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Patrick Wightman and Robert Schoeni, University of Michigan

Keith Robinson, University of Texas at Austin

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Familial Financial Assistance to Young Adults

Patrick Wightman, University of Michigan*
Robert Schoeni, University of Michigan
Keith Robinson, The University of Texas at Austin

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Abstract: We use the Transition to Adulthood (TA) Supplement to the Panel Study of Income Dynamics (PSID) to examine current trends in financial and material assistance provided by parents to their college-age, young adult children. We also investigate the determinants of these transfers. We find that most young adults receive some form of assistance and that the average annual value of all transfers is substantial, roughly \$7,500. We find large disparities by family SES, although we also find that as a share of total family income, the total value of all transfers is fairly consistent across the income distribution. We show that controlling for young peoples' college attendance, childhood cognitive and non-cognitive characteristics, family income is the most important predictor of both the receipt and value of parental assistance. We find some evidence that parents' perception of childhood behavior influences discretionary transfers, i.e. gifts and loans. Finally, we find some evidence that these trends were affected by the recession of 2007-2009.

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I. Introduction

For many young people in the U.S., the post-adolescence period become an important and distinct developmental period. They are taking longer to leave home, complete their schooling and get married. Stable employment, once the foundation of adulthood, is becoming more elusive as the labor market is becoming more fluid; average job tenure is shorter and employment transitions, voluntary and involuntary, occur more frequently—with all the accompanying uncertainty. The relationship between parenthood and marriage is becoming increasingly tenuous as more children are born to single parents and cohabitating and married couples are waiting longer to have children. In short, many young adults are taking longer to make the transition to traditional adulthood. Moreover, these trends have been accompanied by an increase in financial and material support young adults receive from their parents (Schoeni and Ross, 2005).

In this paper, we use the Transition to Adulthood (TA) Supplement to the Panel Study of Income Dynamics (PSID) to examine the current state of the financial relationship between young adults and their parents. We address a number of specific questions, including the share of young adults who receive assistance, the purpose for and amount of transfers received, how these patterns vary with the attributes of the recipient and parent, the within-family determinants of assistance and the effect of the recent recession on this relationship. In light of the widening of the socio-economic gap between low and high income families in the U.S., these questions carry added weight—if successful transitions depend on access to parental assistance, efforts to shrink economic inequality will be hampered by low-income parents' inability (or unwillingness) to provide this support. In fact, we find that even controlling for young peoples' college attendance, childhood cognitive and non-cognitive characteristics, family income is the most important predictor of both the receipt and value of parental assistance.

II. Research on Parental Assistance to Young Adults

Intrafamily transfers of income, assets, and other resources has been a topic of interest for social scientists going back at least to Becker (1974) and Barro (1974). McGarry and Schoeni (1995) were among the first to use to investigate the this behavior at the population level. They used the initial wave

of the Health and Retirement survey (1992) to examine the incidence and value of cash transfers given by respondents born between 1931 and 1941 to their non-resident children ages 18 and older. They find a relatively low transfer rate of roughly 14 percent. This number is not surprising, given that average age among the all children is over 31, 65 percent are married and 50 percent own their own home. The average (non-negative) value is just under \$5,000. They find that less well-off children are more likely to receive assistance. Low income, fewer assets, younger age and living closer to home are all positively associated with the likelihood of receiving a transfer and, with the exception of home ownership, are positively associated with the value of the transfer as well.

Schoeni and Ross (2005) use the 1988 wave of the PSID to examine the value of all support (including time, shared housing and food) given to adult children specifically during the transition to adulthood, defined as ages 18-34. Thirty-four percent of all individuals in this age range received some form of transfer in the year preceding the survey. However the rate of receipt varied substantially according to the specific age of the child, peaking at 59 percent among 21-22 year olds. They also estimate the total average value of assistance received over this seventeen-year period at just over \$38,000, again with younger children more likely to receive a larger contribution. They also find large disparities by parental income.

Among sociologists, a recent paper by Swartz et. al. (2011) examines on the role of life events and the parent-child relationship on receipt of parental support during the transition to adulthood. Their sample comes from the Youth Development Study (YDS), a longitudinal survey of St. Paul-area individuals that began with roughly 1000 ninth graders chosen in 1988. The authors looked specifically at assistance with living expenses and shared housing among respondents over the ages 24 (in 1997) to 32 (in 2005). They find that parents were more likely to provide assistance to children who had made less progress on the road to adulthood, as measured by employment and relationship formation. These findings echo those of McGarry and Schoeni (1995). Negative life events, such as injury or illness or spending time in jail, also increased the likelihood of support. Interestingly, they also found that a positive mother-child relationship had a positive association with support, while a positive father-child relationship had a negative association.

The present paper builds on these findings and provides important contemporary context regarding parental support provided to college-aged children. In particular, we update the work of McGarry and Schoeni (1995) and Schoeni and Ross (2005) and expand on the work of Swartz et. al. (2011) by utilizing a recent dataset that combines two of the singular but separate advantages of other data sources that have been used to study this issue: population representativeness and informational detail. The Transition to Adulthood Supplement (TA) to the PSID is a nationally representative sample of young adults, in this case who were between the ages 0-12 in 1997. Because TA respondents were raised in PSID households, we have available current and background information regarding family attributes, experiences and resources. In addition, as part of the TA questionnaire, respondents are asked to provide uniquely detailed information on the receipt and value of financial and material assistance provided by their parents across a number of categories. Finally, thanks to the presence of a moderate number of sibling pairs in the TA sample, we are able to use between-sibling variation to analyze how children's individual characteristics influence parents' transfer decisions while controlling for unobserved family characteristics that may otherwise bias such an analysis. Together, this information allows us to make three descriptive and analytical contributions to the transfer literature. First, we present (relatively) current, nationally-representative data regarding the receipt, use and value of parental assistance provided specifically to college-aged children. Second, we show how these outcomes vary by family and individual factors. Third, we provide evidence regarding the individual, within-family determinants of transfer receipt.

The paper proceeds as follows. Section III describes the data; Section IV presents descriptive statistics regarding the receipt, use and value of parental transfers, and how these measures vary by family SES. Section V presents multivariate analysis that examines how respondents' current status, childhood attributes and family background are associated with transfers. Section VI presents the results from sibling-pair, fixed effect models on the receipt of assistance. Section VII describes the results from a number of sensitivity analyses and includes a brief discussion of the effects of the recent recession and Section VIII summarizes and concludes.

III. The Transition to Adulthood Study

The TA sample grew out of the Child Development Supplement (CDS) to the PSID. The CDS was designed to provide information on children's cognitive and socio-emotional characteristics, family relationships, and school and neighborhood environments. This information compliments the employment and income information that the PSID collects on their parents. The first wave of the CDS was fielded in 1997 and consisted of approximately 3500 children between the ages of 0-12 residing in PSID-respondent households. Follow-up interviews were conducted in 2002 and 2007. The first wave of TA interviews were conducted in 2005. The on-going study consists of CDS participants who have either graduated from or dropped out of high school and is designed to cover transition-to-adulthood period. In practical terms, demographic shifts in young adult behavior towards increased time between the conclusion of adolescence and achievement economic and social independence means it is taking longer for respondents to enter the PSID as sampling units in their own right. Thus the TA provides information on a crucial and increasingly distinct developmental phase, including educational attainment, early labor market behavior and relationship formation. Moreover, in combination with the CDS and core surveys, this information can be supplemented with data on childhood behavior, the home environment, household economic resources and parental characteristics. As a result we are able to examine in detail the association between these factors and the financial support young adults receive from their parents. Our sample consists primarily of the pooled observations on college-aged (19-22) respondents from the 2005, 2007 and 2009 interviews: 2,098 interviews from 1,368 unique respondents. Sample descriptive statistics are provided in Table 1.

We use a series of questions administered to the TA sample in all waves that allows us to estimate the total value of financial and material assistance (excluding shared room and board) received by the respondent. These questions read as follows:

The next questions are about financial assistance you might have received in the past 12 months. This could be in the form of money given to you or money paid on your behalf for goods or schooling. During (the previous year), did your parents or relatives...[READ LIST. ENTER ALL THAT APPLY]

- Purchase a house or condo for you?
- Pay rent or mortgage on your behalf?
- Give you a personal vehicle such as a car?
- Pay for tuition?
- Cover expenses of bills?
- Give you a personal loan?

Respondents who report yes are then asked the amount for each type of transfer provided.¹ There is a modest share of item non-response on the follow-up questions regarding the amount of assistance—between 1-4 percent depending on the item, these observations are omitted from the analysis (with no significant effect). Financial data are all expressed in 2005 dollars using the CPI-U. Sample weights are used in all descriptive tables and figures. Because we pool across multiple waves, in the multivariate analysis we correct the standard errors for clustering around respondents who are interviewed more than once.

IV. The share of young adults receiving transfers, their value and purposes

The majority of young adults receive some form of financial assistance from parents and relatives. As shown in Table 2, 61.5 percent of respondents received help in some form or another. Help paying bills is the most common form of support, with 42.2 percent of all respondents receiving transfers of this type. Tuition assistance is the next most common category (34.7 percent), followed by vehicles (23 percent), rent (21.5 percent), loans (11.3 percent) and gifts (6.5 percent). Less than a percent of all respondents received support in the form of housing.

The amount received is substantial. The average value of all assistance is \$7,490 (all figures are reported in 2009 USD). Among those who received assistance, the average amount received is nearly \$12,185. Not surprisingly, this figure is skewed, with a small proportion of young adults receiving very

¹ The transfer questions do not appear to include the implicit rental value or in-kind transfer of room and board expenses provided to young adults who live with their parents. The prior study by Schoeni and Ross (2006) factored these in-kind transfers into their estimates.

large transfers (such as tuition assistance). However, the share of youth that received even modestly large sums of assistance is significant—half received transfers valuing over \$5,699.

We classify young adults' SES by their parental family income, for which information was collected from the three PSID waves preceding the TA interviews. This corresponds roughly to the period during which the youth were 13-20 years old (core interviews are conducted biennially). Table 2 shows difference in summary statistics between young adults in the bottom and top quartiles of family income. High-income youth are over 50 percent more likely to receive any assistance. The average amount of assistance received by young adults whose parents were in the top quartile is over 7 times as large as the assistance received by those whose parents are in the bottom quartile: \$2,113 vs. \$15,449. Conditional on any assistance, the gap is over 4 to 1: \$4,471 vs. \$18,863. The gaps are especially large for education related assistance: while just 10.7 percent of low-income youth received tuition assistance, 63.4 percent of high-income youth received such help (among respondents with any post-secondary education these figures are 18.8 and 68.7 percent, respectively). Conditional on receiving such help, the gap is more than 2 to 1: \$5,788 to \$12,877. A large share of this gap is likely due to differences in college enrollment (31.2 vs. 83.8 percent), differences in tuition costs of the schools these students attend, and differences in income-based tuition assistance from government and other non-familial sources. While not shown, it is noteworthy that the gap between whites and non-whites mirrors the gap between bottom and top quartile households.

We further investigate disparities over the income distribution using a lowess smoother. Figure 1A is a scatter plot of total transfers against total parental income, among those receiving assistance. (We exclude the relatively few families with transfers greater than \$50,000 or income greater than \$200,000 to facilitate interpretation using the plot.) As can be seen, the relationship increases in a straightforwardly linear manner throughout the entire distribution. This pattern leads to another question: while lower-income families give far less assistance to their young adults, do they give a lower share of their permanent income to their children? We investigate this issue in Figure 1B, which displays the lowess plot of the *ratio* of transfers to permanent income against permanent income. (We exclude the few cases with a ratio of >1.0 and again, cases with family income greater than \$200,000.) The smoothed

curve is remarkably flat, with families giving to their young adults roughly 10 percent of permanent income regardless of their position on the distribution. There appears to be remarkably little difference in the proportion of permanent income spent on young adults.

V. How are child/parent attributes associated with transfers?

It is well documented that race, income, educational and labor-market opportunities, even family structure are highly intertwined. In order to sort out some of these relationships and how they are associated with parental support, we estimate a series of regression specifications that model receipt and value of assistance by category, as a function of the family attributes described above. Moreover, because the TA is an extension of the CDS, we have measures of respondents' childhood cognitive ability and behavior, which we also incorporate into our analysis. To simplify the discussion we examine four different assistance categories: total, bills & rent, gifts & loans (which includes gifts, housing and vehicle transfers, and loans), and tuition. Furthermore, we group our explanatory covariates into four categories: young adult status, childhood characteristics, family characteristics (including SES) and control variables.

Young Adult Status

The first set of young adult variables measures time use with respect to labor market and education activity over the 12 months prior to the interview. Respondents are categorized as having “attended school” if they are enrolled in college at the time of the interview or at any time in the past year. They are categorized as having “worked” if they were employed at all in the 12 months prior to and including the date of the interview and didn't attend school over the same time period (or are not currently in school).² They are categorized as combining “work and school” if they attended school and worked at all. The reference group are those who do not meet either criteria, or “idle”.^{3,4} The second set of young

² We also examined the associations of high school graduation and GED receipt. Conditional on the measures described here, these measures had no effects.

³ By definition, “idle” may include respondents who are in the military and also stay-at-home mothers. The TA sample includes 11 respondents who are active or were active within the military in the past year. As a sensitivity check, we included a dummy variable indicating that the respondent had ever fathered/given birth which we then interacted with the female indicator. Using this specification we found some evidence that mothers were more likely to have received tuition assistance but in all other cases the effects of both the parent indicator and the interaction were insignificant and did not affect the other results.

⁴ We also included dummy variables that indicated that the respondent reported being either unemployed or out of the labor force in the past year, to investigate whether they clarified the status of the idle respondents, who comprise

adult variables measures living arrangements: these include “resided with parents fall and winter”, “summer” or permanently “resides with parents.” The reference group are those who did not reside with their parents at all in the prior year. Finally, because these variables essentially describe the status of the respondent at the time of the interview and the period immediately preceding it, we include a dummy variable for interview year 2009, indicating that the period in question covers the recession.

Childhood Characteristics

Our childhood characteristic variables include the respondent’s gender (female) and birth-order (a dummy variable if he or she is the oldest child in the household) and three measures taken from the CDS. The first is the average of the standardized Woodcock Johnson letter-word and applied problem scores, taken across all available CDS waves (1997, 2002 and 2007), reported in units of 10.⁵ (This measure is missing for roughly eight percent of the sample. We assign these respondents the sample average and also include a dummy variable indicating the true value missing.) Our second variable is the average value of a scale derived from parent’s report of the respondent’s positive behavior. Typical items used to construct this scale are “Is cheerful, happy”, “Gets along well with other people his/her age”, and “Tries to do things for (himself/herself), is self-reliant.” This measure ranges from 1 to 5. The third variable is a proxy for childhood physical and developmental health: specifically a dummy variable for the presence of any limitation if the parent responded that the child was physically limited in his or her ability to participate in play, school-work and/or home-work (in CDS-I, the only time these questions were asked).⁶

Family Characteristics

Our family characteristic variables include SES, family size and race. The first set of SES measures is derived from the three-wave average of annual family income.⁷ We then divide the sample into quartiles in order to allow for non-linearities in the effect of income. Respondents are assigned

nearly 30 percent of the sample. These variables had no individual effects and their inclusion did not affect the results.

⁵ We chose these two particular tests because the letter-word score had the least non-missing values of reading subtests and the applied problems subtest is the only one of the math subtests administered in all CDS waves. We averaging across both tests to generate a (relative) measure of general cognitive ability and also to maximize the number of non-missing observations available.

⁶ No other measures of either general health or disability had any significant association with any type of assistance.

⁷ We also used sets of dummy variables indicating household quartile position within the 1997 (CDS-I) income distribution, in order to examine whether or not circumstances during childhood were more predictive of assistance than current household circumstances. In the event, current circumstances generated estimates that were more precisely estimated.

dummy variables according to their placement on the distribution, those in the bottom quartile are the reference group. Our second set of SES variables measure parental education, specifically the highest education achieved by either parent, both or a single parent. The categories are high school graduation/some college experience or a four-year college degree. Parents who did not complete high school comprise the comparison group. Together these variables describe the economic and intellectual circumstances of the respondent's household and in this way serve as predictors of the respondent's own educational opportunities and the necessities for parental support that may come along with them. Family size is measured as the number of children in the household at CDS-I. We also categorize race as a family characteristic, using a non-white dummy variable. The largest non-white group is African-American but there is also a non-trivial number of Hispanics (white and black) in the survey. However, when categorized separately, the differences between the two were minimal and had little effect on any of the remaining measures.

Analytical Strategy

The multivariate analysis consists of two parts for each transfer category. First we model the probability of receipt and second, the value of those transfers. The receipt and value models each have somewhat specific requirements in terms of estimation technique. For receipt of assistance we use logit regressions and present the estimated odds ratios for each factor. In this way these estimates provide comparative context for conditional logit models discussed in Section VI. Estimating the value models presents two different challenges. First, some respondents receive no transfers, which truncates the transfer amount distribution at zero. To accommodate this we estimate Heckman MLE selection models.⁸ Second, conditional on receipt, the distribution is highly skewed, which obscures the typical interpretation of the coefficient estimates as conditional mean responses. As a result, we use the natural log of the amount of received transfers in each category as our dependent variables. This means that the coefficients can be interpreted as semi-elasticities, i.e. the proportionate or percentage change in the transfer value associated with a one-unit change in the dependent variable. Our control variables include

⁸ We also fit tobit models to the data, however post-estimation tests indicated that the normality assumptions required for the tobit estimator to be consistent were not met.

the age of the household head along with its square, and a dummy variable for two-parent households, both measured at CDS-I, and the respondent's age at the time of the TA interview.

The analysis proceeds in two steps for receipt and value for each transfer category. First we estimate the effect of each covariate (or set of covariates in the case of employment/enrollment status and parental education) with no other controls. We then fit a full specification that includes all variables, this is the full model. The results are grouped by variable category and presented graphically in the attached bar graphs. Confidence intervals are indicated for statistically significant estimates, with the level of significance designated by either a plus sign (5%) or dot (10%). The results are also presented in regression tables in the appendix. For the sake of brevity, the discussion focuses on the results generated by the full models.

Any Assistance/Total Value

The any/total transfer models are presented in Figures 2A-2F and Appendix Table A1. In most cases, the effects generated by the univariate models are subsequently (and not surprisingly) smaller in magnitude and less precisely estimated in the full model. Of the significant covariates, the odds of receiving any assistance nearly double among respondents who either attended school exclusively or combined work and school, relative to idle respondents. Those residing with their parents during the summer (most likely students) are also more likely to receive assistance. Of the childhood characteristics (Figures 2C and 2D), we find that a childhood limitation is significantly (at the 10 percent level) associated with odds that are lower by 40 percent. Of the family characteristics (Figures 2E and 2F), income has a robust positive association only for those in the top quartile: the odds of receipt are 70 percent higher relative to bottom quartile respondents. Furthermore, being raised by at least one parent with a college degree more than doubles the odds of receipt. In contrast, the odds decline 21 percent with each additional sibling. It is also worth noting that in the full model the nonwhite effect is close to unity in magnitude and statistically insignificant, which suggests that the univariate disparities (44 percent lower odds) are more reflective of SES factors.

Turning to the transfer amounts, we again find positive effects for the variables that both directly and indirectly measure school attendance. The effect of attending any school (either exclusively or in

combination with work) in the past year is an increase of at least 80 percent or more in total support, relative to idle respondents. Living with parents during the summer is associated with a 29.3 percent increase in the value of all transfers. Of the childhood characteristics, positive behavior has a positive association of 38.1 percent for each additional point on the scale. Finally, conditional on all controls, income has a significant, positive effect among respondents in the third (62.8 percent) and top (92.3 percent) quartiles. Having a college-educated parent increases the value of all transfers by 47.5 percent. Once again, the nonwhite effect disappears once education and income are controlled for.

Bills and Rent

These results are presented in Figures 3A-3F and Appendix Table A2. Forty-eight percent of all respondents received help with rent or utilities or both. School attendance is the largest determining factor, the odds of housing-related support are roughly 150 percent higher among respondents who spent at least some time in school in the past year. For those residing with their parents only during the summer the odds are 100 percent higher. Of the childhood characteristics, we find a significant positive effect for the average WJ test score: a 10 point increase in this measure is associated with a 12 percent increase in the odds of receiving assistance. Turning to the family characteristics, we find that the positive effects of coming from the top income quartile and having at least one college-educated parent are very similar at 92 and 86 percent increased odds, respectively. In the fully-specified value model, school attendance by itself is associated with a 69 percent increase in the amount of support while respondents who live with their parents during the school year receive 34.8 percent less. Interestingly, respondents interviewed in 2009 received 21.6 percent more relative to prior years. Each 10-point increase in the average WJ test score increases the value of housing-related support by 10.2 percent, while a point increase on the positive behavior scale increases it by nearly 30 percent. Finally, in contrast to the receipt model, only income is associated with increased support, parental education has no significant effect.

Gifts and Loans

These transfers, which also include vehicles and housing, are grouped together because of their one-time, non-recurring nature. In this way, they may also be more discretionary from parents' perspectives. Thirty-two percent of the sample received at least one transfer in this category. Of the

specific types transfers making up this group, vehicles are by far the most common: 23 percent of respondents received a vehicle or help purchasing a vehicle. At 11.3 percent loans are the next most common category, followed by gifts at 6.5 percent and housing at 0.5 percent. Receipt results are presented in Figures 4A-4F and Appendix Table A3. As can be seen, respondents combining work and school are marginally more likely (43 percent higher odds) to receive a discretionary transfer in the full model. The odds for firstborn respondents are slightly (22 percent) lower. Of the family characteristics we find two that have robust associations with the transfer of a gift or loan: for the children of college-educated parents the odds are 120 percent higher, while each additional sibling reduces the odds by 19 percent. We find more robust associations looking at the value of these transfers. Exclusive school attendance is associated with a 50 percent increase in the amount of one-time transfers. The amounts given to female and female respondents are 46.7 and 52.6 percent greater relative to male and younger offspring, respectively. Respondents in each of the three upper income quartiles receive significantly more than those in the bottom quartile.

Tuition

Tuition assistance represents a unique category. Descriptively, the rate of receipt for the sample is just under 35 percent. However, among respondents who attended any school within twelve months of the interview the rate is more than half (53 percent). We do not directly address the question of the *role* of such support, i.e. whether or not parents' money sends their children to college or if it follows them there. However, we do condition on college attendance over the time period covered by the transfer questions. This reduces the sample size by roughly half, to 1152 observations. The results are presented in Figures 5A-5F and Appendix Table A4. Looking first at receipt, conditional on attendance the odds for respondents who combine work and school are statistically no different than those for respondents who attend college exclusively. For respondents residing with their parents during the summer the odds that they receive help with tuition are 70 percent higher while the coefficients for those residing with parents during the school year and year-round are not significant. Of the childhood characteristics, we find a significant effect for the average WJ test score, a 10-point increase on the scale average increases the odds

of assistance by 21 percent. Of the significant family characteristics, the top-income-quartile effect is a 205 percent increase in the odds of support, the college-educated parent effect is a 277 percent increase.

Turning to the value model, we find that, compared to college-going respondents living independently, those residing with their parents only during the summer receive 40 percent more in tuition assistance while those who live at home year-round receive 41.5 percent less. Firstborn respondents receive 45 percent more. Those from top income-quartile homes and those with college-educated parents receive 61.4 and 90.1 percent more, respectively.

V. Within families, how are transfers apportioned?

In spite of the breadth of information available in the PSID and its supplements, the findings reported thus far do not necessarily represent causal relationships. For example, while these results indicate that “smarter” kids (as measured by the average WJ test score) are more likely to receive tuition assistance, we cannot say that this is *because* they are smarter. High-income families have more resources to spend on their children’s education, likely improving their WJ test scores. Higher test scores increase the likelihood of going to college, which at the very least presents the opportunity for parents to help pay tuition costs. The presence of a modest number of sibling pairs in the TA sample allow us to estimate fixed-effects models on the receipt of assistance.⁹ Because such models use differences between siblings to identify the effects of observed traits, they inherently control for unobserved, time-invariant, family-level characteristics which may be correlated with both childhood developmental trajectories and young adult outcomes. In this way, we are able to investigate the causal role of respondents’ individual attributes.

The structure of the TA sample provides for specification of fixed effects at two different points, each of which uses a different source of variation to identify effects. The first we refer to as the *Year Fixed Effect*. In this model, variables are differenced between siblings who are interviewed in the same year. Essentially they are compared within the same point in time but (presumably) under varying

⁹ Regarding models for transfer amounts, there are a number of proposed methods for dealing with fixed-effects in a selection model framework. However none have gained wide acceptance in the applied field. As a result such an analysis is beyond the scope of this paper.

circumstances e.g. further along in school compared to just beginning school. The second we refer to as the *Age Fixed Effect*. This specification relies on the fact that many siblings enter the sample at different times, 2005 vs. 2007 vs. 2009. Thus, effects are identified by differencing between siblings of the same age but at different points in time.

Tables 3A and 3B present descriptive statistics for the year and age fixed-effect samples, respectively. Specifically, they show how the transfer rates differ between one- and two-offspring households, and how assistance varies within multiple-sibling families. As can be seen in Table 3A, at a given point in time, the rates of receipt are fairly similar across both types of households. Moreover, the household transfer rate (the weighted average of the number of households with at least one transfer recipient) is also very similar to the general transfer rate (the average number of all respondents who receive a transfer). Nevertheless, we do see variation in the number of parents giving money to both, one, or no young adult children across each category. In fact, with regards to the interview year fixed effect, in each category there is a greater percentage of multiple-sibling households who provide assistance to only one young adult (although with respect to any transfer, the difference is quite small). We see similar patterns when we look at the value of assistance. Multiple-sibling households provide greater assistance on average, but within these families, the average value is close to the population average. The between-sibling difference in transfer values are relatively small, but do suggest at given points in time, the older of the pair is receiving more money (as indicated by the positive value). The one exception is tuition assistance, in which case it is likely that a number of older siblings have finished school.

Turning to the age fixed effect sample in Table 3B, we find largely the same patterns. This may be somewhat surprising if we assume that young adults of the same age (and from the same family) tend to be generally in similar situations. In these cases, differences in family conditions (younger siblings are more likely to be facing the recession) may play an important role in these results. Some differences stand out, in particular with regards to the receipt of any transfer, the modal household provides some assistance to both offspring, and the difference in the value of total transfers is quite small.

For our multivariate analyses, we use conditional logit regressions. This allows us to control for unobserved, time-invariant fixed-effects with a dichotomous dependent variable. However, this technique

imposes restrictions on the data. First, because they are identified off of between-sibling variation in both the dependent and independent variables, the functional sample size (and statistical power) is constrained to those sibling pairs with differing values on both variables. In other words, observations that do not differ in value are dropped from the analytic sample. Similarly, variables for which there is no variation between siblings—parental education for example—also drop out of the model. Moreover, estimates represent relationships at the within-family level, not the population. As a result, we restrict the full model to the education/employment/residence indicators and childhood characteristics. Once again we present the estimate results in the form of odds ratios.

We estimate each specification on the receipt of total transfers, bills assistance and gifts and loans; the tuition results are omitted because, conditional on college attendance, the samples are prohibitively small. Results are presented in Figures 6, 7 and 8. The sample sizes—reported in detail in the appendix tables—range from 335 to 470 (there is one group of three siblings) and the loss of statistical power must be kept in mind when evaluating these estimates. Results from the year fixed-effects are represented by the white bars, those from the age fixed effects by the black bars. Looking first at the receipt of any transfer (Figures 6A and 6B), we find that within the same year, the odds of receipt for siblings combining work and school are over 300 percent higher than those who are idle. Among siblings of the same age, the odds are similarly about 300 percent higher for those who live at home only during the summer, and 160 percent higher for each additional point rated on the positive behavior index. For siblings who had a limitation during childhood, the odds of receipt are over 90 percent lower in both models. Turning to rent and utility assistance (Figures 7A and 7B) we find only one marginally significant effect: the odds of receipt for siblings who combine work and school are 138 percent higher relative to idle siblings.

Finally, turning to the gifts and loans models, we find lower odds for siblings attending school full-time (age model), those residing at home during the school year (both models) and those staying at home year round (year model). Of the childhood characteristics, we find that among offspring at the same age, with each additional 10 points on the average WJ score the odds decrease 41 percent. Finally, childhood limitations (80 percent lower) and gender (44 percent lower for women) are both associated

with lower odds in the age models. Perhaps the most interesting result from both models in this category is that higher scores on the positive behavior scale are associated with increased odds of receipt. This is especially noteworthy because these young adults were between the ages of six and twelve when this scale was constructed. Given the discretionary nature of these transfers, this suggests that parents are more inclined to provide extra support to those children whom they perceived to be more outgoing and/or self-reliant.

VI. Recession Effects and Supplementary Analysis

An important characteristic of our sample is that roughly 40 percent of all the interviews were conducted over a period during which the U.S. was at the height of the so-called Great Recession. Table 4 shows the bivariate differences in the employment, school and residential activity of college-aged respondents based on the timing of the interviews. These differences are substantial, the number of respondents working fell by over 50 percent, more respondents were in school, but fewer were combining work and school and the idleness rate increased over 70 percent. Furthermore, among respondents who spent no time in school in the year prior to the interview the idleness rate increased to nearly 85 percent. Table 5 reports transfer receipt and values by interview year. The difference in the rate of receipt for all transfers is statistically significant, driven primarily by the marginally significant decline in assistance with bills and vehicles. In terms of the transfer amounts, only the value of rent assistance reported in 2009 was significantly lower than in the two previous waves of interviews.

To further examine the effect of the recession, we interacted the recession dummy with each of the covariates in each of our receipt and value models. These interactions indicate whether or not those respondents who, for example, were primarily working during this time period received more help from their parents, or whether low SES families cut back their assistance to young adult family members. In fact, the opposite appears to be true, the interactions between the recession indicator and the third- and fourth-income quartile dummies suggest that upper income families cut back their assistance with bills and rent and also gifts in loans in the months leading up to the 2009 interviews. Female respondents were more likely to receive support with living expenses over this same time period.

We conducted a number of additional analyses to investigate the robustness of our findings to sample composition and model specification. Given that college attendance defines this demographic more than any other characteristic, we estimated each of our models separately on the subsample of respondents who reported no time in school in the year prior to the interview. Nearly 70 percent of these individuals were from the bottom two income quartiles, 18 percent had less than a high school education and only 35 percent reported any work. Only 42 percent received a transfer of any kind; help with bills was the most common form of assistance. Not surprisingly, this sample generated very few statistically significant coefficients in any of the multivariate models. These patterns underscores the prominent role that education plays in the parent-child relationship for this age group.

While we restrict our primary sample to respondents of college-going age, the full TA sample consists of individuals as young as 17 and as old as 25. When we estimated the models on all TA respondents our results were strikingly similar: of the young adult measures, those indicating college going were still the most important as far as influencing the receipt of assistance. Of the family background measures, SES is again most important, measured either by income or parental education. Thus our findings are not particularly sensitive to the age-restriction. This is true of the fixed-effect results as well.

We also re-estimated each of the value models using as the dependent variable the amount of each type of transfer relative to the parent family's total income. Recall from Figure 1B that the total value of all transfers as a share of family income is roughly constant across the income distribution. This pattern is confirmed in these regressions. Again we find that school attendance and those factors related to school attendance have strongest associations with the amount of assistance received by young adults, however the parent family income effects (measure in quartiles) we found in the previous models are no longer significant. The only exception is gifts and loans, as a share of total income, the transfers received by respondents from top-income quartile families are nearly 75 percent less than those from bottom-quartile homes.

VII. Discussion and Limitations

The patterns presented here are in large part the result of the confluence of two factors: college attendance and family socioeconomic status, particularly high socio-economic status. Descriptively, the rate of college experience among respondents from top-income-quartile families is almost 95 percent, and over 80 percent of them received a parental transfer in some form. Conditional on these factors, very little else matters as far as explaining the economic relationship between parents and their young adult children, including race and gender. Moreover, those characteristics whose effects are consistently robust, such as residential status and childhood limitations, are strongly correlated with both enrollment status and SES.

In many ways, these patterns are encouraging. To the extent that parents continue to provide financial support as their children begin the transition to adulthood, these findings suggest that this behavior can be characterized as an investment in human capital. Moreover, this appears to be equally true of transfers from both low- and high-income families. In this regard, whether as a cause or effect (unfortunately we cannot say which at this point), parental assistance at this stage appears to be largely productive. On the other hand, the fact that young adults from low-income families are 50 percent less likely to attend school than those from high-income families shows that these investments are heavily concentrated at the upper end of the income distribution. Whether these transfers represent opportunity or—on a more fundamental level—access, to the extent that they are unavailable to young adults from low-income homes, either way they represent a disadvantage to their economic mobility.

References

Schoeni, B. and K. Ross, 2005. "Material Assistance from Families during the Transition to Adulthood" in F. Furstenberg, Jr., and R. G. Rumbaut (ed), *On the Frontier of Adulthood: Theory, Research, and Public Policy*. Chicago: University of Chicago Press.

Barro, R. 1974. "Are Government Bonds Net Wealth?" *Journal of Political Economy* 82(6):1095-1117.

Becker, G. 1974. "A Theory of Social Interactions." *Journal of Political Economy* 82(6):1063-93.

McGarry, K., and B. Schoeni. 1995. "Transfer Behavior in the Health and Retirement Study: Measurement and the Redistribution of Resources within the Family." *Journal of Human Resources* 30:S184-S226.

Swartz, T., M. Kim, M. Uno, J. Mortimer, and K. B. O'Brien. 2011. "Safety Nets and Scaffolds: Parental Support in the Transition to Adulthood." *Journal of Marriage and Family* 73(2):414-429.

Table 1: TA Sample Statistics

	TA Sample	19-22 Year Olds	Received Any Transfer	No Transfer	Bottom 25% Income	Top 25% Income
High school dropout	0.859	0.872	0.912	0.808	0.755	0.972
Any college experience	0.782	0.786	0.870	0.640	0.608	0.947
Worked in past year	0.131	0.142	0.103	0.205	0.189	0.076
Attended school in past year	0.276	0.275	0.310	0.219	0.213	0.339
Worked/attended school in past year	0.300	0.316	0.410	0.165	0.162	0.495
No work/school in past year	0.293	0.267	0.177	0.411	0.436	0.090
w/Parents fall&winter	0.243	0.204	0.186	0.231	0.275	0.129
w/Parents summer	0.158	0.200	0.258	0.109	0.087	0.347
Resides w/parents	0.236	0.208	0.199	0.224	0.252	0.140
2009 Interview	0.452	0.399	0.375	0.437	0.379	0.414
Average WJ test scores	106.217	106.352	109.313	101.629	97.772	114.356
.	(15.561)	(15.526)	(15.020)	(15.155)	(13.092)	(13.629)
Missing Average WJ test scores	0.083	0.082	0.074	0.095	0.086	0.058
Positive behavior(average)	4.192	4.198	4.226	4.154	4.253	4.262
.	(0.521)	(0.527)	(0.497)	(0.568)	(0.553)	(0.437)
Limited activity	0.054	0.057	0.039	0.086	0.071	0.029
Age	20.209	20.342	20.284	20.435	20.299	20.406
.	(2.006)	(1.080)	(1.068)	(1.092)	(1.068)	(1.085)
Female	0.513	0.519	0.526	0.507	0.565	0.478
Race (nonwhite)	0.310	0.307	0.260	0.384	0.572	0.117
Firstborn	0.389	0.377	0.390	0.356	0.355	0.401
# Siblings	2.520	2.519	2.407	2.697	2.796	2.451
.	(1.104)	(1.098)	(0.996)	(1.223)	(1.403)	(0.867)
Parents married	0.730	0.728	0.771	0.660	0.479	0.873
Parents HS+	0.504	0.502	0.448	0.588	0.461	0.318
Parents college grads	0.306	0.306	0.412	0.135	0.048	0.660
Family income	64.675	65.398	77.294	46.420	26.324	121.374
.	(61.016)	(62.468)	(73.525)	(30.345)	(16.389)	(92.065)
Sample size	3407	2098	1223	875	620	445
Sum of weights	60311	36714	22567	14146	8633	9630

Table 2: Parental Transfers in the PSID-TA

	Sample			Bottom Income Quartile			Top Income Quartile			
	% Receiving	Mean	Conditional Mean	Conditional Median	% Receiving	Mean	Conditional Mean	% Receiving	Mean	Conditional Mean
Any type	61.5%	7490	12185	5699	47.3%	2113	4471	81.9%	15449	18863
.	.	(14893)	(17428)	.	.	(5784)	(7771)	.	(19956)	(20540)
Bills	42.2%	684	1741	900	28.7%	250	928	63.4%	1300	2157
.	.	(1827)	(2580)	.	.	(844)	(1423)	.	(2460)	(2865)
Tuition	34.7%	3393	10147	6408	10.7%	616	5788	65.7%	8249	12877
.	.	(7711)	(10460)	.	.	(2788)	(6636)	.	(11309)	(11837)
Vehicles	23.0%	2094	9682	6269	17.6%	977	5760	32.4%	3881	12674
.	.	(5874)	(9287)	.	.	(3798)	(7624)	.	(8123)	(10214)
Rent	21.5%	780	3937	2670	11.2%	164	1688	36.5%	1874	5465
.	.	(2663)	(4838)	.	.	(864)	(2281)	.	(4385)	(6048)
Loans	11.3%	223	2079	570	10.3%	78	756	11.5%	154	1358
.	.	(2041)	(5919)	.	.	(453)	(1226)	.	(768)	(1907)
Gifts	6.5%	517	8220	2000	7.1%	343	5365	8.5%	1003	11789
.	.	(7241)	(27859)	.	.	(2464)	(8337)	.	(13236)	(44514)
Housing	0.5%	429	80242	69146	0.1%	38	50262	0.5%	535	104582
.	.	(7124)	(57244)	.	.	(1518)	(33039)	.	(8183)	(57256)
Sample size	2098	.	.	.	620	.	.	445	.	.

Figure 1A.

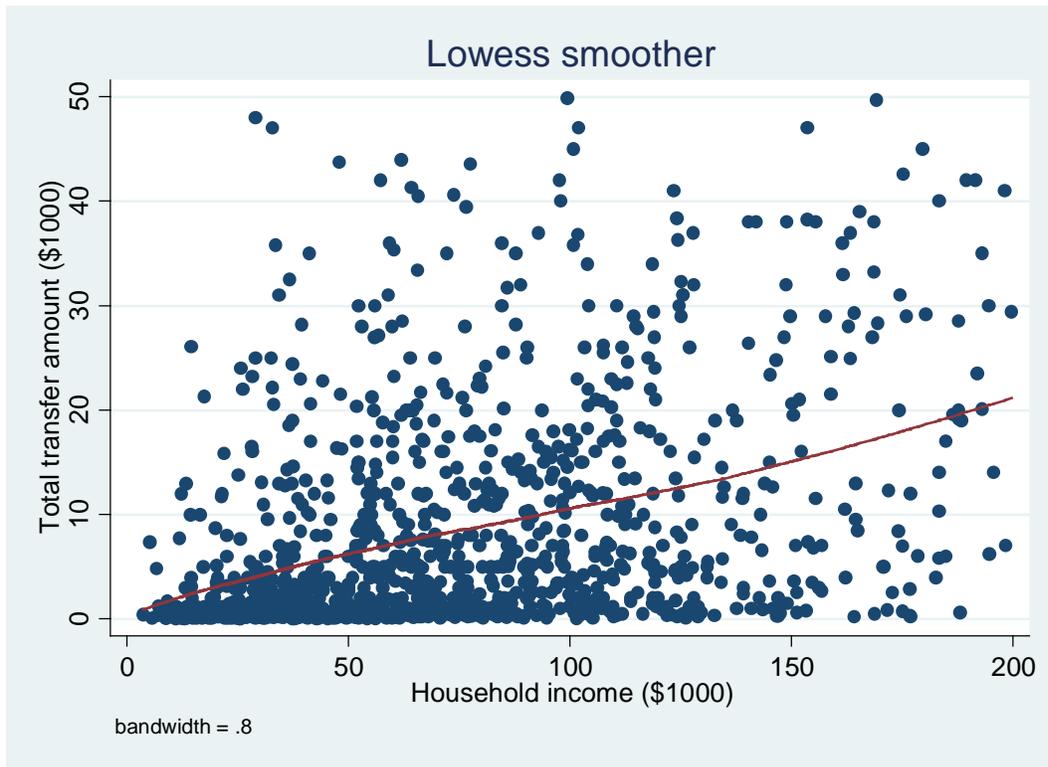
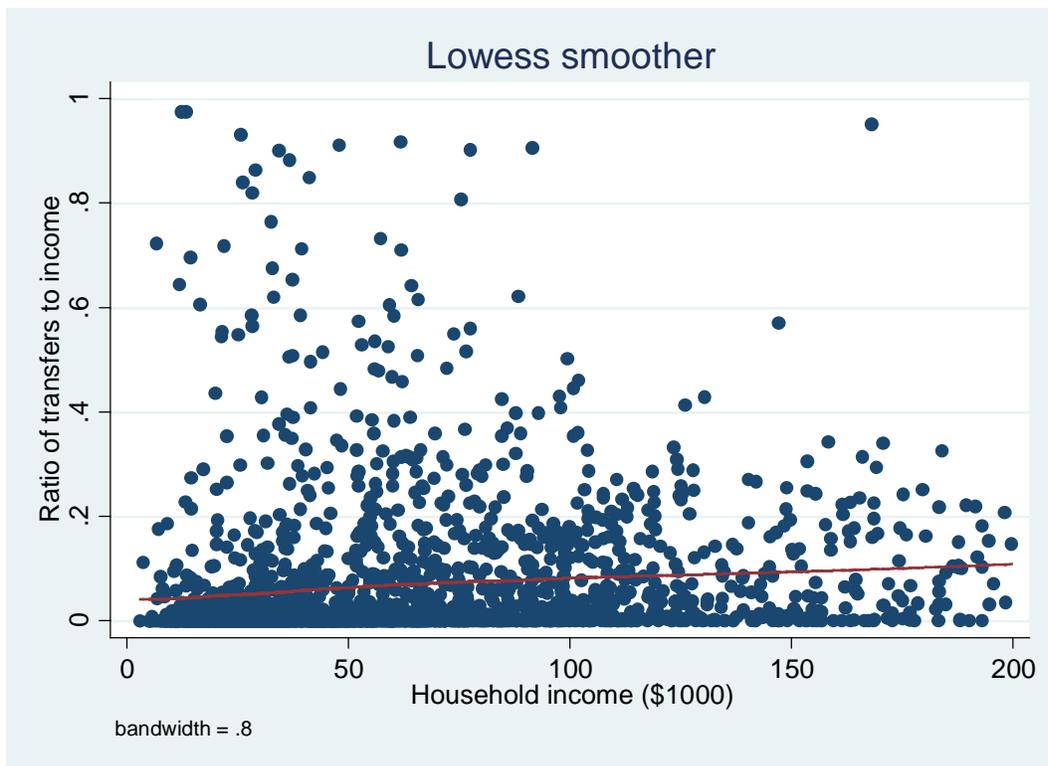
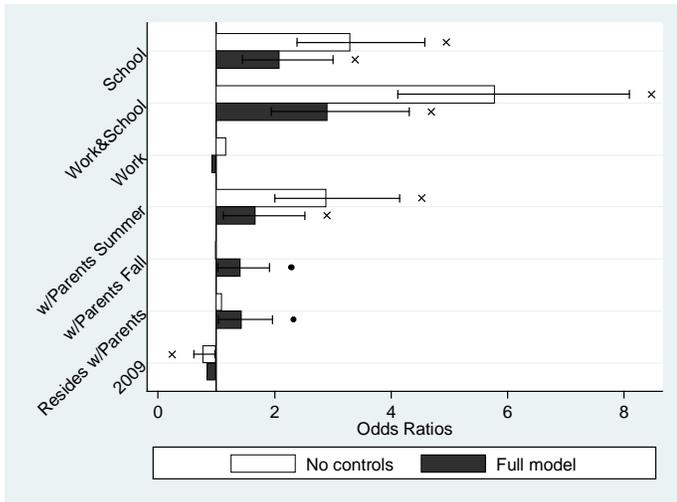


Figure 1B.



Any Transfer Receipt
Figure 2A: Young Adult Status



Total Transfer Value
Figure 2B Young Adult Status

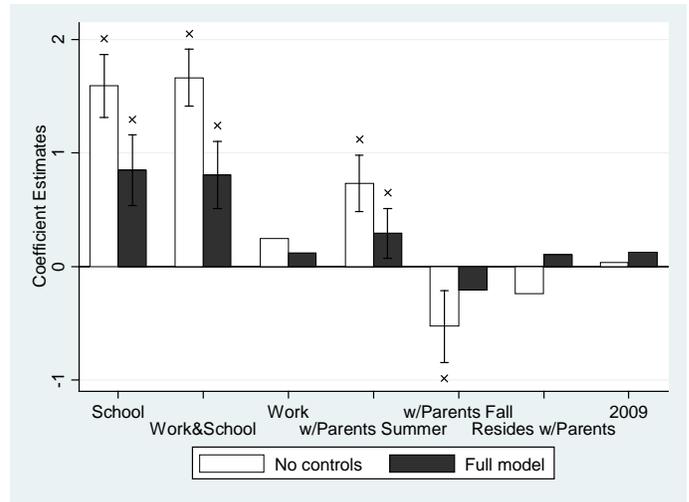


Figure 2C: Childhood Characteristics

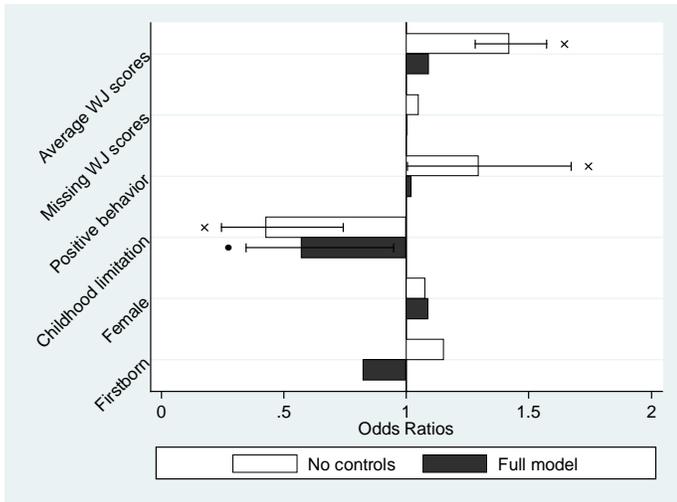


Figure 2D: Childhood Characteristics

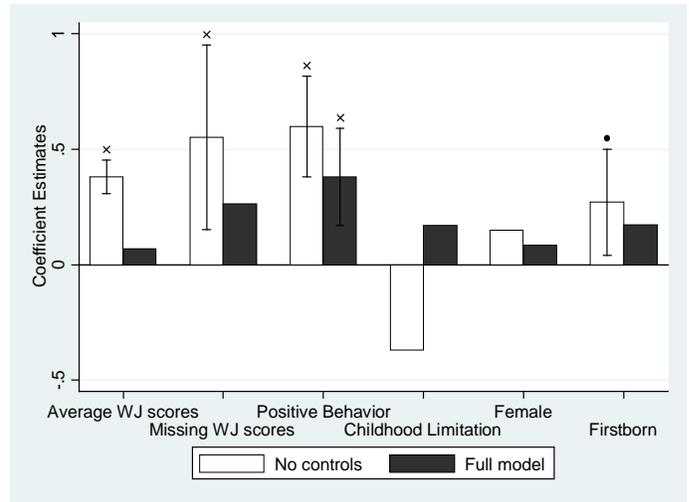


Figure 2E: Family Characteristics

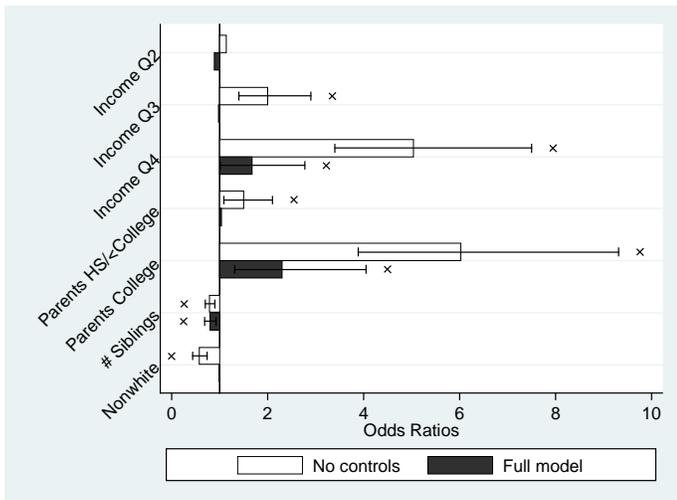
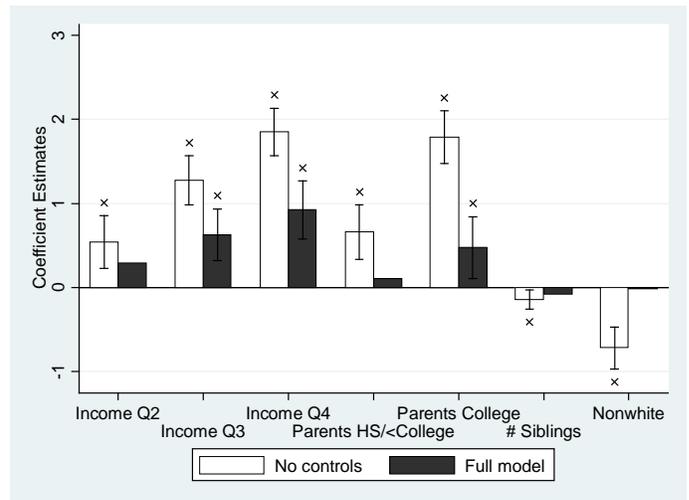


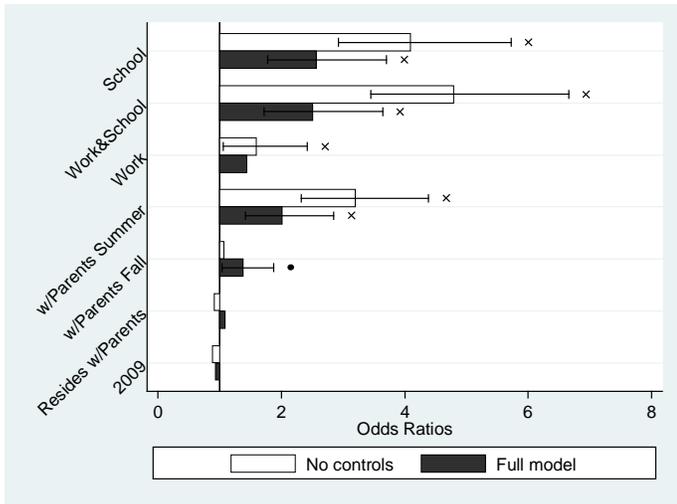
Figure 2F: Family Characteristics



Notes: Full model includes controls for age of household head and parents' marital status in 1997 and IW year. Bars indicate confidence intervals for statistically significant estimates. x p<.05, • p<.10

Rent & Utilities Assistance

Figure 3A: Young Adult Status



Value of Rent & Utilities Assistance

Figure 3B Young Adult Status

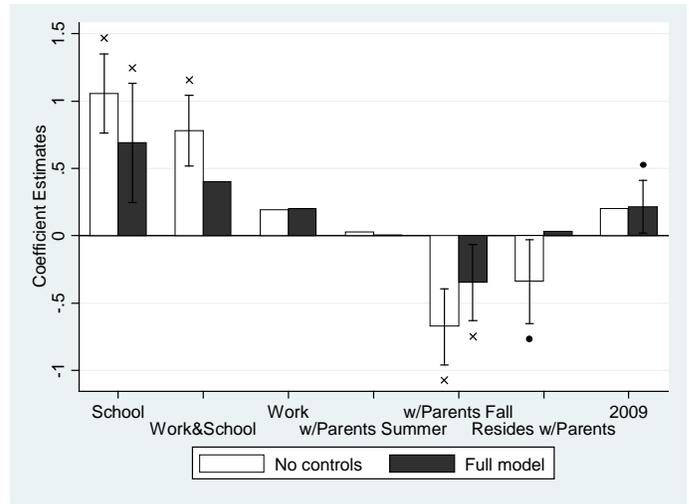


Figure 3C: Childhood Characteristics

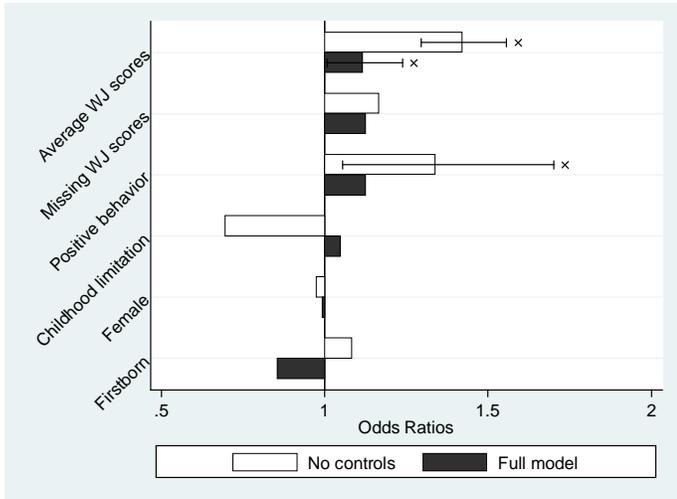


Figure 3D: Childhood Characteristics

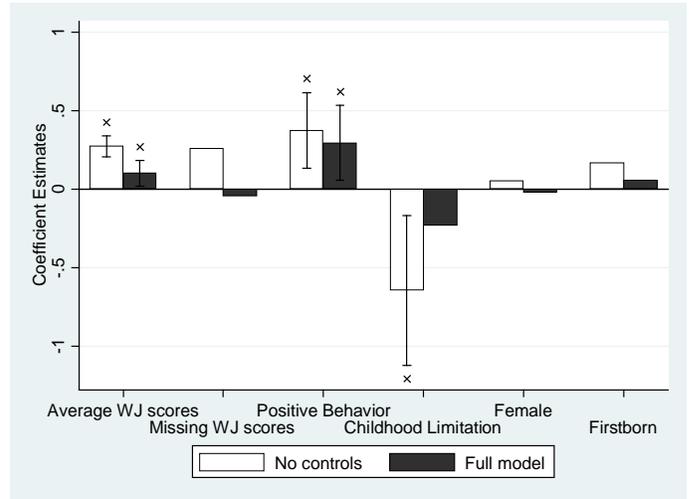


Figure 3E: Family Characteristics

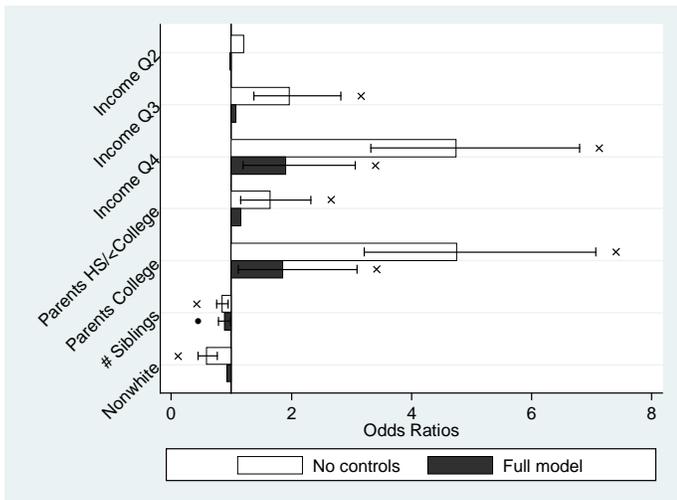
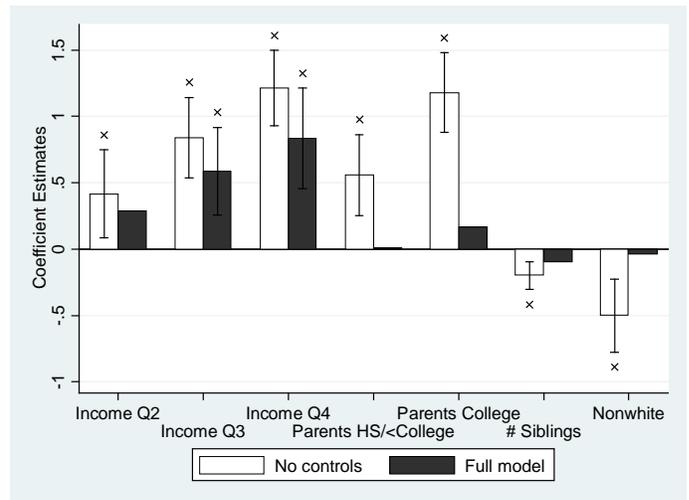


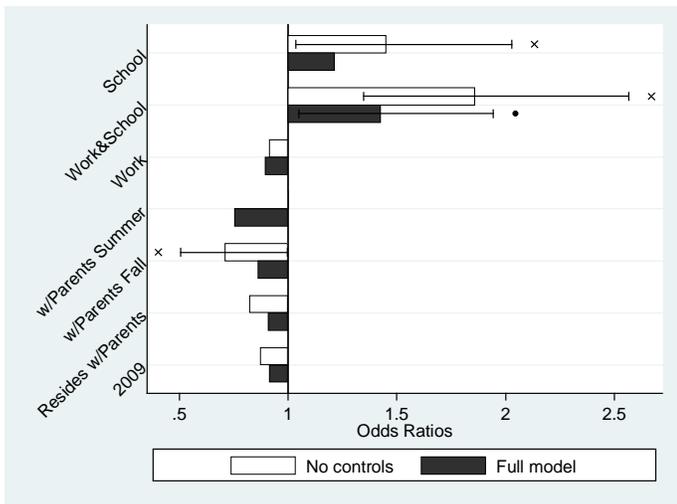
Figure 3F: Family Characteristics



Notes: Full model includes controls for age of household head and parents' marital status in 1997 and IW year. Bars indicate confidence intervals for statistically significant estimates. x p<.05, • p<.10

Gifts & Loans

Figure 4A: Young Adult Status



Value of Gifts & Loans

Figure 4B Young Adult Status

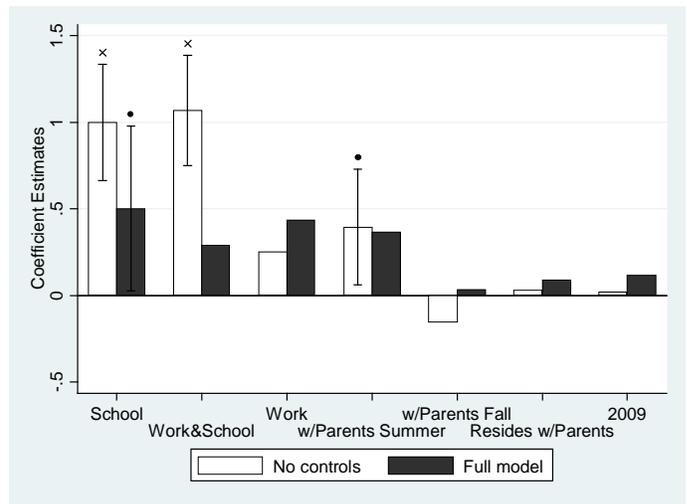


Figure 4C: Childhood Characteristics

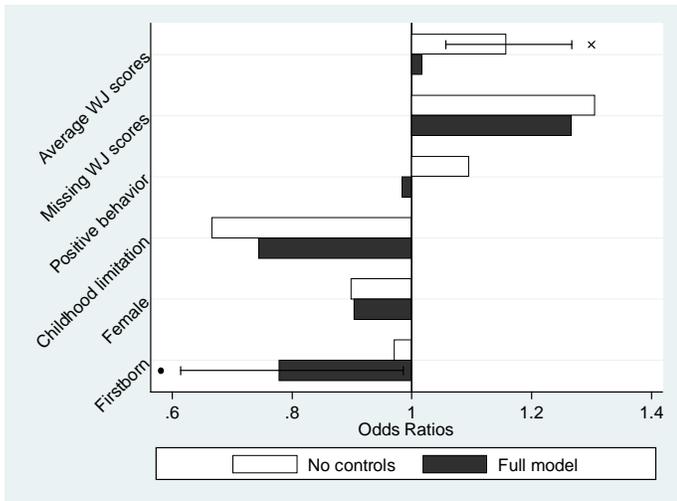


Figure 4D: Childhood Characteristics

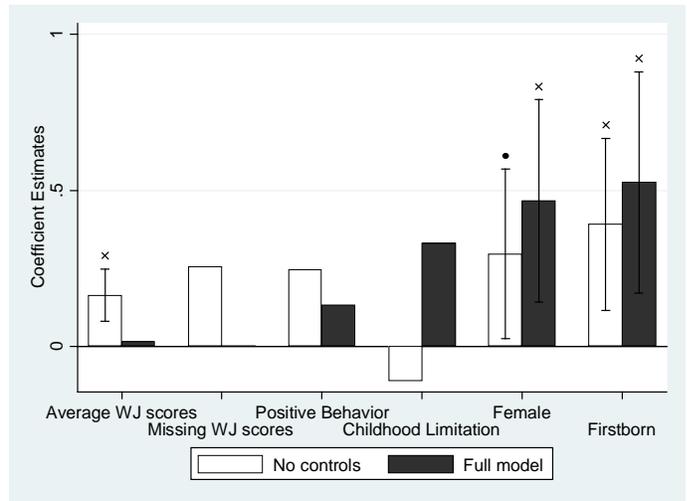


Figure 4E: Family Characteristics

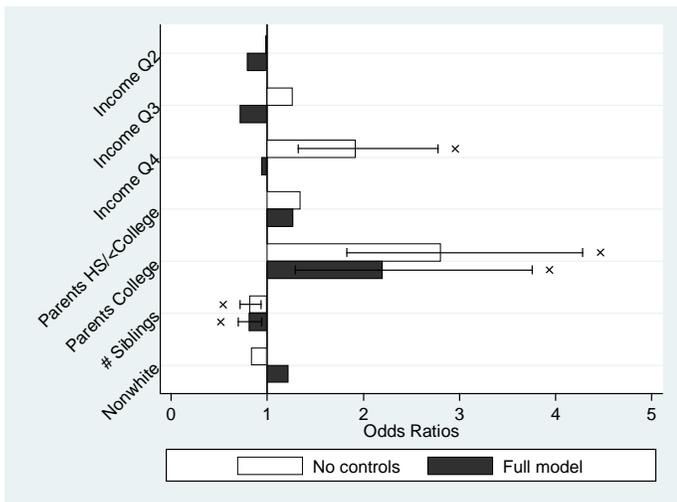
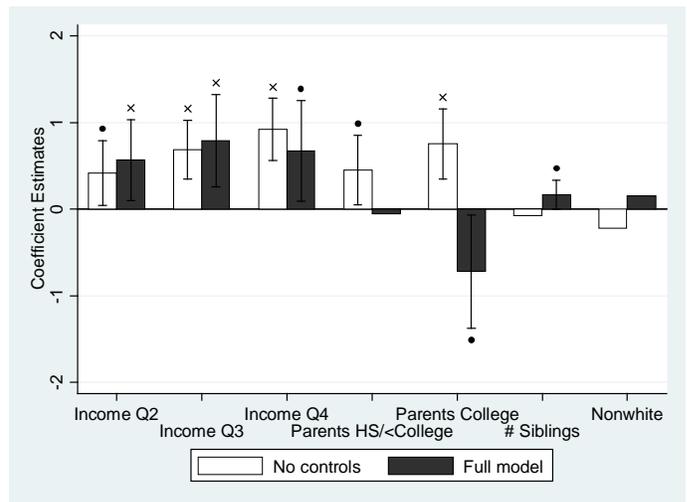


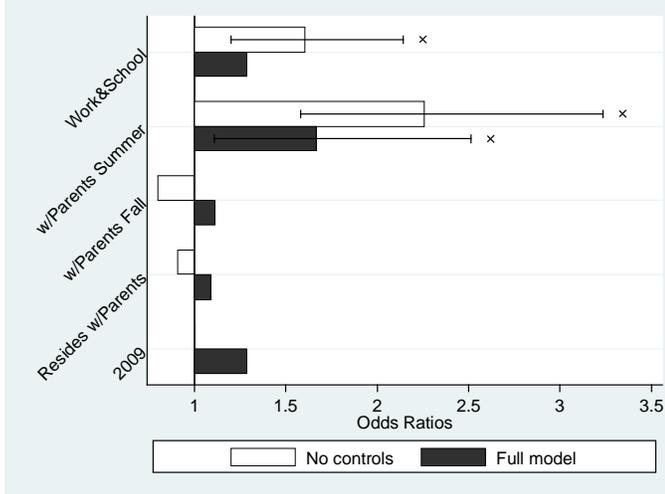
Figure 4F: Family Characteristics



Notes: Full model includes controls for age of household head and parents' marital status in 1997 and IW year. Bars indicate confidence intervals for statistically significant estimates. x p<.05, • p<.10

Tuition Assistance

Figure 5A: Young Adult Status



Value of Tuition Assistance

Figure 5B Young Adult Status

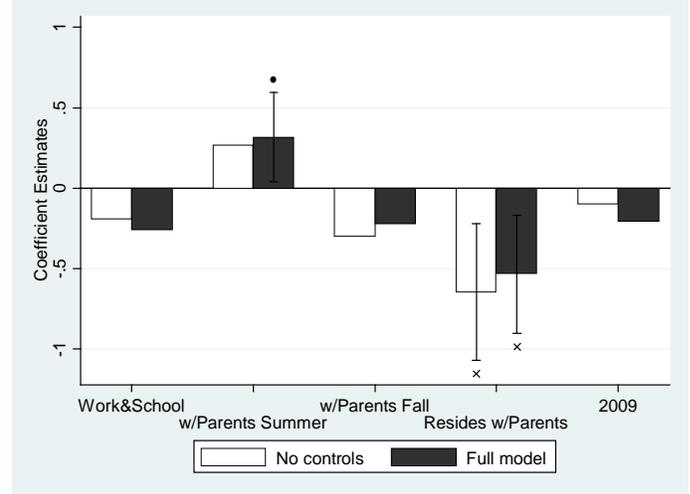


Figure 5C: Childhood Characteristics

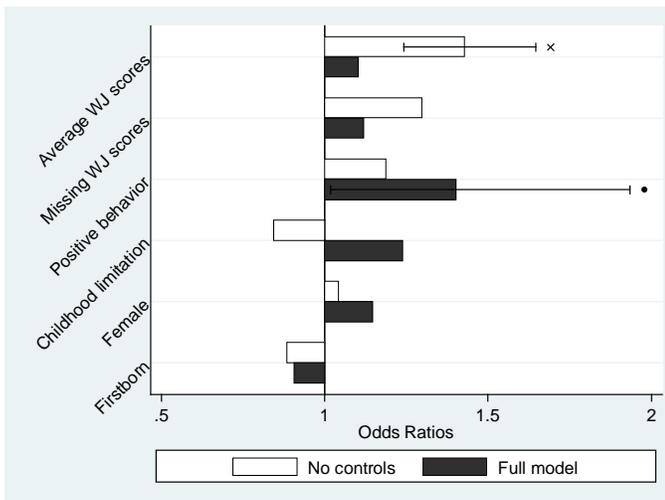


Figure 5D: Childhood Characteristics

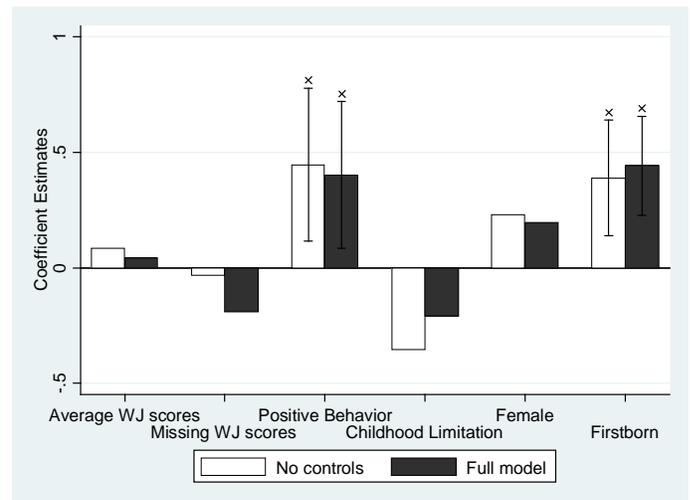


Figure 5E: Family Characteristics

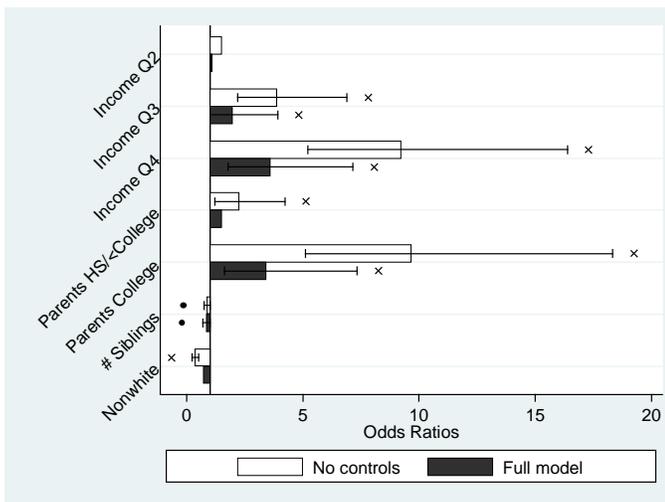
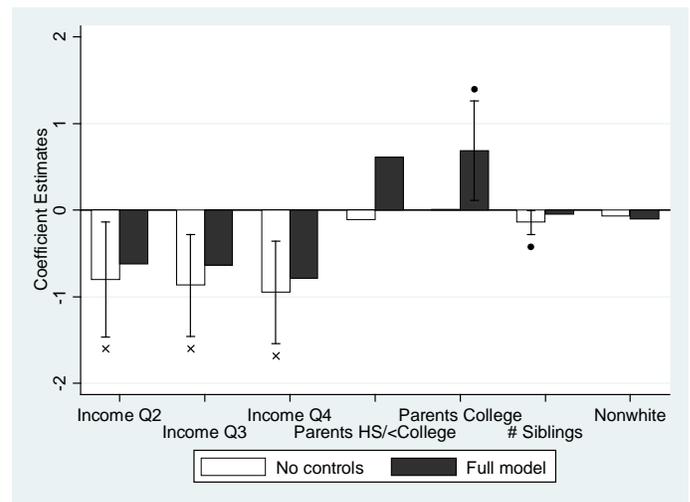


Figure 5F: Family Characteristics



Notes: Full model includes controls for age of household head and parents' marital status in 1997 and IW year. Bars indicate confidence intervals for statistically significant estimates. x p<.05, • p<.10

Table 3A: Within Household Transfer Statistics by Interview Year

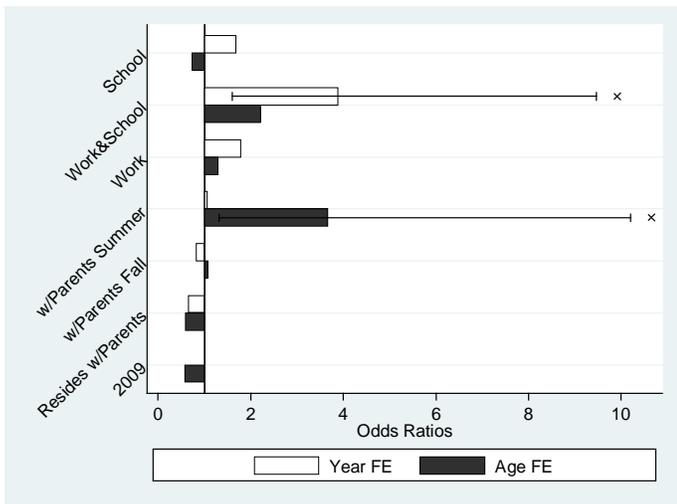
	Any/All Transfers		Rent & Utilities		Gifts & Loans		Tuition	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
	Average transfer rate	0.576	0.625	0.458	0.492	0.295	0.332	0.294
Average within-household transfer rate	0.576	0.617	0.458	0.503	0.295	0.337	0.294	0.368
One YA received transfer	.	0.366	.	0.392	.	0.381	.	0.268
Both YAs received transfer	.	0.434	.	0.307	.	0.147	.	0.234
Neither YA received transfer	.	0.200	.	0.301	.	0.472	.	0.497
Mean value of all transfers	5836	6935	1213	1003	2228	2604	2458	3362
Mean within-household value of all transfers	5836	6841	1213	1158	2228	2402	2458	3392
Average within-household difference	.	188	.	-309	.	405	.	-0.888
N Sibling pairs	2472	442	2472	442	2472	442	2472	442
Sample size	2472	884	2472	884	2472	884	2472	884

Table 3B: Within Household Transfer Statistics by Children's Age

	Any/All Transfers		Rent & Utilities		Gifts & Loans		Tuition	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
	Average transfer rate	0.598	0.589	0.476	0.486	0.315	0.317	0.312
Average within-household transfer rate	0.598	0.572	0.476	0.464	0.315	0.301	0.312	0.315
One YA received transfer	.	0.409	.	0.417	.	0.366	.	0.310
Both YAs received transfer	.	0.368	.	0.256	.	0.118	.	0.160
Neither YA received transfer	.	0.223	.	0.328	.	0.516	.	0.529
Mean value of all transfers	6045	6174	1201	1033	2277	2154	2626	3044
Mean within-household value of all transfers	6045	6337	1201	1197	2277	2315	2626	3034
Average within-household difference	.	-327	.	-326	.	-322	.	284
N Sibling pairs	2263	572	2263	572	2263	572	2263	572
Sample size	2263	1144	2263	1144	2263	1144	2263	1144

Young Adult Status

Figure 6A: Any Transfer Receipt



Childhood Characteristics

Figure 6B: Any Transfer Receipt

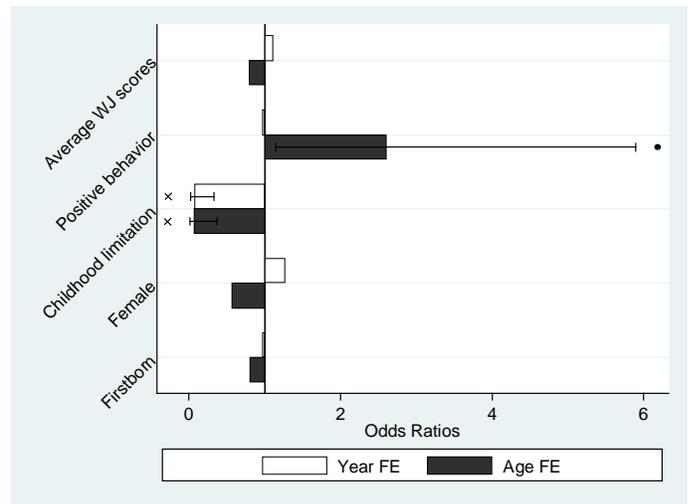


Figure 7A: Rent & Utilities Assistance

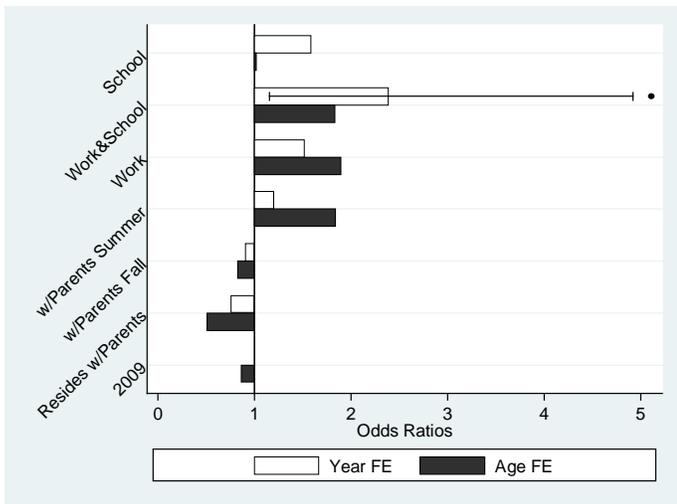


Figure 7B: Rent & Utilities Assistance

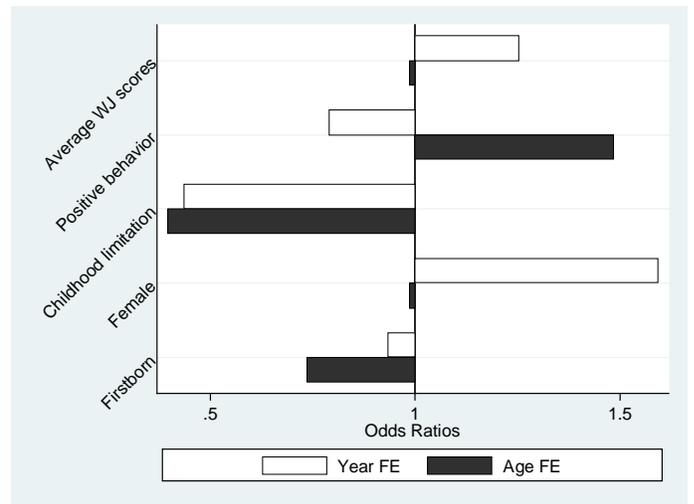


Figure 8A: Gifts & Loans

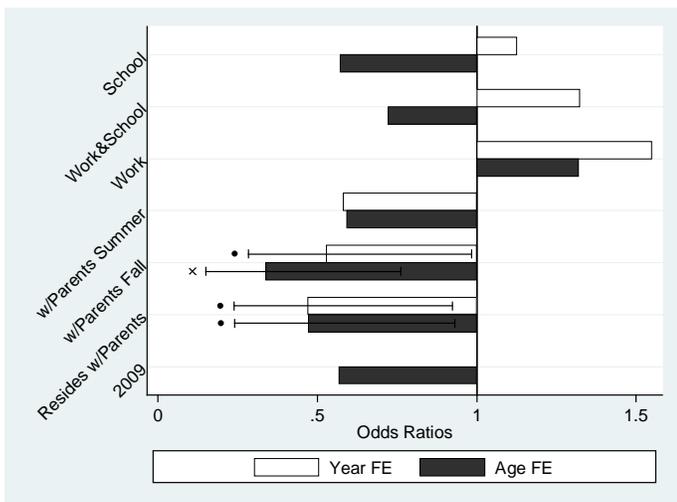
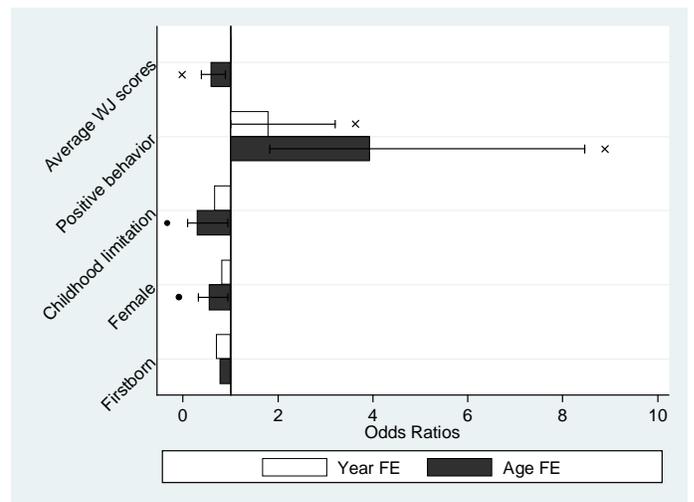


Figure 8B: Gifts & Loans



Notes: Model includes controls for respondents' ages missing average WJ test scores. Bars indicate confidence intervals for statistically significant estimates. x $p < .05$, • $p < .10$

Table 4: Employment, Enrollment & Residential Descriptive Statistics for TA Respondents by Interview Year

	Sample			Attended School in Past Year			No School in Past Year		
	2005/2007 Waves	2009 Wave	Difference	2005/2007 Waves	2009 Wave	Difference	2005/2007 Waves	2009 Wave	Difference
Worked in past year	0.189	0.072	0.117***	0.000	0.000	0.000	0.474	0.169	0.305***
Attended school in past year	0.198	0.392	-0.194***	0.329	0.683	-0.354***	0.000	0.000	0.000
Worked/attended school in past year	0.404	0.182	0.222***	0.671	0.317	0.354***	0.000	0.000	0.000
No work/school in past year	0.209	0.354	-0.145***	0.000	0.000	0.000	0.526	0.831	-0.305***
Annual weeks worked	20.695	9.752	10.943***	22.606	11.719	10.887***	17.823	7.087	10.736***
.	(20.818)	(17.752)	(0.000)	(20.073)	(18.512)	(0.000)	(21.593)	(16.320)	(0.000)
w/Parents fall&winter	0.139	0.300	-0.161***	0.104	0.261	-0.157***	0.192	0.353	-0.161***
w/Parents summer	0.216	0.178	0.038**	0.316	0.270	0.047*	0.063	0.054	0.010
Resides w/parents	0.280	0.101	0.179***	0.215	0.083	0.132***	0.377	0.124	0.253***
Never w/parents	0.365	0.421	-0.056**	0.364	0.385	-0.021	0.367	0.469	-0.102***
Sample size	1265	833	.	709	443	.	556	390	.

**p<.05; *p<.10

Table 5: Parental Transfers by Interview Year

	2005 & 2007 Waves				2009 Wave			
	% Receiving	Mean	Conditional Mean	Conditional Median	% Receiving	Mean	Conditional Mean	Conditional Median
Any type**	63.9%	7506	11744	5699	57.8%	7467	12923	6000
.	.	(13932)	(15939)	.	.	(16245)	(19660)	.
Bills*	43.6%	685	1676	684	40.0%	681	1852	1000
.	.	(1747)	(2409)	.	.	(1942)	(2846)	.
Tuition	35.4%	3439	9988	6408	33.6%	3321	10408	7000
.	.	(7722)	(10390)	.	.	(7697)	(10593)	.
Vehicles*	24.4%	2188	9596	6269	21.0%	1952	9831	6000
.	.	(5901)	(9045)	.	.	(5835)	(9719)	.
Rent	21.7%	700	3435	2136	21.1%	903	4757	4000
.	.	(2204)	(3808)	.	.	(3238)	(6089)	.
Loans	12.2%	290	2487	570	9.9%	124	1315	600
.	.	(2570)	(7178)	.	.	(690)	(1879)	.
Gifts	6.6%	590	9242	2052	6.3%	407	6619	2000
.	.	(8854)	(34096)	.	.	(3648)	(13360)	.
Housing*	0.3%	298	93110	77962	0.9%	627	73017	55000
.	.	(5708)	(42023)	.	.	(8841)	(65408)	.
Sample size	1265	.	.	.	833	.	.	.

**p<.05; *p<.10

Table A1: Total Transfers

	Any Transfer Receipt (Logit) ¹				Log Transfer Amount (Heckman Selection) ²	
	Univariate	Multivariate	Year FE	Age FE	Univariate	Multivariate
Attended school in past year	3.31**	2.09**	1.69	0.74	1.590**	0.846**
·	(2.39, 4.58)	(1.45, 3.01)	(0.81, 3.53)	(0.27, 2.02)	(0.170)	(0.190)
Worked/attended school in past year	5.77**	2.90**	3.89**	2.21	1.663**	0.806**
·	(4.12, 8.10)	(1.95, 4.31)	(1.60, 9.47)	(0.72, 6.80)	(0.152)	(0.180)
Worked in past year	1.17	0.92	1.78	1.29	0.245	0.123
·	(0.80, 1.71)	(0.61, 1.40)	(0.60, 5.31)	(0.45, 3.72)	(0.284)	(0.282)
w/Parents summer	2.88**	1.68**	1.06	3.67**	0.734**	0.293**
·	(2.00, 4.15)	(1.12, 2.52)	(0.41, 2.72)	(1.32, 10.21)	(0.151)	(0.134)
w/Parents fall & winter	0.99	1.40*	0.83	1.07	-0.530**	-0.213
·	(0.72, 1.35)	(0.97, 2.03)	(0.36, 1.90)	(0.43, 2.65)	(0.193)	(0.178)
Resides w/parents	1.09	1.42*	0.66	0.59	-0.244	0.105
·	(0.78, 1.51)	(0.97, 2.08)	(0.26, 1.64)	(0.25, 1.40)	(0.170)	(0.152)
2009 Interview	0.77**	0.84	1.00	0.57	0.036	0.125
·	(0.61, 0.97)	(0.63, 1.12)	(1.00, 1.00)	(0.25, 1.31)	(0.125)	(0.124)
Average WJ test scores	1.42**	1.09	1.11	0.80	0.380**	0.068
·	(1.28, 1.57)	(0.97, 1.22)	(0.82, 1.51)	(0.56, 1.13)	(0.044)	(0.045)
Childhood positive behavior	1.30**	1.02	0.98	2.60*	0.599**	0.381**
·	(1.00, 1.67)	(0.78, 1.34)	(0.51, 1.88)	(0.98, 6.91)	(0.132)	(0.128)
Any childhood limitation	0.43**	0.57*	0.08**	0.07**	-0.370	0.169
·	(0.25, 0.74)	(0.31, 1.05)	(0.02, 0.33)	(0.01, 0.37)	(0.290)	(0.210)
Female	1.08	1.09	1.27	0.57	0.151	0.085
·	(0.83, 1.39)	(0.82, 1.44)	(0.68, 2.37)	(0.28, 1.16)	(0.136)	(0.109)
Firstborn	1.15	0.82	0.98	0.81	0.271*	0.174
·	(0.88, 1.50)	(0.61, 1.11)	(0.46, 2.06)	(0.34, 1.92)	(0.141)	(0.124)
Current income quartile 2	1.15	0.89	.	.	0.542**	0.291
·	(0.82, 1.60)	(0.62, 1.28)	.	.	(0.191)	(0.182)
Current income quartile 3	2.01**	0.96	.	.	1.274**	0.628**
·	(1.39, 2.90)	(0.61, 1.51)	.	.	(0.178)	(0.187)
Current income quartile 4	5.05**	1.68**	.	.	1.852**	0.923**
·	(3.40, 7.50)	(1.01, 2.77)	.	.	(0.172)	(0.211)
Parents HS+	1.50**	1.05	.	.	0.659**	0.104
·	(1.08, 2.09)	(0.71, 1.56)	.	.	(0.197)	(0.183)
Parents college grads	6.02**	2.30**	.	.	1.789**	0.475**
·	(3.89, 9.32)	(1.30, 4.05)	.	.	(0.192)	(0.224)
Race (nonwhite)	0.56**	0.98	.	.	-0.721**	-0.017
·	(0.43, 0.74)	(0.69, 1.39)	.	.	(0.152)	(0.136)
# Siblings	0.79**	0.79**	.	.	-0.145**	-0.088
·	(0.70, 0.89)	(0.69, 0.91)	.	.	(0.068)	(0.059)
Sample size	.	2098	452	335	.	2098
Mean of dependent variable	.	0.61	0.500	0.497	.	7490

1) Odds ratios; 95% CI bounds in parentheses. 2) Standard errors in parentheses. Notes: Controls include dummy variable for missing WJ test score, and age of household head and parents' marital status in CDS-I. **p<.05; *p<.10

Table A2: Bills & Rent

	Any Transfer Receipt (Logit) ¹				Log Transfer Amount (Heckman Selection) ²	
	Univariate	Multivariate	Year FE	Age FE	Univariate	Multivariate
Attended school in past year	4.09**	2.56**	1.59	1.02	1.057**	0.690**
·	(2.92, 5.73)	(1.78, 3.71)	(0.72, 3.48)	(0.40, 2.61)	(0.179)	(0.270)
Worked/attended school in past year	4.80**	2.50**	2.38*	1.83	0.781**	0.402
·	(3.45, 6.66)	(1.72, 3.64)	(1.00, 5.67)	(0.74, 4.53)	(0.159)	(0.273)
Worked in past year	1.60**	1.45	1.51	1.90	0.191	0.204
·	(1.06, 2.42)	(0.92, 2.28)	(0.60, 3.81)	(0.66, 5.50)	(0.283)	(0.287)
w/Parents summer	3.19**	2.01**	1.19	1.84	0.028	0.005
·	(2.32, 4.39)	(1.41, 2.85)	(0.50, 2.86)	(0.65, 5.23)	(0.154)	(0.160)
w/Parents fall & winter	1.08	1.39*	0.90	0.83	-0.676**	-0.348**
·	(0.78, 1.48)	(0.98, 1.98)	(0.43, 1.90)	(0.38, 1.81)	(0.171)	(0.173)
Resides w/parents	0.91	1.09	0.75	0.51	-0.341*	0.031
·	(0.66, 1.26)	(0.76, 1.57)	(0.31, 1.84)	(0.22, 1.15)	(0.189)	(0.175)
2009 Interview	0.88	0.93	1.00	0.86	0.204	0.216*
·	(0.71, 1.10)	(0.70, 1.22)	(1.00, 1.00)	(0.38, 1.92)	(0.124)	(0.118)
Average WJ test scores	1.42**	1.12**	1.25	0.99	0.274**	0.102**
·	(1.29, 1.56)	(1.01, 1.24)	(0.92, 1.70)	(0.74, 1.30)	(0.040)	(0.049)
Childhood positive behavior	1.34**	1.12	0.79	1.48	0.376**	0.297**
·	(1.05, 1.70)	(0.87, 1.46)	(0.44, 1.43)	(0.78, 2.84)	(0.147)	(0.145)
Any childhood limitation	0.69	1.05	0.44	0.40	-0.643**	-0.229
·	(0.40, 1.21)	(0.54, 2.04)	(0.09, 2.11)	(0.08, 2.07)	(0.291)	(0.326)
Female	0.97	0.99	1.59	0.99	0.053	-0.016
·	(0.76, 1.25)	(0.76, 1.30)	(0.88, 2.87)	(0.54, 1.81)	(0.134)	(0.111)
Firstborn	1.08	0.86	0.93	0.74	0.170	0.059
·	(0.84, 1.41)	(0.64, 1.15)	(0.44, 1.99)	(0.35, 1.54)	(0.135)	(0.130)
Current income quartile 2	1.21	0.97	.	.	0.415**	0.289
·	(0.86, 1.70)	(0.67, 1.42)	.	.	(0.202)	(0.182)
Current income quartile 3	1.97**	1.08	.	.	0.840**	0.586**
·	(1.38, 2.83)	(0.70, 1.68)	.	.	(0.184)	(0.202)
Current income quartile 4	4.76**	1.92**	.	.	1.214**	0.834**
·	(3.33, 6.80)	(1.20, 3.07)	.	.	(0.172)	(0.231)
Parents HS+	1.64**	1.15	.	.	0.559**	0.008
·	(1.16, 2.32)	(0.77, 1.73)	.	.	(0.186)	(0.190)
Parents college grads	4.77**	1.86**	.	.	1.180**	0.169
·	(3.21, 7.07)	(1.12, 3.09)	.	.	(0.182)	(0.249)
Race (nonwhite)	0.58**	0.92	.	.	-0.500**	-0.040
·	(0.44, 0.76)	(0.65, 1.31)	.	.	(0.168)	(0.158)
# Siblings	0.84**	0.88*	.	.	-0.199**	-0.097
·	(0.75, 0.95)	(0.77, 1.01)	.	.	(0.064)	(0.063)
Sample size	.	2098	470	391	.	2098
Mean of dependent variable	.	0.48	0.500	0.497	.	1415

1) Odds ratios; 95% CI bounds in parentheses. 2) Standard errors in parentheses. Notes: Controls include dummy variable for missing WJ test score, and age of household head and parents' marital status in CDS-I. **p<.05; *p<.10

Table A3: Gifts & Loans

	Any Transfer Receipt (Logit) ¹				Log Transfer Amount (Heckman Selection) ²	
	Univariate	Multivariate	Year FE	Age FE	Univariate	Multivariate
Attended school in past year	1.45**	1.21	1.13	0.57	1.000**	0.502*
·	(1.04, 2.03)	(0.84, 1.74)	(0.52, 2.45)	(0.23, 1.42)	(0.204)	(0.290)
Worked/attended school in past year	1.86**	1.43*	1.32	0.72	1.069**	0.292
·	(1.35, 2.57)	(0.99, 2.06)	(0.58, 3.02)	(0.31, 1.71)	(0.194)	(0.295)
Worked in past year	0.92	0.89	1.55	1.32	0.252	0.437
·	(0.60, 1.39)	(0.58, 1.39)	(0.63, 3.81)	(0.51, 3.43)	(0.341)	(0.367)
w/Parents summer	1.00	0.76	0.58	0.59	0.396*	0.367
·	(0.72, 1.40)	(0.53, 1.08)	(0.29, 1.16)	(0.29, 1.22)	(0.203)	(0.234)
w/Parents fall & winter	0.71**	0.86	0.53*	0.34**	-0.152	0.033
·	(0.51, 1.00)	(0.60, 1.24)	(0.25, 1.11)	(0.15, 0.76)	(0.222)	(0.278)
Resides w/parents	0.82	0.91	0.47*	0.47*	0.031	0.089
·	(0.59, 1.15)	(0.63, 1.31)	(0.21, 1.05)	(0.21, 1.06)	(0.203)	(0.274)
2009 Interview	0.87	0.91	1.00	0.57	0.020	0.117
·	(0.70, 1.10)	(0.70, 1.20)	(1.00, 1.00)	(0.28, 1.14)	(0.153)	(0.205)
Average WJ test scores	1.16**	1.02	1.01	0.59**	0.165**	0.016
·	(1.06, 1.27)	(0.92, 1.13)	(0.75, 1.38)	(0.39, 0.90)	(0.051)	(0.075)
Childhood positive behavior	1.10	0.98	1.80**	3.93**	0.247	0.134
·	(0.84, 1.44)	(0.75, 1.29)	(1.00, 3.21)	(1.83, 8.46)	(0.165)	(0.200)
Any childhood limitation	0.67	0.74	0.66	0.30*	-0.110	0.330
·	(0.37, 1.20)	(0.41, 1.35)	(0.19, 2.28)	(0.08, 1.18)	(0.340)	(0.387)
Female	0.90	0.90	0.82	0.56*	0.297*	0.467**
·	(0.69, 1.16)	(0.69, 1.18)	(0.50, 1.34)	(0.29, 1.05)	(0.165)	(0.198)
Firstborn	0.97	0.78*	0.70	0.78	0.391**	0.526**
·	(0.74, 1.27)	(0.59, 1.03)	(0.36, 1.35)	(0.38, 1.59)	(0.168)	(0.216)
Current income quartile 2	0.98	0.79	.	.	0.417*	0.569**
·	(0.68, 1.42)	(0.54, 1.16)	.	.	(0.227)	(0.285)
Current income quartile 3	1.26	0.72	.	.	0.689**	0.790**
·	(0.87, 1.83)	(0.46, 1.12)	.	.	(0.206)	(0.324)
Current income quartile 4	1.92**	0.94	.	.	0.921**	0.673*
·	(1.32, 2.78)	(0.58, 1.51)	.	.	(0.219)	(0.355)
Parents HS+	1.35	1.27	.	.	0.451*	-0.058
·	(0.89, 2.03)	(0.82, 1.96)	.	.	(0.245)	(0.319)
Parents college grads	2.80**	2.20**	.	.	0.755**	-0.720*
·	(1.83, 4.29)	(1.29, 3.76)	.	.	(0.247)	(0.398)
Race (nonwhite)	0.83	1.22	.	.	-0.220	0.153
·	(0.63, 1.10)	(0.87, 1.72)	.	.	(0.175)	(0.226)
# Siblings	0.82**	0.81**	.	.	-0.071	0.168*
·	(0.72, 0.93)	(0.69, 0.94)	.	.	(0.076)	(0.101)
Sample size	.	2098	436	391	.	2098
Mean of dependent variable	.	0.36	0.500	0.502	.	3260

1) Odds ratios; 95% CI bounds in parentheses. 2) Standard errors in parentheses. Notes: Controls include dummy variable for missing WJ test score, and age of household head and parents' marital status in CDS-I. **p<.05; *p<.10

Table A4: Tuition (Students Only)

	Any Transfer Receipt (Logit) ¹				Log Transfer Amount (Heckman Selection) ²	
	Univariate	Multivariate	Year FE	Age FE	Univariate	Multivariate
Attended school in past year	0.64**	0.82	.	.	-0.010	0.083
.	(0.47, 0.87)	(0.57, 1.19)	.	.	(0.128)	(0.123)
w/Parents summer	2.23**	1.70**	.	.	0.387**	0.401**
.	(1.53, 3.24)	(1.10, 2.60)	.	.	(0.145)	(0.127)
w/Parents fall&winter	0.89	1.43	.	.	-0.281	-0.056
.	(0.56, 1.42)	(0.81, 2.54)	.	.	(0.187)	(0.183)
Resides w/parents	1.02	1.41	.	.	-0.677**	-0.415**
.	(0.65, 1.60)	(0.83, 2.39)	.	.	(0.205)	(0.179)
2009 Interview	0.92	1.13	.	.	0.068	-0.034
.	(0.69, 1.23)	(0.77, 1.67)	.	.	(0.124)	(0.131)
Average WJ test scores	1.46**	1.21**	.	.	0.102*	0.009
.	(1.27, 1.69)	(1.05, 1.41)	.	.	(0.054)	(0.053)
Childhood positive behavior	1.07	1.16	.	.	0.266	0.254*
.	(0.73, 1.57)	(0.77, 1.75)	.	.	(0.175)	(0.154)
Any childhood limitation	0.69	0.96	.	.	-0.460	-0.328
.	(0.30, 1.57)	(0.43, 2.11)	.	.	(0.344)	(0.252)
Female	1.07	1.39	.	.	0.181	0.165
.	(0.76, 1.51)	(0.93, 2.07)	.	.	(0.134)	(0.117)
Firstborn	0.85	0.89	.	.	0.366**	0.451**
.	(0.60, 1.19)	(0.59, 1.34)	.	.	(0.134)	(0.117)
Current income quartile 2	1.74*	1.16	.	.	0.159	0.177
.	(0.99, 3.06)	(0.61, 2.19)	.	.	(0.321)	(0.290)
Current income quartile 3	4.56**	1.93*	.	.	0.597**	0.362
.	(2.54, 8.19)	(0.92, 4.02)	.	.	(0.297)	(0.296)
Current income quartile 4	8.92**	3.05**	.	.	0.973**	0.614**
.	(4.97, 16.00)	(1.46, 6.37)	.	.	(0.291)	(0.301)
Parents HS+	3.06**	1.88*	.	.	0.333	0.416
.	(1.62, 5.77)	(0.92, 3.85)	.	.	(0.339)	(0.324)
Parents college grads	11.06**	3.77**	.	.	1.080**	0.901**
.	(5.80, 21.10)	(1.73, 8.24)	.	.	(0.327)	(0.333)
Race (nonwhite)	0.38**	0.90	.	.	-0.593**	-0.229
.	(0.26, 0.56)	(0.54, 1.50)	.	.	(0.173)	(0.160)
# Siblings	0.83**	0.88	.	.	-0.061	-0.037
.	(0.70, 0.99)	(0.72, 1.09)	.	.	(0.088)	(0.067)
Sample size	.	1152	144	129	.	1125
Mean of dependent variable	.	0.53	0.500	0.481	.	5339

1) Odds ratios; 95% CI bounds in parentheses. 2) Standard errors in parentheses. Notes: Controls include dummy variable for missing WJ test score, and age of household head and parents' marital status in CDS-I. **p<.05; *p<.10