Parental Expectations and Childhood Activities in Immigrant Transitions to Adulthood

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Abstract

As the proportion of U.S. children who are immigrants or children of immigrants increases, controversy about how they are or should be transitioning into adulthood has arisen with relatively little recent national data. The present study uses the Child Development and the Transition to Adulthood supplements of the Panel Study of Income Dynamics to compare a small sample of contemporary immigrant and nonimmigrant youth completing high school in 2005-11 as they move into the young adult years. Higher SES family background and greater parental educational expectations are associated with later successes of these new Americans. Active learning and higher achievement levels contribute to high school completion and to later integration. Results show that children of immigrants are highly successful in graduating from high school, enrolling in college, and being gainfully occupied in work or in school, and are less likely than children of nonimmigrants to have a criminal record as young adults.

Key words: Immigrant youth, transition to adulthood, culture, activity patterns

Based upon criteria that include finishing school, getting a job, becoming self-sufficient, and avoiding trouble with the law, the transition of youth into adult roles and responsibilities has been lengthening. Reversing declines of the 1950s, the proportion of young men and women in their mid-20s living with their parents has increased over time; a quarter of white males age 25 lived at home in 2007 compared to one-fifth in 2000 and only about 13 percent in 1970 (Settersten & Ray, 2010). In the past youth lived at home as they completed their schooling but continued schooling is less and less likely for young men. As recently as 1990 about one-third of men and women were likely to enroll in college. In 2012, 44.5% of girls compared to 37.6% of boys 18-24 were enrolled in degree-granting institutions. Access to good jobs for those without higher education has been lowered by reductions in the manufacturing sector (Settersten & Ray, 2010). Limited work opportunities for non-college youth limit self-sufficiency. In 2013 18% of young men 20-24 were neither enrolled in school nor working, compared with 11% in 2000; about the same proportion of women 20-24 (19%) were neither enrolled in school nor working in 2013 as in 2000 (Federal Interagency Forum on Child and Family Statistics, 2014).

Although transitions to adulthood have been an object of study for some time, they have been altered by a new set of circumstances: the increased fraction of young adults whose parents were immigrants. In 2008 almost 30% of the 68 million young adults 18-34 were foreign born or had a foreign born parent (Passel, 2011). In addition, 17 million children under age 18 who are immigrants or children of immigrants will be transitioning to adulthood in the next 2 decades. Their transitions to adulthood differ from those of youth of nonimmigrant backgrounds for reasons that include wide disparities in parental human capital, family and neighborhood context, varied cultural traditions, different opportunities during the school years, and different pathways to citizenship (Rumbaut, 1996; Rumbaut & Komaie, 2011). As one example, men and women

born in the US to foreign-born parents are more likely to live at home than those born to native-born parents (Berlin, Furstenberg & Waters, 2010). Increased heterogeneity of backgrounds leads to increased heterogeneity in pathways to adulthood.

Immigrants have had remarkable success in this transition. Parental education, income, family structure, and family size are important to immigrants' and native children's success. Because of the economic differences between immigrant and native families, immigrant children are usually disadvantaged. However, after adjusting for socioeconomic differences, children of immigrants have been shown to be more likely to enter and complete college than native children from European background (Feliciano & Rumbaut, 2005; Perreira, Harris & Lee, 2006). In order to better understand young adults' future needs and their contributions to American society it is important to understand what it is about immigrant background through school that leads to success in young adulthood (Tseng, 2006; Feliciano & Rumbaut, 2005; Perreira et al., 2006).

Of course, the success in the transition from childhood into young adulthood is dependent upon more than nativity and income. It is dependent upon *culture*, particularly beliefs and values regarding schooling: some parents have expectations that their children will succeed and push their children in any ways they can, regardless of resources. Research has found parental educational expectations for their children to be strongly linked to children's later schooling success (Hao & Bonstead-Bruns, 1998). Children's activities also represent cultural practices; through engaging in such activities children become part of a community (Tudge, Doucet, Odero, Piccinini & Lopes, 2006). Cultural practices may be dependent on the race and ethnicity as well as nativity of the family. Race/ethnicity and nativity are not totally separable, as research shows that a much higher proportion of Hispanic and Asians are of immigrant background than European and African Americans (Tseng, 2006). Even so, some of the same immigrant

advantage has been shown to accrue to Black immigrants and immigrants of other race/ethnic origins (Thomas, 2009).

Here we examine how, in addition to family background and parental expectations, lifestyle patterns in the high school years support, bolster, and contribute to later high achievement. Activities such as spending time on homework, playing video and computer games, and involvement in sport occur regularly, are intensive during the school year, and may distinguish immigrant from nonimmigrant children's pathways through school.

Studies of the high school to college transition of immigrants, such as the Children of Immigrants Longitudinal Study, have focused on cohorts coming of age in the 1990s (Feliciano & Rumbaut 2005). This study examines differences across immigrant generations in high school completion, college enrollment, involvement in school or work, criminal activity, and self-sufficiency during the period from age 17 to 23 of a recent cohort of youth who completed high school during the period from 2005-2011. In contrast to previous research, this research has had access to data on the full socioeconomic background and school experiences of children of immigrant parents from childhood through high school. The present study takes advantage of recent national data first collected when children were in elementary school and subsequent follow-up interviews through high school into young adulthood, comparing them to nonimmigrant youth. It attempts to identify how much successes in transitions are due to immigrant generation, to family background, and to culture. Then, it identifies activity clusters through the adolescent years to see to what extent choices of activities and academic achievement explain the influence of immigration, background, and culture on transitions to young adulthood.

Background and Hypotheses

Research shows that a remarkable proportion of the children of immigrants enter postsecondary schooling. Among those 25-39 years old in 2000, the difference in college graduation between foreign and U.S. born children was actually small; about 22% of foreign born (but who came as a child) and 27% of U.S. born children had completed 4 years of college by 25-39 (Rumbaut, 2005). The Children of Immigrants Longitudinal study showed that, by age 24-25, 37% of male and 46% of female immigrants who came to the U.S as children or were children of immigrants were enrolled in or had completed a bachelor's degree (Feliciano & Rumbaut, 2005). Census data show that in 2009 about 51% of 18-21 year olds who were high school graduates were enrolled in college in 2009. Adjusted to all youth 18-21, 90% of whom completed high school, we expect that about 45% of all youth 18-21 are enrolled in college. This suggests that immigrant youth are doing well. The big immigrant-native difference is in high school completion. Almost one-third (31%) of foreign-born children dropped out before completing high school compared with 12% of native children, with major differences by region of origin: highest rates of high school dropout were among Mexican (61%) and Central American immigrant youth (53%) and lowest rates among Chinese (9%), Indian (7%) and Korean (3%) immigrant youth (Rumbaut, 2005).

Other potential outcomes in young adulthood include employment, incarceration, and childbearing. Among youth 16-24 years of age, 77% of high school graduates and 65% of high school dropouts were employed (U.S. Census Bureau, 2012). The Children of Immigrants Longitudinal survey shows about 80% of children of immigrants employed either full or part-time at about age 24-25 (Rumbaut, 2005). Immigrant children are shown to have rates of incarceration less than half those of natives, 1.25% compared with 3.5% (Rumbaut, 2005).

Finally, immigrant girls are more likely to have children and they have them earlier than native-born females (Rumbaut, 2005).

Explanations for the Successful Transition of Children of Immigrants into Adulthood

As shown above, children of immigrants are usually shown to be disadvantaged in terms of schooling. This is because most immigrant families exhibit substantial economic and educational disadvantage compared to native families (Brandon, 1999; Hofferth, 1999). Once differences in socioeconomic background are controlled, the achievement of children of many immigrant groups has been shown to exceed that of comparable children whose parents were not immigrants (Fuligni, 1997; Kao & Tienda, 1995; Sastry & Pebley, 2010)and the performance of children of immigrant appears to be stronger in recent compared to earlier cohorts of children (White & Glick, 2009). A study using the National Longitudinal Survey of Adolescent Health found that after controls were introduced, the first generation had the lowest proportion of dropouts, the second generation intermediate, and the third generation the highest proportion of dropouts (Perreira et al., 2006). A comparison of children of African American race also indicated that children of immigrants (second generation) were much less likely to be delayed in their educational completion for their age than children of natives (Thomas, 2009).

Considerable research has been conducted since this "immigrant paradox" was first documented, yet it is still not well understood. There are multiple explanations. The first is cultural. Some argue that the positive academic attainments of children of immigrants are due to immigrant parental efforts or "optimism" that fuel their achievement compared to children of nonimmigrants (Kao & Tienda, 1995). Immigrant families have been shown to be somewhat better off than others in their home country before coming to the United States (Akresh & Frank, 2008; Crosnoe & Turley, 2011). Parental beliefs and values favoring higher education or

focusing on hard work rather than social skills could explain greater achievement in first and second compared with later generation children (Feliciano, 2005; Glick, Bates & Yabiku, 2009). These beliefs and values could be related to the same values that brought them to the U.S. in the first place or they could be related to culture in their country of origin and migration experience.

Relationship between Culture and School Success

What is culture? One approach conceptualizes culture as a set of values, beliefs, and expectations that are shared within a group (Tudge et al., 2006). Another conceptualization is that it is a "toolkit of habits, skills and styles" (Swidler, 1986). Gans (Gans, 2014) refers to ethnic organizations, ethnic practices and ethnic identity as aspects of culture related to ethnicity. In this paper, parental expectations and beliefs are the main identifiers of culture for children prior to high school. Consistent with Eccles expectancy value theory, parents influence their children through three mechanisms: role modeling, direct provision of experiences, and by the messages they give regarding their children's competence (Simpkins, Fredericks, Davis-Kean & Eccles, 2006). Immigrant parents may demonstrate through their own life styles (schooling, occupation, activities) what activities are important. However, expectations may not have a high correlation with parents' own education, particularly for immigrant parents who may have been unable to attain a high level of education in their home country; rather, parents may communicate to children their expectations for achievement (Hao & Bonstead-Bruns, 1998). Substantial research supports parental expectations as key to children's success (Pong & Landale, 2012; Feliciano & Rumbaut, 2005). Parental expectations are also manifested in encouragement of children's participation in social activities such as religious or sport activities, which can be considered cultural manifestations (Tudge et al., 2006). Parental activities at home

and with friends also influence children's choices. Finally, parental English language skills may limit their communication skills and therefore their ability to acculturate.

However, it is generally believed that children's experiences during the school years matter. Recent research suggests that immigrants, particularly those from Mexico, experience an initial disadvantage in readiness for school (Crosnoe & Turley, 2011), a gap that diminishes over the elementary school years (Glick & Hohmann-Marriott, 2007) such that, by high school, immigrant students are advantaged in achievement over their nonimmigrant peers (Fuligni, 1997; Kao & Tienda, 1995; Pong & Landale, 2012). There are several potential factors related to the apparent catch-up among immigrant children. First, they appear to have fewer behavior problems; their behavior is not as rated as problematic by teachers as that of children of third and higher generation parents (Crosnoe & Turley, 2011). This may improve their chance of learning, their grades, and their chance of getting help from adults when needed. One study found that students with fewer behavior problems were more likely to enter college (Feliciano & Rumbaut, 2005). In addition, their choices of course-work and extracurricular activities during high school may increase their chances of successfully graduating high school and entering college (Tseng, 2006). These choices include taking courses in math and science, involvement in sports or academic clubs, studying hard and excelling at their studies. Immigrant background has been linked to greater math/science content of their college program. Tseng (2006) found that the aspirations and skills of the youth in high school were implicated. In particular, higher aspirations were linked to choosing courses with higher math/science content. Having good verbal test scores but estimating one's English proficiency as low was associated with choosing a math/science curriculum. Immigrant students estimated their chances in math/science would be better; however, many immigrant students actually tested well on verbal achievement.

Different Life Style Pathways through School

Thus the second potential explanation is that immigrant families and children select pathways through the child and adolescent years that have more potential for later success in the transition to adulthood than others (Nicholas, Stepick & Stepick, 2008). Previous research suggests that an early focus on academic achievement is one of the potential pathways to success for immigrants as it has been for the native born. Hao & Ma (Hao & Ma, 2012) used enrollment in advanced math and science courses as their measure of achievement and the proportion of courses passed as their measure of engagement to construct trajectories through the high school years. For those for whom academic achievement is not an option, however, alternative pathways need to be found. One such pathway is the social route, through involvement with peers or in the local ethnic community. Family integration into their ethnic community could benefit the child's later achievement (Kroneberg, 2008). It can also lead to early entry and success in occupation and employment or to family formation. Sports can integrate a student both into a community and provide important skills for future success. Parents particularly show an interest in teamwork, in learning to work with others, in physical fitness, and in developing skills that may result in college scholarships (Hofferth, Kinney & Dunn, 2009). Youth who can build ties to other adults than parents wind up better off than those whose ties are restricted to home and family. These ties provide both important supports and mentoring but also ties to the labor market through social networks (Settersten & Ray, 2010). Finally, many immigrant children assist in the work of the family, by caring for younger siblings or doing other types of household chores while the parents engage in paid work (Fuligni & Pederson, 2002). An important outcome that may be linked to this avenue is that of self-sufficiency – the ability to

support oneself financially. However, alternatively, it could lead to involvement in illegal activities that could eventual lead to getting in trouble with the law. This could be an unintended consequence of being undocumented and unable to work for legitimate employers.

Relationship between Out of School Activities, Achievement, and Later School Success

Multiple studies have linked extracurricular activity participation such as academic clubs to higher academic success (Eccles & Barber, 1999) through reinforcement of academic goals. Probably the most widely found result is a link between sports participation and success. Students who were involved in extracurricular sports activities have demonstrated higher math test scores and significantly lower rates of dropping out (Glick & Hohmann-Marriott, 2007; McNeal, 1995). Students who were involved in extracurricular activities were believed to be better integrated into their school and more involved with other students and their adult mentors (Larson, 1994). Student integration into the school has been shown to be related to a lower chance of dropping out and to a lower chance of criminal activity. However, this research has not been conducted on immigrant groups. It is unclear whether sports are the avenue to the same types of successes for immigrants as for nonimmigrant children. Feliciano and Rumbaut (Feliciano & Rumbaut, 2005) found that GPA was linked to a higher likelihood of entering/completing college. In addition, previous studies have focused on extracurricular activities to the exclusion of informal activities in which children engage at home, such as studying, television viewing, and household work; children of immigrants have been shown to participate less in formal activities than children of native-born parents so their activities may not be taken into account (Simpkins, Price, Quach, Starbuck & Delgado, 2012). Feliciano and Rumbaut (Feliciano & Rumbaut, 2005) showed that second generation immigrant students' homework hours were positively linked with matriculation in college and television viewing was

negatively linked to prestige of occupation expected at age 30. Although computer use has been linked to greater academic achievement (Hofferth & Moon, 2011), this has not been shown for immigrant children.

Other Factors Linked to Success in the Transition to Adulthood

Success is dependent upon family of origin and community (Portes & Zhou, 1993; White & Glick, 2009; Pong & Landale, 2012). Especially important are economic resources. Some children grow up in families or communities with substantial financial, human, and social capital resources and, as a result, can support their children's activities whereas others may be able to support participation only in activities not requiring investment in transportation, fees, and uniforms. Important aspects of resources include income, educational level of mother, number of parents, and number of children in the family. The substantial differences across families from different ethnic and racial backgrounds, different immigrant experiences, conditions in their sending countries, language and cultural disadvantage need to be taken into account before comparing children from immigrant generations (Perreira et al., 2006).

Gender clearly differentiates pathways through adolescence and into adulthood. Compared with boys, girls receive better grades (Fuligni, 1997), are more likely to graduate high school (82.5% of female vs. 78.1% of male 18-21 year olds), and are more likely to enroll in college immediately after high school (74% vs. 66% of 16-24 year olds who graduated high school in the previous year) (U.S. Census Bureau, 2012). Boys and girls make different activity choices in their high school years, which may impact their educational opportunities (Crosnoe & Trinitapoli, 2008).

Hypotheses

Few studies have gone beyond academic achievement to examine factors associated with immigrant success during the transition from high school to young adulthood. In this paper we examine how family background, culture, and extracurricular activities and achievement during high school operate to explain the advantages or disadvantages of immigrant families in transitioning beyond high school into young adulthood. Our model is shown in Figure 1. We hypothesize that immigrant generation will be associated with young adult outcomes – high school graduation, college attendance, involvement in school/work, noninvolvement in criminal activity, and self-sufficiency. Our primary interest lies in examining the extent to which culture, and active life styles and cognitive achievement help explain differences in high school completion and post high school involvement in school and work, controlling for family SES background, family structure and other socioeconomic factors. We hypothesize:

1. Children of immigrants will be more likely to successfully graduate high school, enter college, be engaged in working/studying, be less likely to have a criminal record, and be more likely to be self-sufficient than children of nonimmigrants, net of family background such as parental education and income, family size and family structure.
2. Immigrant-native differences in young adult outcomes will be partially explained by culture, that is, parental expectations, language, and ethnicity.
3. Immigrant-native differences will be further explained by the types of activities in which children participate and by their own achievement in high school.
    a. Children of immigrants will be more likely to specialize in activities related to academic life and less likely to be involved in social activities.

Data and Methods

Data

The current study draws upon data through 2011 from the Panel Study of Income Dynamics (PSID), a longitudinal ongoing survey gathering detailed socioeconomic and demographic data from individuals since 1968. The PSID is a representative sample of U.S. families (Fitzgerald, Gottschalk & Moffitt, 1998). In 1997, the PSID added a refresher sample of 441 immigrant families, conducting interviews in Spanish, English, and other languages. Either the head/wife or their parents had to have arrived in the United States after 1968, when the first wave of the PSID was collected. Also in 1997, the PSID inaugurated the first Child Development Supplement (CDS I), which was administered to the primary caregivers of children aged 0-12 and up to two of their children were assessed using standardized assessments. Interviews were conducted in the preferred language of the parent respondent and assessments were conducted in either English or Spanish. The first wave of the CDS included 3,563 children from 2,380 families, with a response rate of 88%. These same families were recontacted approximately 5 years later. In the second wave (CDS II), conducted in 2002 and 2003, 2,907 out of 3,191 eligible children and adolescents aged 5-18 completed interviews; this represented a response rate of 91%. All children who had reached age 18 and who had completed high school were interviewed for a study of the Transition into Adulthood (TA) in 2005, 2007, 2009, and 2011. This instrument collected information on the current activities and well-being of the young adults and was used to determine the outcomes of the transition to adulthood. Unfortunately, from a total sample of 610 immigrant children first interviewed in 1997 or 2002, only a fraction had reached age 18 by the 2011 TA interview.

This study focuses upon 143 first-generation (1.5 generation) and second-generation children age 5 - 13 and their families added to the study in 1997 and 160 comparison children chosen from the core, all of whom were followed from childhood into young adulthood and were interviewed as part of the transition to adulthood study. The comparison group consists of all families of nonimmigrant Hispanic and Asian origin who were in the main sample and a random sample of the remaining families, mainly native White and Black families. Random sampling on the control group does not alter the findings but was used to maintain comparable sample sizes and precision of estimates in immigrant and nonimmigrant groups (Szklo & Nieto, 2007). The majority of the Hispanic families (74 percent) were from Mexico and we refer to all as Latinos. We used data from both the 1997 and 2003 waves to maximize the information available on the children. Pooling across the two waves maximized the number of immigrant children we were able to include and reduced potential selection bias. We included only those children who had time diary information (81%), which reduced the sample size. And after selecting only biological, step-, or adopted children, or grandson/daughter of the head of household; there were 303 total children remaining in the final sample.

Young Adult Outcomes

From the Transition to adulthood supplement we include 5 indicators of attainment of adult status: 1) whether the youth had graduated from high school, 2) whether the youth was enrolled in college, 3) whether the youth has been arrested, 4) whether the youth was productively engaged by being either employed or in school, and 5) the extent to which the youth was self-sufficient. This last is a continuous indicator of the level of self-sufficiency of the youth based upon four questions that ask about the extent of personal responsibility for making a living, paying the rent, paying the bills, and managing money. The response categories are: 1 =

somebody else does this for me all of the time, somebody else does this for me some of the time, 3 = I do this half of the time, 4= I do this most of the time, and 5= I am completely responsible for this all of the time.

Generation

First generation children were born outside the U.S. to foreign born parents, second generation children were born in the U.S. to at least one foreign-born parent, and third generation children were born in the U.S. to U.S.-born parents. All first generation children in our study arrived prior to age 13, often referred to as the 1.5 generation because of their similarity to the second generation. Generation was determined by questions that asked where each of the child's parents and grandparents was born and where each child was born. Families were identified by in-person household screening in areas of high immigrant concentrations (Panel Study of Income Dynamics, 1999). A screener was used to establish the birthplace of each respondent and each respondent's parents so that country of origin as well as race/ethnicity is known. To be eligible for the refresher sample, a family had to have had a family member immigrate to the United States after 1968.

Background Variables

Individual Characteristics. Individual characteristics that might influence the child's achievement were used as control variables. Individual characteristics included child's gender and age. Child gender was coded as 0 for boy and 1 for girl. Children's age in young adulthood ranged from age 17 to age 23.

Socioeconomic status. Family SES includes parental education, family income, and family size. Parental education was determined primarily according to mother's education, but father's education was used in the case of single father families. Children of parents who had

completed high school and children of parents with some college education or more were compared with children of parents who had less than a high school education. Poverty ratio is the ratio of household income to the needs standard for a family of that size and composition. Family size is the number of children in the household and family structure is whether or not the child is living with a single parent.

Culture

Expectation for Child's Schooling. The child's parent was asked how much schooling he or she expected that the child would complete; responses included high school graduation, some college, college graduation, and graduate or professional degree. This was coded into two dummy variables: (1) obtain a college degree or more versus (0) not complete a college degree and (2) complete some college versus (0) not complete any college. The omitted category is complete high school or less.

English Proficiency. English proficiency is the average of one parent's rating of their reading and writing skills in English. Items are "How well do you read newspapers and books in English?" and "How well do you write letters in English?" Answers were coded 1=not at all, 2=a little, 3=some, 4=well, and 5=very well. Over 90% of the primary caregivers responding were mothers. For comparability, the preferred parent was the mother, but the father was used if the mother's English proficiency was missing or the parent was a single father.

Race/ethnicity. Dummy variables were created for each racial/ethnic group, and in this study Black, Latino, and Asian groups were compared to those of European background or White, unspecified. Race was determined by the race/ethnicity of the child in the household reported by the primary caregiver. If that was not available, the ethnicity was determined by information on the household head. In 2 cases there was a discrepancy between race/ethnicity of

parent and child; the race/ethnicity of parent was selected; these may have been adopted children and the background of parent was of more importance to our analyses.

Children's Activities.

In each year in which the Child Development Supplement was administered, the study collected diaries on the type, duration, and location of children's activities. Two time diaries were collected, one for a randomly chosen week day and one for a randomly chosen weekend day. The time diary was completed by the parents of young children, or by the parents and child together in the case of older children and adolescents, as a 24-hour record of children's activities, the start and end-times for these activities, the people who accompanied the child, and the location of the activities. The time diaries began at midnight on one randomly chosen week day and one randomly chosen weekend day. Excluding secondary activities, the total hours per child for each time diary amounted to 24.

Tallies for the total time children spent on computer games and video games were drawn from time spent on a set of computer-related activities and video game play that occurred at home. Other computer-related activities accounted for little of the time spent (e.g., web surfing, email, and shopping) (Hofferth & Moon, 2011). Television viewing was children's most frequent extracurricular activity. Children's reading time included time spent reading books, newspapers, magazines, or online material, as long as this reading was not for homework, but rather for pleasure (Hofferth & Moon, 2011). The time spent on study and homework, either using the computer or not, was categorized as a child's study time. Time spent on household chores included indoor activities such as setting the table, doing dishes, or making beds, and outdoor chores such as weeding or trash cleanup. Visiting time included socializing with people other than the child's own household members both at home and at places other than the child's

home (e.g. at a party). Time spent on sports included lessons, practices, and sports matches such as football, baseball, and gymnastics in which the child participated. Music included time spent playing, practicing, or taking lessons in a musical instrument or voice. In sum, the following eight children's activities were used for outcome analysis: computer and video game play, television viewing, reading, studying, household work, visiting, sports participation, and music lessons. To estimate the total time spent per week on each of these activities (in hours), the total weekday time was multiplied by 5, and added to the total weekend time multiplied by 2.

In order to identify the particular types of activities in which children engaged, we conducted a latent class analysis of children's activity participation by gender, adjusted for age. All of our analyses showed differences in the types of activities in which boys and girls engage; we constrained the latent activity groups to be similar but allowed the probability of being in each group to differ by gender. We divided time in each of the activities into no participation, and some participation. We tested models with three to five latent classes. The four-class model was selected based on parsimony and improvement in fit.

Cognitive Achievement.

Children's cognitive achievement was measured using two subsets of the Woodcock-Johnson Revised Test: passage comprehension, a test that measures reading comprehension skills; and applied problems, a test of skill in analyzing and solving practical numerical problems (Woodcock & Mather, 1989). The interviewers were trained and provided with the materials needed to administer this standardized test in the target child's home. The scores of the tests were standardized by child's age, with a mean of 100 and a standard deviation of 15.

Had a Child between 15 and 18.

Finally, we included an indicator for whether or not the youth bore or fathered a child during the high school years. The activities leading to a birth are unlikely to be identifiable in the time diary; additionally, research has documented the detrimental influence of a child on continuation of education, among both males and females (Bozick & Deluca, 2005).

Analysis Plan

For the PSID-CDS data we first show means of background variables and activities by generation (Tables 1 and 2). The results of the latent class analysis are presented in Table 3. A multinomial logistic model shows the association between background characteristics and the latent activity classes (Table 4). In the multivariate analysis (Tables 5-8), young adulthood outcomes – high school graduation, some college, working or in school, had been arrested, and self-sufficiency – are first regressed on immigrant generation (Model 1). Model 2 adds socioeconomic background variables. Model 3 adds culture – educational expectations, race/ethnicity, and language use at home. In Model 4 childhood activity patterns and achievement scores are added. As variables are added, the size and significance of coefficients of activity, achievement and generation are examined. A decline in a coefficient suggests that the added variables "explain" or mediate some of the association of generation with the outcome. Robust standard errors that adjust for multiple children in a family were used to calculate significance levels.

Results

Descriptive Results

Table 1 presents the characteristics of the sample by generation. The table summarizes results across boys and girls; the few gender differences are mentioned in the text. The average ages of the youth (19) are similar across the three generations. More immigrant youth had

graduated from high school – 95% of the first, 91% of the second than children of non-immigrants – 82%. First generation immigrant youth were also more likely than the third generation to currently be in college (77% compared to 56%). One notable gender difference (not shown) is that first generation girls were more likely than first generation boys to be enrolled in college (86% versus 67%). Only 5% of the first generation was not working or studying, compared with 22% of the third, a significant difference. Almost all of the first generation youth (95%) would be eligible for the Dream Act, if undocumented. This is because only a small fraction of first generation youth (5%) had a criminal record compared with a sizeable fraction (26%) of the third generation; this difference is statistically significant, as is the difference between the second (10%) and the third generation. Another notable gender difference is that 38% of third generation boys had a criminal record compared with only 12% of third generation girls. There was no significant difference in self-sufficiency across generations.

Children of immigrants were more disadvantaged than children of nonimmigrants; their parents were more likely to have completed less than a high school education, their family incomes were lower, and family size was larger. Offsetting these disadvantages, children of immigrants were more likely than children of nonimmigrants to live with two parents.

Immigrant youth's parents' educational expectation were very high; 85% of parents of first generation and 69% of parents of second generation youth expected them to complete college, compared with 57% of parents of third generation children, significant differences. Parental English proficiency was lower in immigrant families and first and second generation immigrant youth were more likely to be of Latino and Asian origin than nonimmigrant youth.

Activities differed across generations; compared to third generation youth whose parents were born in the U.S., both first and second generation youth spent more time studying (Table 1).

First generation immigrant youth spent less time playing video games and more time watching television and those of the second generation spent less time playing sports than children from nonimmigrant families. Activities clearly differed by gender as well as generation. Table 2 shows that, across generations, boys spent more time playing video games than did girls; girls spent almost no time playing games. First generation girls spent marginally more time watching television than did first generation boys. In the first and third generations boys spent more time playing sports than did girls. Finally, third generation girls spent more time doing household work than third generation boys. Gender differences in household work were not statistically significant among first and second generation children.

In spite of their economic disadvantage, first generation youth's scores did not differ from those of the third generation. Achievement test scores were the lowest for second generation youth of immigrants compared with children of native-born parents.

Latent Class Analysis of Activities

Table 3 shows the results of the latent class analysis of activities. Using 8 activities, youth were grouped into 4 latent groups, which we have labeled as 1) traditional learners, 2) active learners, 3) sports/gaming or social, and 4) sedentary. These activity classes are based upon an LCA in which activities in the groups were assumed to be invariant by gender, and age of youth was included as a covariate. We then ran an LCA for all youth releasing the invariance assumption and another in which we ran separate LCAs by gender with age as a covariate. Under the different assumptions only one class – group 3 – differs for boys and girls.

Youth in group 1 (traditional learners) participated at high levels in studying, household work, and watching television. Youth in group 2 (active learners) were characterized by a high probability of playing games, reading, studying, playing sports (girls), and taking music lessons

(boys). They were engaged in multiple activities. Across all youth, assuming measurement invariance, group 3 was comprised of those playing games and engaging in sports (sports/gaming). However, no girls fell into that category because girls were so much less likely to play games. When the LCA was run separately by gender, group 3 (now called socializers) consisted of boys with a high probability of both playing sports and visiting and girls with a high probability of visiting and some sports activity. In this gendered classification, game playing was assigned to group 4 (sedentary). Youth in group 4 (sedentary) demonstrated a high probability of watching television in the full sample and little else. This was expanded to include playing video or computer games as well as watching television in the gender-specific sample (sedentary players). Using the LCA conducted separately by gender, among boys, 30% were traditional learners, 9% were active learners, 5% were socializers, and 56% were sedentary. Among girls, 44% were in traditional learners, 3% were active learners, 51% were socializers, and 2% were sedentary.

Multinomial Logistic Analysis of Activity Class

Youth were assigned to the most likely class based upon their activities. Using multinomial logistic regression, we first examined which variables linked to this activity classification, with traditional learners as the comparison category. Over all youth (Table 4), those of the first generation were more likely ($p < .10$) to be active learners than the third generation after controlling for socioeconomic background (Model 2). This coefficient declined 88% and was no longer significant in Model 3, after controls were included for parental expectations and race/ethnicity. Black children were also less likely to be active learners.

First generation children were significantly more likely to be involved in sports and gaming than third generation children (Model 2). Again, this coefficient declined 19% and was

no longer significant once parental expectations and ethnicity were included (Model 3). Immigrant status was not linked to sedentary activities. Greater educational expectations of parents and being African American (significant) or Asian (marginal) were linked to a lower likelihood of being sedentary.

For girls, generation was not linked to activity group and, in fact, girls' activity classes were not linked to any of the background or cultural variables (not shown). As expected given that activity classes appeared to fit boys better than girls, third generation boys were less likely to be active learners than were first and second generation children (Table 4). This association remained significant even after controlling for English proficiency in Model 3. Third generation boys were also less likely to be sedentary. This means that first and second generation boys were more likely to be both active learners and to be sedentary television viewers and game players than were third generation boys. These held even after controlling for parental education, income, and family size and structure.

Relationship between Immigrant Generation and Young Adult Outcomes

Table 5 reports the results of regressing young adult outcomes on immigrant status, background variables, cultural variables, and activities and achievements in 4 models. We first present results for all youth, then discuss any separate male and female findings that differ.

<u>High School Graduation</u>

<u>All Youth</u>. Even in Model 1, with no controls for background, second generation youth were more likely to graduate from high school than third generation youth ($p < .10$). This coefficient became statistically significant at $p < .05$ after background controls were introduced in Model 2. The coefficient for first generation also increased and became marginally significant. Parental college education and living with two parents were associated with a

significantly greater chance of graduation. In Model 3, after adding cultural elements – expectations and ethnicity – generational influence declined 54 % to 63 % and was no longer significant. In Model 3, the most important variable was parental expectation for child education. Those whose parents expected them to complete college had 4 times the chance of graduating from high school as those who expected less schooling. In Model 4 the generation coefficients continued to decline. Children engaged in sports and gaming had a significantly lower chance of graduating from high school than traditional learners. Those who had a child also had a significantly lower chance of graduating from high school.

Girls. The results for girls are similar to those for the full sample and are not shown.

Boys. For boys there was no association of immigrant status with high school graduation in any model. The results for the background, culture, and activities variables were similar to those in the full sample (not shown).

College Enrollment

All Youth. With no controls (Model 1), first generation youth were more likely to be enrolled in college than the third generation. Once socioeconomic variables were controlled, both first and second generation youth were more likely to be enrolled than third generation youth (Model 2). Parents with some college education had children more likely to be enrolled in college. Older youth were less likely to be enrolled; they may have already graduated. In Model 3, after adding cultural variables the influence of immigrant generation declined 67 % to 90 % and was no longer significant. Both parental education and educational expectations were strongly linked to enrollment in college. Finally, in Model 4 with the addition of activities, unlike high school, there was no continued influence of activity group on college enrollment.

Instead, reading comprehension test score was linked to college enrollment at the $p < .10$ level. Having had a child while in high school significantly reduces college enrollment.

Girls. The results for girls were similar to those for all children (not shown). In Model 4, the link between a higher reading comprehension score and college enrollment was statistically significant at $p < .05$.

Boys. The models for boys were also similar to those for all children (not shown). The only additional finding was that Black males were likely to attend college than white males with similar characteristics.

Working and/or Studying

All Youth. Either working or studying serves as an indicator of positive engagement. Not all attended college but may be productively engaged; older youth may also have graduated by the time they were interviewed in the PSID transition to adulthood survey. First generation immigrant children were slightly more likely to be either working or studying than third generation children (Model 1). After controlling for socioeconomic variables in Model 2, both first and second generation immigrant children were more likely to be either working or studying than third generation children. Higher parental education was associated with a greater chance of working or studying. This is the second model (the other was college enrollment) in which income was associated with a young adult outcome. A greater ratio of income to poverty was associated with a higher chance of the youth working or studying. Once cultural expectations were added in Model 3, the association between generation and working/studying declined and was no longer significant even though none of the cultural variables was statistically significant. Parental education remained the most important variable. Finally, in Model 4, the influence of generation changed very little and remained nonsignificant. Having had a child was associated

with a marginal reduction in the chance of working or studying. Those with a higher reading comprehension test score were (marginally) more likely to be working or studying.

Girls. Findings were the same for girls as for the entire sample and are not shown here.

Boys. There was no association between immigrant generation and working or studying for boys (not shown). The other variables had associations similar to those in the entire sample.

Criminal History

All Youth. In Model 1 before any controls were added, youth from immigrant families were significantly less likely to have a criminal history than were third generation youth. This association did not diminish with controls for background (Model 2). Girls were less likely to have a criminal history but current parental education, income or structure, were not related. In Model 3 the association declined 37 % to 58 % and was no longer significant once parental expectations for child's education were added. Children whose parents expected their child to complete 4 years of college were 62 % less likely to have a criminal history. In Model 4, the influence of generation declined further but the only variable significantly associated with criminal history was whether the youth had a child or not. Having a child was associated with a *greater* chance of a criminal history, net of all else.

Girls. The results for girls were the same as for all youth (not presented). One interesting finding was that after adding activities in Model 4, girls with better scores on the applied problems achievement test were less likely to have a criminal background than those with worse scores.

Boys. There was no association between immigrant generation and criminal record for boys (not presented). The contribution of the other variables to the model was similar to those in the full sample.

Self-sufficiency

All Youth. Not surprisingly, self-sufficiency is the opposite of being in school; those more likely to be enrolled in school were least likely to be self-sufficient. In our analyses, first and second generation immigrant children were less likely to be self-sufficient than third generation children (results not shown). Once controls for socioeconomic factors were included in the model, first and second immigrant generation coefficients were statistically significant and negative. In Model 2, children from lower income families were less likely to be self-sufficient. Older youth and those from larger families were more likely to be self-sufficient. In Model 3, after adding in the cultural variables, the impact of being child of immigrant parents declined and was no longer significant. Children of parents who expected the child to compete college were less likely to be self-sufficient. English proficiency was also associated with lower likelihood of being self-sufficient. Both Latino and Asian children were significantly less likely to be self-sufficient. Finally, in Model 4 we see that active learners were marginally less likely to be self-sufficient, probably because they were enrolled in higher education.

Girls. There was no association between immigration status and self-sufficiency for females (not shown). Other associations were similar for the full sample. Interestingly, among girls, socializers were more likely to be self-sufficient than those with other activity patterns.

Boys. The models for males were similar to those of the full sample (not shown).

Discussion

This paper has compared the transition to adulthood for first (1.5) and second generation immigrant youth compared with third and later generation youth. Consistent with Hypothesis 1, the results indicate that immigrant youth are completing high school and attending college at

high rates. After controlling for socioeconomic status, first and second generation immigrant boys and girls were more likely than third generation youth to graduate from high school and to be enrolled in college up to age 23.

Additionally, females from immigrant families were less likely to have a criminal record and were more likely to be either working or studying than girls from nonimmigrant families. There were no significant differences in criminal record or working/studying by immigrant status for boys. Because they are highly likely to be enrolled in school and because of strong family ties, however, immigrant boys are *less rather than more* self-sufficient; this result is not surprising in light of the average age of the sample of 19 years.

The second hypothesis, that culture would be important in explaining generational differences in youth accomplishments was supported. Generational differences remained significant until cultural variables – race/ethnicity, parental educational expectations, and English proficiency – were added to the models. Parental educational expectation was the key cultural mediator for high school graduation (positive), college enrollment (positive), and criminal record (negative). For self-sufficiency, in contrast, race/ethnicity and English proficiency were the important cultural mediators. Children of Asian and Latino background were less self-sufficient, perhaps due to greater family supports; however, those from families with greater English proficiency were also less self-sufficient, probably because they were enrolled in school. Our conclusion is that the most important of the cultural factors was the parental expectation that the child would at least complete college. Race/ethnic origins occasionally but not always contributed. English proficiency rarely did.

The third hypothesis, that children's activities and achievements in the school years would also contribute, was partially supported. We were able to show associations between

immigrant generation and activity patterns and between activity patterns and high school graduation. In contrast to existing literature, but not surprisingly given their lack of attention to their studies, those who concentrated on sports and games had a significantly lower chance of graduating high school than traditional learners. However, childhood activity patterns were not as important or significant as were parental college expectations and whether or not the youth had a child in predicting later successful transitions into college and into working or being in school. Of course, parents' preferences influence activity patterns, which we show in this paper, and so activity patterns can still play an indirect contributing role. Active learners were marginally less likely to be self-sufficient, probably because they were enrolled in school. Among girls, socializers were marginally more likely to be self-sufficient. Socializers are likely to marry and establish an independent household more quickly.

The results are promising in that we were able to show distinct classes of children based upon their activities on two diary days, and these activities are associated with longer term consequences for child self-sufficiency and well-being. We also demonstrated an association between the active learner class of activities with reading and applied problems achievement scores. Scores on academic tests were strongly predictive of college enrollment for girls. A higher reading comprehension test score was associated with a greater chance ($p < .10$) of working and studying for the full sample. Because activities and test scores were measured at the same time points, it was not possible to disentangle causality.

Higher Education and Immigrants

From our initial tabulations, 86 % of first, 65 % of second, and 55 % of third generation female youth were enrolled in college and 67 % of first, 63 % of second, and 56 % of third generation male youth were enrolled in college at the time of the young adult interview.

Immigrant generation remained a critical factor linked to college enrollment in the multivariate models. Even after controlling for family background – SES and other factors – first and second generation youth were more likely to be enrolled in college than those of the third or later generation. After parental educational expectations, race, and language proficiency were included, generation was no longer significantly linked to college enrollment. Parental educational expectation and the child's own reading achievement test score were the key important positive factors linked to college enrollment.

Limitations of the Study

A number of study limitations should be recognized. First, these outcomes were measured soon after youth left high school. More time needs to pass before measuring the well-being of these young adults. Second, the sample is small; again, as more immigrant youth transition to adulthood, the size of the group will increase. Future analyses will be able to further investigate these suggestive findings. Third, we captured children's activities over two days in an average week. Capturing activities over more time points would provide a richer characterization of children's activities, but that was not possible in this study because of the large age range and small number of time points examined. For all these reasons, the results are suggestive rather than definitive. However, data limitations are outweighed by its national coverage, the inclusion of children of Latino and Asian backgrounds, and the extensive nature of data on the children, obtained concurrently from childhood into young adulthood.

Conclusions

One of the important objectives of this study was to examine the part played by culture in young adult outcomes for children of immigrants. Based upon the indicators we had – race/ethnicity, parental educational expectations, and English language proficiency – we show

that culture does explain quite a bit of the generational difference. Once these variables were included in the model, generation was no longer significant. Because of the small sample size we were unable to include aspects of culture other than educational expectations, but we see that educational expectations are quite powerful. Parental background influences both activity pathways and test scores; these, in turn, plus parental expectations for children's education are important determinants of college enrollment and deterrents to criminal activity. To the extent that they are able to complete college and then are able to work legally, immigrant youth are well-prepared to make significant contributions to American society in the coming decade.

References

Akresh, I., & Frank, R. (2008). Health selection among new immigrants. *American Journal of Public Health, 98,* 2058-2064.

Berlin, G., Furstenberg, F., & Waters, M. (2010). Transition to Adulthood: Introducing the Issue. *The Future of Children, 2010*(1), 3-18.

Bozick, R., & Deluca, S. (2005). Better late than never? Delayed enrollment in the high school to college transition. *Social Forces, 84,* 527-550.

Brandon, P. (1999). Receipt of public assistance by immigrant children and their families: Evidence from the Survey of Income and Program Participation. In D. Hernandez (Ed.), *Children of immigrants: Health, adjustment, and public assistance* (pp. 584-619). Washington, DC: National Academy Press.

Crosnoe, R., & Trinitapoli, J. (2008). Shared family activities and the transition from childhood into adolescence. *Journal of Research on Adolescence, 18,* 23-48.

Crosnoe, R., & Turley, R. (2011). K-12 educational outcomes of immigrant youth. *Future of Children, 21*(1), 129-152.

Eccles, J., & Barber, B. (1999). Student council, volunteering, basketball, or marching band: What Kind of extracurricular involvement matters? *Journal of Adolescent Research, 14,* 10-43.

Federal Interagency Forum on Child and Family Statistics. (2014). *America's Young Adults: Special Issue, 2014.* Washington, DC: U.S. Government Printing office.

Feliciano, C. (2005). Educational selectivity in U.S. immigration: How do immigrants compare to those left behind? *Demography, 42,* 131-152.

Feliciano, C., & Rumbaut, R. (2005). Educational and occupational expectations and outcomes among adult children of immigrants. *Ethnic and Racial Studies, 28,* 1087-1118.

Fitzgerald, J., Gottschalk, P., & Moffitt, R. (1998). An analysis of sample attrition in panel data: The Michigan Panel Study of Income Dynamics. *Journal of Human Resources, 33*(2), 251-299.

Fuligni, A. (1997). The academic achievement of adolescents from immigrant families: The roles of family background, attitudes, and behavior. *Child Development, 68,* 351-363.

Fuligni, A. J., & Pederson, S. (2002). Family obligation and the transition to young adulthood. *Developmental Psychology, 38,* 856-868.

Gans, H. J. (2014). The coming darkness of late-generation European American ethnicity. *Ethnic and Racial Studies, 37,* 757-765.

Glick, J. E., Bates, L., & Yabiku, S. (2009). Mother's age at arrival in the United States and early cognitive development. *Early Childhood Research Quarterly, 24,* 367-380.

Glick, J. E., & Hohmann-Marriott, B. (2007). Academic performance of young children in immigrant families: The significance of race, ethnicity, and national origins. *International Migration Review, 41,* 371-402.

Hao, L., & Bonstead-Bruns, M. (1998). Parent-child differences in educational expectations and the academic achievement of immigrant and native students. *Sociology of Education, 71,* 175-198.

Hao, L., & Ma, Y. (2012). Immigrant youth in postsecondary education. In C. Garcia-Coll & A. K. Marx (Eds.), *The Immigrant Paradox in Children and Adolescents* (pp. 275-296). Washington, DC: American Psychological Assocation.

Hofferth, S. L., Kinney, D., & Dunn, J. (2009). The hurried child: Myth vs. reality. In K. Matsuka & C. Christiansen (Eds.), *Life Balance: Multidisciplinary Theories and Research* (pp. 183-206). Bethesda, MD: AOTA press.

Hofferth, S. L., & Moon, U. J. (2011). Electronic play, study, communication, and adolescent achievement and behavior, 2003-2008. *Journal of Research on Adolescence.*

Hofferth, S. (1999). Public assistance receipt by Mexican American and Cuban American children in native and immigrant families. In D. Hernandez (Ed.), *Children of immigrants: Health, adjustment, and public assistance* (pp. 546-583). Washington, DC: National Academy Press.

Kao, G., & Tienda, M. (1995). Optimism and achievement: The educational performance of immigrant youth. *Social Science Quarterly, 76*(1), 1-19.

Kroneberg, C. (2008). Ethnic communities and school performance among the new second generation in the United States: Testing the theory of segmented assimilation. *Annals, AAPSS, 620,* 138-160.

Larson, R. (1994). Youth organizations, hobbies, and sports as developmental contexts. In R. Silbereisen & E. Todt (Eds.), *Adolescence in context: The interplay of family, school, peers, and work in adjustment* (pp. 46-65). New York: Springer-Verlag.

McNeal, R. B., Jr. (1995). Extracurricular activities and high school dropouts. *Sociology of Education, 68,* 62-81.

Nicholas, T., Stepick, A., & Stepick, C. D. (2008). Here's your diploma, mom! Family obligation and multiple pathways to success. *Annals, AAPSS, 620,* 237-252.

Panel Study of Income Dynamics. (1999, 12 May). *1997 Public Release I documentation* (New Immigrant Sample Addition). Retrieved December 28, 2010, from Panel Study of Income Dynamics: http://psidonline.isr.umich.edu/data/Documentation/Fam/1997/readme.txt.

Passel, J. (2011). Demography of immigrant youth: Past, present, future. *Future of Children, 21*(1), 19-41.

Perreira, K., Harris, K., & Lee, D. (2006). High school completion by immigrant and native youth. *Demography, 43,* 511-536.

Pong, S.-L., & Landale, N. S. (2012). Academic achievement of legal immigrants' children: The roles of parents' pre- and postmigration characteristics in origin-group differences. *Child Development, 83,* 1543-1559.

Portes, A., & Zhou, M. (1993). The new second generation: Segmented assimilation and its variants. *Annals, AAPSS, 530,* 74-96.

Rumbaut, R. (1996). Ties that bind: Immigration and immigrant families in the U.S. In A. Booth, A. Crouter & N. Landale (Eds.), *Immigration and the Family: Research and Policy on U.S. Immigrants* (pp. 3-46). Hillsdale, NJ: Lawrence Erlbaum.

Rumbaut, R. (2005). Turning points in the transition to adulthood: Determinants of educational attainment, incarceration, and early childbearing among children of immigrants. *Ethnic and Racial Studies, 28,* 1041-1086.

Rumbaut, R., & Komaie, G. (2011). Immigration and adult transitions. *Future of Children, 20*(1), 43-66.

Sastry, N., & Pebley, A. R. (2010). Sources of socioeconomic inequality in children's achievement. *Demography, 47,* 777-800.

Settersten, R., Jr., & Ray, B. (2010). What's going on with young people today? the long and twisting path to adulthood. *Future of Children, 20*(1), 19-41.

Simpkins, S., Fredericks, J., Davis-Kean, P., & Eccles, J. (2006). Healthy mind, healthy habits. In A. Huston & M. Ripke (Eds.), *Developmental Contexts in Middle Childhood* (pp. 283-302). New York: Cambridge University Press.

Simpkins, S., Price, C., Quach, A., Starbuck, E., & Delgado, M. (2012). Socioeconomic status, ethnicity, culture, and immigration: Examining the potential mechanisms underlying Mexican-origin adolescents' organized activity participation. *Developmental Psychology, 2012,* 706-721.

Swidler, A. (1986). Culture in action: Symbols and strategies. *American Sociological Review, 51,* 273-286.

Szklo, M., & Nieto, J. (2007). *Epidemiology: Beyond the Basics, 2nd edition.* Jones & Bartlett.

Thomas, K. J. (2009). Parental characteristics and the schooling progress of the children of immigrant and U.S.-born Blacks. *Demography, 46*, 513-534.

Tseng, V. (2006). Unpacking immigration in youths' academic and occupational pathways. *Child Development, 77,* 1434-1445.

Tudge, J., Doucet, F., Odero, D. S., T., Piccinini, C., & Lopes, R. (2006). A window into different cultural worlds: Young children's everyday activities in the United States, Brazil, and Kenya. *Child Development, 77,* 1446-1469.

U.S. Census Bureau. (2012). *Statistical Abstract of the U.S.*. Washington, DC: U.S. Government Printing office.

White, M. J., & Glick, J. E. (2009). *Achieving Anew: How New Immigrants do in American Schools, Jobs, and Neighborhoods.* New York: Russell Sage Foundation.

Woodcock, R., & Mather, N. (1989). *W-J-R Tests of Achievement: Examiner's Manual*. Allen, TX: DLM Teaching Resources. R.W. Woodcock & M.B. Johnson, Woodcock-Johnson Psycho-Educational Battery-Revised).

Table 1. Descriptive Statistics for All Variables by Generation

	1st Generation			2nd Generation			3rd Generation	
	All			All			All	
Variables	**Mean/%**	**Std**	**vs. 3rd**	**Mean/%**	**Std**	**vs. 3rd**	**Mean/%**	**Std**
Girl	54%	0.51		61%	0.49	*	46%	0.50
Age (range 17-23)	19.05	1.17		18.94	1.05	+	19.21	1.33
Income/poverty ratio	2.00	1.45	***	2.53	2.28	**	3.38	2.57
Number of children in the HH	2.62	1.29	+	2.61	1.33	*	2.27	1.04
Family structure								
Single parent family	13%	0.34	+	13%	0.34	**	27%	0.44
Parent education								
Less than high school	59%	0.50	***	61%	0.49	***	20%	0.40
High school	3%	0.16	***	19%	0.40	*	33%	0.47
Some college or more	38%	0.49		20%	0.40	***	48%	0.50
Whether had a child or not	5%	0.22	**	10%	0.30	+	18%	0.38
Parent expectation for child's education								
4-year college or more	85%	0.37	***	69%	0.46	*	57%	0.50
Parents' English proficiency	2.24	1.56	***	2.80	1.58	***	5.00	0.00
Race/ethnicity								
White	10%	0.31	***	6%	0.23	***	45%	0.50
Black	0%	0.00	***	7%	0.25	***	36%	0.48
Latino	69%	0.47	***	71%	0.46	***	18%	0.39
Asian	21%	0.41	**	16%	0.37	***	1%	0.11
Child Activities (Weekly hours)								
Video games	1.05	2.43	*	1.63	3.86		2.49	5.77
Computer games	0.74	2.51		0.99	4.57		0.91	3.84
Television	21.41	15.36	**	13.40	9.17		13.95	10.85
Visiting	2.91	5.61		2.55	5.06		3.02	6.27
Read	0.96	2.04		1.32	2.67		0.88	2.01
Study	5.93	5.98	*	6.42	7.69	***	3.30	4.45
Household work	3.50	4.77		2.90	3.93		2.61	3.42
Sports	2.33	4.28		2.32	4.32	*	3.69	6.47
Music	0.31	1.16		0.40	1.77		0.39	1.37
Academic achievement								
Passage comprehension	101.41	13.00		98.62	14.06	**	104.54	14.86
Applied problems	104.18	17.72		102.02	17.54	*	107.78	17.62
Young Adult (17-23 years old)								
HS graduation	95%	0.22	**	91%	0.28	*	82%	0.39
Currently in college	77%	0.43	*	64%	0.48		56%	0.50
Ever criminal record	5%	0.22	***	10%	0.30	***	26%	0.44
Working or studying	95%	0.22	***	83%	0.38		78%	0.41
Self-sufficient	12.26	3.93		12.09	4.47	+	13.06	4.22
N	39			104			160	

*** p< .001, ** p< .01, * p< .05, + p<.10 two-tailed test

Table 2. Mean Hours in Child Activities by Generation and Gender

	1st Generation					2nd Generation					3rd Generation				
	Boys		Girls		boys	Boys		Girls		boys	Boys		Girls		boys
Variables	Mean/%	Std	Mean/%	Std	vs. girls	Mean/%	Std	Mean/%	Std	vs. girls	Mean/%	Std	Mean/%	Std	vs. gi
Child Activities (Weekly hours)															
Video games	2.19	3.25	0.07	0.33	*	3.76	5.44	0.24	0.87	***	4.12	7.29	0.54	1.71	***
Computer games	1.16	3.17	0.39	1.78		1.83	6.93	0.44	1.74		0.83	3.31	1.00	4.40	
Television	16.97	8.49	25.22	18.82	+	12.69	11.20	13.87	7.62		14.24	10.84	13.61	10.93	
Visiting	3.12	6.80	2.73	4.53		1.67	3.68	3.13	5.74		2.45	6.16	3.70	6.37	
Read	0.62	1.74	1.25	2.27		1.34	2.98	1.30	2.48		0.87	2.02	0.89	2.02	
Study	5.64	6.60	6.18	5.55		5.62	6.46	6.94	8.40		2.87	4.09	3.82	4.81	
Household work	2.21	4.24	4.60	5.01		2.56	3.81	3.12	4.03		1.88	2.19	3.47	4.32	**
Sports	3.97	5.58	0.93	1.98	*	3.61	5.41	1.49	3.21	*	5.61	7.83	1.40	3.07	***
Music	0.00	0.00	0.58	1.55		0.64	2.22	0.25	1.40		0.39	1.54	0.39	1.14	
N	18		21			41		63			87		73		

*** p< .001, ** p< .01, * p< .05, + p<.10 two-tailed test

Table 3. Item Response Probabilities for Four-class model by Gender With Covariates of Child Age; Probability of Endorsing Item Given Latent Class

	Measurement invariance[b]				No measurement invariance[c]							
	All children				Boys				Girls			
	1	2	3	4	1	2	3	4	1	2	3	4
Class Membership Probabilities												
	0.17	0.12	0.54	0.16	0.30	0.09	0.05	0.56				
	0.48	0.04	0.00	0.48					0.02	0.03	0.51	0.44
Item Response Probabilities												
Any activity	trad	active	sport/ga	seden	trad	active	social	seden	seden	active	social	trad
Games	0.08	0.44	0.47	0.04	0.16	0.44	0.18	0.43	0.60	0.56	0.05	0.01
Reading	0.17	0.94	0.01	0.16	0.13	0.92	0.21	0.08	0.01	0.88	0.13	0.22
Study	0.83	0.76	0.53	0.46	0.68	0.77	0.03	0.58	0.08	0.98	0.36	0.99
Household work	0.62	0.18	0.27	0.32	0.75	0.22	0.31	0.15	0.95	0.03	0.32	0.57
TV	0.89	0.50	0.83	0.88	0.91	0.32	0.53	0.86	0.99	0.99	0.89	0.84
Visiting	0.00	0.05	0.09	0.29	0.12	0.00	0.61	0.06	0.01	0.01	0.28	0.00
Sports	0.18	0.33	0.34	0.13	0.23	0.33	0.83	0.27	0.02	0.23	0.14	0.16
Music	0.16	0.21	0.00	0.00	0.09	0.38	0.00	0.00	0.89	0.00	0.00	0.13
Covariate of Child Age												
B	Boy	-0.10	0.06	-0.04		-0.05	0.27	0.11				
Odd ratio		0.91	1.06	0.96		0.96	1.31	1.12				
B	Girl	0.12	-0.01	-0.03						0.46	0.05	0.09
Odd ratio		1.13	0.99	0.97						1.58	1.05	1.10

[a] A baseline latent class model with three classes with covariate of child age.

[b] Adding child's sex as a grouping variable, all parameters constrained to be equal across the variable of child's sex.

[c] Adding child's sex as a grouping variable, all parameters freely estimated across the variable of child's sex.

Table 4. Multinomial Logistic Regression of Activity Classes on Immigrant Generation, All, Boys, and Girls

Variables	All												Boys												Girls											
	Model 1				Model 2				Model 3				Variables	Model 1				Model 2				Model 3				Model 1				Model 2				Model 3			
	b	SE	*p*	OR	b	SE	*p*	OR	b	SE	*p*	OR		b	SE	*p*	OR	b	SE	*p*	OR	b	SE	*p*	OR	b	SE	*p*	OR	b	SE	*p*	OR	b	SE	*p*	OR
Class: Active Learner													**Active Learners**																							
Constant	-1.23	0.30	***		12.96	6.48	*		16.50	7.56	*		Constant	-0.77	0.49			16.10	7.86	*		17.08	8.00	*		-2.55	0.52	***		-8.93	7.53			-9.00	8.04		
Immigrant generation													Immigrant generation																							
1st generation	-0.23	0.71		0.79	1.63	0.99	+	5.09	0.19	1.38		1.21	1st generation (ref)																							
2nd generation	-0.45	0.49		0.64	0.27	0.62		1.32	-0.49	0.97		0.61	2nd generation (ref)																							
3rd generation (ref)													3rd generation	-0.71	0.65		0.49	-1.54	0.77	*	0.21	-1.14	0.99	*	0.32	-1.04	1.14		0.35	-1.04	1.29		0.35	-0.36	1.60		0.70
Class: Sports/Games													**Social**																							
Constant	0.14	0.20			-3.33	3.84			-3.30	4.21			Constant	-1.18	0.57	*		14.70	11.13			16.44	11.15			-0.67	0.24	**		-0.36	3.09			-0.23	3.11		
Immigrant generation													Immigrant generation																							
1st generation	0.07	0.42		1.07	2.58	1.07	*	13.18	2.10	1.31		8.19	1st generation (ref)																							
2nd generation	-0.68	0.32	*	0.51	-0.21	0.54		0.81	-0.28	0.95		0.75	2nd generation (ref)																							
3rd generation (ref)													3rd generation	-1.56	0.93	+	0.21	-2.02	1.05	+	0.13	-0.88	1.56		0.42	0.62	0.34	+	1.85	0.67	0.38	+	1.95	0.94	0.52	+	2.55
Class: Sedentary													**Sedentary players**																							
Constant	-0.13	0.21			0.07	2.74			1.36	2.90			Constant	1.02	0.32	**		1.96	2.91			2.18	2.97			-3.24	0.72	***		-4.67	11.25			-4.03	11.72		
Immigrant generation													Immigrant generation																							
1st generation	-0.49	0.51		0.62	-0.44	0.55		0.64	0.12	0.76		1.13	1st generation (ref)																							
2nd generation	-0.33	0.32		0.72	-0.35	0.36		0.71	0.07	0.53		1.07	2nd generation (ref)																							
3rd generation (ref)													3rd generation	-0.60	0.40		0.55	-1.01	0.48	*	0.36	-0.83	0.70		0.44	-0.34	1.24		0.71	-0.97	1.47		0.38	-0.67	1.65		0.51
*** p< .001, ** p< .01, * p< .05, + p<.10 two-tailed test													*** p< .001, ** p< .01, * p< .05, + p<.10 two-tailed test													*** p< .001, ** p< .01, * p< .05, + p<.10 two-tailed test											
N=301													N=146													N=155											
a The baseline category is 'Traditional learners'.													a The baseline category is 'Traditional learners'.													a The baseline category is 'Traditional learners'.											
Controls in Model 2 include gender, age, income/poverty, family size, family structure, and parental education																																				
Controls in Model 3 include Model 2 controls plus parental educational expectation, English proficiency and race/ethnicity																																				

Tables 5-8. Logistic Regression for Early Adult Outcomes, All

Table 5: High school graduation	**Model 1**				**Model 2**				**Model 3**				**Model 4**			
	b	**SE**	***p***	**OR**	**b**	**SE**	***p***	**OR**	**b**	**SE**	***p***	**OR**	**b**	**SE**	***p***	**OR**
Constant	1.48	0.21	***		3.86	2.95			4.94	3.36			-3.09	4.82		
Immigrant generation (ref. 3rd)																
1st generation	1.09	0.70		2.97	1.47	0.77	+	4.37	0.55	1.12		1.73	0.25	1.21		1.28
2nd generation	0.81	0.42	+	2.24	1.12	0.51	*	3.05	0.52	0.83		1.69	0.32	0.93		1.37
Girl					0.54	0.39		1.72	0.49	0.40		1.63	-0.78	0.86		0.46
Age					-0.17	0.15		0.84	-0.18	0.16		0.83	0.05	0.18		1.06
Income/poverty ratio					0.19	0.15		1.21	0.17	0.16		1.18	0.13	0.18		1.14
Number of children in the HH					-0.10	0.16		0.91	-0.09	0.16		0.91	0.09	0.20		1.09
Single parent family					-1.08	0.45	*	0.34	-1.17	0.50	*	0.31	-0.91	0.55		0.40
Parent education (ref. Less than HS)																
High school					0.58	0.50		1.79	0.40	0.52		1.49	0.59	0.60		1.81
Some college or more					1.53	0.59	**	4.63	0.99	0.62		2.70	0.92	0.74		2.51
Parent expectation for child's education																
4-year college or more									1.40	0.44	**	4.04	0.93	0.48	+	2.52
Parents' English proficiency									-0.23	0.26		0.79	-0.29	0.29		0.75
Race/ethnicity (ref. White)																
Black									0.27	0.60		1.31	0.40	0.68		1.49
Latino									-0.43	0.66		0.65	0.04	0.78		1.04
Asian									-0.63	1.12		0.53	-0.74	1.26		0.48
Whether had a child or not													-2.16	0.54	***	0.12
Childhood activity patterns (ref. Traditional learners)																
Active learners													-1.28	1.08		0.28
Sports/games													-1.90	0.96	*	0.15
Sedentary players													-0.03	0.65		0.97
Academic achievement																
Reading comprehension													0.03	0.02		1.04
Applied problems													0.02	0.02		1.02
*** p< .001, ** p< .01, * p< .05, + p<.10 two-tailed test																
N=271																

Table 6: Enrolled in college	Model 1				Model 2				Model 3				Model 4			
	b	SE	*p*	OR	b	SE	*p*	OR	b	SE	*p*	OR	b	SE	*p*	OR
Constant	0.26	0.17			6.84	2.63	**		7.17	2.83	*		1.98	3.70		
Immigrant generation (ref. 3rd)																
1st generation	1.04	0.45	*	2.83	1.69	0.54	**	5.42	0.55	0.74		1.74	0.56	0.78		1.76
2nd generation	0.39	0.28		1.48	1.01	0.37	**	2.74	0.10	0.56		1.10	0.24	0.61		1.27
Girl					0.36	0.29		1.44	0.34	0.30		1.40	0.40	0.50		1.50
Age					-0.42	0.14	**	0.66	-0.41	0.14	**	0.66	-0.31	0.16	*	0.73
Income/poverty ratio					0.20	0.10	*	1.23	0.18	0.11	+	1.20	0.16	0.11		1.17
Number of children in the HH					-0.07	0.13		0.93	-0.04	0.13		0.96	-0.02	0.15		0.98
Family structure (ref. Two-parent family)																
Single parent family					0.05	0.39		1.06	0.24	0.42		1.27	0.54	0.46		1.72
Parent education (ref. Less than HS)																
High school					0.14	0.39		1.15	0.28	0.43		1.32	0.24	0.46		1.27
Some college or more					1.65	0.44	***	5.19	1.52	0.48	**	4.57	1.36	0.52	**	3.91
Parent expectation for child's education																
4-year college or more									0.67	0.33	*	1.96	0.24	0.36		1.27
Parents' English proficiency									-0.16	0.19		0.85	-0.18	0.20		0.83
Race/ethnicity (ref. White)																
Black									-0.42	0.45		0.66	-0.32	0.49		0.72
Latino									0.26	0.50		1.29	0.49	0.54		1.64
Asian									0.75	0.82		2.11	0.36	0.86		1.44
Whether had a child or not													-1.49	0.49	**	0.23
Childhood activity patterns (ref. Traditional learners)																
Active learners													0.35	0.80		1.42
Sports/games													-0.18	0.55		0.83
Sedentary players													-0.14	0.40		0.87
Academic achievement																
Reading comprehension													0.03	0.02	+	1.03
Applied problems													0.01	0.01		1.01
*** p< .001, ** p< .01, * p< .05, + p<.10 two-tailed test																
N=271																

Table 7: Working and/or studying	Model 1				Model 2				Model 3				Model 4			
	b	**SE**	***p***	**OR**	**b**	**SE**	***p***	**OR**	**b**	**SE**	***p***	**OR**	**b**	**SE**	***p***	**OR**
Constant	1.23	0.20	***		0.99	2.71			2.46	2.88			-5.06	3.97		
Immigrant generation (ref. 3rd)																
1st generation	1.34	0.69	+	3.81	2.05	0.74	**	7.74	1.30	0.96		3.68	1.39	0.99		4.01
2nd generation	0.29	0.34		1.34	0.95	0.42	*	2.58	0.44	0.66		1.55	0.62	0.70		1.86
Girl					-0.07	0.34		0.94	-0.05	0.33		0.95	-0.57	0.62		0.56
Age					-0.08	0.14		0.92	-0.08	0.14		0.92	0.09	0.15		1.10
Income/poverty ratio					0.26	0.13	*	1.30	0.22	0.13	+	1.25	0.23	0.14		1.26
Number of children in the HH					0.08	0.14		1.09	0.09	0.14		1.10	0.18	0.16		1.20
Family structure (ref. Two-parent family)																
Single parent family					-0.20	0.42		0.82	0.01	0.45		1.01	0.26	0.48		1.30
Parent education (ref. Less than HS)																
High school					0.84	0.44	+	2.33	0.92	0.46	*	2.50	0.99	0.49	*	2.69
Some college or more					1.36	0.50	**	3.91	1.34	0.53	*	3.82	1.01	0.56	+	2.76
Parent expectation for child's education																
4-year college or more									0.25	0.37		1.29	-0.15	0.40		0.86
Parents' English proficiency									-0.22	0.21		0.80	-0.23	0.22		0.79
Race/ethnicity (ref. White)																
Black									-0.70	0.50		0.50	-0.52	0.55		0.59
Latino									-0.63	0.57		0.53	-0.25	0.62		0.78
Asian									-0.05	1.03		0.96	-0.47	1.05		0.63
Whether had a child or not													-0.83	0.45	+	0.44
Childhood activity patterns (ref. Traditional learners)																
Active learners													0.10	1.00		1.10
Sports/games													-0.87	0.69		0.42
Sedentary players													-0.32	0.46		0.73
Academic achievement																
Reading comprehension													0.03	0.02	+	1.04
Applied problems													0.01	0.02		1.01
*** p< .001, ** p< .01, * p< .05, + p<.10 two-tailed test																
N=271																

Table 8: Criminal history	Model 1				Model 2				Model 3				Model 4			
	b	SE	*p*	OR	b	SE	*p*	OR	b	SE	*p*	OR	b	SE	*p*	OR
Constant	-1.12	0.19	***		-3.78	2.87			-2.48	3.30			-0.26	4.08		
Immigrant generation (ref. 3rd)																
1st generation	-1.45	0.69	*	0.24	-1.55	0.75	*	0.21	-0.97	1.06		0.38	-0.80	1.06		0.45
2nd generation	-1.04	0.39	**	0.35	-1.02	0.47	*	0.36	-0.43	0.77		0.65	-0.38	0.77		0.69
Girl					-1.61	0.39	***	0.20	-1.62	0.39	***	0.20	-1.65	0.59	**	0.19
Age					0.17	0.14		1.18	0.16	0.15		1.17	0.09	0.16		1.09
Income/poverty ratio					-0.16	0.11		0.86	-0.09	0.11		0.91	-0.06	0.11		0.94
Number of children in the HH					0.20	0.15		1.22	0.13	0.16		1.14	0.14	0.17		1.15
Family structure (ref. Two-parent family)																
Single parent family					0.40	0.43		1.49	0.31	0.46		1.36	0.17	0.47		1.19
Parent education (ref. Less than HS)																
High school					0.27	0.49		1.31	0.37	0.52		1.45	0.43	0.53		1.54
Some college or more					-0.36	0.52		0.70	0.10	0.58		1.10	0.07	0.60		1.07
Whether had a child or not													1.11	0.51	*	3.03
Parent expectation for child's education																
4-year college or more									-0.97	0.41	*	0.38	-0.94	0.43		0.39
Parents' English proficiency									-0.17	0.26		0.84	-0.23	0.26		0.80
Race/ethnicity (ref. White)																
Black									0.35	0.50		1.42	0.25	0.54		1.28
Latino									-0.69	0.66		0.50	-0.96	0.69		0.38
Asian									-0.70	1.07		0.50	-0.92	1.08		0.40
Childhood activity patterns (ref. Traditional learners)																
Active learners													0.38	0.80		1.46
Sports/games													-0.25	0.60		0.78
Sedentary players													-0.67	0.57		0.51
Academic achievement																
Reading comprehension													0.00	0.02		1.00
Applied problems													-0.01	0.02		0.99
*** p< .001, ** p< .01, * p< .05, + p<.10 two-tailed test																
N=271																