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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

Delinquency, School Environment,  
and Academic Achievement in Japan

**Hiroshi Ishida**

(Institute of Social Sciences, University of Tokyo)

**Satoshi Miwa**

(Graduate School of Education, Tohoku University)

May 2012

No.61

**Institute of Social Sciences  
University of Tokyo  
Panel Survey Project Discussion Paper Series No. 61  
May, 2012**

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**Hiroshi Ishida  
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The permission to use the panel data is obtained from the Research Planning Committee of the Japanese Life Course Panel Surveys. This research was supported by Grant-in-Aid for Scientific Research (S) (numbers 18103003 and 22223005) from the Japan Society for the Promotion of Science (JSPS). The research support in conducting the panel surveys from the Institute of Social Science, University of Tokyo, and the Outsourcing Company is gratefully acknowledged. An earlier version of the paper was presented at the meeting of the “Comparative School Discipline Project” in Milano, Italy, June 25-26, 2009. The authors are grateful to the participants of the meeting for helpful comments, to Richard Arum and Melissa Velez for assistance in statistical analysis, and to Matt Wickens for editorial assistance.

# **Delinquency, School Environment, and Academic Achievement in Japan**

**Hiroshi Ishida**

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

**and**

**Satoshi Miwa**

**(Graduate School of Education, Tohoku University)**

## **Abstract**

We examined the long-term effect of school disciplinary climate and delinquency and victimization experience in middle school on life chances following the graduation of middle school. The experience of delinquency in middle school affects the type of high school one advances after middle school, high school grades, and eventually the chances of attending institutions of higher education. However, the disciplinary environment of the school or the experience of victimization does not seem to affect the later individual achievement.

**Keywords:** delinquency, achievement, disciplinary environment in school

## 1. INTRODUCTION

Crime and delinquency committed by youth attract considerable attention in the media. Whenever there is huge media coverage about juvenile delinquency, there is a tendency for the public to assume that the juvenile crime and delinquency is on the rise and becoming more malignant. The official statistics of juvenile crime, however, do not support such an assumption (Ayukawa 2001). Figure 1 shows the trends of the number of juvenile delinquent arrests and the rate by 100 thousand young people aged 10 to 19 years old. The number and the rate of arrests peaked in the early 1980s. Although there was an increasing trend in the late-1990s, the rate continues to decline since 2003. Figure 2 shows trends of the number of juvenile arrests in brutal crimes (homicide, robbery, rape, and arson). The number of brutal crimes is clearly on the decline since the early 1960s, despite the slight increase in the late-1990s. The increase in the late 1990s corresponds to the public recognition of the increased heinous crimes, but the increase is due primarily to the jump in robbery statistics from 1996 to 1997. Some people ascribe the increase to the more stringent enforcement of juvenile police at the time (Kuzuno 2003). The overall trend of crimes committed by juveniles, therefore, does not always reflect the public perception about the juvenile delinquency.

The reporting of any serious juvenile delinquency is almost always associated with school education in recent Japan. It is now common to assume that the school environment acts as a causal factor in students' misbehavior, especially at school. However historically, juvenile delinquency and school are not associated. Immediately following the end of World War II and up to the early 1960s, there were many more incidents of delinquencies and serious crimes committed by youth, as shown in Figure 1. However, most of these were committed by the youth who were already out of school (15 and over for the middle school graduates and 18 and 19 for the high school graduates). The attendance rate to high school was still about 50 percent in the late 1950s, and going to school was a privilege because it was protected from the real world. Young people who were not able to continue schooling and moved out of the rural areas had to survive in the urban life which was still full of confusion following the defeat in the war, and some of them broke the law (Matsumoto 1984). The lack of education and low socio-economic condition were thought to be the two major factors in explaining juvenile delinquency.

During the high economic growth of the 1960s and 1970s, the high school attendance rate jumped reaching 90 percent in 1974, and many young people remained in school for the most of their teenage period. The extension of the school leaving age changed the relationship between delinquency and school. As the attendance rate to high school increased, the ranking and stratification among high schools became manifest. The competition among middle school students for entry into high school and among high school students for entry into university intensified. Stress for further achievement and conflict between those who advanced to high-ranking schools and those who did not were singled out as the leading causes of misbehavior among youth. The causal factor responsible for delinquency was no longer the lack of education but the excessive competition for further education (Ito 1999).

In the late 1970s and early 1980s, violence within school stormed many middle schools and high schools in Japan (Ito 2007a). Media reported violence against teachers and destruction of school facilities, and delinquency and student life at school were closely connected in people's minds. There was a widespread belief that education and guidance offered by teachers at school were not adequate and caused delinquency among students. Schools and teachers were considered responsible for the misbehavior (Hirota 2001). Violence within school began to subside by the late-1980s, following the stricter enforcement of school rules by the teachers. The administration of regulations and various new rules regarding students' lives both inside and outside of the schools were enforced especially in middle school. These rules were comprehensive and totalitarian because they covered students' behaviors not only at school but also outside of school. Most middle schools have uniforms that must be worn when the students come to school. New rules often required students to wear uniforms when they go out after school and weekends because the students in uniforms are easily identified when they stay out late on the street or go places where minors are not supposed to enter. Although excessive rules were taken a second look in the 1990s, the enforcement of basic rules and regulations by and large continues until the present day (Noda 2000).

Beginning in the 1990s, misbehaviors within schools takes on a different form. Until the 1980s, delinquency is often targeted at teachers and school facilities, and it took the form of physical violence. In the 1990s, disciplinary problems often manifest in the form of non-compliance (Ito 2007b). Some students do not pay attention to teachers and walk around the classroom or go outside to play on the school ground. Because the teacher-and-student ratio is high in Japanese schools (often 30-40 students supervised by one teacher), it was not possible for the teachers to maintain the usual classroom activities when a few students walk around the classroom. The situation was called a classroom breakdown. In order to maintain the usual classroom activities, additional staff members were necessary to chase students who do not sit still or run away to the playground.

In addition to classroom breakdown, there was a widespread phenomenon called bullying of students by other students in the 1990s. (Matsunaga and Okura 1999). Bullying can take the form of physical violence of hitting and pushing but also a more subtle way of not allowing a student to join the group, hiding belongings, and spreading bad rumors about the student. Although bullying is not a delinquent behavior defined by law except for those cases which involved physical violence, it was widely recognized as problem at school by teachers and the Japanese Ministry of Education. The ministry compiles statistics on bullying since 1985, and in 2007 there were 48,896 cases of bullying reported in elementary schools, 43,505 cases in middle schools, and 8,385 cases in high schools. These cases were found in 39 percent of elementary schools, 64 percent of middle schools and 51 percent of high schools throughout the nation (Ministry of Education 2008a).

Another type of misbehavior reported in schools involves absenteeism (Hosaka 2000;

Ito 2007c, 2007d). Absenteeism generally refers to the non-attendance of a student who is expected to be at school, and there is a special category of absenteeism (school refusal) that is defined as the absence from school for more than 30 days per year (Okano and Tsuchiya 1999). According to the School Basic Survey of the Ministry of Education (2008b), students who were absent from school for more than 30 days per year amount to over 100,000 in middle schools, about three percent of all students. The same figure for elementary school students is about 24,000 (0.34 percent of all students). In addition, there are students who come to school but cannot take part in the regular school program and spend most of their time at the nurse's office in school (attendance at nurse office). It is estimated that 6.6 per 1,000 students in elementary and middle schools are attendants at a nurse office (Akiba 2007). The proportion of students who refuse to attend ordinary school programs has been increasing gradually since the late 1990s. The increase in the number of students who cannot establish personal relationship with others and the increased tolerance for absence on the part of the parents are reported to be the major causes for the increase in school refusal. Although more attention is given to bullying, classroom breakdown and absenteeism in recent Japan, this does not necessarily mean that the traditional forms of delinquent behaviors have disappeared from schools. On the contrary, there is the persistence of violent incidents reported in schools in the 1990s and 2000s. According to the survey by the Ministry of Education, six percent of elementary schools, 37 percent of middle schools, and 54 percent of high schools reported violent behaviors at school. Violent behaviors included physical violence against teachers, fellow students, and other individuals, as well as destruction of school facilities. In total, five thousand violent incidents were reported in elementary schools, 37 thousand incidents in middle schools, and 11 thousand incidents in high schools, as compared to 100 thousand incidents of bullying in all schools from elementary to high school. However, the proportion of students who were involved in violent incidents is still very low, less than one percent of all students even in middle schools where the incidents are most frequent (Ministry of Education 2008a).

When we examine the actions taken against students who committed violent behaviors (physical violence against teachers and students and vandalism), there is a clear difference between the compulsory level and the post-compulsory level. Among delinquent students in elementary and middle schools, less than five percent were expelled, suspended, or reprimanded, whereas over 80 percent of delinquent students in high schools experienced such actions (Ministry of Education 2008a). Japanese elementary and middle schools are extremely cautious in giving formal punishment to students because students are considered immature and should not be disadvantaged in their later life by being labeled as delinquents.

In contemporary Japan, juvenile delinquency and misbehaviors are closely related to school environment and discipline. Delinquent behavior is more frequently reported within schools than outside schools. Therefore, the organizational context of schools and the administration of rules and discipline in the school setting are important factors in understanding juvenile misbehaviors.

This study attempts to contribute to the project on cross-national study on school discipline by examining the relationship among school characteristics, individual background and achievement, and school discipline climate in Japan. Specifically, the study asks the following research question about the consequences of school discipline climate and delinquency at the later stage of life course. The paper asks whether the achievement in high school and the attending higher education are associated with student misbehavior and school environment in middle schools.

## **2. DATA, VARIABLES, AND METHODS**

This study uses the Japanese Life Course Panel Survey (JLPS) which is the national survey of youth and middle-aged in Japan. JLPS is composed of the youth panel of those aged 20 to 34 in 2007 and the middle-aged panel of those aged 35 to 40 in 2007, and our analysis combines the two panel surveys (for details of the JLPS, see Ishida *et al.* 2008 and Ishida *et al.* 2009).

Our main independent variables are school disciplinary climate, delinquency experience and victimization experience while the respondents were in middle school. The JLPS asked the respondents whether the middle school they attended had a disruptive school environment. The respondents were also asked if they experienced delinquency in middle school (skipped classes, smoked at school or hit teachers) and if they were the target of bullying at school.

In addition to school discipline variables described above, we introduced gender (female as the base), father's class (Erikson-Goldthorpe-Portocarero six-category class), father's education (father's attendance in higher education), and grades in middle school (five-point scale). See Erikson and Goldthorpe (1992) for the details of the class category.

Our dependent variables are the academic achievement of the respondents. The first dependent variable is high school type: whether the respondents attended academic high schools or not. The second dependent variable is the self-reported high school grades (very good or good versus other grades). The third dependent variable is the attendance in higher educational institutions.

The method used in this paper is logistic regression. We estimate the effect of school disciplinary climate, delinquency experience and victimization experience on our three dependent variables: (1) high school type, (2) high school grade, and (3) attendance in higher education.

## **3. ANALYSIS**

We examine whether the later achievement in high school and the attendance to higher education are associated with student misbehavior and school environment in middle

schools. Table 1 reports the results of three sets of logistic regression analyses. Three dependent variables are: (1) high school type (academic high schools versus vocational and other types), (2) high school grade (very good/good versus other grades), and (3) attendance in higher education.

High school types are the destinations for middle school graduates since over 95 percent of students in middle-school advance to high schools. Japanese students are sorted into different high schools which are ranked hierarchically within each district, and academic schools are ranked higher than vocational schools. In addition to middle school grades, odds of going to academic high schools rather than vocational schools are affected by social background. Students from more advantaged class backgrounds (that is, the professional and managerial class or I+II in the Erikson-Goldthorpe-Portocarero class schema) and those whose fathers attended higher education are more likely to attend academic than vocational high schools.

Disruptive school environment and victimization experience in middle school do not affect the high school type, but the experience of delinquent behavior in middle school negatively affects the odds of attending an academic high school. The advancement to high school is determined by middle school grades and reports from the school, as well as by the result of the entrance examination. Since the reports from the middle school affect the chances of entrance to high school, those who were engaged in delinquent behaviors are likely to be disadvantaged in school reports, thereby having lower chances of attending high-ranking schools.

The second model shows the effects on high school grades. As would be expected, the most significant determinant is middle school grades. However, delinquent experience in middle school has a lasting influence. Those with delinquent experience tend to have lower high school grades, over and above the effect of middle school grades. None of the social origin variables have significant effect on high school grades when the grades in middle school are controlled. Disruptive school environment and victimization experience do not seem to have any independent effect on high school grades.

Finally, the third model shows the relationship between student- and school-level characteristics and the probability of attending higher education. The actual attendance of higher education is associated with the father's education and middle school grades. In addition, the experience of delinquency in middle schools lowers the chances of attending institutions of higher education. To summarize, one of the most consistent findings across three models is that delinquency experience in middle school appears to have long-lasting effects on later life chances. Even after leaving middle school, one's delinquency experience affects achievement in high school and attendance in higher education. However, the school environment itself or the experience of victimization does not seem to affect the later individual achievement.

#### **4. SUMMARY**

We examined the long-term effect of school disciplinary climate and delinquency and victimization experience in middle school on life chances following the graduation of middle school. The experience of delinquency in middle school affects the type of high school one advances after middle school, high school grades, and eventually the chances of attending institutions of higher education. However, the disciplinary environment of the school or the experience of victimization does not seem to affect the later individual achievement.

In summary, school disciplinary climate does not seem to affect the future life chances of the students after leaving middle school, as far as high school type, high school grade, and college attendance are concerned. However, the experiences of delinquency in middle school show lasting influence on the individuals' life chances after leaving middle school. Because the occurrence of delinquency in middle school is still rare in Japan, those who did commit the rare event are probably disadvantaged in later life course.

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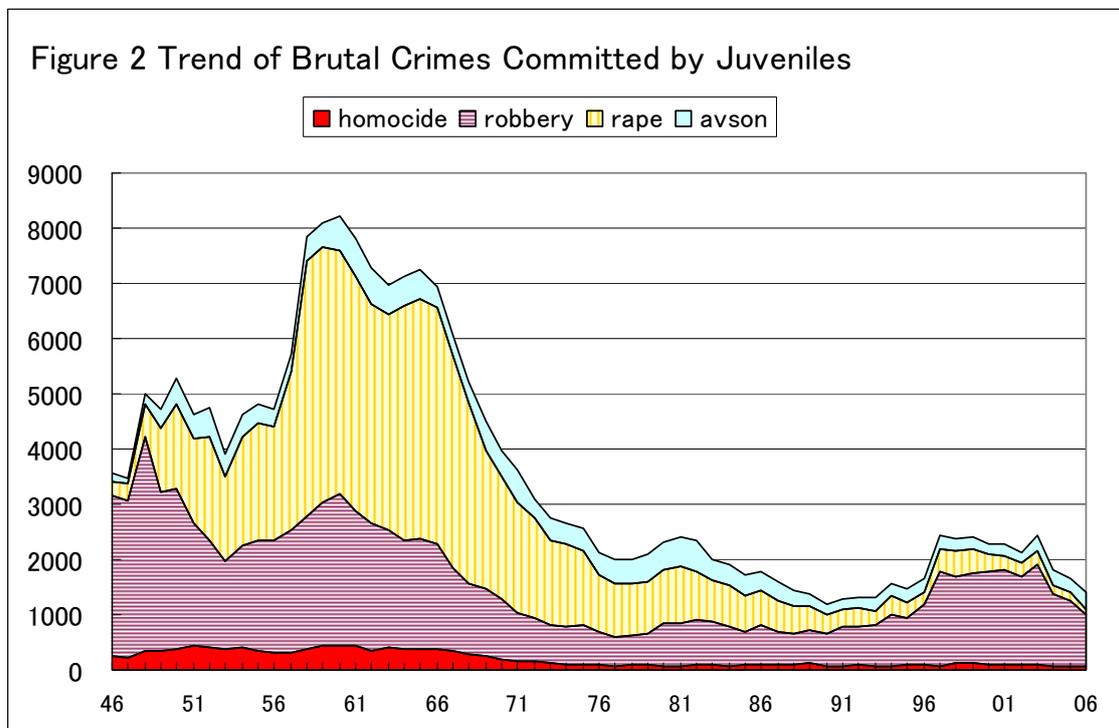
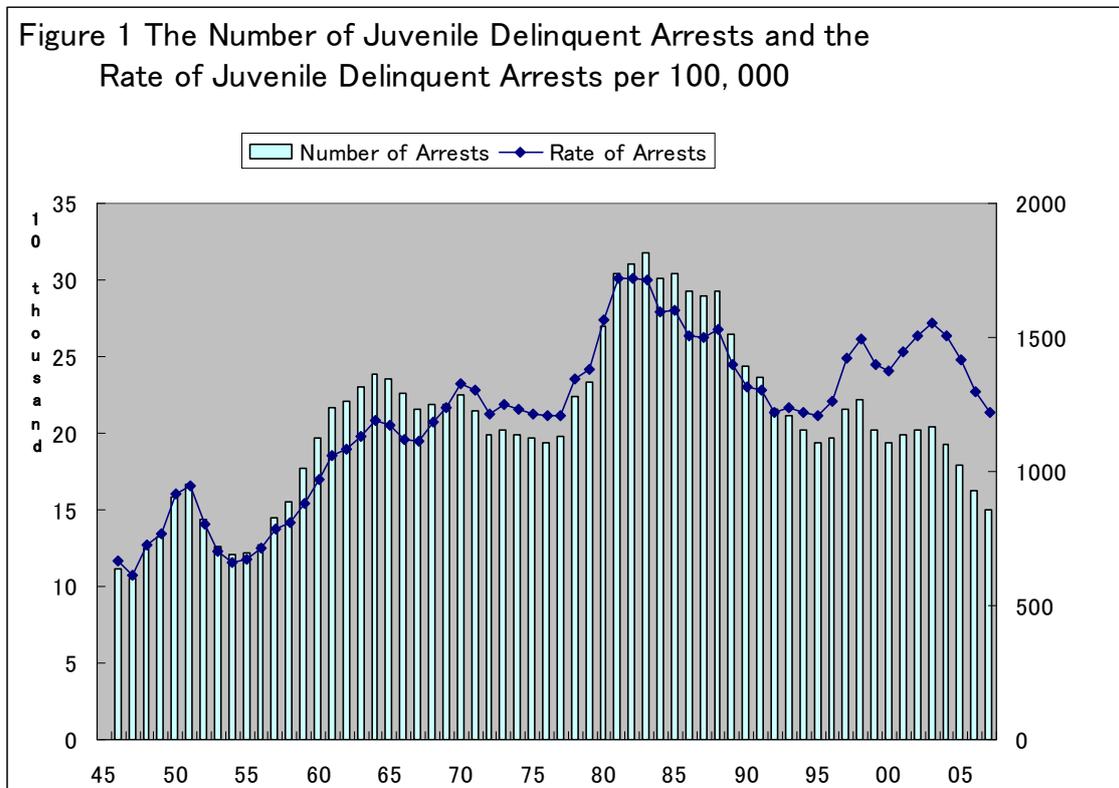
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Figures and Tables



<b>Table 1. HLM models estimating the effects of School Discipline and Social Background on High School Type, High School Grade, and Attendance in Higher Education</b>				
	Model 1	Model 2	Model 3	
<b><i>Student Background</i></b>				
Male	-0.082 (0.091)	-0.090 (0.078)	0.133 (0.085)	
Father's class (no father/no occupation)				
Professional-managerial class (I+II)	0.849 ** (0.261)	-0.163 (0.253)	0.163 (0.272)	
Routine non-manual class (III)	0.624 * (0.295)	-0.378 (0.279)	-0.118 (0.298)	
Petty bourgeoisie and farming class (IVab/IVc/VIIb)	0.389 (0.260)	-0.283 (0.256)	-0.538 * (0.273)	
Skilled manual working class (V/VI)	0.259 (0.267)	-0.326 (0.265)	-0.427 (0.281)	
Non-skilled manual working class (VIIa)	0.143 (0.280)	-0.292 (0.278)	-0.421 (0.294)	
Father's education	0.668 ** (0.117)	-0.025 (0.089)	1.098 ** (0.102)	
<b><i>Middle School Achievement</i></b>				
Middle school grade	0.482 ** (0.041)	0.360 ** (0.037)	0.809 ** (0.042)	
<b><i>Disciplinary Climate</i></b>				
Disruptive School environment	-0.016 (0.101)	0.041 (0.088)	0.076 (0.096)	
Delinquent experience	-0.331 ** (0.106)	-0.199 * (0.103)	-0.519 ** (0.107)	
Victimization experience	-0.085 (0.107)	0.032 (0.094)	0.006 (0.102)	
Intercept	-0.406 ** (0.141)	-1.754 ** (0.253)	-2.310 ** (0.272)	
-2 Log likelihood	3101.760	3872.489	3436.573	
Cox & Snell R-square	0.106	0.043	0.251	
N	3139	3017	3164	
*p<.05, **p<.01				
Notes: standard errors are in parentheses.				
Missing covariates are listwise deleted.				
Model (1) High school type (academic schools versus others)				
Model (2) High school grade (very good or good versus other grades)				
Model (3) Attendance in higher education				

## 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。

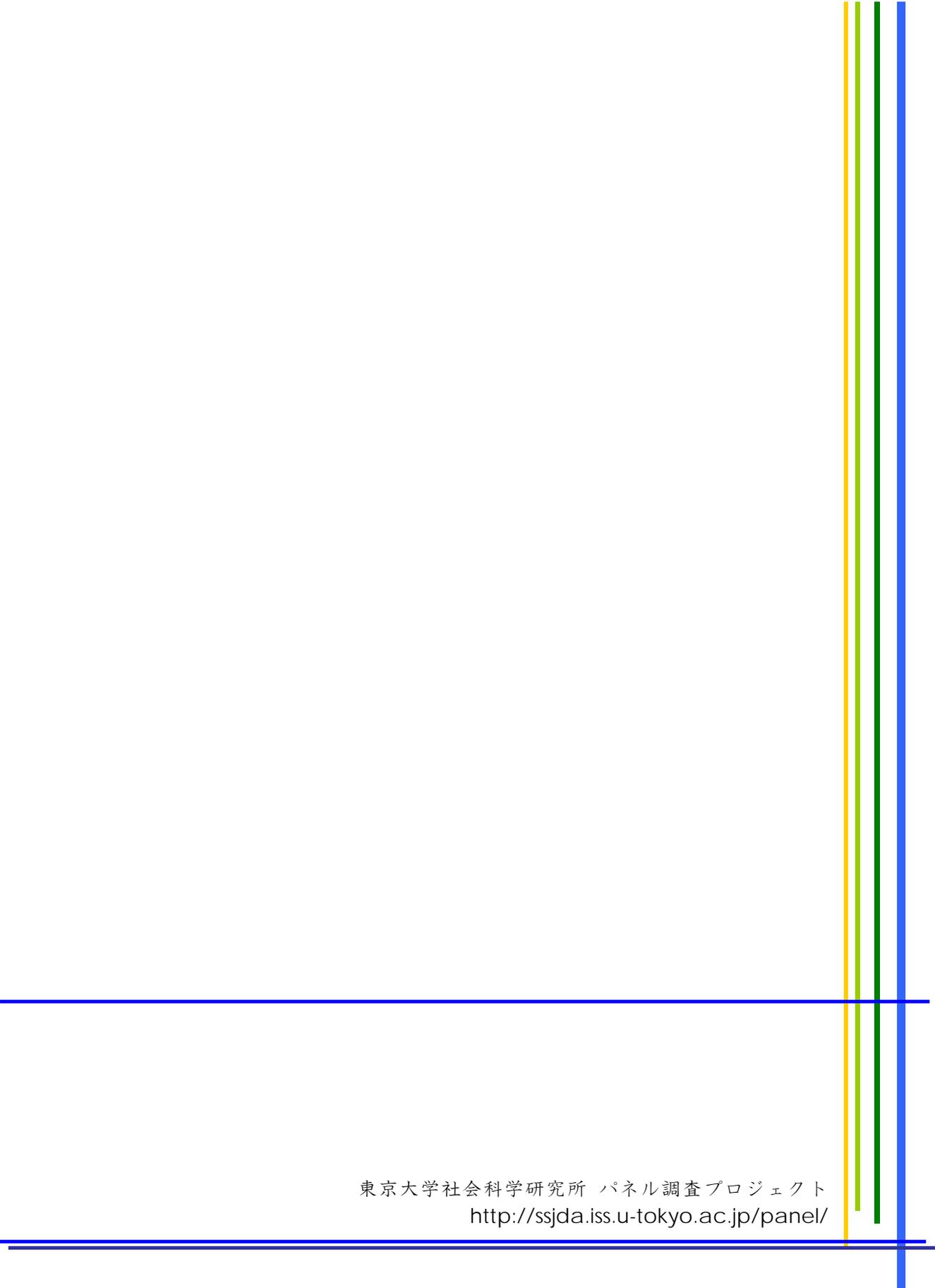
文部科学省・独立行政法人日本学術振興会科学研究費補助金  
基盤研究 S：2006 年度～2009 年度、2010 年度～2014 年度

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 年度～2008 年度

## 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

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