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東京大学社会科学研究所 パネル調査プロジェクト  
ディスカッションペーパーシリーズ

Educational Attainment and  
Social Background

Hiroshi ISHIDA

(Institute of Social Sciences, University of Tokyo)

February 2009

No.21

**Institute of Social Sciences  
University of Tokyo  
Panel Survey Project Discussion Paper Series No. 21  
February 2009**

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**Hiroshi Ishida**

**(Institute of Social Sciences, University of Tokyo)**

## **Educational Attainment and Social Background**

**Hiroshi Ishida**  
**(University of Tokyo)**

### **Abstract**

Advancement to higher education is affected by a variety of characteristics of home environment. In particular, cultural resources of the home represented by parental education and the number of books at home appear to exert profound influence on children's educational achievement. Opportunities of education do not seem to be equal among children from different social backgrounds. Family environment has significant consequence for access to higher education.

With regard to the difference between the youth and the middle-aged surveys, although there are small differences in the effects of father's class and living standard, the overall picture has not changed between the two cohorts. In other word, there does not seem to be any obvious tendency for the effects of social background to increase among recent cohort members. The results do not provide support for the claim about the increased inequality in recent Japan. Instead, the results point to the persistence of inequality in educational opportunities in contemporary Japan.

## **1. INTRODUCTION**

The demographic and socio-economic environment surrounding Japanese youth has taken a distinct turn in the past two decades. Japanese society, once characterized by stability, growth and cooperation, is now known to suffer from lack of a smooth school-to-work transition (Honda 2005; Brinton 2008), loss of job security and anxiety over future employment (Genda 2005), and deprivation of hope (Yamada 2004). The falling birth rate, which is associated with a delay in marriage and family formation (Shirahase 2005), is considered to be a major threat to the intergenerational balance within society. Given these drastic societal transformations, it is important to ask how the Japanese youth are responding to these changes. In order to examine the current state and the changes in behavior and attitude among the youth in Japan, the Institute of Social Sciences, University of Tokyo, is in the midst of conducting a longitudinal panel survey called the Japanese Life Course Panel Survey (JLPS).

## **2. JAPANESE LIFE COURSE PANEL SURVEY**

JLPS consists of three surveys: the youth survey, the middle-aged survey and the high school graduate survey. The youth survey sampled respondents from the population of men and women aged 20 to 34 residing in Japan, and the middle-aged survey from men and women aged 35 to 40 residing in Japan, using the electoral registry and resident registry. The first wave of JLPS was conducted from January to April 2007. The respondents were sent questionnaires by regular mail, and the staff from a survey company visited the respondents and collected the questionnaires. For the youth survey, 3,367 responses were obtained (response rate: 34.5%), and 1,433 responses (response rate: 40.4%) for the middle-aged survey. Because the respondents were told that the survey was panel and required multiple years of commitment, the response rate was slightly lower than the rates of usual cross-sectional surveys.

From January to March 2008, respondents were contacted again for a followed-up survey. Questionnaires were sent by mail and picked up by the staff of a survey company. There were 2,719 responses (response rate: 80%) for the youth survey and 1,246 responses (response rate: 87%) for the middle-aged survey. These figures are subject to change since the cleaning of the data set is still in progress. The analyses reported here employ the youth and middle-aged surveys.

The high school graduate survey was first conducted from January to March 2004. The respondents were high school seniors in 101 high schools in four prefectures in Japan. Four prefectures were selected on the basis of college attendance rate and the proportion of graduates who neither advance to further education nor engage in

employment. Schools were selected randomly from a list of all high schools (excluding night schools) in each prefecture. The questionnaires were sent to schools, and the total of 7,563 responses (response rate: 69.1%) was obtained. The first follow-up was conducted in October 2004. The questionnaires were sent by mail to 2,036 respondents who agreed to take part in the follow-up survey. There were 500 responses (response rate: 24.6%). In addition, 485 parents responded to parental questionnaires. Additional follow-up surveys were conducted in October 2005, 2006, and 2008.

### **3. EDUCATIONAL ATTAINMENT AND SOCIAL BACKGROUND**

This section reports the results of examining the relationship between social background characteristics and educational attainment. JLPS includes a number of questions about the social background of the respondent. By taking into account a variety of background characteristics, it is possible to determine what kind of background factors influence access to higher education. Furthermore, by comparing the results from the youth survey and the middle-aged survey, we will be able to verify whether the effects of background characteristics are increasing among recent cohort members.

We examine the effects of eight social background characteristics on access to higher education. The outcome is whether the respondent attended institutions of higher education (including both junior college and university). The eight factors<sup>1</sup> are: (1) parental education (middle school, high school, higher education)<sup>2</sup>, (2) father's class (upper white-collar class, lower white-collar class, petty bourgeoisie, farm class, skilled manual class, non-skilled manual class), (3) living standard (above average, average, below average), (4) home ownership, (5) number of books at home (less than 10, 10 – 50, 51 – 100, more than 100), (6) lack of private bathroom<sup>3</sup>, (7) warm home environment (self-reported response), and (8) parental divorce. We run logistic regression, predicting the attendance of higher education by eight background factors. Figures represent the independent effects of these factors after controlling for other background characteristics<sup>4</sup>.

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<sup>1</sup> Social background factors are the characteristics of the home or parents when the respondent was about age 15, except for parental education, which is determined by the last school attended by parents.

<sup>2</sup> The highest educational level of the father or the mother is taken as the level of parental education.

<sup>3</sup> Because of the prevalence of public bath facilities, poor families did not use to have private bathroom. This item is used as an indicator of poverty.

<sup>4</sup> In addition to other background characteristics, we control for the sex of the respondent and the cohort (youth or middle-aged).

Figure 1 presents the effect of parental education on access to higher education. The base category of parental education is “high school completion,” so the effect (log odds ratio) of higher education indicates that respondents with a parent with higher education are 2 to 2.5 times ( $e^{0.745}=2.1$  for the youth and  $e^{0.908}=2.5$  for the middle-aged) more likely to attend institutions of higher education than those with a parent of high school education. When the parents had only middle school education, the respondents are 2.5 to 3 times less likely to attend college and university than those whose parents had high school education. These differences by parental education are substantial and statistically significant.

The effects of the father’s class on educational attainment are more modest, as shown in Figure 2. Compared with the respondents whose fathers engaged in non-skilled manual work (base category), those whose fathers engaged in upper white-collar work are more likely and those whose fathers were farmers are less likely to attend college and university. The effects of class origin are attenuated because these are the effects still remaining after controlling for education, economic and cultural resources of the family. Figure 3 shows the effect of economic resource on educational advancement. When the respondents reported that their living standards at age 15 were more than the average at the time, they are more likely to attend institutions of higher education among the youth sample. Among the middle-aged sample, the respondents who reported their living standards to be below average are less likely to attend institutions of higher education than those who reported their living standards to be average.

Figure 4 presents the effect of cultural resources at home on educational attainment. It is clear that the more books at home when the respondents were growing up, the higher the rate of advancement to higher education. The effects are substantial because the respondents with more than 100 books at home are 2.5 to 3 times more likely to attend college and university than the respondents who had almost no books at home.

Figure 5 shows the effects of other social background characteristics on college attendance. Home ownership and warm atmosphere at home are advantageous to educational advancement of the children, while the lack of bathroom at home, which is the indicator of poverty, and the experience of parental divorce appear to have a negative consequence on children’s education.

#### **4. CONCLUDING REMARKS**

Advancement to higher education is affected by a variety of characteristics of home

environment. In particular, cultural resources of the home represented by parental education and the number of books at home appear to exert profound influence on children's educational achievement. Opportunities of education do not seem to be equal among children from different social backgrounds. Family environment has significant consequence for access to higher education.

Finally, with regard to the difference between the youth and the middle-aged surveys, although there are small differences in the effects of father's class and living standard, the overall picture has not changed between the two cohorts<sup>5</sup>. In other word, there does not seem to be any obvious tendency for the effects of social background to increase among recent cohort members. The results do not provide support for the claim about the increased inequality in recent Japan. Instead, the results point to the persistence of inequality in educational opportunities in contemporary Japan.

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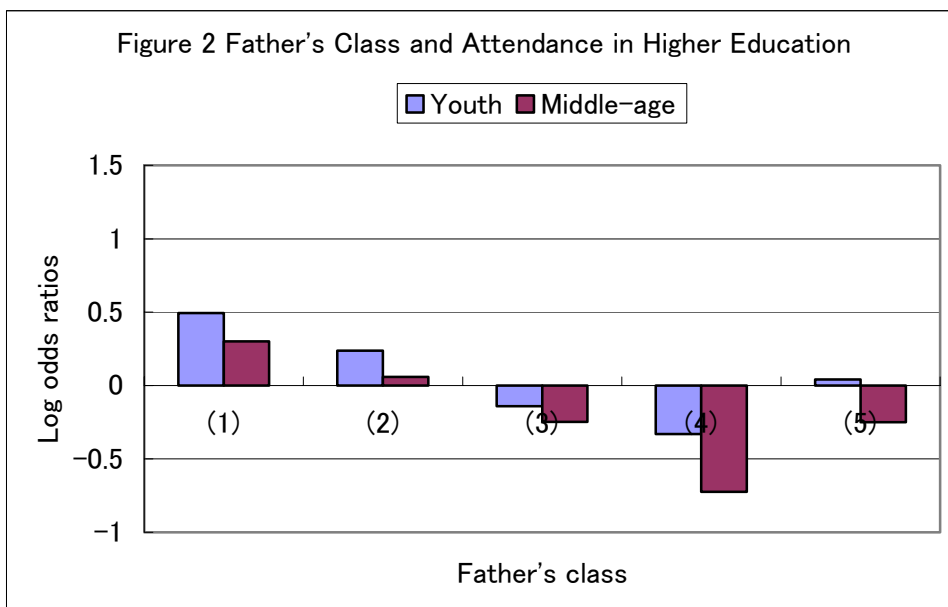
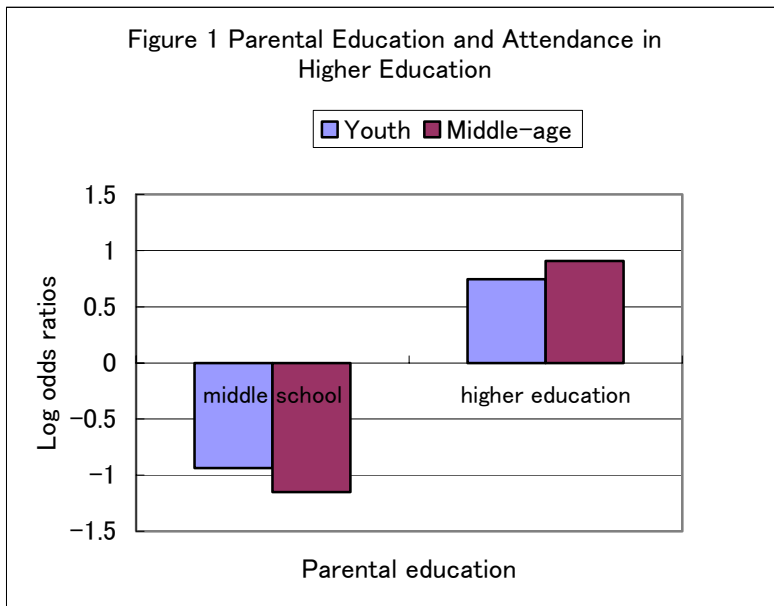
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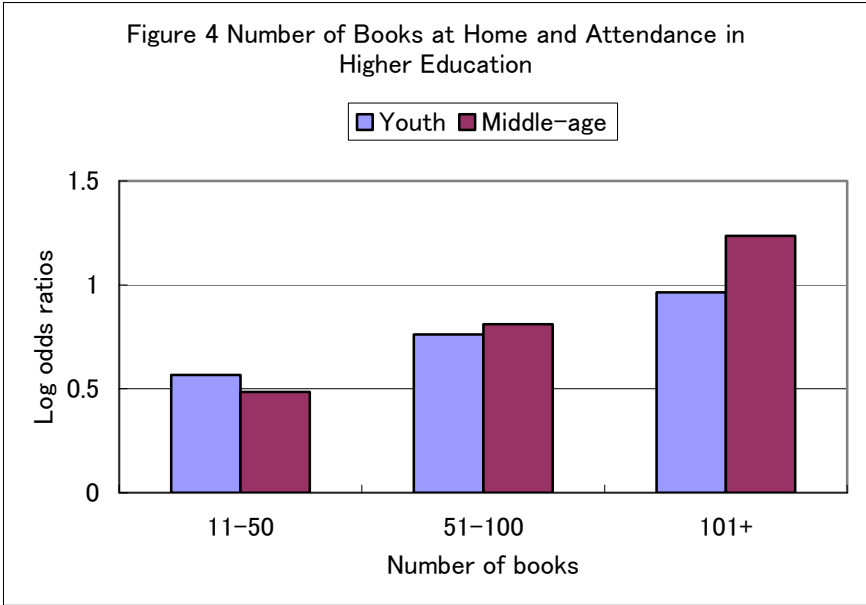
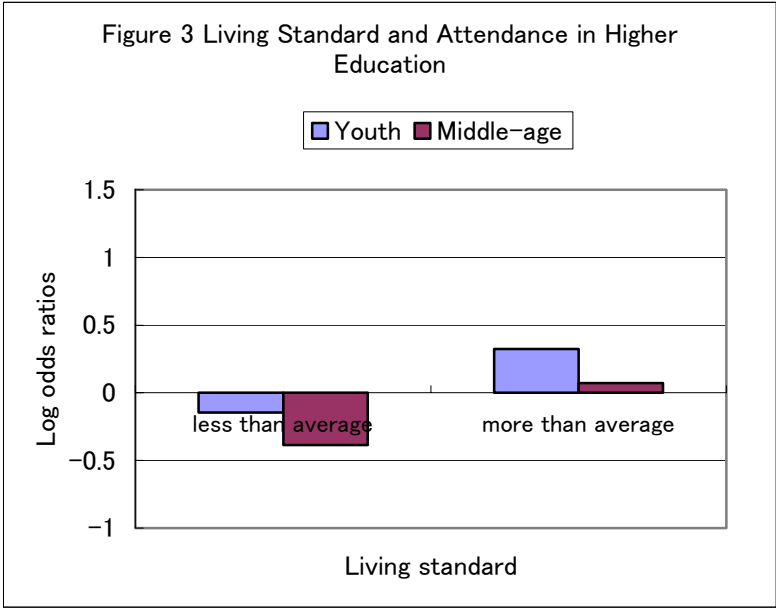
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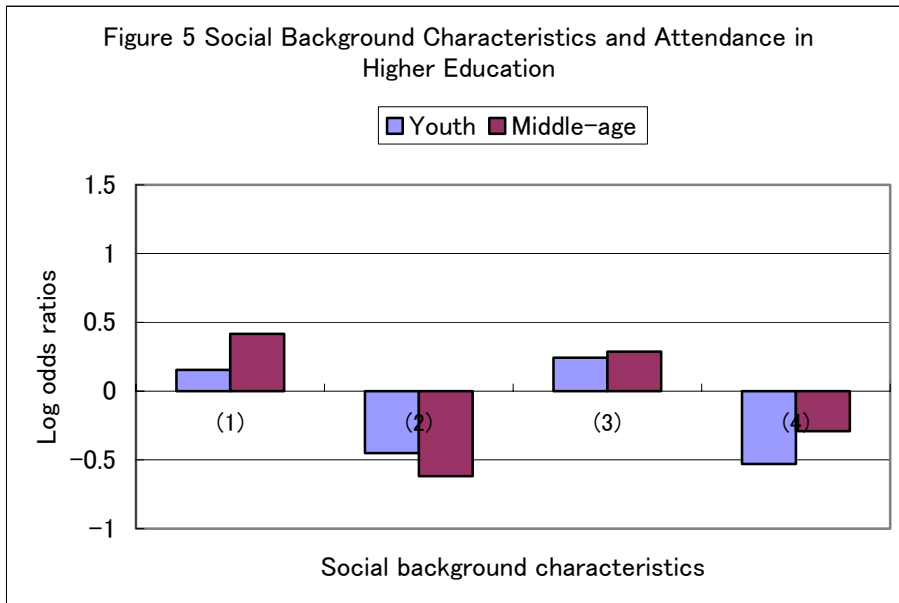
<sup>5</sup> The statistical tests examining the difference in coefficients, for example, between the effect of living standard of the youth sample and that of the middle-aged sample are not significant.



Note: (1) upper white-collar class, (2) lower white-collar class  
 (3) petty bourgeoisie, (4) farm, (5) skilled manual class







Note: (1) home ownership, (2) lack of bathroom  
 (3) warm home environment, (4) parental divorce

## 東京大学社会科学研究所パネル調査プロジェクトについて

労働市場の構造変動、急激な少子高齢化、グローバル化の進展などにともない、日本社会における就業、結婚、家族、教育、意識、ライフスタイルのあり方は大きく変化を遂げようとしている。これからの日本社会がどのような方向に進むのかを考える上で、現在生じている変化がどのような原因によるものなのか、あるいはどこが変化してどこが変化していないのかを明確にすることはきわめて重要である。

本プロジェクトは、こうした問題をパネル調査の手法を用いることによって、実証的に解明することを研究課題とするものである。このため社会科学研究所では、若年パネル調査、壮年パネル調査、高卒パネル調査の3つのパネル調査を実施している。

本プロジェクトの推進にあたり、以下の資金提供を受けた。記して感謝したい。

文部科学省・独立行政法人日本学術振興会科学研究費補助金  
基盤研究 S：2006 年度～2010 年度

厚生労働科学研究費補助金  
政策科学推進研究：2004 年度～2006 年度

奨学寄付金  
株式会社アウトソーシング（代表取締役社長・土井春彦、本社・静岡市）：2006 年～

## 東京大学社会科学研究所パネル調査プロジェクト ディスカッションペーパーシリーズについて

東京大学社会科学研究所パネル調査プロジェクトディスカッションペーパーシリーズは、東京大学社会科学研究所におけるパネル調査プロジェクト関連の研究成果を、速報性を重視し暫定的にまとめたものである。

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