Associations between Household Income, Parental Education and Adolescents Study Time in Japan between 1996 and 2006

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Short Abstract

1. Background

A large and growing body of research has emphasised the increasing socio-economic bifurcation in parenting behaviours across developed countries, with particular attention to the impact of mothers' education levels. "Diverging destinies" literature has focused on the way lower educational attainment among mothers is increasingly associated with less stable family environments for children to grow up in. More broadly, women at the lower end of the socio-economic spectrum have been shown to increasingly make family-related choices associated with less advantageous children's outcomes. Although much of the evidence for the "diverging destinies" argument comes from the US, it has also been documented for other rich societies (Härkönen, 2017; McLanahan, 2004; Raymo & Iwasawa, 2016).

At the same time, the rise of the literature on intensive parenting has stressed the emergence of a broader bifurcation of parenting styles in association with parental education levels. Better educated mothers and fathers have been shown to invest more time in rearing their offspring and put a particular emphasis on engaging in developmentally beneficial activities with their children such as reading, studying, sports, or having meals together. The evidence for the latter trend comes almost exclusively from the European and Anglophone world (Sani & Treas, 2016; Sayer, Gauthier, & Furstenberg, 2004).

This paper aims to build on the two above research strands and analyse how natal family characteristics translate into educational (dis)advantage in late adolescence as children do (or do not) prepare for tertiary education in Japan. Japan is an interesting case study because it has a strong tradition of high-quality public education as well as a historically strong culture of educational aspiration that also extended to lower classes. If socio-economic bifurcation of education behaviours is strengthening there too, it suggests that the trend is global and independent of cultural context.

Japan is one East Asian country which has been shown to broadly follow trends highlighted in the diverging destinies literature (Park, 2007; Raymo & Iwasawa, 2016). Raymo and Iwasawa (2016) focus on how levels of education among Japanese women are increasingly associated with specific demographic behaviors regarding premarital pregnancy, marriage, cohabitation, and divorce. They do not, however, focus on the consequences that increasing socioeconomic differences in family behaviors are having for the next generation of Japanese children.

Recent research by (Matsuoka, 2019) has shown that attitudes to education are increasingly correlated with regional, but also socio-economic background of Japanese adults, with lower classes

shown to be less ambitious. We do not, however, know, whether this has been accompanied by changes in how parents of different status levels approach education in practical terms.

Our paper contains the first ever analysis of longitudinal trends in the associations between natal family household income, parents' education, parents' time availability and adolescent study time in Japan between 1996 and 2006.

We select high school children (aged 15 to 17) from households with two married parents. Pre-high school education is compulsory in Japan and the quality of state schools is reasonably homogeneous. Between 97 and 98 percent of all Japanese children enrolled into high schools throughout the years of interest. But as high school education is not compulsory, the quality of high schools differs substantially, with a large distinction between academically and non-academically oriented high schools. 15 to 17 years of age is a crucial period during which children with university ambitions must spend substantial amounts of time to prepare for university entrance examinations. At this time many families make use of extracurricular resources and thus diversification of children 's efforts spent on education is most likely to be visible. Moreover, the amount of time children spend studying between the ages of 15 and 17 is likely to critically influence children's educational life trajectories.

2. Data and Methods

We use the micro-data of the Survey on Time Use and Leisure Activities (STULA), conducted in 1996, 2001, and 2006 by Statistical Bureau Japan. We employ OLS regression models to analyse the associations between adolescents' study time on one hand and their natal household income, education levels of both parents, and fathers' and mothers' time availability on the other. We control for children's gender, the number of adults in the household and the number of siblings of the focal child in the household. We analyse study time separately on weekends and weekdays. This allow us to differentiate between a) compulsory study time in school and afterschool activities children may have to enrol into because of their parents' work schedules and b) discretionary weekend study time.

3. Results

In models with no interactions between the survey year and our key variables of interest we find that the time high school children spend studying became shorter in 2006. Household income and parental education are positively associated with the time adolescents spend on studying on both weekdays and weekends. The positive association between mother's and father's education and children's study time is particularly pronounced on weekends. Parental time availability is not strongly associated with high school students study time in Japan.

Models with interactions between survey years and our core variables of interest make it clear that the associations between household income as well as parental education with adolescent children study time have been changing over time: Adolescents' study time was much more similar across households with different income levels in the mid-90s compared to the mid-2000s. The differentiation by household income has become particularly pronounced on weekends, when study is largely discretionary (see Figure 1).

Figure 1



Similarly, parental education levels had a much weaker association with children's study time in the mid-90s compared to 2006 and the differentiation has been more pronounced on weekends compared to weekdays.









Critically, household income and parental education are both shown to be associated with children's study time independently of each other. The relationship remains robust in models where we interact household income with father's and mother's education (available from the authors upon request).

4. Concluding remarks

Our research suggests that Japan is following global trends in which socio-economic characteristics of natal families lead to an increasing differentiation of children's educational efforts. This is likely to have long-term consequences for inter-generational social mobility and reproduction of social disadvantage.

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