambodian and Laotian) have higher levels of crime and delinquency than other Asian populations (e.g., Chinese) (Le and Stockdale 2005).

Strain theory is particularly salient for studies of minority ethnic groups. Minority adolescents are at high risk of participating in delinquent activities because they are more likely to live in economically disadvantaged communities with higher levels of stress (Mirowsky & Ross 1980). They also experience more strain due to discrimination and social isolation (Portes et al. 2005; Simons et al. 2003; Crowder & South 2003; Massey & Denton 1993; Albrecht et al. 2005). The negative stimuli linked to poverty and social isolation increase the chances that youth turn to delinquency as a way to achieve goals or deal with negative tensions.

However, ethnic groups show different levels of stress in response to these negative stimuli and some demonstrate more socio-psychological resistance to distress than others (Mirowsky & Ross 1980; Jang 2002; Rumbaut 1994; Bachman et al. 1991). For example, Mirowsky and Ross (1980) find that among adults, minority status is distressing for Blacks, especially if it is also correlated with low socioeconomic status. Whereas, the signs of distress due to minority and low socioeconomic status are much lower for Mexican-Americans (Mirowsky & Ross 1980). Other studies show higher rates of delinquency among Hispanic vs. Black adolescents and suggest that Hispanic identity is more distressing than Black identity.

*Immigrant Generation.* Social control, social learning, and self-control theories describe the institutions and processes that influence the development of prosocial and antisocial

behaviors. Migration and the process of assimilation can disrupt these developmental processes during the transition from adolescence to adulthood. As they adapt to life in America, immigrant children must navigate between native and American cultures. Because many children of immigrants live in economically disadvantaged communities with high crime and delinquency rates and are subject to discrimination and social isolation, they are at high risk of participating in delinquent activities (Mirowsky & Ross 2006; Zhou 1997; Portes et al. 2005). Further, increased assimilation can lead to conflict with parents over social norms, decreasing social control, and increasing participation in delinquency (Wong 1997; Khondaker 2005).

A dominant theory of immigrant assimilation, segmented assimilation theory, argues that responses to migration vary by ethnic group, the context of reception into the U.S., and the extent to which cultural norms are maintained post-immigration (Portes & Rumbaut 2001). Therefore, we expect differences in delinquency rates by immigrant generation within race-ethnic groups. Minority youth who experience downward assimilation into lower socio-economic classes and who are subject to discrimination or social isolation are expected to report higher delinquency levels than their white counterparts (Alba & Nee 1997). In some cases, the second generation children of immigrants are at highest risk for negative outcomes such as delinquency because they take an adverse stance against the native culture (Zhou 1997; Perlmann & Waldinger 1998). In other cases, the first generation children of immigrants are at lowest risk for negative outcomes due to high levels of optimism about their futures, strong social controls in their families, and limited engagement with third-plus generation natives. In one study using the initial wave of Add Health data, Harris (1999) examined youths' propensities to engage in any risky behavior including delinquency. She found that second generation Chinese children have more

risky behaviors than first or third-plus generation children. Other racial groups showed progressively higher risk behavior levels between the first, second and third-plus generations.

In addition to varying by race-ethnicity, the effects of immigrant generation on delinquency are expected to vary by gender. Scholars have found significant gaps in gender attitudes between Asian, Hispanic, and mainstream American cultures (Harris & Firestone 1998; Wilkie 1993; Kane 2000; Pyke & Johnson 2003). Hispanic and Asian respondents report more traditional, less egalitarian gender values, whereas the general trend in the American mainstream is toward more egalitarian gender norms (Harris & Firestone 1998; Wilkie 1993; Kane 2000; Pyke & Johnson 2003). This gap is difficult for females to navigate and produces increased strain. As a result, we hypothesize that female children of immigrants will have higher delinquency rates than their male counterparts.

*Community Co-ethnic Concentration.* Segmented assimilation theory and social control theory, also suggest that the co-ethnic concentration of a community, which can indicate the strength of ethnic ties, will influence immigrant outcomes. Immigrant youth embedded in strong ethnic subcultures or co-ethnic communities are exposed to greater social control during and post migration and may be deterred from delinquent behavior. High community co-ethnicity was positively related to self-esteem among Chinese immigrants (Schnittker 2002). High co-ethnic concentration has also been linked with higher earnings and labor market opportunities for less-skilled immigrants. But saturation of the labor market can attenuate and even reverse this relationship (Bachmeier, 2007). Finally, Le and Stockdale (2005) found that the loss of co-ethnic ties, often as a result of living in areas of lower minority concentration, could increase delinquency rates.

In sum, we examine trends in delinquency from the Add Health survey over-time during the developmental period of adolescence to young adulthood. By using longitudinal data, we can evaluate individual delinquency through a life-course perspective, treating delinquency as a career that varies over time and across environments rather than as an isolated event.

Based on theories of social control, learning, and strain, we expect to find that females participate in less delinquent behavior than males, and White youth participate in less delinquent behavior than most minority youth. Black respondents are hypothesized to report lower delinquency rates than respondents of other race-ethnicities. Therefore, they may be the exception to this rule. Based on segmented assimilation theory and differences in gender socialization by immigrant groups, we expect race-ethnicity, gender, and co-ethnic community concentration to modify delinquency trajectories by immigrant generation. Thus, we evaluate interactions between these characteristics.

## **DATA AND METHOD**

### **DATA**

We use data from the National Longitudinal Study of Adolescent Health (Add Health), an ongoing nationally representative, school-based study of adolescents in grades 7 to 12 who have been followed with multiple interview waves, beginning in 1994 and ending in young adulthood. Add Health was designed to explore the causes of health-related behaviors, with an emphasis on the influence of social context. In 1994-95, Add Health administered an In-School Questionnaire to every student attending school from a nationally representative sample of 80 high and 52 middle schools.

Using the rosters of selected schools, a random sample of students and their parents was selected for in-home interviews in 1995, constituting the Wave 1 data. A number of special

samples, including over-samples of various ethnic groups, were also selected on the basis of in-school responses. As a result of high immigration to the US during the 1990s and the Add Health design that over-sampled relatively rare ethnic groups (e.g., Cuban, Puerto Rican, and Chinese), Add Health contains a large number of adolescents in immigrant families—one out of four adolescents lived in an immigrant family (first and second generation). Of the adolescents selected for the in-home interviews, 79% participated in Wave 1 resulting in a sample size of 20,745 adolescents aged 11 to 19.

All adolescents in grades 7 through 12 in Wave 1 were followed up one year later for the Wave 2 in-home interview in 1996, with a response rate of 88%. In 2001-02 a third in-home interview was conducted with the original respondents from Wave 1, now aged 18 to 28 and experiencing the transition to adulthood. Over 15,000 Add Health respondents were re-interviewed at Wave 3 (77% response rate). See Harris et al. (2003) for more details on the Add Health design and longitudinal data. The final sample size for this analysis is 20,133 respondents. Each respondent can contribute up to three observations to the analysis, with the total number of observations being 43,341. Fifty-six percent of the sample has observations at all three time points; 32% have observations at only two time points, and 12 % contribute only one observation to the analysis.

## **MEASURES**

*Delinquency.* At Waves 1 and 2, delinquency is the sum of nine yes/no questions about participation in activities considered delinquent, such as minor property crime and theft, in the last 12 months.<sup>1</sup> At Wave 3, questions were altered for developmental appropriateness. For example, questions on running away from home, driving a car without the owner's permission and graffiti were removed and questions on writing bad checks and using someone else's credit

card were added. Delinquency at Wave 3 is the sum of eight yes/no questions about participation in activities such as minor property crime and theft in the last 12 months. To allow for comparisons across waves, we standardize the scales so that they range from zero to eight.

*Immigrant generation.* The immigrant generation variable consists of three categories: 1) first generation, or foreign born children of foreign-born parents; 2) second generation immigrant children, or U.S.-born children of immigrant parents; and 3) third+ generation immigrant children, or native-born children of native-born parents (Harris 1999). First generation adolescents were neither born in the U.S. nor born as U.S. citizens abroad; a majority came to the U.S. as children with their immigrant parents. The third-plus generation natives are the reference group in these analyses. Some of these respondents have grandparents who migrated to the U.S., but immigration is not as integral a part of their experience as for those who either immigrated themselves or whose parents immigrated to the U.S.

*Race-ethnicity.* We define race-ethnicity using self-reported ethnic identity along with information on the country of birth for first generation adolescents and their parents (see Harris 1999). For Asian and Hispanic respondents, cross-checking information from both adolescent and parental reports added specificity and accuracy. For respondents reporting multiple racial-ethnic identities, we cross-checked respondents' race with parental race-ethnicity and assigned maternal race-ethnicity if parents were of different ethnic background. From this classification system, we identified four race-ethnicity categories: 1) Hispanics; 2) non-Hispanic Asians; 3) non-Hispanic Whites; 4) non-Hispanic Blacks, with non-Hispanic Whites as the reference group. We dropped a small number (N=334) respondents who identified themselves as of "other" race from this analysis because it is difficult to interpret the meaning of this variable.

*Gender.* Gender was coded as 1 for females and 0 for males based on self-report data.

*Co-ethnic Community Concentration.* Data regarding the percentage of a respondent's community of a particular race or ethnicity from the 1990 Census was merged with Wave 1 Add Health data by census-tract. We used these data to create a variable indicating the percentage of a respondent's community that is co-ethnic, taking the average percentage of the respondents' community who is of his/her race. This variable ranges from zero to one and represents the fraction of the population in the respondent's Census tract at Wave 1 that is of his/her race-ethnicity (i.e., % white for a White adolescent, % Black for a black adolescent, % Hispanic for a Hispanic adolescent and % Asian for an Asian adolescent).

#### **ANALYTICAL STRATEGY**

To evaluate demographic differences in the risk of delinquency, we fit a non-linear growth curve model with delinquency as the continuous outcome and the categorical variables race-ethnicity, immigrant generation, gender, and the level of co-ethnicity in a respondent's community as the primary independent variables. Growth curve models allow us to evaluate changes over time (i.e. age) for individuals. The model fits a developmental trajectory for changes in delinquency as youth age into adulthood (Level 1 model) and allows race-ethnicity, immigrant generation, and gender to shift that trajectory (Level 2 model). Using the notation by Bryk and Raudenbush (1992), our Level 1 model can be written as:

$$Delinquency\ score_{it} = \pi_{0i} + \pi_{1i}(age-11)_{it} + \pi_{2i}(age-11)^2_{it} + e_{it} \quad (1)$$

for each individual (i) at time (t). With three waves of data, we have up to three time observations for each person in the sample. The intercept,  $\pi_{0i}$ , of the growth curve model gives the expected level of delinquency at the earliest observed age (11 years old). Age is centered at eleven in these analyses for ease of interpretation. The slope of the model,  $\pi_{1i}$ , provides the expected change in delinquency with a 1-year increase in age. The  $\pi_{2i}$  captures the curvature or

the rate of change in delinquency for each 1-year increase in age.  $e_{it}$  is a Level 1 random effect that represents the deviation of the adolescents' delinquency score from the predicted score based on the student-level model.

The second level of the growth curve model can be written as:

$$\pi_{0i} = \beta_{00} + \beta_{01}(\text{Female})_{1i} + \beta_{02}(\text{1}^{\text{st}} \text{ generation})_{2i} + \beta_{03}(\text{2}^{\text{nd}} \text{ generation})_{3i} + \beta_{04}(\text{Asian})_{4i} + \beta_{05}(\text{Black})_{5i} + \beta_{06}(\text{Hispanic})_{6i} + \mu_{0i} \quad (1)$$

$$\pi_{1i} = \beta_{10} + \beta_{11}(\text{Female})_{1i} + \beta_{12}(\text{1}^{\text{st}} \text{ generation})_{2i} + \beta_{13}(\text{2}^{\text{nd}} \text{ generation})_{3i} + \beta_{14}(\text{Asian})_{4i} + \beta_{15}(\text{Black})_{5i} + \beta_{16}(\text{Hispanic})_{6i} + \mu_{1i} \quad (2)$$

$$\pi_{2i} = \beta_{20} + \beta_{21}(\text{Female})_{1i} + \beta_{22}(\text{1}^{\text{st}} \text{ generation})_{2i} + \beta_{23}(\text{2}^{\text{nd}} \text{ generation})_{3i} + \beta_{24}(\text{Asian})_{4i} + \beta_{25}(\text{Black})_{5i} + \beta_{26}(\text{Hispanic})_{6i} + \mu_{2i} \quad (3)$$

The estimated  $\beta_{0i}$ ,  $\beta_{1i}$ , and  $\beta_{2i}$  provide information on how each individual characteristic affects the intercept, slope, and acceleration parameters, respectively.  $\pi_{0i}$  is the conditional intercept model;  $\pi_{1i}$  is the conditional slope model; and  $\pi_{2i}$  is the conditional acceleration model. Because the life-course theory suggests that delinquency does not follow a linear path over time, the growth curve model presented here was estimated as a quadratic model. In sensitivity analyses, we also estimated log-linear and linear models and found that the quadratic model fit the data most accurately.

To conduct these analyses, we use the *proc mixed* procedure in the SAS program and estimate our results using unweighted data.<sup>2</sup> In the final analyses, we include five models with combinations of demographic variables (age, age-squared, gender, ethnicity, immigrant generation, and community co-ethnic concentration) and interactions (female with race-ethnicity, female with immigrant generation, ethnicity with immigrant generation, and co-ethnic concentration with race-ethnicity). We evaluated models with a co-ethnic concentration by immigrant generation interaction and found no significant results; therefore these interactions are not included in the final analysis. For ease of interpretation, we graph our results.

In sensitivity analyses (not shown)<sup>3</sup>, we centered delinquency on the school mean to account for sampling at the school level and found no meaningful difference in the results. Because Black high education respondents were over-sampled, we also controlled for parental education and the interaction of parental education and race in additional analyses. Again, the inclusion of these variables did not meaningfully impact the analyses.

## **RESULTS**

### **DESCRIPTIVE STATISTICS**

As shown in Table 1, third-plus generation respondents compose a majority of the sample (78%). A little over half of the respondents are White (54%), and the average age of respondents at Wave 1 is 16. The average delinquency rate is approximately one delinquent act per year at Wave 1 but decreases to .39 acts by Wave 3, when respondents are 6 years older. Examining the breakdowns of Asian and Hispanic ethnicities (not shown), we identified a high percentage of Mexican immigrants among Hispanics (50%) and Filipinos (42%) among Asians. Southeast Asians comprised the second largest Asian sub-group (36%).

[INSERT TABLE 1]

A more detailed examination of co-ethnic communities (not shown) suggests that the co-ethnic concentration of a community is highly correlated with single-parenthood rates, poverty rates, unemployment rates, and the percent foreign-born in the community. Communities with high percentages of Black residents (i.e. ≥ 85% Black) had the highest rates of single parenthood (33%), the highest unemployment rate (9%), and the highest concentrations of poverty (17% of population living below the Federal Poverty Level). In contrast, communities with the highest percentages of White residents (i.e. ≥ 99% White) had the lowest rates of single parenthood (23%), the lowest unemployment rates (7%), and the lowest concentrations of poverty (12%).

High levels of White co-ethnic concentrations were also associated with lower percentages of foreign born (9%), whereas high levels of Hispanic co-ethnic concentrations were associated with higher percentages of foreign born (16%) residents.

#### **UNCONDITIONAL QUADRATIC MODEL OF DELINQUENCY**

We begin our analysis by estimating an unconditional quadratic model of delinquency where the intercept, age and age-squared are alternatively specified as non-randomly varying (Table 2, Model 1) and randomly varying (Table 2, Model 2). We find that the unconditional model treating the intercept, age and age-squared as non-randomly varying and randomly varying are identical. Therefore, we set  $\mu_{0i}$ ,  $\mu_{1i}$ , and  $\mu_{2i}$  equal to zero in our estimations of the conditional models specified in equations 2-4.

[INSERT TABLE 2 HERE]

*Age and Age-Squared.* At age 11, the average delinquency score was 1.033 (Table 2, Model 1 intercept). For the sample as a whole, delinquency decreases with age at a significantly decreasing rate. For most groups, the level of delinquency decreases to zero after age 24. However, due to the small sample size of respondents over 24 (N=140), it is more accurate to interpret the models as indicating that delinquency approaches zero at older ages.

[INSERT TABLE 3 HERE]

#### **CONDITIONAL QUADRATIC MODEL OF DELINQUENCY**

In our Level 2 model (Table 3), we allow the coefficients on the intercept, slope and acceleration to vary as a function of each adolescent's gender, race-ethnicity and immigrant generation. Our final model also includes all two-way interactions between these demographic factors. The omitted reference category is therefore white, third-plus generation males. For ease of interpretation, we graph the results of the final models in Figures 1-3.

*Gender.* At the onset of adolescence, white 3<sup>rd+</sup> generation females and males do not engage in delinquent activities at significantly different rates. However, delinquency among white females decreases over time more so than among white males (Figure 1). Among all non-White natives, females begin adolescence with slightly higher delinquency rates than those of males and these rates consistently decrease over time. Delinquency among non-White males follows a pattern more like that predicted by life course theory, increasing toward late adolescence and then decreasing as adulthood approaches.

The interaction of female with race-ethnicity also shows that both Asian and Hispanic females begin adolescence with higher delinquency rates than their White or Black peers. Delinquency rates for both Hispanics and Asians decrease significantly over time, but the decrease occurs at an increasingly slower rate over time for Asians (Figure 1). Finally, the initial gap between male and female delinquency rates is much greater among Asian and Hispanic natives than among Black or White natives. However, all race-ethnicity groups in the 3<sup>rd+</sup> generation reach parity by age 24.

[INSERT FIGURE 1 HERE]

*Race-Ethnicity and Immigrant Generation.* The gender differences in Figure 1 focused solely on 3<sup>rd+</sup> generation natives and ignored differences by immigrant generation. To highlight immigrant generation differences by race-ethnicity, we graph results separately for females and males.

Among Black and White females (Figure 2), second generation adolescents have the highest delinquency rates throughout early and middle adolescence, while first generation adolescents have the lowest delinquency rates. During the transition to adulthood (age 18-25), delinquency rates among Black females of all immigrant generations converge and asymptote to zero. Delinquency rates among White, first generation females decline slowly and, at age 19,

they are higher than among any other female demographic group. Although Asian and Hispanic females of all immigrant generations begin adolescence with higher delinquency rates than their Black or White peers, their delinquency rates decrease rapidly and become negligible by late adolescence. As was true for both White and Black females, Hispanic and Asian second generation females are at highest risk of delinquency through most of the life course. However, Asian first generation females have the highest rates of delinquency during the onset of adolescence.

[INSERT FIGURE 2]

Patterns of race-ethnicity and immigrant generation differences among males are similar to those identified among females (Figure 3). For all racial-ethnic groups except Asian, 2<sup>nd</sup> generation youth have the highest delinquency rates at the onset of adolescence and first-generation immigrants have the lowest delinquency rates. Among Asian males, delinquency rates are highest for the first-generation but decrease rapidly and become the lowest by age 19. Most importantly, these results show that it is only among 3<sup>rd+</sup> generation males that we observe the n-shaped pattern in delinquency rates predicted by life-course theory.

[INSERT FIGURE 3]

*Co-ethnic Community Concentration.* In initial models (not shown) that included only main effects for gender, race-ethnicity and immigrant generation, higher co-ethnic concentrations in a community were associated with significantly lower delinquency rates in early adolescence and throughout the life course. After including race-ethnicity, gender and immigrant generation interactions, the co-ethnic concentration of a community was only significant for Asians. Figure 4 shows that in communities with low co-ethnic Asian concentrations (i.e.  $\leq 5\%$  Asian), females were at lower risk of delinquency than their peers in high co-ethnic communities (i.e.  $\geq 40\%$

Asian). The benefits of living in a community with a low co-ethnic Asian concentration, however, quickly dissipate over the life course.

[INSERT FIGURE 4]

## **DISCUSSION**

Guided by a life course perspective, our study shows how trajectories of delinquency from adolescence to early adulthood vary by gender, race-ethnicity, and immigrant generation. The life-course perspective predicts that delinquency will increase moderately from early to middle adolescence and then decrease as adulthood approaches. However, we only observed this trajectory among native 3<sup>rd+</sup> generation males. Among females and among first and second generation males, delinquency typically peaked during early adolescence and declined continuously until early adulthood.

Based on social control and strain theories, we expected most females to participate in delinquent activities at lower rates than males throughout the life course. Gender role conflicts in Asian and Hispanic families, however, were expected to lead to increased strain and delinquency among the female children of immigrants in these two populations. Our results supported these hypotheses. We found that first and second generation Asian females and second generation Hispanic females had higher delinquency rates than their male counterparts during early adolescence but these gender difference subsided as youth emerged into adulthood.

Strain theory also suggested that minority youth contending with discrimination, social isolation and economic disadvantage would be more likely than their white counterparts to participate in delinquent activities. The evidence to support this hypothesis was mixed. Black youth uniformly reported lower delinquency rates than their white counterparts. On the other hand, Asian and Hispanic males participated in more delinquent activities, especially during

middle adolescence, than their white counterparts. Asian and Hispanic females engaged in more delinquent behaviors than their white counterparts during early adolescence.

For Asian males and females, these results also varied by neighborhood context. Rather than promoting greater social control, high co-ethnic concentrations of Asians appeared to facilitate the development of strong social ties between delinquent others and increased delinquent activities at the onset of adolescence. This unexpected result was consistent with social learning theory. Nevertheless, delinquency levels among Asians in areas of high co-ethnic concentration decreased quickly over time as individuals become more embedded in their community.

In addition to contributing to the life course perspective and our understanding of gender and race-ethnicity differences in delinquent behaviors, this analysis contributed to segmented assimilation theory and our understanding of the process of immigrant adaptation. We found substantial evidence that responses to migration vary by race-ethnic group and that most children of immigrants experience a second-generation decline. Strong social controls kept most first-generation youth from engaging in delinquent behaviors but potentially greater social strain combined with lower levels of social control placed second generation youth at greater risk.

Overall, these results debunk the myth of immigrant criminality. Fears that immigration will lead to an escalation of crime and delinquency are unfounded. Immigrant youth enrolled in U.S. middle and high schools in the mid-1990s and who are young adults today had among the lowest delinquency rates of all youth. Only Asian females had higher delinquency rates than native youth but these higher rates dissipated by middle adolescence. Similarly, the second generation children of immigrants engaged in more delinquent behavior than children with U.S.-

born parents at the onset of adolescence but these differences completely disappeared with the onset of adulthood.

These results also emphasize the importance of targeting prevention and intervention efforts towards early adolescence when youth first begin experimenting with risky behaviors. For the vast majority of youth, delinquency will begin declining on its own during middle adolescence. Prevention and intervention efforts would also be well targeted towards the second-generation. Programs that help these youth navigate between the cultural worldview of their families and their broader social environments might reduce their engagement in delinquent activities during their transition to adolescence.

As research on adolescent delinquency and immigration continues, it will be increasingly important for social scientists to employ a life course perspective and build upon the cross-sectional work undertaken in most previous studies. To promote the healthy development of immigrant children and other youth, we must not only understand the factors that promote differences at a point in time but we must also understand how these factors shape differences in development through time, especially at key turning points in their lives. This analysis has contributed to these efforts.

## NOTES

---

<sup>1</sup> Delinquency data are based on self-reports of participation in delinquent activity. To minimize any reporting bias, Add Health collected these data using an Audio Computer Assisted Self-Interview (CASI). This methodology has been highly effective in generating data about stigmatized behaviors and promoting participation in studies of sensitive topics (Davies & Morgan 2005).

<sup>2</sup> The weighting option in proc mixed requires different weights than are available through the Add Health data. However, weighted results using M-plus show no substantive differences when compared to the weighted results estimated through proc mixed.

<sup>3</sup> Sensitivity analyses were undertaken in consultation with statisticians for the Add Health project to determine if the sample design (i.e. clustering and weighting) affected our results. They did not.

## REFERENCES

- Agnew, R. (2003). An Integrated Theory of the Adolescent Peak in Offending. *Youth and Society* 34(3): 263-299.
- (1992). Foundation for a General Strain Theory of Crime and Delinquency. *Criminology* 30(1): 47.
- Akers, R.L. (1998). *Social Learning and Social Structure: A General Theory of Crime and Deviance*. Boston: Northeastern University Press.
- Alba, R. & Nee, V. (1997). Rethinking Assimilation Theory for a New Era of Immigration. *International Migration Review* 31:826-873.
- Albrecht, D.E., Albrecht, C.M., & Murguia, E. (2005). Minority Concentration, Disadvantage and Inequality in the Nonmetropolitan United States. *The Sociological Quarterly* 46: 503-523.
- Aneshensel, C.F. & Sucoff, C.A. (1996). The Neighborhood Context of Adolescent Mental Health. *Journal of Health and Social Behavior* 37(4): 293-310.
- Arnett, J.J. (2000). Emerging Adulthood: A Theory of Development from the Late Teens through the Twenties. *American Psychologist* 55: 469-480.
- Ayers, C. D., Williams, J. H., Hawkins, J. D., Peterson, P. L., Catalano, R. F., & Abbott, R. D. (1999). Assessing correlates of onset, escalation, de-escalation, and desistance of delinquent behavior. *Journal of Quantitative Criminology*, 15, 277-307.
- Bachmeier, J. D. (2007). The New Destination 'Contexts of Reception': Coethnic Concentration and the Earnings of Mexican Immigrants. Paper presented at the 2007 annual meetings of the Population Association of American, New York: NY. [Online] Available at: <http://paa2007.princeton.edu/download.aspx?submissionId=7246>.

- Bachman, J. G., Wallace, J. M., Jr., O'Malley, P. M., Johnston, L. D., Kurth, C. L., & Neighbors, H. W. (1991). Racial/ethnic differences in smoking, drinking, and illicit drug use among American high school seniors, 1976-89. *American Journal of Public Health* 81: 372-377.
- Broidy, L. & Agnew, R. (1997). Gender and Crime: A General Strain Theory Perspective. *Journal of Research in Crime and Delinquency* 34(3): 275-307.
- Bryk, A.S., & Raudenbush, S. W. (1992). *Hierarchical linear models: Applications and data analysis methods*. Newbury Park, CA: Sage Publications.
- Buchmann, M. (1989). *The Script of Life in Modern Society: Entry into Adulthood in a Changing World*. Chicago: Univ. Chicago Press.
- Campbell, A. (1993). *Men, Women and Aggression*. New York: Basic books.
- Cernkovich, S.A. & Giordano, P.C. (2001). Stability and Change in Antisocial Behavior: the Transition from Adolescence to Young Adulthood. *Criminology* 39(2): 371-410.
- Chesney-Lind, M. & Shelden, R.G. (1992). *Girls, Delinquency and Juvenile Justice*. Pacific Grove, CA: Brooks/Cole.
- Chung, I., Hill, K.G., Hawkins, J.D., Gilchrist, L.D. & Nagin, D.S. (2002). Childhood Predictors of Offense Trajectories. *Journal of Research in Crime and Delinquency* 39(1): 60-90.
- Cota-Robles, S. & Gamble, W. (2006). Parent-Adolescent Processes and Reduced Risk for Delinquency: The Effect of Gender for Mexican-American Adolescents. *Youth & Society* 37(4): 375-392.
- Crowder, K., & South, S.J. (2003). Neighborhood Distress and School Dropout: the Variable Significance of Community Context. *Social Science Research* 32: 659-698.

- Davies, M. & Morgan, A. Using computer-assisted self-interviewing (CASI) questionnaires to facilitate consultation and participation with vulnerable young people. *Child Abuse Review* 14(6):389-406.
- Elder, G.H., Jr. (2000). Extreme Situations in Young Lives. *Theoretical Criminology* 4(2): 208-215.
- (1998). The Life Course as Developmental Theory. *Child Development* 69(1): 1-12.
- Gallup Organization. (2007). Gallup Pulse of Democracy: Immigration. [WWW Reference]  
Available at: <http://www.gallupoll.com/content/?ci=1660&pg=1>.
- Gordon, R.A., Lahey, B.B, Kawai, E., Loeber, R., Stouthamer-Loeber, M., & Farrington, D.P. (2004). Antisocial Behavior and Youth Gang Membership: Selection and Socialization. *Criminology* 42(1): 55-87.
- Gottfredson, M.R. & Hirschi, T. (1990). A general theory of crime. Stanford: Stanford University Press.
- Grasmick, H.G., Hagan, J, Blackwell, B.S., & Arneklev, B.J. (1996). Risk Preferences and Patriarchy: Extending Power-Control Theory. *Social Forces* 75(1): 177-199.
- Hagan, J. (1997). Defiance and Despair: Subcultural and Structural Linkages between Delinquency and Despair in the Life Course. *Social Forces* 76(1): 119-134.
- Harris, K.M., F. Florey, J. Tabor, P.S. Bearman, J. Jones, and J.R. Udry. 2003. The National Longitudinal Study Of Adolescent Health: Research Design. [WWW Reference]  
Available at: <http://www.cpc.unc.edu/projects/addhealth/design.htm>.
- Harris, K.M. (1999). The Health Status and Risk Behavior of Adolescents in Immigrant Families. Pp. 286-347 in Donald J. Hernandez (ed.), *Children of Immigrants: Health, Adjustment, and Public Assistance*. Washington, D.C.: National Academy Press.

- Harris, R.J. & Firestone, J.M. (1998). Changes in Predictors of Gender Role Ideologies Among Women: A Multivariate Analysis. *Sex Roles* 38: 239-252.
- Hindelang, M.J. (1981). Variations in Sex-Race-Age-Specific Incidence Rates of Offending. *American Sociological Review* 46(4): 461-47.
- Hirschi, T. (1969). *Causes of delinquency*. Berkeley and Los Angeles: University of California Press.
- Hoffmann, J.P., & Ireland, Timothy O. (2004). Strain and opportunity structures. *Journal of Quantitative Criminology* 20(3): 263-292
- Jang, S.J. (2002). Race, Ethnicity, and Deviance: A Study of Asian and Non-Asian Adolescents in America. *Sociological Forum* 17:647-680.
- Kane, E.W. (2000). Racial and Ethnic Variations in Gender Attitudes. *Annual Review of Sociology* 26: 419-439.
- Kaufman, J.M. (2005). Explaining the Race/Ethnicity-Violence Relationship: Neighborhood Context and Social Psychological Processes. *Justice Quarterly* 22:2: 224-251.
- Khondaker, M.I. (2005). Deviant Behavior among Youths of an Immigrant Bangladeshi Community in New York City. *Criminal Justice Studies: A Critical Journal of Crime, Law and Society* 18(4): 321-333.
- LaGrange, T.C., & Silverman, R.A. (1999). Low Self-Control and Opportunity: Testing the General Theory of Crime as an Explanation for Gender Differences in Delinquency. *Criminology* 37(1): 41-72.
- Lay, B., Ihle, W., Esser, G., & Schmidt, M.H. (2005). Juvenile-Episodic, Continued or Adult-Onset Delinquency? Risk Conditions Analyzed in a Cohort of Children Followed up to the Age of 25 Years. *European Journal of Criminology* 2(1): 39-66.

- Le, T.N., & Stockdale, G. (2005). Individualism, Collectivism, and Delinquency in Asian American Adolescents. *Journal of Clinical Child and Adolescent Psychology* 34(4): 681-691.
- Le, T.N., , G. & Stockdale, G.D. (2004). The Relationship of School, Parent and Peer Contextual Factors with Self-Reported Delinquency for Chinese, Cambodian, Laotian and Mien, and Vietnamese Youth. *Crime and Delinquency* 51(2): 192-219.
- Longshore, D., Chang, E., Hsieh, S.C., & Messina, N. (2004). Self-Control and Social Bonds: A Combined Control Perspective on Deviance. *Crime & Delinquency* 50: 542-564.
- Massey, D.S. & Denton, N.A. (1993). *American apartheid: Segregation and the making of the underclass*. Harvard University Press, Cambridge, Mass.
- Mirowsky, J. & Ross, C.E. (1980). Minority Status, Ethnic Culture, and Distress: A Comparison of Blacks, Whites, Mexicans and Mexican Americans. *American Journal of Sociology* 86(3):479-495.
- Moffitt, T.E. (1993). Adolescence-Limited and Life-Course Persistent Antisocial Behavior: A Developmental Taxonomy. *Psychological Review* 100(4): 674-701.
- Morse, A. (2004) A Quick Look at U.S. Immigrants: Demographics, Workforce, and Asset-Building. Retrieved February 1, 2007. [WWW Reference] Available at: <http://www.ncsl.org/programs/immig/immigstatistics0604.htm>.
- Patterson, G.R., DeBaryshe, B.D., & Ramsey, E. (1989). A Developmental Perspective on Antisocial Behavior. *American Psychologist* 44: 329-335.
- Perlmann, J., & Waldinger, R. (1998). Are the Children of Today's Immigrants Making It? *Public Interest* 132: 73-96.
- Pew Hispanic Center. (2006). A Statistical Portrait of the Foreign-Born Population at Mid-Decade. [WWW Reference] Available at: <http://pewhispanic.org/reports/foreignborn/>.

- Portes, A. & Rumbaut, R. (2001). *Legacies: The Story of the Immigrant Second Generation*. Berkeley, CA: University of California Press.
- Portes, A., Fernandez-Kelly, P., & Haller, W. (2005). Segmented Assimilation on The Ground: The New Second Generation in Early Adulthood. *Ethnic and Racial Studies* 38(6):1000-1040.
- Pyke, K.D., & Johnson, D.L. (2003). Asian American Women and Racialized Femininities: 'Doing' Gender across Cultural Worlds. *Gender and Society* 17: 33-53.
- Rindfuss, R.R., Swicegood, C.G., & Rosenfeld, R.R. (1987). Disorder in the Life Course: How Common and Does It Matter. *American Sociological Review* 52(6): 785-801.
- Rumbaut, R. G., Gonzales, R.G., Komaie, G., & Morgan, C.V (2006). Debunking the Myth of Immigrant Criminality: Imprisonment Among First- and Second-Generation Young Men, [WWW Reference] Available at:<http://migrationinformation.com/Feature/print.cfm?ID=403>
- Rumbaut, R.G. (1994). The Crucible Within: Ethnic Identity, Self-esteem, and Segmented Assimilation among Children of Immigrants. *International Migration Review* 28:748-794.
- Rutter, M. (1996). Connections between Child and Adult Psychopathology. *European Child and Adolescent Psychiatry*, 5(1), 4-7.
- Sampson, R.J., & Laub, J.H. (1993). *Crime in the Making Pathways and Turning Points Through Life*. Harvard University Press.
- Schnittker, J. (2002). Acculturation in Context: The Self-Esteem of Chinese Immigrants. *Social Psychology Quarterly* 65(1): 56-76.

- Shanahan, Michael J. (2000). Pathways to Adulthood in Changing Societies: Variability and Mechanisms in Life Course Perspective. *Annual Review of Sociology* 26: 667-92.
- Simons, R.L., Stewart, E., Gordon, L.C., Conger, R.D., & Elder, G.H., Jr. (2002). A Test of Life-Course Explanations for Stability and Change in Antisocial Behavior from Adolescence to Young Adulthood. *Criminology* 40(2): 401.
- Smith, C.A., Krohn, M.D., Lizotte, A.J., McCluskey, C.P., Stouthamer-Loeber, M., & Weiher, A. (2000). The Effect of Early Delinquency and Substance Use on Precocious Transitions to Adulthood among Adolescent Males. *Contemporary Perspectives in Family Research* 2: 233-253.
- Sutherland, E.H., & Cressey, D. (1966). *Principles of Criminology*. Philadelphia: J.B. Lippincott.
- Voss, H.L. (1970). Causes of Delinquency. *Review of Causes of Delinquency*, by Travis Hirschi. Berkeley, CA: University of California Press. 1969. *American Sociological Review* 35(6): 1114-1115.
- Wiatrowski, M.D., Griswold, D.B., & Roberts, M.K. (1981). Social Control Theory and Delinquency. *American Sociological Review* 46(5): 525-541.
- Wilkie, J.R. (1993). Changes in Men's Attitudes Toward the Family Provider Role, 1972-1989. *Gender and Society* 7: 261-279.
- Wong, S.K. (1997). Delinquency of Chinese-Canadian Youth: A Test of Opportunity, Control and Intergeneration Conflict Studies. *Youth and Society* 29: 112-133.
- Zhou, M. (1997). Growing Up American: The Challenge Confronting Immigrant Children and Children of Immigrants. *Annual Review of Sociology*, 23:63-95.

**Table 1: Descriptive Statistics (N=20,133)**

	<b>%/Mean</b>	<b>Std. Dev.</b>
<b>Dependent Variable</b>		
Delinquency Score (0-8)		
Wave 1 (mean)	0.97	1.49
Wave 2 (mean)	0.75	1.33
Wave 3 (mean)	0.39	0.95
<b>Independent Variables</b>		
Age (Wave 1 mean)	15.67	1.74
Female	51%	--
Immigrant Generation		
First	8%	--
Second	14%	--
Third+	78%	--
Race-Ethnicity		
White	53%	--
Black	23%	--
Asian	7%	--
Hispanic	17%	--
Community Co-ethnic Concentration	68%	--
White	97%	--
Black	57%	--
Asian	26%	--
Hispanic	29%	--

**Table 2: Unconditional and Conditional Quadratic Level 1 Models (N= 20,133)**

	<b>Model 1 Unconditional Fixed Effects</b>	<b>Model 2 Unconditional Random Effects</b>	<b>Model 3 Conditional Fixed Effect</b>
Intercept	1.033 *** (.026)	1.033 *** (.026)	<b>1.246 ***</b> (.216)
Age	-.006 (.007)	-.006 (.007)	.037 (.063)
Age-squared	-.004 *** (.000)	-.004 *** (.000)	-.008 ** (.004)
AIC	160949	160949	160313
-2 Log Likelihood	160945	160945	160309

\*p=.1 \*\*p=.05 \*\*\*p=.01

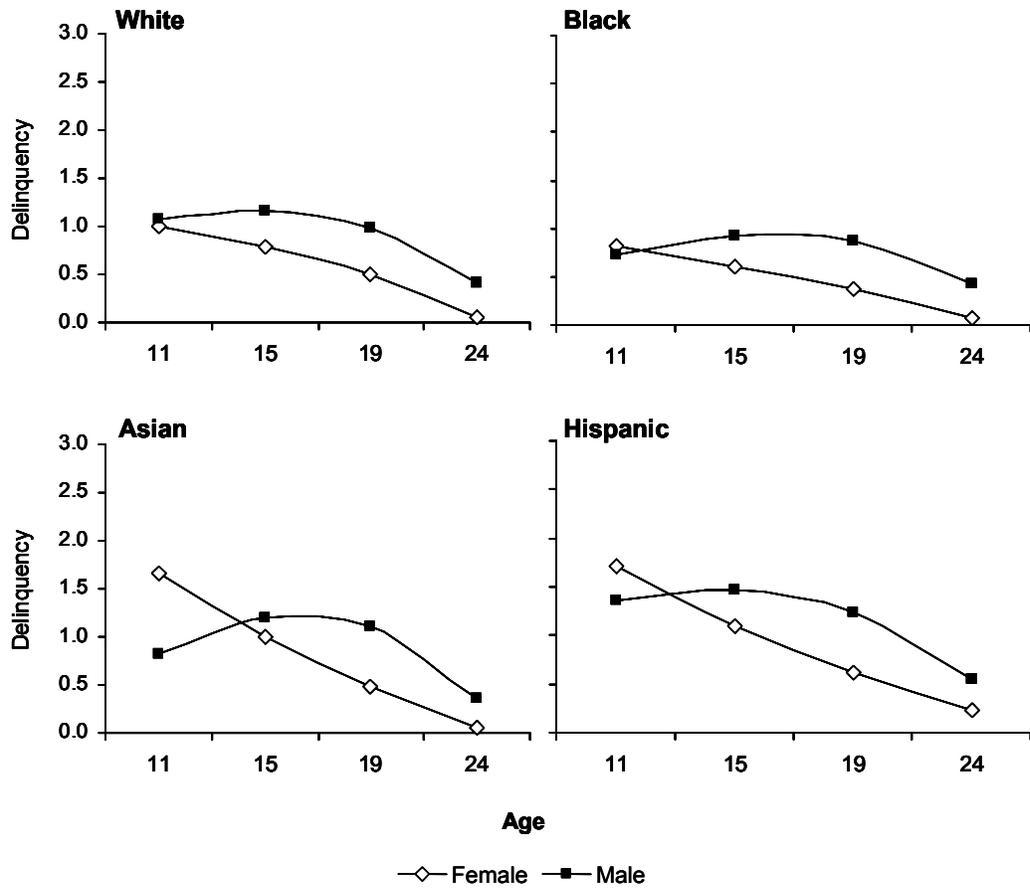
**Table 3: Level 2 Hierarchical Linear Model of Delinquency (N= 20,133)**

	Intercept	Slope	Acceleration
Female (vs. Male)	-.069 (.070)	-.099 *** (.020)	.006 *** (.001)
Race-ethnicity (white vs.)			
Black	-.422 * (.245)	.052 (.071)	-.001 (.005)
Asian	-1.240 *** (.415)	.298 ** (.119)	-.016 ** (.008)
Hispanic	.031 (.261)	.072 (.075)	-.005 (.005)
Generation (Third+ vs.)			
First	-.254 (.439)	-.031 (.125)	.003 (.008)
Second	.292 (.184)	-.060 (.053)	.002 (.003)
Coethnic Concentration	-.258 (.233)	.023 (.067)	.000 (.004)
Female*First Gen	-.358 (.280)	.120 (.075)	-.006 (.005)
Female*Second Gen	-.165 (.184)	.080 (.052)	-.005 (.003)
Female*Black	.169 (.127)	-.040 (.037)	.002 (.002)
Female*Asian	.899 *** (.271)	-.235 *** (.075)	.013 *** (.005)
Female*Hispanic	.414 ** (.180)	-.134 *** (.051)	.008 ** (.003)
Coethnic*Black	.109 (.285)	-.028 (.082)	.001 (.005)
Coethnic*Asian	1.453 *** (.537)	-.292 * (.151)	.014 (.009)
Coethnic*Hispanic	.390 (.344)	-.093 (.097)	.005 (.006)
Black*First Gen	.280 (.685)	-.054 (.182)	.002 (.011)
Asian*First Gen	1.030 * (.535)	-.237 (.152)	.013 (.010)
Hispanic*First Gen	-.073 (.468)	-.034 (.133)	.003 (.008)
Black*Second Gen	.245 (.280)	-.087 (.080)	.005 (.005)
Asian*Second Gen	.107 (.351)	-.041 (.102)	.003 (.007)
Hispanic*Second Gen	.015 (.218)	-.067 (.062)	.005 (.004)
AIC		160313	
-2 Log Likelihood		160309	

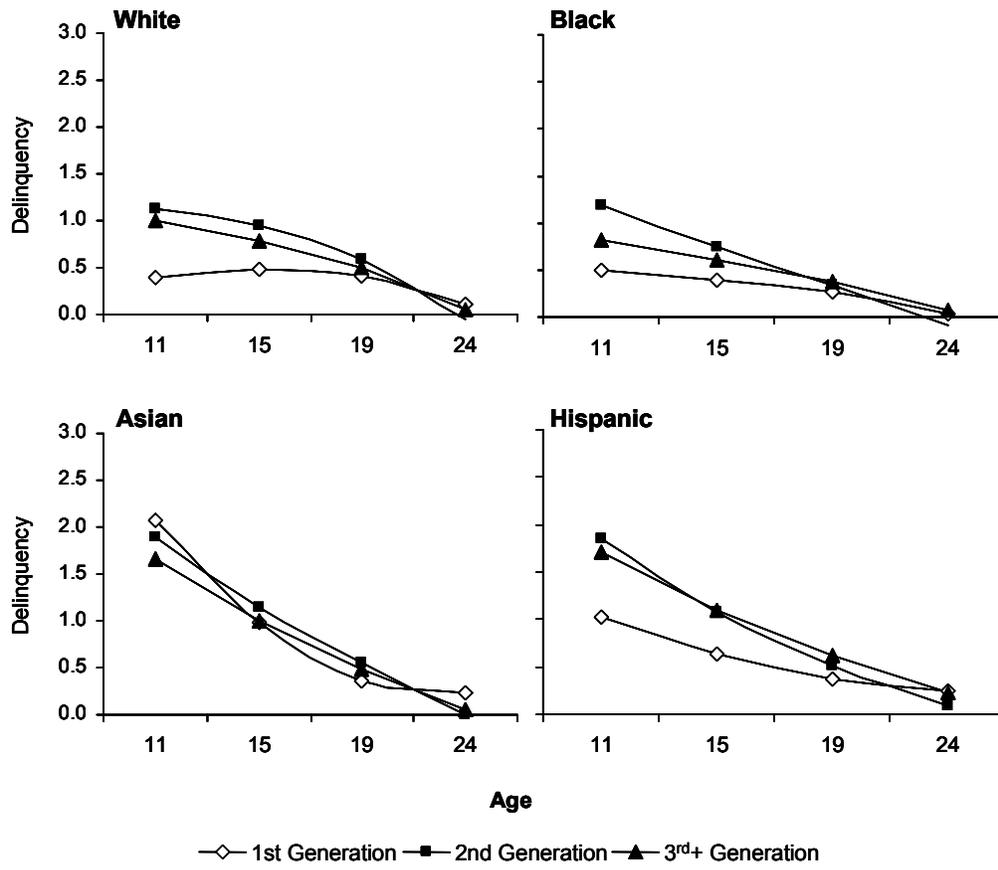
\*p=.1 \*\*p=.05 \*\*\*p=.01

Note: Level 1 portion of the model is shown in Table 2, Model 3.

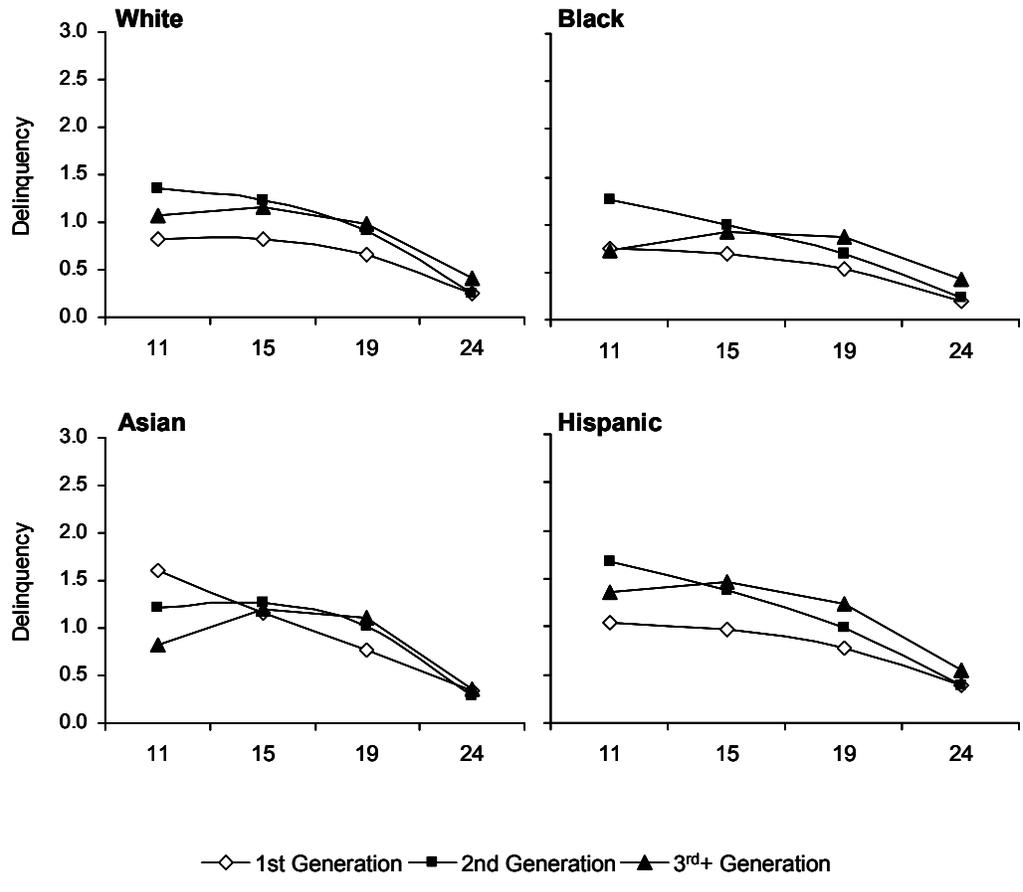
**Figure 1. Delinquency Rates for Third+ Generation by Gender and Race-Ethnicity**



**Figure 2. Delinquency Rates for Females by Race-Ethnicity and Immigrant Generation**



**Figure 3. Delinquency Rates for Males by Race-Ethnicity and Immigrant Generation**



**Figure 4. Delinquency Rates for Asian Females by Co-ethnic Concentration**

