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Social Class, Family Formation, and Delinquency in Early Adulthood

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Abstract

Recent research suggests increasing heterogeneity in the transition from adolescence to early adulthood. This study considers how this heterogeneity may influence delinquency between these two developmental periods. We focus on the role of family transitions, educational attainment, and employment in predicting risk of nonviolent delinquency and substance use, as well as disparities in transitions across socioeconomic status subgroups. Data are from the National Longitudinal Study of Adolescent to Adult Health (Add Health). We find that family and neighborhood advantage are negatively associated with transitions into marriage, cohabitation, and parenthood, yet positively associated with educational attainment. In addition, adolescent family and neighborhood advantage are associated with a continuation of delinquent behavior and substance use during early adulthood. In multivariate analyses, accounting for family transitions in early adulthood largely attenuates the relationship between neighborhood advantage in adolescence and delinquency in early adulthood. We conclude by discussing the implications of our findings for developmental criminology.

Keywords

delinquency, substance use, socioeconomic status, family transitions, early adulthood

Introduction

Research on delinquency has traditionally focused on the adolescent or teenage years, in part due to a well-known aggregate pattern in which the rate of offending sharply declines before people enter their 20s (Farrington 1986; Hirschi and Gottfredson 1983). Life course criminologists have largely attributed this process of aging out to successful role acquisitions during the transition to adulthood, arguing that as adolescents enter adulthood, normative transitions such as marriage and childbearing limit motivations and opportunities for offending. However, recent research points to an increasing heterogeneity in the timing and sequencing of roles that define when adolescence ends and adulthood begins (Settersten, Furstenberg, and Rumbaut 2005; Shanahan 2000). Resulting from recent extensions in postsecondary education and accompanying delays in

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labor force participation, marriage, and parenthood, becoming an adult "generally occurs in a more gradual, complex, and less uniform fashion" than it did a half century ago (Furstenberg, Rumbaut, and Settersten 2005:5). We consider the implications of this extended period of "emerging adulthood" (Arnett 2000) for patterns of change in delinquency. In particular, we examine the degree to which a contemporary sample of youths extend their involvement in nonviolent delinquency into early adulthood, and whether such adult delinquency is related to social class origins and relationship transitions.

Increasing heterogeneity and inequality within emerging adulthood suggests that not all subgroups in the population are likely to have the same opportunities, abilities, or motivations; hence, there are likely multiple "normative" developmental pathways into adulthood. Thus, the likelihood of delaying role transitions, as well as of extending negative ones (i.e., delinquency), may depend on socioeconomic status (SES). Those with more socioeconomic resources (e.g., from a middle-class or upper-class background) may be better able to delay normative transitions like getting married or having children as they pursue higher education and explore career options; the absence of these relationship/family roles may thus offer continued opportunity to engage in delinquency and other deviant behaviors such as substance use. However, those with fewer resources (lower SES) might actually be pushed into "early exits" from adolescence into adulthood (Hagan and Foster 2001; Newcomb and Bentler 1986), which could serve to cut short the period of engaging in delinquency. Reflecting recent research suggesting that delinquency is related to both family and community characteristics (Lund and Dearing 2012), we consider the roles of both family and neighborhood socioeconomic resources.

We extend research on delinquency by situating it within the period of emerging adulthood, and examine the roles of family and neighborhood SES and family transitions after high school for a nationally representative sample of American youths. We not only focus on relationship and family formation transitions including marriage, cohabitation, and child rearing but also consider employment and educational attainment. We examine whether these adult transitions are related to SES origins and if so, whether they help us understand a possible link between SES and adult delinquency. The link between SES and delinquency has been inconsistent at best; from a number of theoretical perspectives (e.g., subcultural, strain, labeling theories), lower SES youths should be more prone to delinquency yet empirical studies do not always support this contention, and certain theories argue for a link between more privileged class status and delinquency (Hagan 1991) and are complicated by considerations of gender. As a starting point, we seek to examine basic associations between class origins and nonviolent delinquency and substance use to explore whether class-based family formation patterns are associated with continued involvement in these forms of delinquency.

Life Course Transitions and Delinquency

To consider why people would continue to offend, it is important to examine the literature that predicts why people cease their offending. Sampson and Laub's theory of age-graded informal social control posits that criminals desist from offending primarily because they experience turning points in adulthood that increase their stakes in conformity—marriage and employment are key turning points that give prior offenders something to lose, thus making continued offending a more risky endeavor. However, Sampson and Laub (Laub and Sampson 1993; Sampson and Laub 1990) argue that it is not simply the existence of turning points, but rather their quality, that lead to declines or cessation of offending. Thus, it is not just any marriage that represents a stake in conformity, but a "good" marriage.

Empirical studies of the association between marriage and crime abound, although the precise mechanism linking them is less clear. Sampson and Laub (Laub and Sampson 1993; Sampson and Laub 1990) show that marital attachment promotes reductions in crime, net of prior delinquency

in childhood. Horney, Osgood, and Marshall (1995) show that, for men, living with a wife reduces the short-term likelihood of criminal offending. Mark Warr (1998) reveals that marriage reduces crime because it reduces the time spent with deviant peers—in other words, marriage "knifes off" ties to former delinquent associates that were important for earlier offending. Laub, Nagin, and Sampson's (1998) research reveals support for the importance of the timing and quality of marriage. In particular, they find that "early marriages characterized by social cohesiveness" prevent crime, but that "good marriages" take time to develop before they can significantly inhibit crime (Laub et al. 1998:237). More recent research questions the importance of the quality of marriages, however. Sampson, Laub, and Wimer (2006) show that marriage is associated with a 35 percent reduction in the probability of crime, and that for young adults in particular, marriage inhibits crime regardless of the quality of marriage and criminal activity of the spouse. King, Massoglia, and Macmillan (2007) find evidence that marriage reduces crime for males but not females, but that the effect of marriage also depends on one's propensity to get married in the first place; marriage is especially salient for males with low propensities to get married, whereas marriage matters only for females with a moderate propensity to marry. Bersani and Doherty (2013) recently extended this line of research to demonstrate that *broken* marriages (divorce) increase the likelihood of offending, especially for those whose marriages were longer in duration.

Giordano and colleagues (Giordano, Cernkovich, and Rudolph 2002; Giordano, Schroeder, and Cernkovich 2007) have also examined emotional and symbolic interactional processes that relate to long-term patterns of change in offending, and argue that emotional identity transformation is crucial in terms of redefining the self. This redefinition is not instantaneous, though, it takes time. Prosocial others can serve as "emotional role models," but it is still a "continuous process of role taking" that leads to a new emerging identity (Giordano et al. 2007:1650). Importantly, the mechanism here can be beneficial for desistance even in the absence of the marriage or other transition. The sample in the Giordano research included only a small percentage who were married at both adult interviews (8 percent), thus demonstrating that in a more contemporary sample, "the transition to marriage does not on its own provide us with a comprehensive framework for understanding life course continuities and changes in criminal behavior" (Giordano et al. 2007:1638).

A limitation of much of the research that examines the influence of adult relationships or other turning points on desistance is that it focuses on already-known offenders and high-risk populations, or those living in disadvantaged settings. For example, Piquero and colleagues (2002) study serious offenders paroled from the California Youth Authority and find that "stakes in conformity" in the late teens and 20s reduce the number of nonviolent arrests. Unfortunately, their measure combines employment and marriage, so we are not able to untangle the specific role of marriage. In the recent study by Kreager and colleagues (2010) that identifies the effect of motherhood on desistance for females, the sample is limited to disadvantaged women in Denver, Colorado. The work of Edin and Kefalas (2005) similarly demonstrates a strong link between motherhood and desistance among poor women. The important research of Giordano and colleagues is also based on a sample of serious offenders in Ohio. Although this focus on disadvantaged populations is valuable, it leaves us knowing less about the desistance process among the general population or about persistence in offending among more *advantaged* subgroups. These studies are important for extending questions about mechanisms of change/persistence, but even they demonstrate that the "good marriage effect" is limited among contemporary samples of serious offenders, due to changes in marriage and labor markets. Thus, an important question is whether this "more highly varied order of all of the major adult transition events" (Giordano et al. 2007:1649) has implications for persistence in offending among a more general population that includes affluent respondents and neighborhoods.

Laub and Sampson's (1993) life-course theory posits that structural position (SES) and historical context are relevant for understanding later adult developmental processes (see also Elder

1974). In the contemporary context, relationship transitions may be so uncommon during emerging adulthood, at least among advantaged young adults, that their absence creates a prolonged period of delinquency into the mid-20s. Some scholars have argued that these larger demographic shifts in adult transitions are more influential for disadvantaged groups than advantaged groups (Booth, Crouter, and Shanahan 1999), yet delays in transitions are not happening solely among disadvantaged populations.

Life Course Transitions in Contemporary Context

Due to contemporary trends in the transition to adulthood (Furstenberg et al. 2005; Shanahan 2000), many young adults may in fact not be experiencing the traditional "turning points" of marriage or parenthood, or may be experiencing them at later ages. As Fussell and Furstenberg (2005:53) note, men and women "began delaying marriage to later ages" around 1970. Among those ages 18 to 24, the percentage who had never married rose from 60.5 percent in 1973 to 77.1 percent in 1997 (Smith 2005). Cohabitation has also emerged as a more common relationship, especially among younger generations (Brown, Van Hook, and Glick 2008), and cohabiting couples are increasingly likely to have and raise children (Bumpass and Lu 2000). Cohabitation often represents a less stable and committed relationship, which frees partners to spend more time in other contexts—or perhaps allows them to more easily "drift" (Matza 1990) into delinquent circles with fewer restrictions. Thus, it is important to consider multiple family transitions, especially given that married households have been declining yet cohabiting households have significantly increased between the mid-1990s and 2012, most notably among younger people (Lamidi 2014).

Delays in marriage and child rearing may also be delaying the development of a prosocial adult identity that is crucial to making cognitive shifts that serve as catalysts for reduced offending (Giordano et al. 2002; Giordano et al. 2007). Recent work supports this notion, as Shanahan and colleagues (2005) find that youths who have experienced more family transitions (establishing an independent household, getting married or cohabiting, and becoming a parent) are significantly more likely to see themselves as adults, compared with those who have not experienced all of these transitions. Experiencing multiple transitions (e.g., marriage as well as parenthood) in young adulthood could have implications for delinquency; these transitions could mark a commitment to adult responsibility that produces a decline in delinquent patterns. Yet these adult relationship responsibilities may be less "chosen" among more disadvantaged youths who see them as the *only* route to legitimate adulthood, because education or employment opportunities elude them.

Of course, given current economic concerns, even those from middle-class households might have reduced job prospects or be uncertain about whether advanced education will be of benefit; thus, delinquency patterns might persist among some members of the young adult population because future success is no longer the guarantee that it once was, among even more privileged youths. Many scholars point to diminishing economic opportunities for young adults in recent decades, which are likely related to delays in family transitions. These delayed transitions can, for some, lead to increased time spent on leisure activities (especially if they are also not working or attending school, or are otherwise "disengaged"; Gauthier and Furstenberg 2005). This trend can be seen in the changing attitudes of young adults. For example, Smith (2005) reports that those aged 18 to 24 perceive their jobs as more unstable than older persons.

Yet despite these growing economic concerns, many young adults still find the time for the pursuit of leisure activities, and this is particularly true for students who are often not burdened by family responsibilities (Gauthier and Furstenberg 2005). This increase in leisure time is likely class dependent, but no research examines this possibility. Gauthier and Furstenberg (2005) argue that future research should examine differences across socioeconomic subgroups. We suggest that

these trends in increased leisure time, delayed marriage, increases in college attendance, and deterioration of economic status could have implications for persistence in nonviolent delinquency and drug use among young adults, but that SES is a key contingency that must be considered.

Life Course Transitions, SES, and Delinquency

While much of the research on emerging adulthood has centered on identity exploration, fewer studies have examined risk behaviors during this period. Risky sexual behaviors, binge drinking, and driving under the influence have been found to peak during emerging adulthood rather than adolescence (Arnett 1998). These risky behaviors may result from the process of identity formation or from the freedom afforded by the lack of adult roles and responsibilities. However, youths who come from advantaged backgrounds—who are *not* the traditional focus of research—may be the ones who can most afford the luxury of delaying the transition to adulthood, whereas those from disadvantaged backgrounds may feel more urgency to join the labor force or establish relationships that serve as stakes in conformity. Structural privilege in the form of parents' higher SES could, we argue, increase the likelihood of engaging in nonviolent and leisure/party forms of delinquency in early adulthood. This would be consistent with Arnett's (2003) research which finds that young adults from low-SES families were more likely than those from high-SES families to view themselves as having reached adulthood.

It is well established that young adults from lower socioeconomic backgrounds experience different, or differently timed, transitions than their better-off peers. Swail (2002) shows, for example, that college attendance is less likely for emerging adults from lower social class backgrounds. In particular, "fewer than 40 percent of 18-24 year olds in the lowest quartile of family income—those with the least academic resources—go to college. This compares to about 80 percent of the top quartile income earners" (Swail 2002:19). College attendance (educational attainment in general) should also serve as a stake in conformity, and theoretically those more privileged youths who are attending college during early adulthood should be less inclined to mortgage their futures by engaging in delinquent behaviors. However, a college degree is such an expected form of adult capital for those from higher class backgrounds that its value is arguably less a deterrent than getting married or having a child—especially when it comes to considerations of engaging in more minor forms of delinquency, drinking, or smoking marijuana.

Osgood and colleagues (2005) also observe that turning points and transitions are linked to the social class of one's family of origin. Some families and parents, they note, place more value on education and careers, whereas others privilege marriage and parenthood. Young adults who have internalized the values of their family of origin are more likely to pursue a trajectory in line with those values, thereby choosing parenthood or marriage over college, or vice versa. Sandefur and colleagues' (2005) research also supports the idea that family SES influences adult transitions. In their research using the National Education Longitudinal Study (NELS) data, they find that young persons whose parents are more highly educated are less likely to have started a family in early adulthood. The absence of this traditional stake in conformity could serve to extend participation in minor forms of delinquency or "party" behaviors. However, young persons who come from lower SES backgrounds may face "precocious exits" (Newcomb and Bentler 1988) in the form of early family transitions. Family formation represents a well-established stake in conformity that lower SES youths would likely not want to risk losing (likewise, as college completion is less likely among low-SES youths, postsecondary attainment may represent a larger stake in conformity for them than for upper-class youths). Reduced opportunity for college among lower-class youths may also increase time spent in paid work; hence, more privileged youths may be less likely to work full-time jobs because they are full-time students, whereas those from lower-class backgrounds might be working more. This is consistent with research highlighting

class-based differences in college, as those from less privileged backgrounds are more likely "to delay entry, more likely to enter two-year as opposed to four-year schools, more likely to transfer institutions, and less likely to finish degrees" than advantaged students (Goyette 2008:465). This class variability in adult transitions (family formation, college experiences, paid work) could have implications for likelihoods of participation in adult delinquency. Lower SES young adults who are working full-time or starting families may simply not have the time or the inclination to engage in minor forms of delinquency. More privileged youths, however, may continue to engage in delinquency, not only because they have the time to do so due to fewer family responsibilities but also because they are socialized to expect that delinquency will not limit their later prospects; in fact, it may open more doors for them, especially if they are males (Hagan 1991).

Family class status is also linked to the larger community context, and this community context may represent an additional setting in which decisions to participate in adult delinquency are embedded. Research supports the contention that childhood neighborhoods influence adult outcomes such as educational attainment and mental health (Harding 2003; Wheaton and Clarke 2003). There is also a large body of research linking neighborhoods to problem behaviors for children and adolescents (Sampson, Morenoff, and Gannon-Rowley 2002). In line with our arguments above related to family SES, recent work finds boys to report higher levels of delinquency in the most affluent neighborhoods (Lund and Dearing 2012). We know very little, however, about whether high-SES neighborhoods influence delinquency or party behaviors in *adulthood*, whether neighborhood SES is implicated in the likelihood of family transitions in adulthood, or if so, whether the association between neighborhood SES and family transitions informs the likelihood of participation in adult delinquency. Following our argument that those from better-off families might be more likely to participate in nonviolent delinquency as young adults, as well as new scholarship noting more delinquency in affluent neighborhoods (Lund and Dearing 2012), we thus expect neighborhood socioeconomic advantage to be associated with fewer family transitions in early adulthood, and to thus be positively associated with delinquency in young adulthood.

Following the above discussion, we offer the following hypotheses:

Hypothesis 1: Adult nonviolent delinquency and substance use will vary significantly by family SES and neighborhood affluence, with those in more privileged statuses having increased involvement in all three types of behavior.
Hypothesis 2: Family formation in adulthood will vary significantly by family and neighborhood SES, with those from higher SES groups less likely to make such transitions.
Hypothesis 3: Family SES in adolescence will be positively associated with nonviolent delinquency and substance use in young adulthood, net of controls.
Hypothesis 4: Neighborhood affluence will be positively associated with nonviolent delinquency and substance use in young adulthood, net of controls.
Hypothesis 5: Family formation in adulthood will partly account for the association between family SES, neighborhood affluence, and adult delinquency and substance use.

Data

This study uses data from Waves 1 and 3 of the National Longitudinal Study of Adolescent to Adult Health (Add Health). Add Health is a school-based, nationally representative sample of youths in Grades 7 through 12 in the United States in the 1994–1995 school year. The original round of data collection was done through an in-school survey in 80 high schools and 52 middle schools. This round of data collection resulted in a pool of over 90,118 potential respondents. Of these, 20,745 respondents were randomly selected for interviews in their homes (Wave 1) in 1995. Wave 1 also includes a contextual database, which contains information from the 1990

Census on characteristics of the respondents' census tracts, which we use to operationalize neighborhoods. Data from Wave 3 were collected in 2001–2002, when respondents were largely beyond high school and between 18 and 26 years old. The Wave 3 response rate for the probability sample was 76.04 percent (75.60 percent weighted), and bias analyses have concluded that the Wave 3 sample "adequately represents the same population as the Wave 1 sample when final sampling weights are used to compute estimates" (Chantala, Kalsbeek, and Andraca 2005:5). Of an initial Wave 3 sample size of 14,322, we lose close to 800 cases due to missing data on parents' SES, and smaller numbers of cases due to missing data on other independent variables or the dependent variable. Our final sample consists of 12,878 respondents for nonviolent delinquency, 12,796 for getting drunk, and 12,674 for smoking marijuana. Attrition analyses reveal no differences in demographic characteristics between the initial Wave 1 sample and the final analytic samples.

Outcome Measures

We examine our research questions as they pertain to three separate nonviolent delinquency outcomes: *Delinquency in adulthood* is a dichotomous variable calculated as involvement in any of five nonviolent delinquent acts during the past year. We focus on nonviolent delinquency because, although not definitive, there is a substantial body of scholarship supporting the contention that the correlates of violent and nonviolent delinquency are different (Loeber and Stouthamer-Loeber 1998; MacDonald, Haviland, and Morral 2009; Nagin and Tremblay 1999; Piquero et al. 2002). Research focused specifically on the emerging adult phase of development also finds that stakes in conformity predict nonviolent, but not violent, offending (Piquero et al. 2002).[1] In the Add Health survey, respondents were asked how often (in the past 12 months) they had engaged in these five activities: (1) deliberately damaged property that did not belong to them, (2) gone into a house or building to steal something, (3) sold marijuana or other drugs, (4) stolen something worth less than $50, or (5) stolen something worth more than $50. Original responses were measured as 0 (never), 1 (one or two times), 2 (three or four times), and 3 (five or more times). Due to the skewed nature of responses (most skew toward zero), we recoded any positive responses to 1 and created a dichotomous measure of involvement in any of them. These items are identical at both measurement points, thereby allowing us to include *adolescent delinquency* as a control at Wave 1 in a lagged dependent variable model (*adolescent delinquency*).

Two additional outcomes, which relate to John Hagan's (1991) notion of the party subculture, are getting drunk and smoking marijuana. *Getting drunk in adulthood* comes from a question asking respondents how many days in the past 12 months they have been very drunk or high on alcohol. Original days range from 0 to 6, which represents "every day or almost every day." However, there are very few responses at the upper end of this measure, and thus we code any response equal to or greater than 1 ("1 or 2 days") to represent getting drunk, thereby dichotomizing it (1 = got drunk, 0 = did not). *Smoking marijuana in adulthood* is a similar dichotomous variable coded as 1 if respondents smoked marijuana in the past 30 days (1 = yes, 0 = no; original response options ranged from 1 time to 999 times). We also include identical measures of *adolescent drunk* and *adolescent marijuana* from Wave 1 to assess the influence of our socioeconomic and relationship transition measures on adult outcomes, net of earlier substance use. We use survey-corrected logistic regression (svy: logit) in Stata 13.1 to estimate all models.[2]

Independent Measures

Neighborhood and life course indicators. *Neighborhood advantage in adolescence* is measured as the average of the standardized scores for three census tract items at Wave 1: the proportion of residents with college degrees, in managerial/professional occupations, and families earning

more than $75,000 in 1990. This measure has an alpha value of .93. We use a parallel measure of neighborhood advantage at Wave 3, and then use this to calculate *change in neighborhood advantage* as the difference between the two measures. This advantage measure is very similar to the one used in prior work using Add Health (Roche et al. 2005), and is consistent with arguments that neighborhood affluence, more so than poverty or disadvantage, should offer enhanced resource potential for supporting well-being and enhancing healthy behaviors or reducing risky behaviors (Massey 2001; Morenoff, Sampson, and Raudenbush 2001; Sampson, Morenoff, and Earls 1999; Wen, Browning, and Cagney 2003).[4]

Life course family transitions are measured using a series of five dummy variables that represent family transitions based on Wave 3 indicators, to gauge not just the influence of marriage but also the more common union experience of cohabitation, as well as the presence of children; prior work on motherhood (see Kreager et al. 2010) shows that it is an important predictor of desistance among disadvantaged women, so separating relationship status from parenthood is warranted, especially when considered alongside SES origins. Dichotomous measures included are *married with children, married without children, cohabiting with children, cohabiting without children*, and *single with children*. The omitted category here is single with no children. We also control for two additional forms of *adult capital*—educational attainment and employment status—which can also serve as stakes in conformity but which also likely vary by SES origins. *Educational attainment* is a categorical variable representing the highest level/degree completed by respondents at Wave 3. It ranges from 0 (no degree/less than high school diploma) to 3 (four-year degree or master's degree completed). *Work hours* is a categorical variable indicating the number of hours the respondent is working per week, at Wave 3. It ranges from 1 (0–9 hours per week) to 4 (40+ hours per week). All analyses use weights and control for complex sampling design (Chantala and Tabor 1999).

Controls in our analysis include gender, race/ethnicity, age and age-squared, family structure, and residential mobility. Gender is a dummy variable where a value of 1 indicates that the respondent is female, and 0 indicates male. Race/ethnicity is measured using a series of dummy variables indicating respondent's self-identification as Latino, non-Hispanic black, Asian, Native American, or some Other group. Non-Hispanic whites are the omitted racial group. Age is the age in years of the respondent at Wave 3 (centered), and age-squared is the square of the Wave 3 age measure. Family structure is a dummy variable indicating whether or not the respondent lives with two biological parents at Wave 1 (coded as 1, with all other possible family arrangements coded as 0). Residentially mobile is a dummy variable that represents whether the respondent moved residences between waves (between adolescence and young adulthood). To measure family SES, we adopt the approach developed by. Ford, Bearman, and Moody (1999), in which five parental education categories (1 = less than high school, 2 = high school degree, 3 = some college, 4 = college degree, 5 = graduate/professional degree) are combined with six occupation categories (0 = not in the labor force, 1 = unskilled laborer, 2 = skilled laborer, 3 = white-collar lower level, 4 = white-collar upper level, and 5 = professional) to yield a SES score for each parent from 1 to 10. In cases where data were available for both parents, we selected the higher combined score.3 Numerous studies have adopted this approach using Add Health (Haynie, Doogan, and Soller 2014; Haynie, Steffensmeier, and Bell 2007; Kuhl, Warner, and Wilczak 2012; Roettger et al. 2011).

Findings

Descriptive Statistics

Table 1 presents descriptive statistics (means and standard deviations) for all variables used in the study. To begin with, as respondents in the sample move from adolescence to early adulthood, we

Table 1. Sample Descriptive Statistics.

Variables	*M*	*SD*
Dependent variable		
Delinquency in Adulthood	0.18	
Getting Drunk in Adulthood	0.51	
Smoking Marijuana in Adulthood	0.21	
Control variables		
Adolescent Delinquency	0.32	
Adolescent Drunk	0.28	
Adolescent Marijuana	0.14	
Female	0.49	
Latino	0.11	
Black	0.15	
Asian	0.04	
Native American	0.01	
Other	0.01	
Age (centered)	−0.22	1.84
Age-squared	3.43	3.59
Family Structure	0.59	
Residentially Mobile	0.72	
Family SES	5.78	2.65
Neighborhood indicators		
Advantage in adolescence	−0.01	0.96
Change in advantage	0.03	1.38
Life course family transition		
Married, with child	0.07	
Married, no child	0.09	
Cohabiting, with child	0.03	
Cohabiting, no child	0.09	
Single, with child	0.05	
Adult capital		
Educational attainment	1.19	0.76
Work hours	2.67	1.30

Note. Means for dummy variables can be interpreted as the proportion of the sample coded 1 on that indicator. *SD*s are omitted for dummy variables. All analyses are weighted and corrected for survey design. SES = socioeconomic status.

see that, on average, their delinquency involvement declines (32 percent report engaging in nonviolent delinquency at Wave 1 vs. 18 percent at Wave 3). However, the opposite is the case for the substance use measures. In total, 28 and 14 percent, respectively, got drunk or smoked marijuana in adolescence, whereas in early adulthood, 51 and 21 percent engaged in these behaviors; 59 percent of respondents come from two-parent families, and a substantial majority (72 percent) were residentially mobile between adolescence and emerging adulthood. Average SES in the family of origin during adolescence is what might be considered middle class (close to a value of 6 on a scale of 1–10). There is substantial variation around this mean, however ($SD = 2.65$).

In Appendix A, we present bivariate associations among our outcome measures and both family and neighborhood SES. The overall pattern is that all of our dependent variables increase as family SES and neighborhood advantage increase. In Table A1, we see that levels of nonviolent delinquency, getting drunk, and smoking marijuana in adulthood are significantly lower among

respondents who had low family SES in adolescence. Similarly (Table A2), the average levels of delinquency and substance use are almost identical at parallel levels of neighborhood advantage (at extreme advantage, respondents have the highest levels of all three outcomes).

As we can see from Table 1, 18 percent of respondents are married (9 percent) or cohabiting (9 percent) without children, 7 percent are married and living with a resident child, 5 percent are single and living with a resident child, and 3 percent are cohabiting with a child. While one-third of respondents report a family transition in early adulthood, the majority of respondents (67 percent) remain single without children. Moreover, these family transitions likely vary by family and neighborhood SES, and to the extent that they do, these class differences in transitions could potentially play a role in explaining involvement in delinquency in emerging adulthood.

In Appendix B, we present comparisons for all family transitions by mean family SES and neighborhood advantage. What emerges from this table is that those respondents who remain single and childless, on average, come from higher family SES backgrounds (Table B1), and more advantaged neighborhoods (Table B2) than respondents who made any family transition—marriage, cohabitation, or having children. Average family SES during adolescence among single, childless respondents is 6.13, compared with 5.47 for those who are married without a child, and 5.59 for those cohabiting without a child. For those living with a child, family SES is even lower yet, ranging from just 4.34 (cohabiting with child) to 4.74 (married with child). The results for neighborhood advantage parallel those for family SES. Single, childless respondents have highest average levels of neighborhood advantage (0.11) on the standardized index, whereas those with children, collectively, have the lowest levels of neighborhood advantage. Thus, there is a significant bivariate association between both family and neighborhood SES origins with adult family transitions.[5]

To assess whether these family transitions matter in explaining delinquency and substance use among emerging adults, we turn next to our multivariate models. Multivariate models will allow us to examine whether (1) adult delinquency, getting drunk, and smoking marijuana are significantly predicted by family and neighborhood SES and (2) family transitions partly account for the associations between family and neighborhood SES and adult delinquency, getting drunk, and smoking marijuana.

Multivariate Models

In Table 2, we present findings for our logistic regressions of Wave 3 delinquency on all predictor variables. Model 1 includes all individual-level controls as well as the family SES measure from Wave 1; Model 2 adds neighborhood indicators of advantage and change in advantage, and Model 3 adds life course family transitions, educational attainment, and employment status. This modeling sequence is repeated for the getting drunk and smoking marijuana outcomes (Tables 3 and 4).

In Model 1 of Table 2, we see that females are 64 percent (1–0.360) less likely to have engaged in any adult delinquency than males, while moving residences between waves is associated with a 22 percent increased likelihood of adult delinquency. The largest association is with prior delinquency; those who report engaging in adolescent delinquency are 2.85 times more likely (or have a 185 percent increased likelihood) to engage in adult delinquency than those who did not engage in earlier delinquency, net of other controls. Turning to our focal independent variable, we see that the effect of family SES on delinquency is both positive and statistically significant. This association is in line with our predictions: Youths who come from a higher SES background have *greater* likelihoods of engaging in delinquency in young adulthood than those who come from a lower SES background. Specifically, a 1-point increase in family SES is associated with a 6.5 percent increase in the odds of engaging in any nonviolent delinquency in adulthood, controlling for prior delinquency.

Table 2. Odds Ratios from Logistic Regression of Delinquency in Early Adulthood (N = 12,878).

	1	2	3
Adolescent delinquency	2.851***	2.822***	2.820***
	(.184)	(.182)	(.183)
Female	0.360***	0.358***	0.420***
	(.024)	(.024)	(.030)
Latino	0.928	0.932	0.956
	(.083)	(.085)	(.087)
Black	0.986	1.029	0.970
	(.086)	(.089)	(.085)
Asian	0.986	0.961	0.938
	(.182)	(.175)	(.174)
Native American	0.886	0.934	0.940
	(.321)	(.353)	(.332)
Other	1.054	1.030	1.089
	(.377)	(.365)	(.354)
Age	0.832***	0.834***	0.892***
	(.015)	(.015)	(.017)
Age-squared	1.026**	1.023**	1.025**
	(.009)	(.009)	(.009)
Family structure	0.968	0.970	0.986
	(.065)	(.066)	(.069)
Residentially mobile	1.220***	1.223**	1.404***
	(.083)	(.083)	(.096)
Family SES	1.065**	1.048***	1.042**
	(.013)	(.014)	(.014)
Neighborhood indicators			
Advantage in adolescence		1.121**	1.087
		(.047)	(.048)
Change in advantage		0.997	0.990
		(.023)	(.022)
Life course family transition			
Married, with child			0.179***
			(.033)
Married, no child			0.377***
			(.055)
Cohabiting, with child			0.488**
			(.115)
Cohabiting, no child			0.890
			(.100)
Single, with child			0.313***
			(.069)
Adult capital			
Educational attainment			0.797***
			(.036)
Work hours			0.998
			(.026)
F	53.07***	48.21***	32.75***

Note. All analyses are weighted and corrected for survey design. Standard errors are given in parentheses.
SES = socioeconomic status.
*p < .05. **p < .01. ***p < .001 (two-tailed tests).

Table 3. Odds Ratios from Logistic Regressions of Getting Drunk in Early Adulthood (N = 12,796).

	1	2	3
Adolescent drunk	2.575***	2.558***	2.682***
	(.164)	(.163)	(.175)
Female	0.628***	0.624***	0.685***
	(.033)	(.032)	(.036)
Latino	0.678***	0.676***	0.688***
	(.059)	(.059)	(.060)
Black	0.343***	0.369***	0.347***
	(.031)	(.032)	(.031)
Asian	0.573***	0.536***	0.513***
	(.085)	(.080)	(.074)
Native American	0.649	0.700	0.693
	(.196)	(.231)	(.236)
Other	0.871	0.824	0.762
	(.212)	(.211)	(.201)
Age	0.907***	0.906***	0.913***
	(.015)	(.015)	(.018)
Age-squared	0.994	0.995	0.995
	(.008)	(.007)	(.007)
Family structure	1.090	1.092	1.043
	(.065)	(.064)	(.061)
Residentially mobile	1.243***	1.251***	1.465***
	(.074)	(.076)	(.094)
Family SES	1.132***	1.098***	1.070***
	(.015)	(.013)	(.013)
Neighborhood indicators			
Advantage in adolescence		1.199***	1.123*
		(.056)	(.053)
Change in advantage		0.952*	0.945*
		(.024)	(.022)
Life course family transition			
Married, with child			0.340***
			(.040)
Married, no child			0.465***
			(.047)
Cohabiting, with child			0.429***
			(.067)
Cohabiting, no child			0.889
			(.086)
Single, with child			0.613***
			(.083)
Adult capital			
Educational attainment			1.202***
			(.056)
Work hours			1.049*
			(.023)
F	45.06***	45.00***	36.54***

Note. All analyses are weighted and corrected for survey design. Standard errors are given in parentheses.
SES = socioeconomic status.
*p < .05. **p < .01. ***p < .001 (two-tailed tests).

Table 4. Odds Ratios from Logistic Regressions of Smoking Marijuana in Early Adulthood (N = 12,674).

	1	2	3
Adolescent marijuana use	4.273***	4.210***	4.028***
	(.321)	(.316)	(.293)
Female	0.539***	0.537***	0.603***
	(.031)	(.031)	(.036)
Latino	0.758*	0.758*	0.750*
	(.091)	(.090)	(.089)
Black	0.777**	0.819*	0.762**
	(.072)	(.075)	(.070)
Asian	0.516***	0.498***	0.493***
	(.089)	(.086)	(.087)
Native American	0.728	0.769	0.729
	(.260)	(.277)	(.254)
Other	0.889	0.872	0.904
	(.352)	(.342)	(.362)
Age	0.833***	0.832***	0.893***
	(.015)	(.015)	(.017)
Age-squared	1.012	1.013	1.011
	(.010)	(.010)	(.010)
Family structure	0.866*	0.866*	0.902
	(.052)	(.052)	(.054)
Residentially mobile	1.241**	1.242***	1.351***
	(.075)	(.075)	(.085)
Family SES	1.068***	1.048***	1.056***
	(.014)	(.013)	(.014)
Neighborhood indicators			
Advantage in adolescence		1.110*	1.095
		(.057)	(.057)
Change in advantage		0.968	0.962
		(.037)	(.037)
Life course family transition			
Married, with child			0.296***
			(.053)
Married, no child			0.440***
			(.069)
Cohabiting, with child			0.720
			(.134)
Cohabiting, no child			1.229
			(.129)
Single, with child			0.756
			(.116)
Adult capital			
Educational attainment			0.737***
			(.041)
Work hours			0.993
			(.026)
F	50.44***	49.01***	37.66***

Note. All analyses are weighted and corrected for survey design. Standard errors are given in parentheses.
SES = socioeconomic status.
*p < .05. **p < .01. ***p < .001 (two-tailed tests).

Model 2 incorporates neighborhood indicators into the model. As expected, living in a more advantaged neighborhood during adolescence is positively associated with adult delinquency. A one-unit increase in neighborhood advantage results in a 12 percent increase in the likelihood of engaging in delinquency as a young adult. Thus, it seems that more SES resources during adolescence are indicative of increased odds of nonviolent delinquent behavior in adulthood; those who had exposure to fewer resources (both in their own families and in their neighborhoods) have significantly lower odds of engaging in nonviolent delinquency in early adulthood. Change in neighborhood advantage between Waves 1 and 3 is not associated with delinquency, perhaps reflecting the generally stable nature of neighborhood inequalities in the transition to adulthood (Sharkey 2012; Swisher, Kuhl, and Chavez 2013). The associations between the control variables and delinquency remain largely unchanged in this model (a 1-point increase in family SES is now reduced, leading to just a 4.7 percent increase in adult delinquency, but the effect remains statistically significant).

Finally, we add family transition measures and adult capital measures in Model 3. Cohabiting without a child is the only arrangement that is not associated with adult delinquency; for all other transitions, there is a reduction in the odds of engaging in delinquency. Those who are married with children are 82 percent less likely to engage in adult delinquency compared with those who are single without children. Comparatively, those who are cohabiting with a child are 51 percent less likely to engage in adult delinquency than single persons without children. Family transitions are thus good predictors of nonviolent delinquency cessation. The one exception is perhaps due to the fact that cohabiting unions in early adulthood tend to be relatively short and often end in dissolution (Schoen, Landale, and Daniels 2007). However, having a child in a cohabiting relationship (as well as in a marriage) appears to represent a larger stake in conformity in adulthood, and thereby does seem to produce a reduction in the odds of delinquency. Employment status is not associated with adult delinquency, but educational attainment is. For every unit increase in educational attainment, respondents are 20 percent less likely to engage in delinquency in early adulthood.

Importantly, the addition of the family transition variables attenuates the association of neighborhood advantage and delinquency to nonstatistical significance. The effect of family SES is attenuated somewhat as well, but still remains significant. Thus, this pattern of findings suggests that family transitions may represent an important component of the relationship between socioeconomic origins—at least within the neighborhood context—and delinquency in emerging adulthood. The significant differences in neighborhood advantage by family transition (that we see in Table B2) appear to be important for explaining adult delinquency.[6]

Table 3 presents results for the getting drunk outcome. Results are in many ways similar to the delinquency outcome, yet there are important differences. The general differences associated with gender, mobility, prior drunkenness, and family SES are similar to results for delinquency. Females are 37 percent less likely to report getting drunk in adulthood than males, whereas residentially mobile respondents and those who got drunk as youths have significantly higher odds of adult drunkenness than those who stayed in the same location or did not get drunk as youths. A one-unit increase in family SES is associated with a 13 percent increase in the odds of getting drunk as an adult, net of prior drinking and other controls. Unlike the delinquency models, there are also race differences in getting drunk (as well as for marijuana use in the next table). All minorities except Native Americans are significantly less likely to report getting drunk or smoking marijuana (Table 4) than white respondents. These differences retain significance in full models.

In Model 2 of Table 3, neighborhood advantage has a significant association with getting drunk in adulthood. For every unit increase in the advantage index, respondents have a 20 percent increase in their likelihood of getting drunk, net of controls. Change in neighborhood advantage is also significant, indicating that those who experienced increases in neighborhood advantage

since adolescence (either due to moving or changes in the neighborhood) are less likely to get drunk in young adulthood, controlling for prior drinking. Although this association was not expected, it may suggest that those experiencing upward mobility in neighborhood attainments feel that they have more to lose (i.e., greater stakes in conformity) from drinking than do those who grew up within an advantaged neighborhood.

In the final model of Table 3, we consider whether adult transitions and capital are associated with changes in getting drunk, and whether they attenuate the former associations. To begin with, family transitions are similarly associated with getting drunk as they were for nonviolent delinquency; all transitions except cohabiting without a child are associated with a reduction in the odds of getting drunk in adulthood. As examples, those who are single but are living with a child have a 29 percent reduced odds of getting drunk, whereas those who are married with a child have a 66 percent reduced odds of getting drunk. Both educational attainment and employment status have significant associations with getting drunk as well. An increase in the number of hours worked is associated with a 5 percent increase in the likelihood of getting drunk, whereas an increase in educational attainment is associated with a 20 percent increase in getting drunk. These results appear to be in line with party subculture arguments (Hagan 1991:579) that link preferences for "drinking and mildly disreputable pleasures" to members of the nonworking classes. Importantly, while the associations of family SES and neighborhood advantage with getting drunk remain statistically significant, the odds ratio for neighborhood advantage is substantially attenuated (i.e., reduced in magnitude by 38 percent); a one-unit increase in advantage is now associated with just a 12 percent greater likelihood of getting drunk once accounting for family transitions and adult capital.[7]

In Table 4, we report results for smoking marijuana. As with getting drunk, there are reduced odds for females and racial/ethnic minorities, but increased odds for those who report prior smoking and those who moved across waves. Females are 46 percent less likely than males (Model 1) to smoke marijuana in early adulthood, whereas those who moved are 24 percent more likely to smoke marijuana. One difference here is that family structure is also important: Those who lived with two biological parents in adolescence have a 13.4 percent reduced likelihood of smoking marijuana in adulthood than those who lived in some different family arrangement. Importantly, and in line with other results and expectations from bivariate results, family SES has a positive association with smoking marijuana. A one-unit increase in family SES is associated with a nearly 7 percent increase in the odds of smoking marijuana in adulthood.

In Model 2, the addition of neighborhood advantage does not change the patterns from Model 1, but neighborhood advantage is important. A unit increase in advantage translates to an 11 percent increase in the odds of smoking marijuana in adulthood, net of prior marijuana use and other individual controls. Once we account for family transitions and adult capital in Model 3, this association is no longer statistically significant, though it is only slightly attenuated in size. Educational attainment has a significant association with smoking marijuana, although employment status does not. Higher levels of educational attainment are associated with a 26 percent *reduction* in the odds of smoking marijuana as an adult (this effect was positive for getting drunk). Finally, only the marital transitions (with and without a child) are associated with a reduction in smoking marijuana, whereas for delinquency and getting drunk, having a child for cohabitors and single persons were associated with reduced likelihoods of those behaviors. Being married and living with a child is associated with a 70 percent decrease in the odds of smoking marijuana in adulthood, whereas being married without a child is associated with a 56 percent decrease.

Discussion

In the contemporary context, life course transitions typically associated with desistance from crime and delinquency are happening later, and for some, not happening at all. This raises the

possibility of a continuation, into adulthood, of delinquent behavior. However, just as SES should affect the likelihood and timing of life course transitions, continued delinquency into adulthood may also depend on prior SES—one's family-of-origin SES as well as the status of the neighborhood in which one lives. We have used nationally representative data from Add Health to test the argument that nonviolent delinquent behaviors are more likely to persist into early adulthood for those whose family SES is higher, and whose adolescent neighborhood SES is also more advantaged. We consider family transitions of marriage, cohabitation, and having children, as well as educational attainment and employment, as possible intervening pathways that could account for these relationships between socioeconomic advantage and delinquency in adulthood. This study contributes beyond prior empirical tests of the link between SES and delinquency because it focuses on a unique demographic (emerging adults); it focuses on a nationally representative sample of youths who are not already institutionalized or known offenders; it links delinquency to a larger literature in family sociology that points to the importance of marriage, cohabitation, and parenthood for well-being; and because it situates considerations of class origins, family formation, and delinquency within the contemporary context of ambiguous adult futures in which traditional markers of success are no longer expected or guaranteed.

Our empirical results lead to a couple of noteworthy conclusions. First, family and neighborhood SES are associated with all three outcomes: nonviolent delinquency, getting drunk, and smoking marijuana in early adulthood (in support of Hypothesis 1). Furthermore, in support of Hypothesis 2, family and neighborhood SES are also associated with family transitions of marriage, cohabitation, and parenthood in early adulthood. In particular, those who come from families and neighborhoods with lower levels of SES or affluence report engaging in significantly *fewer* delinquent behaviors in adulthood than those who come from more privileged families and neighborhoods (see Appendix A). Paralleling this is that those young adults who are making adult relationship transitions (especially those having children as young adults) come from significantly less privileged families and neighborhoods (see Appendix B). This finding is consistent with the expectation that lower-class youths from disadvantaged neighborhoods are making "early exits" to adult status markers whereas those from more advantaged contexts are likely to delay these transitions (Hagan and Wheaton 1993).

In terms of multivariate results, we find that family SES and neighborhood advantage have significant positive effects on delinquency and both types of substance use in early adulthood, net of prior adolescent delinquency (in support of Hypotheses 3 and 4). Moreover, and importantly, while the effects of family SES retain significance throughout models including adult transitions, the influence of neighborhood affluence is largely attenuated after we account for family transitions (especially for nonviolent delinquency and getting drunk—the effect of affluence on smoking marijuana is reduced only slightly), in partial support for Hypothesis 5. The variability in family formation by family and neighborhood SES (especially the latter) thus seems to be an important consideration for delinquency among young adults.

These results provide further evidence that there is not simply one emerging adulthood that is the same for everyone in their late teens and 20s, but rather, "many emerging adulthoods and many forms the experience of this life stage can take depending on social class" (Arnett and Tanner 2011:47). Delinquency is not normative in adulthood, but given the changes in likelihood and timing of different types of family formation for adults today, and the heterogeneity of positive role transitions by social class and neighborhood context, we may continue to see prolonged delinquent activities for select groups of emerging adults. These results also call into question the argument that changing shifts in marriage and labor market options have stronger implications for disadvantaged groups than advantaged groups (Booth et al. 1999) because here we see that it is among more advantaged respondents that offending is likely to persist. These results are also in line with Hagan's (1991:579) research on party subcultures, although our focus on early adulthood leaves open the question of whether these party behaviors (nonviolent delinquency and

drug use, or "mildly disreputable pleasures") will have longer term positive influences on success, as they did in his sample of men, who actually improved their status attainments as result of their subcultural pursuits. We see that privileged status origins are associated with prolonged party behaviors, which in the short term at least, represent a *negative* consequence of privileged status. In addition, this focus on party subcultures seemed especially beneficial for men in Hagan's (1991) research, so future research should certainly consider not just the consequences of this continued party delinquency for various realms (educational and labor market success, relationship stability, etc.) but should consider gender as a possible moderating factor. It would be especially worthwhile to explore the intersections of family formation, gender, and delinquency in future studies, given recent insights from family sociology and criminology on the gendered nature of family transitions and recent work outlining gender differences in how role transitions influence offending over the life course (Macmillan and McCarthy 2014).

A caveat of our findings that points to variability in the association between adult transitions and party behavior comes from our finding that adult educational attainment is *negatively* associated with nonviolent delinquency and smoking marijuana, but positively associated with getting drunk. A trend of prolonged educational attainment in recent decades (i.e., adults are staying in college for not just bachelors but also masters, PhD, or professional degrees) has spurred questions of the consequences of this for other outcomes. Here we see that education is beneficial in some respects but detrimental in others (it increases the odds of getting drunk). Again, however, these are young adults who may not be done with their educations, so future research must consider whether these patterns reverse as persons age into their 30s; completed professional degrees could serve as greater stakes in conformity than current enrollment in college, and whether privileged class backgrounds or affluent neighborhoods condition this stake in conformity remains an open question.

One limitation of the present analyses is that Add Health is a school-based sample and is not able to capture youths who have dropped out of school by Wave I, those at greatest risk of engaging in delinquent or substance use behaviors in adolescence. These youths may be most likely to make early transitions into adult roles. However, to the degree that we focus on the delinquent experiences of more advantaged youths in emerging adulthood, these data allow us to examine the influence of early adult relationship, educational, and employment statuses on continued involvement in nonviolent delinquent behavior. Future research should further explore these associations with respect to other roles and statuses (e.g., peer group formation and stability in adulthood, adults' relationships with parents) as well as with respect to the *quality* of these roles and transitions, which we are unable to explore here. Future research should also examine these pathways among different demographic subgroups, including race/ethnicity and immigrant/generational status.

Two additional and very important contingencies to consider in future research are the timing and duration of transitions. Add Health does not provide the ability to create measures of how old respondents were when they started employment or postsecondary education (though one can examine completion dates for education and start dates of marriage and cohabitation), thus limiting the ability to examine "on-time" versus "off-time" events in the context of contemporary demographic patterns. Although timing is a key aspect of arguments in life-course criminology, especially those in the "precocious exits" literature, survey data limitations have prevented scholars from examining patterns of continuity in adulthood for representative samples of the general population. Research that extends considerations of delinquency involvement into later adulthood would benefit from information on the timing of not only relationship events but also cessation of behaviors. Use of life event calendars among general samples would greatly advance developmental criminology beyond its current state.

Despite these limitations, we feel that this study does fill a gap in research in that it links scholarship on social class, delinquency, and life transitions for a contemporary sample of adults in a unique phase of their lives—emerging adulthood. Recent work (Massoglia and Uggen 2010) has explored the link between multiple adult status markers and desistance as well as subjective

assessments of adulthood. This important line of inquiry and theorizing has served as a jumping off point to examine what it means to be an adult in contemporary America, yet we show here that *adolescent* status origins continue to inform adult behaviors and whether young people will or will not "grow out of" delinquency as we might hope they will.

Appendix A

Wave 3 Outcomes by Family Socioeconomic Status (SES) and Neighborhood Advantage

Table A1. Wave 3 Outcome Means by Family SES Categories.

	Low SES	Medium SES	High SES
Dependent variable			
Nonviolent Juvenile Delinquency in Adulthood	.16[a]	.19	.23
Getting Drunk in Adulthood	.40[a]	.55	.63
Smoking Marijuana in Adulthood	.18[a]	.23	.26

Note. Family SES ranges from 1 to 10. Low family SES = 1 through 3; Medium SES = 4 through 7; High SES = 8 through 10. SES = socioeconomic status.
[a]Represents a significant difference from High SES ($p < .01$, two-tailed tests).

Table A2. Wave 3 Outcome Means by Neighborhood Advantage Categories.

	Low advantage	Medium advantage	High advantage
Dependent variable			
Nonviolent Juvenile Delinquency in Adulthood	.16[a]	.19	.24
Getting Drunk in Adulthood	.42[a]	.55	.65
Smoking Marijuana in Adulthood	.18[a]	.22	.28

Note. Neighborhood advantage split into quartiles. Low advantage is the lowest quartile, high advantage is the highest quartile, and medium advantage is the second and third quartiles combined. Results are similar if advantage is split equally into three percentiles.
[a]Represents a significant difference from high advantage ($p < .01$, two-tailed tests).

Appendix B

Wave 3 Family Transitions by Family SES and Neighborhood Advantage

Table B1. Mean Family of Origin SES by Early Adult Family Transitions.[a]

	M	*SD*
Life course family transition		
Married, with child	4.74[b]	2.33
Married, no child	5.47[b]	2.63
Cohabiting, with child	4.34[b]	2.29
Cohabiting, no child	5.59[b]	2.50
Single, with child	4.66[b]	2.61
Single, no child	6.13	2.64

Note. SES = socioeconomic status.
[a]All analyses are weighted and corrected for survey design.
[b]Represents a significant difference from single with no child ($p < .01$, two-tailed tests).

Table B2. Mean Neighborhood Advantage by Early Adult Family Transitions.[a]

	M	*SD*
Life course family transition		
Married, with child	−0.36[b]	0.75
Married, no child	−0.24[b]	0.81
Cohabiting, with child	−0.37[b]	0.67
Cohabiting, no child	−0.05[b]	0.90
Single, with child	−0.31[b]	0.83
Single, no child	0.11	1.00

[a]All analyses are weighted and corrected for survey design.
[b]Represents a significant difference from single with no child ($p < .01$, two-tailed tests).

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Notes

1. We did run separate logistic models for violent delinquency, but results, as suspected, were quite different from nonviolent delinquency results. Neither family socioeconomic status (SES) nor neighborhood advantage was associated with violence in initial models. In final models including family transitions and adult capital, neighborhood advantage was marginally significant but negative (the opposite of the direction we find for all other outcomes here), and the only relationship transition that mattered was marriage (with or without children). This gives additional support to arguments in favor of the "multiple pathways" argument for violent and nonviolent offending.
2. We ran sensitivity analyses for all models using ordered logit instead, but the Brant test in Stata revealed that these models violate the proportional odds (parallel lines) assumption. As we are less

substantively interested in frequency or severity, combined with the fact that data are rather stretched when we consider the relatively few cases at the upper end of these original distributions, we use logistic regression for simplicity of interpretation.

3. We also create a categorical variable for descriptive purposes, to gauge the association of SES with our three outcomes. We report these findings in Appendix B. Respondents who have a score of 1 to 3 on the scale represent "low family SES," respondents with a score of 4 to 7 represent "medium family SES," and those with a score of 8 through 10 are "high family SES."
4. As for the family SES measure, we created categories for low, medium, and high advantage (see also the note in Tables A1 and A2). We split the advantage index into quartiles. Low advantage here is the bottom quartile, high advantage is the highest quartile, and medium advantage is the combined second and third quartiles (results are similar if we create three equal percentiles instead of quartiles). We tested for collinearity by looking at the variance inflation factors (VIFs) for all variables in our models. No VIF was above 2.07, and the average was just 1.21. We also examined the correlations of the estimated coefficients in the final models (including all measures). All correlations were below .50. Thus, we are confident that results are not affected by multicollinearity.
5. We also tested (for Appendix B) the difference between married, cohabiting, and single with children versus without children, and those differences are likewise statistically significant. Thus, the mean SES for marrieds with children is significantly lower than SES for marrieds without children, and SES is lower for cohabitors with children than for those without children. Thus, the lowest SES is representative of those who have the "combination" of a relationship transition and child; SES is higher for those who make relationship transitions but do not have children, and is highest for single, childless persons.
6. We also ran models separately with just educational attainment and work status, excluding the relationship transitions, to see if these attenuated the SES or neighborhood advantage effects. They did not. In addition, a model including relationship transitions alone (excluding work status and educational attainment) does show the attenuation of the neighborhood advantage measure. Hence, it seems that these relational factors are what is driving the attenuation.
7. Again it is the family transitions that drive this attenuation. A model including just family transitions reduces the t-value to 2.64 ($p < .01$), whereas the t-value for advantage is much higher (3.93 and 3.47, respectively) when work status and educational attainment are considered separately.

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