The Social Organization of Time-Use in Native and Immigrant Children

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Abstract

There is a large body of literature examine how immigrant children fare in the hose society. However, relatively few studies directly examine the immigrant and native children's differences in time-use in details. This study used the nationally-representative time-use data from the Longitudinal Study of Australian Children to quantify and compare levels of time investments between native and immigrant children. Results show substantial native and immigrant differences in children's time-use, after controlling for a wide range of socio-demographic variables. Specifically, immigrant children spent substantially more time in educational activities, personal care, and organized lessons but they spent less time in free play and organized sports as compared to native children. Yet, such high level of time maternal investments was only observed among non-Anglophone immigrant children. Finally, length of stay did not explain the gaps in time-use suggesting that acculturation may not completely explain the why immigrant children use their time differently.

Introduction

Over the past few decades, many developed countries have experienced a high level of immigration (OECD 1997; Mayda 2010), resulting in substantial number of children lived in families with at least one parent is immigrant (often called as children of immigrant or immigrant children in the immigration literature). In United States, estimates suggest that approximately one out of every four children under age 18 lived in immigrant families (Passel 2012). Data from Australia show that about one third of children under age 18 are children of immigrants (Katz and Redmond 2010). The increasing population of immigrant children worldwide spurs research and generates public concerns because understanding how children of immigrants fare is not only important for science but also significant for public policy that aims to promote their well-being and development as well as their integration into the host society.

A large volume of literature has examined immigrant children's health and educational outcomes over the life course in comparison to their native counterparts. For example, studies have investigated the differences in native and immigrant children's birth outcomes (Landale, Oropesa, and Gorman 1999), breastfeeding status (Gibson-Davis and Brooks-Gunn 2006), nutritional status (Kalil and Chen 2008; Mendoza and Dixon 1999), health behaviors (Harris 1999), deviant behaviors (Harris 1999), school readiness (Magnuson, Lahaie, and Waldfogel 2006), and educational attainment (Perreira, Harris, and Lee 2006). While results from these studies provide considerable insights into how immigrant children, particularly from those whose parents came from developing countries, fare in the host society, relatively few studies have investigated the native and immigrant differences in everyday activities and time-use. Studying children's activities and time-use is important because how children structure their everyday life fundamentally determine the health and education outcomes (Vandewater, Shim, and Caplovitz

2004). In addition, insights from socialization theory and social stratification research suggest that social status is a key factor in shaping children's activities and time-use (Bianchi and Robinson 1997; Hofferth and Sandberg 2001; Lareau 2011; Larson and Verma 1999) and thus point to the potential importance of immigration status in affecting young children's everyday activities and time-use.

This project aims to fill this research gap by examining the native and immigrant differences in children's everyday activities and time-use. Using the Longitudinal Study of Australian Children, I examine children's activities and time-use in native-born and immigrant children. Furthermore, the data has children's time diary for each wave of survey, allowing for detailed investigation of trajectories of time-use over the native and immigrant children's developmental pathways. Results from this study will make significant contributions to studies of children of immigrant and to a boarder conceptualization of social stratification of time-use in children.

Background

Children's Time-Use: The healthy development of a child requires substantial parental investments. In literature, the hallmark and broad conceptualization of parental investments is to provide a set of developmental contexts that are associated with children's well-being and learning (Bronfenbrenner 1979). Each context engages children in distinct matrix of activities and interactions that provide children with a particular set of socialization experiences (Lareau 2011). These socialization experiences, either positive or negative, have considerable implications on the developmental outcomes in children. Some are associated with the learning of specific knowledge and skills. Others may carry with liabilities and risks that undermine

children's health and well-being. A family that structures its children's time to provide them with specific socialization experiences that offer chances for developing intellectual, social, and emotional competencies is making long-term investment in the economic future and health of its children.

The amount of time children spent in a specific activity provides a proxy of their degree of exposure to the developmental context and offers a rough index of their absorption of the socialization experiences (Hofferth and Sandberg 2001). Studies of children's time often classify everyday activities into three board group: sleep and rest, schooling, and leisure. Among them, children's time spent in leisure activities receives the most attention in social sciences because children's spent more or less equal amount of time in school and prior research suggested that the amount of time children spent in various leisure activities was associated with children's educational and health outcomes (Danner 2008; Henderson 2007). In children's time-use literature, leisure can be further divided into four subcategories: (1) out-of-school learning activities such as reading, doing homework, (2) media use such as watching TV, listening to music, (3) free play such as playing in the park, (4) organized activities such as lessons, organized sports (Baxter 2007; Larson and Verma 1999). Each category represents children's exposure to a different developmental context and socialization experience.

Like other social resources, children's time in an activity is never equally distributed across groups within a population. A child's family background deeply structures his or her participation and time spent in an activity (Baxter 2007; Larson and Verma 1999). For example, prior studies consistently find that high SES children spend more time in out-of-school learning and organized activities (Baxter 2007) whereas low SES children spend more time in media use and have more time for free play (Baxter 2007). Because many organized activities (such as

music classes, painting lessons, or organized sports) are costly, poor families are less likely to afford to expose their children to these learning experiences. In addition, high SES parents often have more education. They may place more values on child education and actively monitor children's learning opportunities after school more frequently by reading to children or helping children's with homework assignments. Taken together, the resourcefulness and parents' education make children from high SES families live in a more structured life (Lareau 2011) such that they spend more time in learning and organized activities.

Beyond socioeconomic status, maternal employment and household structure are also influential factors of children's time-use, particular leisure activities. Studies show that children whose mothers employ full-time watch more TV and spend more time in day care center than children whose mothers work part-time or not working (Bianchi and Robinson 1997; Hofferth and Sandberg 2001). These children also tend to spend less time reading (Hofferth and Sandberg 2001). Because mothers are often the primary caregiver, it is thus not surprising that children with employed mothers spend less time in learning and more time in media and play. Similar to maternal employment, single-mothers may find it more difficult to actively monitor children's learning and have fewer resources to invest children in organized activities, As such, children in single-parent families also spend less time in learning-related activities but more time in media use and few play (Hofferth and Sandberg 2001).

Immigration and Children's Time-Use: While prior studies have examined various social process that affect children's time in a number of key activities (Bianchi and Robinson 1997; Hofferth and Sandberg 2001), relative few studies consider parental immigration status as an influential factor in shaping children's time-use. Using time-diary data from the Longitudinal Study of Australian Children, Baxter (2007) find that children with immigrant mothers spend less

time in leisure activities. However, Baxter (2007) did not distinguish different types of leisure activities. Thus, little is known about which type of activity is responsible for the observed gap in leisure time between native and immigrant children. Additionally, Baxter (2007) provides no theoretical explanation of the social distribution of children's time. It is less clear why immigration status should be considered as a key determinant in studying children's time-use.

This study argues that immigration status can deeply affect children's time-use at every developmental stages for two main reasons. First, immigrant families face a number of structural constraints that challenges the healthy development of children of immigrants (Zhou 1997) and may potentially influence children's participation and time spent in an activity. For example, immigrants are more likely to be poor and low educated, particularly for those from less developed countries (Borjas 2001; Van Hook, Brown, and Kwenda 2004). This may lead to the decrease of parental investments in organized activities and parenting supervision of out-of-school learning activities which in turn result in less time spent in these activities. In addition, immigrant parents from less developed countries are more likely to have non-standard work schedules due to their likelihood of holding manufacturer jobs or working in service industry (Giuntella 2012). This may further lead to the reduction of parental supervision and the increase of time for free play. However, immigrants are more likely to marry and thus children of immigrants are more likely to live in two-parent families than their native counterparts (Landale and Oropesa 2007). Family structure thus may be a source of resilience for immigrant children to compensate their socioeconomic disadvantages. As such, immigrant children may still under the supervision of their parents if one of them work in non-standard hours.

Second, immigrant parents' parenting styles and conceptualization of how children should use their time, particularly out-of-school time, may be different from that of native

parents. For example, East Asian and Indian children may spend more time in homework and reading because of the emphasis on education achievement in their host societies' culture (Larson and Verma 1999). They may also spend less time in organized sports because it carry little value or prestige (Larson and Verma 1999). Children from Latin America or East Asia background may spend more leisure time on family-related activities and reduce amount of time in free play given the cultural emphasis on extended family and close ties among relatives (Foner 1997). As such, depending on country of origin, norms and culture of immigrants may reinforce or counteract the structural challenges face by children of immigrants and affect their participation and time spent in specific activities.

Taken together, because of immigrant families' unique social position in the host society's social stratification system and cultural heritage, I expect children of immigrants spend their time differently as compared to children with native-born parents. It is also interesting to note that if the effect of immigration on children's time-use is totally operated through its influence on these structural factors, the differences in time-use between immigrant and native youth should disappear after these factors have been taken into consideration.

Purpose of the Study: Based on the aforementioned discussion, this study aims to answer the following two important research questions. First, I examine how immigrant children spend their time as compared to native children. Second, I examine whether structural constraints and language proficiency can account for the differences in time-use between immigrant and native children. Results from this study provide the very first analysis of time-use in immigrant and native school-aged children from a population perspective.

Methods

Sample: Data used in this analysis come from Growing Up in Australia: The Longitudinal Study of Australian Children (LSAC; Australian Institute of Family Studies [AIFS], 2009). Information about the study measures came from the LSAC Data User Guide (AIFS, 2009). LSAC is a nationally representative sample of Australian children. LSAC was designed to focus on family and social issues and capture information about child development. Data come from direct assessments of child outcomes as well as surveys of parents and, when applicable, teachers. Data were collected on a wide range of topics including family socioeconomic status, family process, children's mental and physical health and their child care, home, school, and everyday experiences. LSAC follows two cohorts of Australian children, a birth cohort of children between 0-12 months in 2004 and a kindergarten cohort, between 4 and 5 years old in 2004.

The present study focused on the kindergarten cohort. The recruitment of children took place between March and November of 2004, and families were interviewed every two years. The kindergarten cohort started with approximately 5,000 children. Currently, there are three waves of data available. The data collection began at 4-5 years old, 6-7 years old, and 8-9 years old. At the third wave of the interview, the retention rates of the main survey were 76% for the kindergarten cohort (AIFS 2013). The LSAC sample, when weighted, is representative of a recent cohort of Australian children.

My analytical sample is limited to the second and third wave of the surveys because, at this time, most children were already in formal schooling. I also eliminated children who did not have time-use data. Because there are missing data in time diary data, not all children have the completed 24 hours time diary. I thus followed Baxter's (2007) suggestion and further eliminated children who missed 90 minutes of time diary data. For missing values of covariates, I used multiple imputation to recover the missing information (Allison 2001). After accounting for

these issues, the final analytical sample for the present study was 3,068.

These data offer several advantages for the proposed research questions. First, the time diary approach is a relatively accurate method for measuring children's time-use as compared to asking mothers to estimate the total amount of time that children spend in each activity (Juster, Ono, and Stafford 2003). Few other nationally-representative surveys have collected information on children's time-use. Second, the time-use diary was filled out by mothers which enabled us to gain insights into children's time-use when they were too young to complete the time diary by themselves. In addition, because mothers completed the time diary, these data also provided fairly accurate estimates of maternal time with children. Finally, the survey's large sample size facilitated comparisons among immigrant families from different countries of origin.

Children's Activities and Time-Use: One innovative feature of the LSAC dataset was its child time-diary data. Traditionally, surveys asked parents to estimate how much time children spent on certain activities such as watching television. This method, despite simple, was problematic because parents might report more time on desirable activities (Hofferth 1999). Furthermore, the estimates might be poor when an activity was infrequent (Marini and Shelton 1993). Recent studies on time-use have demonstrated the reliability of time-diary as a better way to collect information (Hofferth and Sandberg 2001). For each wave of the survey, the LSAC asked mothers to collected time-diary for every child for two full days—one weekday and one weekend day. The time-diary asked questions about the child's flow of activities over a 24 hours period beginning at midnight of the selected day. The time-diary was divided into 96 blocks with each block represented 15 minutes long. The questionnaire asked the primary activity that was going on at that time period, with whom, and where the activity was taking place. The LSAC time-diary listed more than 20 activities, including sleeping, eating, crying, watching TV, reading,

listening music, organized activities, indoor play, visiting people, outdoor activities etc. Appendix provides detailed information of the activities list in the time-diary.

Using these data, I computed the amount of time that each child spent on specific activities on weekday and on weekend day. Next, I estimated weekly time that each child spent on specific activities by multiplying weekday time by 5 and weekend day time by 2. In addition, because the LSAC time-diary asked whom the child with when doing primary activities, I was able to compute maternal and paternal time with children. This allowed for further examining maternal and paternal time investments in children. However, activities listed in time-diary change as children age. Activities that are common (e.g., breastfeeding) at young age may not be relevant when children grow up. Thus, to analyze the trajectory of children's time-use, I grouped children's activities into eight categories following the literature (Hofferth and Sandberg 2001; Larson and Verma 1999), including (1) sleep and rest, (2) personal care, (3) media use, (4) educational activities, (5) free play, (6) household labor, (7) organized sport, and (8) organized lessons.

Immigration Status: At first wave of the survey, mothers and fathers were asked their country of origin. I considered the child as child of immigrant if either the mother or the father was born outside of Australia. Furthermore, because the LSAC provided detail information of immigrant parents' home country, I further coded children of immigrant into two categories: whose parents came from Anglophone countries (i.e., Canada, New Zealand, United Kingdom, and United States) and the others.

Covariates: Because many characteristics of children and families are associated with children's time spent in activities, several potential confounding variables are included in the analyses. Full control variables included child age, gender, maternal age, maternal education (i.e.,

less than high school, high school, some college, and bachelor and more), maternal hours of employment, whether mothers work in non-standard schedule, household income, family structure (i.e., two-parent family, single-parent family, cohabitation), Aboriginal/Torres Strait Islander status, urban residence, and state of residence.

Analytical Strategy: I used the OLS regressions to link immigration status to children's time-use at each wave of the survey. The unit of analysis was individual's time. I stared with modeling children's time use as a function of immigration status and child demographic characteristics (model 1). Next, the model 2, I added socioeconomic status and other structural factors. All regression analyses were weighted. The following equations describe the aforementioned models:

$$Time = \beta_0 + \beta_1 Immigration + \beta_2 Child\ Demographics + \varepsilon \cdots\cdots (1)$$

$$Time = \beta_0 + \beta_1 Immigration + \beta_2 Child\ Demographics + \beta_3 Structural\ Factors + \varepsilon \cdots\cdots (2)$$

Results

Descriptive Statistics: Table 1 provides weighted descriptive statistics for the 3,068 children and compares native children and immigrant children. Overall, 23% of children in the sample were children of immigrants. More specifically, about 8% were from Anglophone countries and approximately 19% were from non-Anglophone countries. About 48% of the children were female. The mean of the child health rating by mothers was 4.4. About 2% were born to parents with aboriginal or Torres Strait Islander status. On average, children in the sample had 1.5 siblings and 65% of them lived in the metropolitan area. The mean maternal age at the time of interview was 37 years old and the mean working hours for mothers was 16.5 hours per week. Nearly 20% of mothers without a high school diploma, 11% were single, 7%

were cohabitating, and 15% work in nonstandard schedules. The average household income for children in the sample was 1,696 Australian dollars per week.

The second and third columns show substantial differences in social and demographic characteristics between native and immigrant children. Immigrant children were more likely to live in two-parent families and in families with higher household income. They were also more likely to have mothers with college education and live in the metropolitan area. With respect to maternal employment, children of immigrants tended to have mothers that worked fewer hours and were less likely to work in nonstandard schedules as compared to their native counterparts. In contrast to the socioeconomic disadvantages of immigrant children in the United States, immigrant children in Australian appear to have better family socioeconomic status than their native peers.

Table 2 presents the means of children's time in each activity. Panel A shows results at aged 6-7 and Panel B shows results at aged 7-8. Again, the first column shows results for the full sample and the remaining column presents results by immigration status. On average, children spent 4,519 minutes per week sleep and rest. This was equivalent to 645 minutes (or 10.7 hours) per day. Interestingly, Australian children also spent substantial time doing personal care. Each week, about 1025 minutes (or 146 minutes per day) of time were used in eating, bathing, or other healthcare activities. In addition, children spent 802 minutes in total in media (including watching TV, listening to CD, or using computer) and another 782 minutes per week in free play. As such, Australian children aged 6-7 spent more than 3.7 hours per day using media and playing. With respect to education-related activities, children used about 247 minutes per week reading books and spent approximately 200 minutes per week in organized activities. Australian children spent more time in organized sports than organized lessons. Finally, children also spent about

120 minutes per week helping household chores.

Moving to the Panel B, there were some changes in children's time use. Australian children at aged 7-8 still spent substantial amount of their time in sleep and rest (4447 minutes per week), personal care (1014 minutes per week), media use (957 minutes per week), and free play (722 minutes per week). Yet, time used for sleep and personal care declined but time for media use increased dramatically, from 802 minutes to 957 minutes. In addition, children time for organized activities also increased. Interestingly, time for educational activities decreased slightly. This may be due to the combination of time children's reading by themselves and being read. As children grow, mothers may less likely to read to children such that total time in educational activities decreased.

The second and third columns show mean of children's time in each activity by immigration status. Immigrant children spent less time in sleep and rest, free play, and household labor at aged 6-7 than native children. In contrast, they spent more time in personal care, educational-related activities, and organized lessons. The differences in time-use remained as children grew. At aged 7-8, immigrant children still spent more time in personal care, educational activities, and organized lessons but spent less time in sleep, free ply, household labor, and organized sports than their native peers.

Regression Results: While Table 3 offers considerable insights into the time-use patterns in native and immigrant children, it remains unclear whether such differences are due to immigration status or differences in demographic characteristics and socioeconomic conditions between native and immigrant families. To answer the question, I turned to regression analysis. Table 3 provides results from OLS regression relating children's time-use to immigration status controlling for a wide range of covariates. Results suggest that immigration status was associated

with an increase of time in personal care for 51 minutes, educational activities for 53 minutes, and organized lessons for 43 minutes. Being children of immigrants were also associated with a decrease of free play time by 76 minutes. A number of social and demographic characteristics were associated with children's time-use in the expected directions. For example, maternal education positively correlated with time in educational activities, free play, and organized activities but negatively correlated with time in media use. Increased in maternal hours of work was associated decreased time in personal care, educational activities, and free play. Urban residency positively correlated with time in organized lessons and negatively correlated free play and household labor.

Table 4 shows results from regressions from children aged 7-8. As the table suggests, patterns are very similar. Immigration status was positively associated with an increase of time in personal care by 64 minutes, educational activities by 58 minutes, and organized lessons by 59 minutes and was negatively associated with a decrease of time in free play by 63 minutes, household labor by 20 minutes and organized sports by 48 minutes. Results from Table 3 and Table 4 suggest that children of immigrant spent more time in education-related activities, organized lessons, and personal care. In contrast, native children spent more time in free ply and organized sports. It appears that children of immigrant spent more time on activities that may promote their development whereas native children had more leisure time.

Like immigrants in the United States, the Australian immigrants are a heterogeneous group. Parents from countries whose language and culture are closer to the Australia may organize their children's time differently than those from elsewhere. In addition, parents' parenting styles may change as they acculturate. More recent immigrant parents may be stick to the parenting styles in the home country whereas those stayed for a long period of time may

show little difference in terms of parenting styles as compared to native-born parents. To address this issue, I performed additional regression analyses by analyzing immigrant children's time-use by their parental country of origin. I also accounted for parent's length of stay. Table 5 shows results from such analyses. There are several interesting patterns. First, I found no difference in children's time-use between native children and immigrant children whose parents came from Anglophone countries. Yet, immigrant children with parents from non-Anglophone countries spent more time in personal care, educational activities, and organized lessons and less time in free play and household labor for each wave of the survey. As such, the immigration effects observed in Table 4 were primary due to the differences in time-use between native children and children whose parents came from non-Anglophone countries. Second, the differences remained robust after taking parental length of stay into consideration. Thus, length of stay in Australia did not account for the differences in children's time-use between native children and children with non-Anglophone immigrant parents.

Discussion

Using time-diary data from the Longitudinal Study of Australian Children, this study examined patterns of time-use in native and immigrant children. I found substantial differences in the social organization of time-use between these two groups of children after controlling a wide range of social and demographic variables. Immigrant children spent more time in personal care, educational activities and organized lessons as compared to native children. On the contrary, native children had more time for free play and organized sports. Children of immigrants clearly spent more time in activities that may promote their cognitive development and school performance while native children focused on activities that were good for their mental health

and physical development. Furthermore, the native and immigrant differences in children's time-use were the greatest between native children and children whose parents were from non-Anglophone countries. As such, immigrant children's time were not more organized than native children. However, immigration status, particular country of origin, is an influential factor in shaping children's time-use.

This study uses immigration status and country of origin instead of primary language at home for several reasons. First, while language skills can facilitate immigrants' assimilation into the host society, it by no means eliminates all structural and cultural challenges that immigrants face. For example, the education, healthcare, and social welfare remain quite different across Anglo-Phone countries. Immigrants from other English-speaking countries still need to understand and be familiar with the Australian systems. At such, using country of origin may better capture the constraints face by immigrants. Second, it is difficult to assess immigrant parents' English skills with a binary indicator. Using English at home may not be equivalent as achieving native fluency in English. As such, it is not a good indicator of immigrants' acculturation or degree of adaptation as some studies suggested (Salant and Lauderdale 2003). Finally, I conduct additional analyses by using primary language as the key explanatory variable. Results were similar.

There are several limitations of this study. First, because of the way in which time-use data were collected, the analysis assumed the activity reordered in each time block lasted for 15 minutes. At such, children's time spent in specific activities may be overestimated. Second, the LSAC time-diary did not differentiate between primary activity and secondary activities. More than one activity can be recorded into the time-dairy concurrently. As such, sum of children's time spent in all pre-coded activities may be greater than 24 hours. Third, the analysis assumed

the person the child was with was the primary caregiver in the specific situation. It is possible that not every person the child was with took the responsibility of caring or monitoring the child. Nor do we know the quality of care and interaction in the given time.

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- Rule out discrimination hypothesis: controlling for child mental health and perceptions about friendship and school
- Elaborate the immigration attainment hypothesis: select children's activities that are better for upward mobile (do not think some activities will promote success)
- Discuss the information issue: immigrant mothers from non-Anglophone countries may less likely to get information of certain organized activities

Table 1: Descriptive Statistics of Children in Longitudinal Study of Australian Children, Aged 6-7 (Weighted, N=3,068)

	Full Sample	By Immigration Status	
		Native Children	Immigrant Children
	Mean or Proportion	Mean or Proportion	Mean or Proportion
Immigration Status	0.27	N/A	N/A
Anglophone Countries	0.08	N/A	N/A
Other Countries	0.19	N/A	N/A
Age at Baseline	6.8	6.8	6.8
Female	0.48	0.48	0.46
Child Health Rating	4.4	4.5	4.3
Aboriginal	0.02	0.03	0.01
Number of Siblings	1.5	1.5	1.4
Maternal Age at Baseline	37.4	37.0	38.8
Maternal Education			
<HS	0.20	0.22	0.14
HS	0.12	0.12	0.11
Some College	0.39	0.39	0.39
Bachelor or More	0.29	0.27	0.37
Weekly Household Income	1,696	1,681	1,746
Family Structure			
Married	0.82	0.80	0.88
Single	0.11	0.12	0.08
Cohabitating	0.07	0.08	0.04
Mom Work Hours	16.5	16.8	15.7
Nonstandard Schedule	0.15	0.16	0.12
Urban	0.65	0.59	0.84

Note. Regression should control for states and territory.

Table 2: Children's Time Spent in Each Activity Per Week by Age Period and Immigration Status (Weighted)

		By Immigration Status	
	Full Sample	Native Children	Immigrant Children
	(Minutes)	(Minutes)	(Minutes)
A: Aged 6-7 (N=3,068)			
Sleep/Rest	4,519	4,534	4,474
Personal Care	1,025	1,013	1,063
Media Use	802	794	825
Educational Activities	247	232	295
Play	782	803	717
Household Labor	120	124	108
Organized Sport	117	116	118
Organized Lessons	86	75	121
B: Aged 7-8 (N=2,612)			
Sleep/Rest	4,447	4,459	4,409
Personal Care	1,014	1,002	1,052
Media Use	957	955	962
Educational Activities	217	199	270
Play	722	748	645
Household Labor	146	155	121
Organized Sport	160	169	135
Organized Lessons	131	113	187

Table 3: Results from OLS Regressions Relating Immigration Status to Children's Time Use, Aged 6-7 (Weighted)

	Sleep and Rest	Personal Care	Media Use	Educational Activities	Free Play	Household Labor	Organized Sports	Organized Lessons
Immigration Status	-40.6	51.1***	28.2	53.4***	-76.3**	-7.7	-5.7	42.8**
	(33.2)	(15.8)	(23.2)	(10.0)	(25.6)	(6.8)	(9.1)	(13.7)
Child Age	-116.6*	-9.2	52.3	-40.2*	-116.3**	11.1	42.9***	5.4
	(54.1)	(25.3)	(38.3)	(15.6)	(43.0)	(11.7)	(15.9)	(21.4)
Female	39.1	55.9***	-77.6***	20.7**	-13.2	17.1**	-19.8**	3.9
	(26.2)	(11.9)	(17.8)	(7.5)	(19.6)	(5.4)	(7.2)	(9.4)
Child Health Rating	19.8	-9.5	-39.8**	2.4	58.9***	1.8	6.7	4.5
	(18.1)	(8.2)	(12.1)	(5.1)	(12.8)	(3.6)	(4.9)	(6.6)
Aboriginal	55.2	-20.2	-40.6	-28.2	-63.7	14.9	-51.4**	8.9
	(88.0)	(39.1)	(62.6)	(30.2)	(68.0)	(20.4)	(15.2)	(31.6)
Number of Siblings	9.7	13.3*	-2.3	-6.1	21.6*	11.9***	0.3	4.8
	(14.1)	(6.6)	(10.5)	(4.2)	(10.9)	(3.1)	(4.0)	(6.1)
Maternal Age	-3.0	0.5	6.8**	0.4	4.5*	-0.2	1.5	1.3
	(2.8)	(1.3)	(2.0)	(0.8)	(1.9)	(0.6)	(0.8)	(0.9)
Maternal Education								
HS	3.2	-4.8	-49.1	24.2	72.8*	10.4	22.4	8.8
	(50.9)	(21.7)	(33.2)	(13.1)	(36.7)	(10.2)	(13.3)	(15.2)
Some College	8.4	-5.9	-59.7*	33.7**	38.0	11.5	17.7	21.4
	(40.9)	(18.5)	(28.1)	(11.1)	(30.8)	(8.2)	(10.4)	(12.6)
Bachelor or More	68.9	21.2	-158.9***	83.8***	180***	32.0***	25.4*	48.9**
	(42.2)	(19.7)	(29.1)	(11.6)	(32.6)	(9.1)	(11.2)	(24.6)
Household Income	-11.2	-16.6**	-18.6*	1.7	-4.1	-6.0*	11.3**	0.8
	(12.7)	(6.3)	(8.2)	(4.1)	(10.5)	(2.5)	(3.9)	(4.9)
Family Structure								
Single	29.3	-14.6	38.2	-19.9	-36.6	-5.8	-14.9	9.9
	(43.7)	(20.9)	(32.6)	(12.3)	(32.8)	(9.4)	(11.4)	(17.6)
Cohabitating	2.2	-18.2	34.9	13.9	70.8	-16.6	-4.3	-3.9
	(50.1)	(23.4)	(34.7)	(13.9)	(40.5)	(10.3)	(14.6)	(17.9)
Mom Work Hours	-0.6	-2.2***	-0.5	-0.6*	-1.9**	0.5**	0.1	0.5
	(0.9)	(0.4)	(0.7)	(0.3)	(0.7)	(0.2)	(0.3)	(0.4)
Nonstandard Schedule	-3.6	57.4**	0.7	10.9	-24.7	-3.1	19.1	14.9
	(36.5)	(18.5)	(24.6)	(10.4)	(28.1)	(7.9)	(11.5)	(15.2)
Urban	27.7	-0.6	-22.4	14.4	-59.9**	-17.6**	-7.0	20.2*
	(29.2)	(12.9)	(20.1)	(8.2)	(21.8)	(6.1)	(8.2)	(9.8)

Note. All regressions controlled for states and territory. * $p<.05$, ** $p<.01$, *** $p<.001$.

Table 4: Results from OLS Regressions Relating Immigration Status to Children's Time Use, Aged 7-8 (Weighted)

	Sleep and Rest	Personal Care	Media Use	Educational Activities	Free Play	Household Labor	Organized Sports	Organized Lessons
Immigration Status	-19.7	63.8***	7.1	57.5***	-62.6*	-19.6*	-47.5***	58.6**
	(32.6)	(17.0)	(29.3)	(10.7)	(27.2)	(8.1)	(12.2)	(18.7)
Child Age	-161.9**	-43.8	-2.2	19.2	-198.3***	-2.4	8.6	41.7
	(59.0)	(28.6)	(50.7)	(18.1)	(47.0)	(14.1)	(21.6)	(29.1)
Female	61.4*	70.5***	-91.6***	26.2**	25.9	10.2	-19.4	30.9*
	(27.7)	(13.3)	(22.9)	(8.4)	(21.8)	(6.7)	(10.4)	(13.7)
Child Health Rating	34.2	-19.3	-28.2	-1.0	27.7	5.6	10.6	-1.5
	(21.8)	(10.0)	(18.0)	(6.2)	(15.5)	(4.9)	(7.5)	(9.9)
Aboriginal	-29.2	-10.8	100.0	-35.8	12.1	-5.5	20.1	-1.9
	(88.3)	(47.5)	(95.3)	(36.5)	(75.6)	(26.2)	(42.9)	(37.3)
Number of Siblings	-19.2	16.6*	-4.0	-3.8	25.4*	14.8***	5.3	-5.7
	(18.0)	(7.5)	(12.5)	(4.6)	(11.9)	(3.7)	(5.4)	(6.8)
Maternal Age	-2.0	0.1	1.7	2.3	2.6	-1.7*	3.5**	0.6
	(3.2)	(1.4)	(2.6)	(0.9)	(2.3)	(0.7)	(1.1)	(1.4)
Maternal Education								
HS	-57.6	34.1	-121.6**	23.5	95.6*	0.1	20.9	20.4
	(52.5)	(26.4)	(46.7)	(16.0)	(44.4)	(13.1)	(20.2)	(25.6)
Some College	-73.1	8.1	-138.0	13.9	25.3	6.3	23.9	4.1
	(40.7)	(21.6)	(38.9)***	(13.1)	(33.8)	(10.8)	(16.1)	(20.2)
Bachelor or More	-84.3*	19.1	-202.7***	73.9***	147.2*	20.7	27.7	100.9***
	(40.9)	(22.4)	(40.6)	(13.9)	(35.5)	(11.2)	(16.5)	(23.2)
Household Income (thousand dollars)	-16.3	-8.6	-17.8	-0.6	-6.5	-4.6	10.5*	4.4
	(12.8)	(5.2)	(9.2)	(4.0)	(9.8)	(2.9)	(4.7)	(6.5)
Family Structure								
Single	-10.9	-47.5	-4.4	-34.1*	-77.7*	-20.8	-17.0	-37.4
	(52.9)	(24.4)	(42.6)	(14.3)	(37.7)	(10.9)	(18.7)	(21.8)
Cohabitating	4.8	-8.6	-49.2	-4.2	15.9	-19.3	6.6	24.9
	(51.2)	(25.5)	(43.9)	(15.0)	(44.8)	(13.0)	(20.8)	(29.9)
Mom Work Hours	-0.7	-1.1*	0.3	-1.7***	-1.5*	0.2	0.5	1.1*
	(0.9)	(0.4)	(0.8)	(0.3)	(0.7)	(0.2)	(0.3)	(0.4)
Nonstandard Schedule	32.5	15.9	46.6	34.2**	-14.2	-9.5	7.0	-26.7
	(37.8)	(18.5)	(31.1)	(11.2)	(30.3)	(9.2)	(14.8)	(18.5)
Urban	0.4	-47.8**	44.0	26.2**	-133***	-21.9**	5.3	13.8
	(31.2)	(14.5)	(25.0)	(9.1)	(24.8)	(7.7)	(12.0)	(14.5)

Note. All regressions controlled for states and territory. * $p<.05$, ** $p<.01$, *** $p<.001$.

Table 5: Results from OLS Regressions Relating Immigration Status to Children's Time Use (Weighted)

	Sleep and Rest	Personal Care	Media Use	Educational Activities	Free Play	Household Labor	Organized Sports	Organized Lessons
Aged 6-7								
Immigration Status								
Anglophone Countries	-13.0	-12.1	25.4	6.3	15.6	11.8	4.5	19.4
	(48.9)	(21.8)	(31.8)	(14.2)	(36.6)	(9.4)	(13.7)	(20.6)
Other Countries	-66.9	92.0***	48.6	71.2***	-104.6**	-20.8*	-8.0	69.4***
	(48.1)	(22.9)	(33.4)	(14.3)	(36.6)	(9.2)	(12.3)	(19.3)
Length of Stay < 10 Years	20.5	-2.3	-42.6	26.9	-67.5	1.7	-9.5	-26.9
	(58.9)	(29.7)	(45.4)	(19.9)	(46.1)	(13.7)	(16.7)	(24.8)
Aged 7-8								
Immigration Status								
Anglophone Countries	27.0	-4.1	5.3	8.7	61.2	-0.1	-36.7*	6.3
	(44.1)	(21.8)	(40.2)	(14.3)	(41.4)	(12.1)	(17.3)	(25.8)
Other Countries	-19.1	111.9***	-12.7	77.2***	-116.2**	-37.4***	-46.4**	80.6**
	(45.2)	(24.2)	(41.1)	(15.6)	(36.3)	(10.3)	(16.7)	(25.6)
Length of Stay < 10 Years	-88.3	-4.7	56.8	37.4	-84.3	12.0	-23.1	37.6
	(68.2)	(35.8)	(60.7)	(23.4)	(48.7)	(17.0)	(21.2)	(44.1)

Note. All regressions controlled for all previously mentioned covariates and states and territory. * $p<.05$, ** $p<.01$, *** $p<.001$.

Appendix: List of Pre-Coded Activities in the Longitudinal Study of Australian Children Time Diary Questionnaire

	Activity	Group
1	Not sure	
2	Sleep/napping	Sleep and Rest
3	Awake in bed	Sleep and Rest
4	Eating, being fed	Personal Care
5	Bathing, health care	Personal Care
6	Do nothing	
7	Crying	
8	Destroy things, fighting	
9	Held, cuddled	
10	Being reprimanded	
11	Watching TV	Media Use
12	Listening to CDs, radio, music	Media Use
13	Using computer/computer game	Media Use
14	(Being) Read a story, talk, sing	Educational Activities
15	Looking at book by self	Educational Activities
16	Quiet free play	Play
17	Active free play	Play
18	Helping with chores	Household labor
19	Visiting people	
20	Organized sport	Organized sport
21	Organized lesson	Organized lesson