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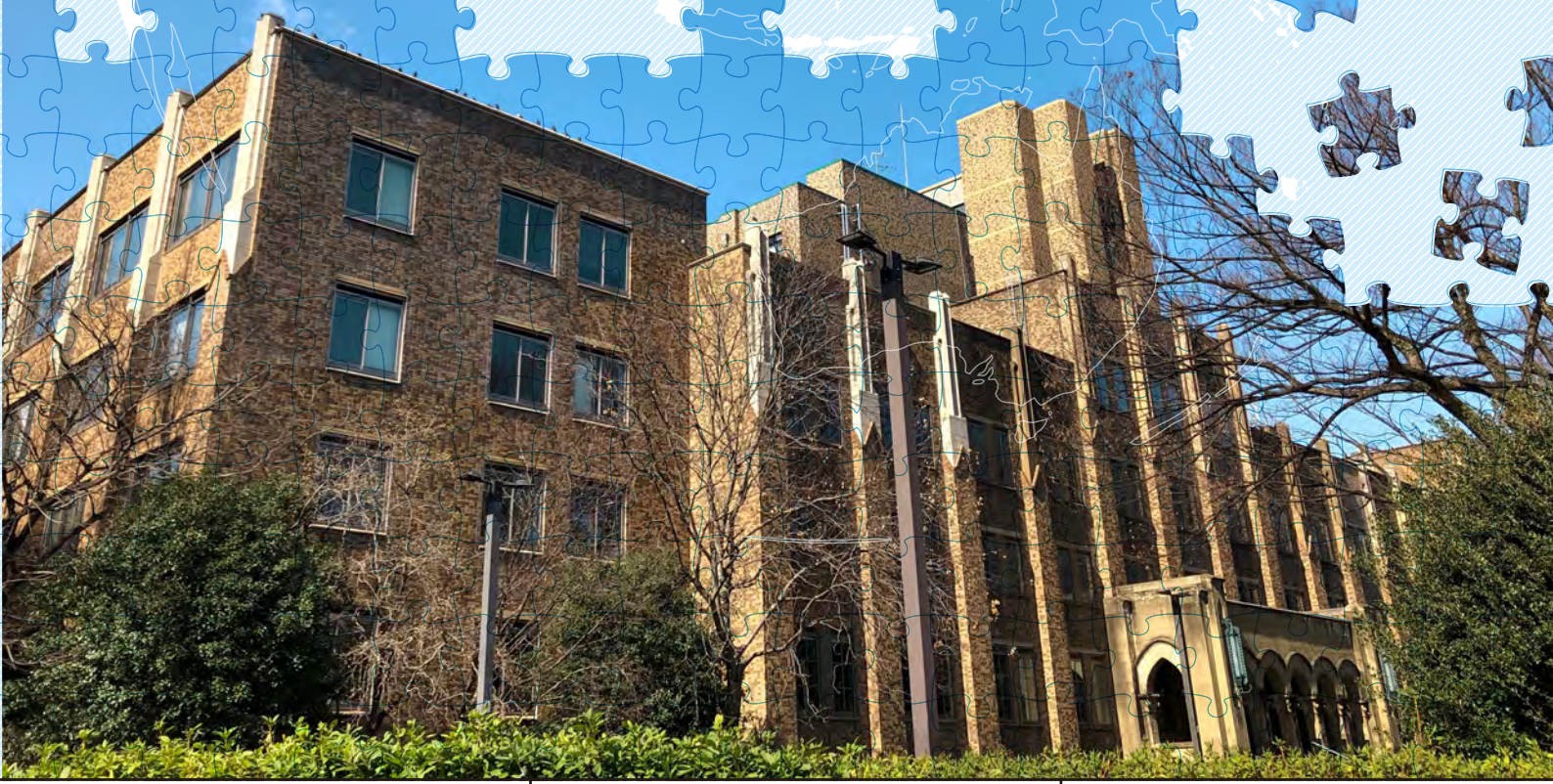
Delaying University Entry as a Class Strategy: Ronin and Educational Inequality in Japan's Standardized System



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Delaying University Entry as a Class Strategy:
Ronin and Educational Inequality in Japan's Standardized System

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Abstract

This study examines *ronin*—high school graduates who delay university entry to retake entrance examinations—as a class-based strategy within Japan's highly standardized education system. Although existing research has shown that *ronin* often come from relatively advantaged social backgrounds, prior studies have relied on case studies or retrospective data limited to those who eventually entered university, leaving systematic national-level evidence lacking. Using microdata from the 1997 Employment Status Survey, which enables identification of *ronin* within a nationally representative birth cohort without retrospective bias, this study analyzes the relationship between social background and becoming *ronin* across six post-high school status categories through weighted multinomial logistic regression. The results show that *ronin* come from social backgrounds at least comparable to those of university entrants in terms of parental education, paternal occupation, and household income, supporting the view that *ronin* functions as a strategic investment rather than a consequence of academic failure. Moreover, the association between advantaged social origins and becoming *ronin* is significantly stronger among men than among women, reflecting the gendered structure of educational investment under Japan's firm-specific skill formation regime and internal labor market. These findings suggest that class strategies in highly standardized educational systems operate not through negotiation within schools but through extended investments beyond school boundaries, and that the institutional context of the labor market shapes the gender-differentiated logic of such strategies.

Keywords: *ronin*, shadow education, gender, standardized education system, inequality

Introduction

Research on the formation of educational inequality has long focused on stratification processes within schools. Studies grounded in social reproduction theory have examined how institutional practices within schools—such as teacher evaluations, entrance examinations, and interactions with school professionals—mediate the relationship between social background and educational outcomes through culturally shaped practices (Bourdieu and Passeron 1977; Cicourel and Kitsuse 1963; Lucas 1999; Lareau 2000; Calarco 2018). These studies demonstrate that the ways students and parents engage with and navigate school institutions vary systematically by social background. At the same time, this focus has tended to privilege processes within schools, leaving less attention to other mechanisms through which educational inequalities are generated.

Alongside this line of research, another strand of literature has increasingly emphasized educational activities that take place beyond school walls (Park et al. 2016). Educational resources outside school, such as private tutoring or supplementary classes, can provide important advantages in academic competition (Yamamoto and Brinton 2010; Hannum et al. 2019). These activities are often referred to as "shadow education," defined as educational practices outside formal schooling that are intended to improve students' chances of success in educational allocation processes (Stevenson and Baker 1992; Baker et al. 2001; Bray 2007; Entrich 2017). Shadow education comprises institutions such as private after-school classes (e.g., *juku*, the cram school prevalent in Japan), private tutoring, and correspondence courses purchased from mail-order companies. Although these activities operate outside the formal school system, they play an important role in shaping educational outcomes (Zeng 1999, Rosegaard 2006, Watanabe 2013). Therefore, educational activities beyond formal schooling have increasingly been scrutinized as mechanisms that may both reflect and reinforce inequalities in educational opportunity (Hajar and Karakus 2022, 2024; Bray 2025).

Previous studies have shown that the prevalence and role of shadow education vary across institutional contexts. The literature indicates that the existence of formal examinations, particularly centrally administered examinations, and tight linkages between the outcomes of education and future opportunities through the educational process at national level foster the use of supplementary education outside schools (Stevenson and Baker 1992: 1640). While earlier research often associated shadow education primarily with East Asian societies (Thomas and Postlethwaite 1983; Zeng 1999), more recent studies show that it has become a global phenomenon across both developing and developed countries (Aurini and Davies 2004; Bray 2007; Baker and LeTendre 2005; Mori and Baker 2010; Baker 2014; Hajar and Karakus 2022, 2024). However, the way shadow education is used differs across societies: it often serves enrichment purposes in East Asia but remedial purposes in many Western contexts (Baker et al. 2001). Thus, understanding how educational activities outside schools contribute to educational outcome and inequality requires careful attention to institutional contexts. Generally, shadow education is recognized as a factor intensifying educational inequality, but some scholars also argue that it can decrease educational inequality (Entrich 2017). In summary, more research is required to identify how such outside school educational activities beyond school walls affect the generation of educational inequality (Park et al. 2016: 241).

In this study, we focus on *ronin*, high school graduates who postpone entry into higher education in order to prepare for university entrance examinations[1]. Although the concept of *ronin* does not necessarily overlap with shadow education, in practice many *ronin* attend preparatory schools (*yobiko*) or engage in other forms of supplementary education. Because admission to prestigious universities is strongly associated with later social status in Japan, *ronin* have attracted considerable attention in stratification research (Tsukada 1988, 1991; Stevenson and Baker 1992; Nishimaru 2006; Ono 2007; Kagawa 2020). Similar practices also

[1] The word *ronin* is derived from references to the masterless samurai who lived in Japan in the feudal era (Tsukada 1988: 287).

exist in other East Asian societies, including South Korea and Taiwan (Zeng 1999). These societies share a common institutional feature in that selection based on academic performance plays a decisive role in determining subsequent social status, thereby generating a widely shared understanding that delaying entry in order to gain admission to more prestigious universities is a rational and legitimate strategy.

The *ronin* phenomenon can be understood within a specific institutional context characterized by strong reliance on standardized examinations and strict age norms in educational transitions. In such systems, success is evaluated primarily through standardized academic performance, which leaves little scope for the kind of institutional negotiation—with teachers, counselors, or school administrators—that characterizes class strategies in more decentralized educational settings. Under these conditions, strategies that improve examination performance outside the formal school system become particularly important. As Matsuoka (2018) shows, participation in shadow education is strongly stratified by socioeconomic status in Japan, with higher-status families more likely to invest in out-of-school learning opportunities. Thus, in addition to studying shadow education itself, it is necessary to examine broader class strategies that improve academic performance in highly standardized educational systems (Park et al. 2011; Kariya 2013; Park et al. 2016). In this sense, *ronin* can be conceptualized as an extended and institutionally structured form of strategy, through which families make prolonged investments to secure educational credentials.

Using Pierre Bourdieu's concept of social reproduction, Lareau (2000) introduced "concerted cultivation" as a class-based strategy among higher-status families in the context of educational institutions in the United States. She further argued that Bourdieu's theory, particularly its emphasis on the concept of "field," helps clarify the mechanisms of educational stratification (Lareau and Weininger 2003).

The concept of concerted cultivation is especially relevant in the U.S. context, where

school districts enjoy considerable autonomy. As a result, what constitutes advantageous educational behavior is not nationally standardized but instead varies across specific school contexts. In such a setting, research on class strategies has focused on how families actively engage with and make use of school institutions and practices—such as interacting with teachers, counselors, and school organizations—to secure advantages for their children.

However, in a different institutional context characterized by strong standardization and a heavy reliance on entrance examinations, it is necessary to consider a form of class strategy distinct from that observed in the United States—one that focuses not only on how families engage with school institutions but also on how they enhance academic achievement beyond school walls.

As Honda (2008) and Matsuoka (2019) demonstrate in the case of Japan, under a highly standardized education system, concerted cultivation is less expressed through direct intervention in schools and more through intensive educational investments outside of school, such as shadow education and the management of children's learning at home. This suggests the need to extend the scope of analysis beyond shadow education to include other strategies, such as delaying university entry, that are distinct from both shadow education and the use of in-school resources.

In recent years, shadow education has expanded worldwide (Bray 2007; Kim and Jung 2019). However, there has been little attempt to conceptualize the diverse forms of shadow education as a class strategy within specific institutional contexts. Earlier research has also found no clear relationship between the prevalence of shadow education and national contexts (Baker et al. 2001). These findings point to the need to identify the conditions under which private supplementary education functions as a class strategy.

Furthermore, drawing on Bourdieu's insight—emphasized in discussions of concerted cultivation—that the forms of capital that confer advantage vary across *fields* (Bourdieu and

Wacquant 1992), it is necessary to examine class strategies embedded in specific institutional contexts that extend beyond shadow education. In particular, in contrast to the United States, where the education system is less standardized, focusing on strategies beyond school boundaries is especially important for understanding class advantage in more standardized systems.

To address this issue, we examine how class origin shapes the likelihood of becoming *ronin* within Japan's highly standardized education system.

Ronin as a class strategy in Japan

Japan is known for having a nationally standardized education system that is heavily dependent on standardized testing. The presence of national curricula and adherence to equal treatment until lower secondary schools strengthen students' aspirations in general (Cummings 1980). Until the age of 14 years, students experience relatively equal treatment under the compulsory schooling system. Subsequently, the hierarchy among high schools creates strong competition among attendees of the high school entrance examination (Rohlen 1983, LeTendre et al. 2003, Taki 2011). Students repeatedly take the standardized tests (mock examination) conducted by the *juku* industry to monitor and improve their academic standing to enter better schools (Watanabe 2013). Students gradually adjust their aspiration to enter appropriate schools according to the results of standardized tests. These tests consolidate the cycle of "warming up" and "cooling down" of aspiration, which activates "self-activating entrance examination system" at the high school level and the university level (Takeuchi 1997). Under this specific context of highly stratified, highly standardized, but weakly vocationally oriented education systems (Taki 2013, 2018), students develop an obsession to win the academic competition in a short term, rather than having concrete occupational aspiration for the distant future (Takeuchi 1997, Watanabe 2013).

Having gained admission to their preferred high schools through competitive examinations, some students go on to prepare for another round of competition for entry into higher education. The hierarchical ranking of universities is widely recognized by students, parents, and employers. This institutional context fosters a strong desire among students to enter the most prestigious university possible, given its implications for future employment opportunities.

To this end, a certain number of students spend an additional year preparing for university entrance examinations if they fail to gain admission to their preferred institutions. These students are known as *ronin*, referring to high school graduates who delay entry into higher education in order to reattempt the university entrance examinations in the following year.

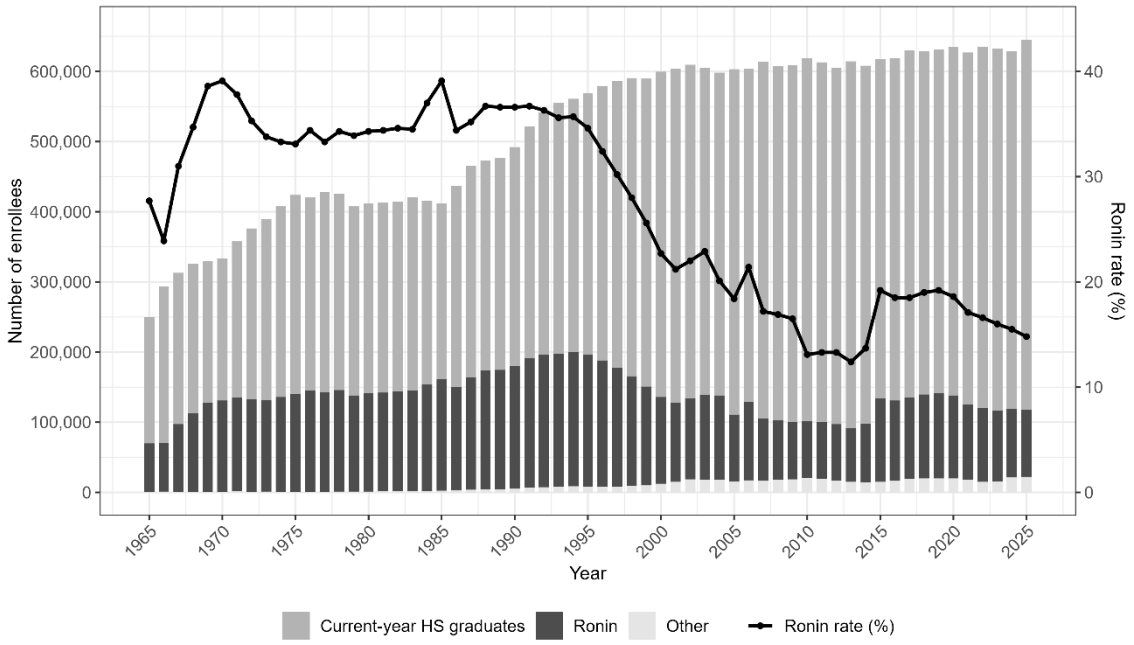

Figure 1 Annual university enrollment and proportion of *ronin* in Japan, 1965–2025

(Source: Basic School Survey, official statistics of MEXT, Japan)[2]

[2] It should be noted that the Basic School Survey changed its enumeration basis from school year of

Figure 1, based on data from the Basic School Survey, presents a stacked bar chart of annual university entrants, distinguishing between those who entered directly after high school and those who entered after one or more years as *ronin*. It also includes a line graph showing the proportion of *ronin* among all university entrants. The figure shows that from the 1970s through the early 1990s, *ronin* consistently accounted for more than 30 percent of entrants, peaking at nearly 40 percent.

Since the early 1990s, when the 18-year-old population reached its peak, the *ronin* share has declined sharply, driven by falling entrance examination competition ratios and the expansion of universities amid a shrinking cohort. By around 2000, the proportion had fallen to approximately 20 percent, and by the mid-2010s it had dropped further to around 13 percent, although, as noted, changes in the calculation used in the Basic School Survey after 2015 warrant caution in interpretation.

Despite its long-standing recognition as an important strategy for university entry, surprisingly little is known, particularly from a quantitative perspective, about who becomes *ronin*. Existing research has relied primarily on case studies of *yobiko* students or on retrospective survey data limited to those who eventually entered university. Earlier studies analyzing the social background of *ronin* have used two types of data: case studies of students attending a *yobiko* in Hiroshima (Tsukada 1988, 1991) and retrospective data from nationally representative social surveys (Ono 2007; Kagawa 2020).

The former provides rich contextual insights into the experience of *ronin* but lacks representativeness, not only for yobiko students but also for the broader population of *ronin*. The latter identifies the effects of social background on becoming *ronin* and on subsequent social status attainment. However, these studies operationalize *ronin* status based on the gap between the timing of high school graduation and university entry. As a result, they capture

graduation to age starting in 2015; comparisons between data from 2014 and earlier and data from 2015 and later should therefore be made with caution.

only those who eventually entered university, excluding individuals who failed to do so.

To identify the effect of social background on becoming *ronin* more accurately, it is necessary to use nationally representative data that include the full range of outcomes within a given birth cohort.

Gendered Investment and the Institutional Foundations of the Ronin Strategy

In the Japanese context, educational investments in children are shaped by gender. This pattern cannot be reduced solely to cultural factors such as Confucianism; rather, it is better understood as a consequence of the institutional context in which the education system and the labor market are closely embedded.

Despite the relative weakness of vocational education in Japan, a smooth school-to-work transition has historically been maintained through a distinctive institutional linkage between schools and employers (Rosenbaum and Kariya 1989). This transition is embedded in the Japanese employment system, in which firms recruit trainable candidates by using school prestige and school-based evaluations, including academic performance and teachers' assessments as signals, and subsequently develop firm-specific skills through on-the-job training and internal job rotation within strong internal labor markets.

The concentration of *ronin* among those aspiring to enter university is partly a consequence of this system. Because advantageous employment opportunities are clustered at the point of labor market entry in Japan, the returns to intensive investment at a single point in time—as in the case of *ronin*—are correspondingly high (Arita 2017). If skills could be acquired more easily at later stages of the life course, such concentrated investment would be less rational.

Why, then, is the Japanese employment system linked to gender-differentiated educational investment in children? One key reason is that, as noted above, large firms in Japan

do not expect schools to provide vocational training, but instead rely on on-the-job training after recruitment to develop firm-specific skills. This form of skill formation is known to disadvantage women (Estevez-Abe 2006).

Women are more likely to experience career interruptions due to childbirth or childcare, and firm-specific skills, by definition, have limited transferability across employers. In contrast, industry-specific skills retain their value even after job changes. As a result, employers in Japan are more likely to engage in statistical discrimination, investing more heavily in the skills of male than female employees, even within the same firm (Brinton 1993).

This institutional context is likely to generate gender differences in the use of the *ronin* strategy. Under the employment regime described above, investment in a son's educational credentials yields higher expected returns than investment in a daughter's. This is consistent with the long-standing pattern in Japan in which men have disproportionately pursued four-year university education, while women have been channeled into junior colleges (Fujimura-Fanselow 1985) and other forms of short-cycle higher education, including professional training colleges, where they seek to avoid gender disadvantage by investing in industry-specific skills (Taki 2025).

These gender differences in educational investment may be even more pronounced in the case of the *ronin* strategy. This is because the recommendation of junior colleges for women has historically been tied to normative expectations regarding the appropriate age for marriage and childbirth, and because firms have maintained practices that expect women to leave employment upon marriage at a certain age (Brinton 1992).

The gender gap in the use of *ronin* as a class strategy thus reflects not cultural preferences, but the institutional structure in which education and the labor market are jointly embedded.

Research Hypothesis

Despite the extensive literature on *ronin*, the relationship between social background and becoming *ronin* has not been sufficiently examined at the national level. In principle, if admission to university is determined primarily by academic ability, students from more advantaged social backgrounds should be more likely to enter university directly after high school. Even if they fail to gain admission to their preferred institutions, such students are likely to enroll in less selective universities rather than remain outside both education and employment. From this perspective, *ronin* would be expected to come disproportionately from relatively disadvantaged backgrounds.

Indeed, research in the United States has shown that students who experience a delay between high school graduation and college entry are more likely to come from low-SES families, and that such delays have negative consequences for later status attainment (Bozick and DeLuca 2005; Rios-Aguilar and Velez 2012). Based on this line of research, one might expect that those who become *ronin* are, on average, from lower social backgrounds. Furthermore, prior studies in Japan have analyzed only those individuals who eventually succeeded in entering university after a period as *ronin*, which may bias the sample toward more advantaged groups relative to the full population of *ronin*. Accordingly, we propose the following hypothesis:

H1a: Individuals who become *ronin* after high school graduation are more likely to come from lower social backgrounds than other higher education entrants.

However, the institutional context of Japan suggests a different possibility. Because university prestige is strongly associated with later occupational opportunities and social status, some students choose to postpone entry into higher education in order to improve their chances

of entering a more prestigious university. Becoming *ronin* therefore may function not only as a consequence of unsuccessful admission but also as a strategic investment in educational attainment. Families with greater economic and cultural resources may be more willing and able to support an additional year of examination preparation. Previous studies have suggested that *ronin* often come from relatively advantaged social backgrounds (Tsukada 1988; Ono 2007; Kagawa 2020). Based on this argument, we expect the following:

H1b: Individuals who become *ronin* come from social backgrounds that are at least comparable to those of other higher education entrants

In addition, previous studies have documented gender differences in the *ronin* strategy. *Ronin* are more common among men than among women (Tsukada 1988, 1991; Isa 2021; Uchikoshi 2022; Chinen 2023), and the consequences of the *ronin* experience for later life outcomes also differ by gender (Kagawa 2020). These differences may reflect the gendered structure of educational investment and career opportunities in Japan (Nakanishi 1998; Yoshihara 1998).

Because employment opportunities are often structured around the timing of labor market entry, postponing university entry may involve different costs and expectations for men and women, particularly in the Japanese context, where internal labor markets are strongly developed. If parental investment strategies differ by gender, the relationship between social background and becoming *ronin* may also vary between men and women. Therefore, we propose the following hypothesis:

H2: The effect of social background on becoming *ronin* is different according to gender

Although the above discussion is exploratory, examining *ronin* as a class strategy contributes to existing research by shifting attention from within-school processes—such as the use of school resources and examination success—to the production of class inequalities beyond school boundaries under highly standardized systems of academic competition, as shaped by the underlying logics through which families organize educational investment.

Data and Methods

Data and Operationalization of Ronin

In this study, we use a nationally representative sample of a single birth cohort to identify the effect of students' social background on becoming *ronin*, as well as its interaction with gender.

We draw on microdata from the Employment Status Survey conducted by the Ministry of Internal Affairs and Communications of Japan. This survey provides comprehensive information on the national employment structure. It was conducted every three years between 1956 and 1982, and every five years thereafter. The survey covers individuals aged 15 and over in approximately 490,000 sampled households. Compared with typical social surveys, the Employment Status Survey has a much larger sample size, enabling comparisons between *ronin* and non-*ronin* youth within a single birth cohort at the national level.

Currently, the Statistical Bureau provides microdata for surveys conducted since 1979. In Japan, more than 90 percent of individuals have attended high school since the mid-1970s, and dropout rates have remained low. Most students attend high school between the ages of 15 and 17, as grade repetition and skipping are rare. After graduating from high school, individuals typically either enter employment, proceed to higher education (such as universities, junior colleges, or professional training colleges), remain out of both education and employment, or spend a year preparing for entrance examinations as *ronin*.

There are, however, several limitations to analyzing *ronin* using this dataset. Although

the Employment Status Survey provides rich information on employment, it contains only limited information on educational trajectories. Because *ronin* cannot be directly identified from the questionnaire, we operationalize the concept indirectly using available indicators.

The survey identifies whether respondents are employed and, for those who are not, distinguishes between individuals who are currently enrolled in education, those who are not working but seeking employment, and those who are neither working nor seeking employment. Based on these categories, we define *ronin* as individuals who, after graduating from high school in the year they turn 18, are not employed, not enrolled in education, not seeking work, and report no intention to work.

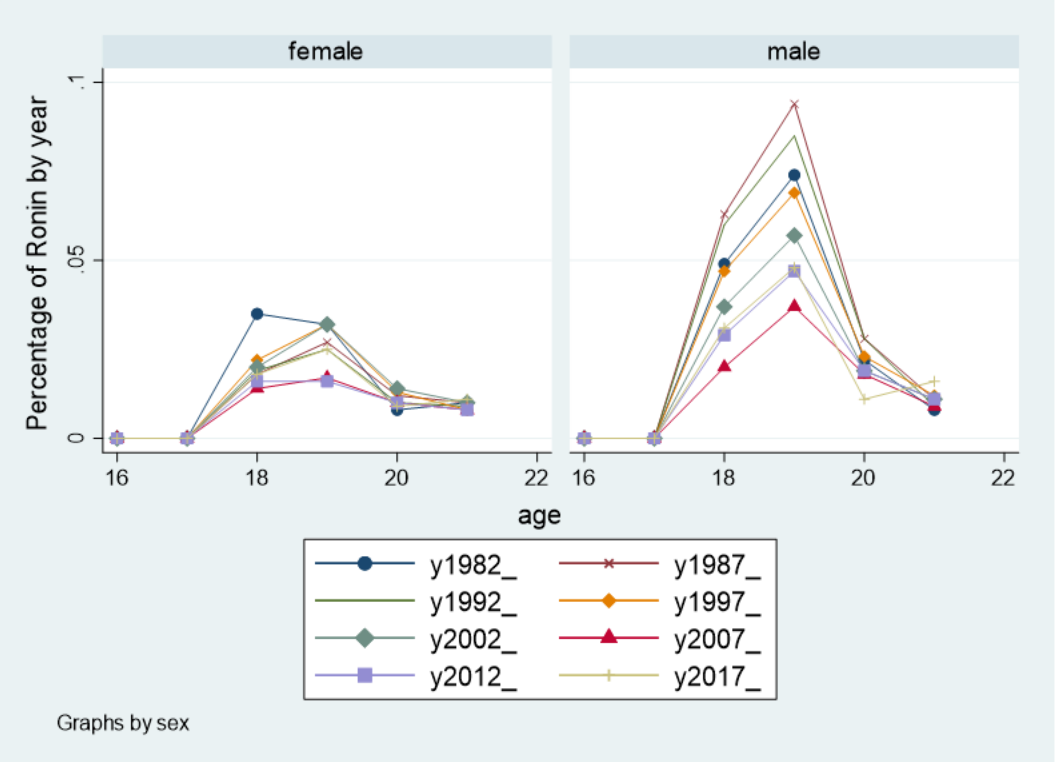

Figure 2 Graph showing the percentage of *ronin* by age for each survey year

Figure 2 shows the proportion of individuals who meet this definition within each cohort from age 18 onward, based on the Employment Status Survey from 1982 to 2017. The figure indicates that *ronin* are more common among men than among women, consistent with

both previous research and widely recognized patterns. The proportion of *ronin* varies across survey years, with the highest level observed in 1987. This pattern is also consistent with national statistics showing that *ronin* were more prevalent up to the 1980s than in later periods. The proportion is notably higher at age 19, suggesting that the share in the second year after high school graduation exceeds that in the first.

This pattern partly reflects the fact that Figure 2 is based on age rather than school cohort. In Japan, the academic year begins in April, making it difficult to identify *ronin* precisely without aligning individuals to school cohorts defined by birth months from April to March. The Employment Status Survey is conducted in October, meaning that individuals in the same school cohort may differ in age depending on whether they were born between April and September or between October and March. Although the survey includes information on month of birth, this is available only for datasets from 1997 onward. Therefore, we recalculate the proportion of *ronin* by school cohort using surveys since 1997, as shown in Figure 3.

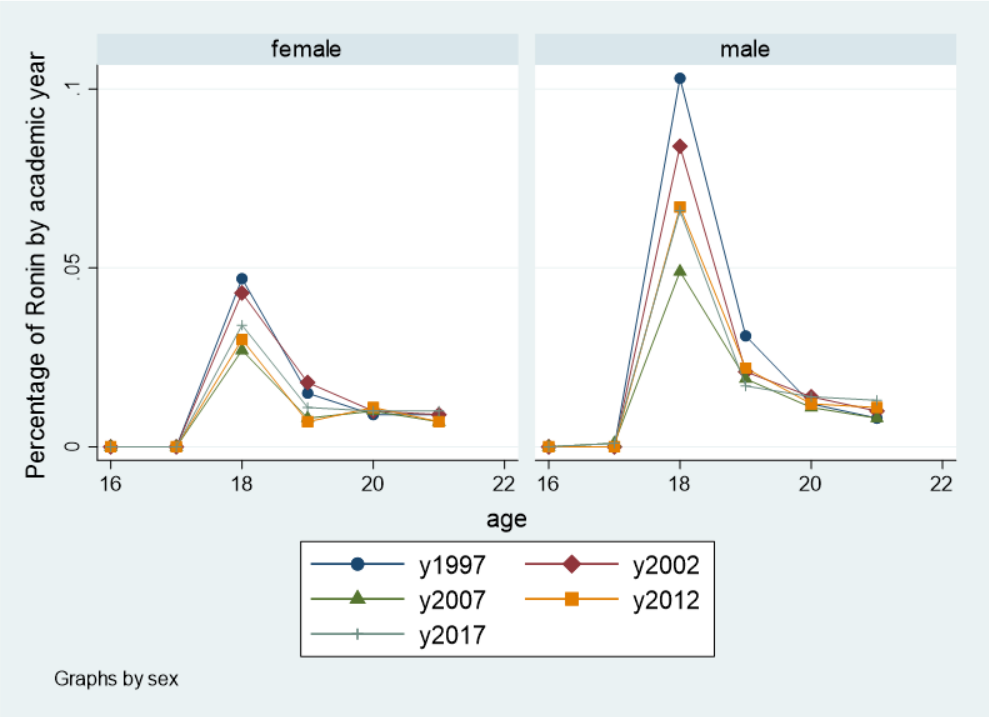

Figure 3 Graph showing the percentages of *ronin* by academic year

Figure 3 shows that *ronin* are concentrated in the school cohort corresponding to age 18, the first year after high school graduation. As the figure makes clear, compared with Figure 2, variation in *ronin* rates is more strongly structured by school cohort than by age. This suggests that spending a year preparing for entrance examinations emerges as a distinct stage in the life course, and that this pattern is accompanied by gender differences.

Given these considerations, we focus on the 1997 survey, the earliest dataset for which school-cohort-based age can be identified and one in which the *ronin* rate is relatively high among the available cohorts.

The *ronin* proportion shown in Figure 1 represents the share of university entrants who enrolled after a delay of at least one year following high school graduation. In contrast, the Employment Status Survey captures individuals' status only a few months after graduation and does not indicate how long they remain *ronin* or whether they eventually enter university. Therefore, direct comparison with Figure 1 is not appropriate. Instead, we compare our estimates with official statistics from the School Basic Survey conducted by MEXT, which report the post-graduation pathways of high school graduates.

According to the School Basic Survey, approximately 1.5 million students graduated from high school in March 1997. In our data from October 1997, the weighted estimate of high school graduates is approximately 1.535 million, indicating close correspondence between the two datasets. Regarding post-graduation pathways, the School Basic Survey reports that 27.4% of graduates entered universities and 29.8% entered junior colleges, colleges of technology, or vocational schools (13.0% for junior colleges and colleges of technology, and 16.8% for professional training colleges). In comparison, the weighted estimates from the Employment Status Survey are 29.9% and 31.0%, respectively (although this survey does not distinguish between junior colleges and professional training colleges in this year).

While the latter estimates are slightly higher than those of the School Basic Survey,

the overall differences are small. The proportion entering employment is 22.8% in the School Basic Survey and 25.8% in our data.

Based on this overall consistency, we estimate that approximately 8.2% of high school graduates can be classified as *ronin*, corresponding to 7.5% of the cohort as a whole. The corresponding figures are 10.3% for men and 4.7% for women.

It is difficult to determine definitively which estimate is more accurate, as differences in definitions—such as what constitutes employment, the treatment of University Entrance Qualification Examination (Daiken) holders, and distinctions between types of vocational institutions—introduce some ambiguity. In addition, this definition does not necessarily imply that all individuals classified as *ronin* are actually aiming to enter higher education. Nevertheless, given that few previous studies have attempted to identify *ronin* using nationally representative microdata in a non-retrospective manner, we proceed with this operationalization.

As noted above, *ronin* are identified indirectly based on available indicators. Furthermore, analyzing their social background requires additional assumptions due to the structure of the data. For this analysis, we derive indicators of social background, such as parental education, occupation, and household income, using household-level information provided in the Employment Status Survey.

However, this procedure has several limitations. For respondents who do not live with their families, information on parental background is unavailable. For example, some *ronin* from rural areas move to metropolitan areas to attend preparatory schools (*yobiko*), and their parental information cannot be observed in the data. In addition, we exclude cases in which parents are not the heads of households, as parental education and occupation are defined as key indicators of social background.

According to the 1997 data, approximately 10% of both males and females live alone,

and about 5% of males and 7% of females live in households headed by their grandparents. After excluding these cases, our analytical sample includes 585 male *ronin* and 258 female *ronin* in the school cohort corresponding to age 18. We then compare their social background with that of individuals enrolled in education, as well as those who are employed or seeking employment.

Table 1 Compositions of the study sample and the whole sample

	Male				Female			
	sample used		whole sample		sample used		whole sample	
	%	N	%	N	%	N	%	N
Not employed	6.5%	324	5.2%	390	4.3%	212	3.5%	257
Employed	34.4%	1719	31.4%	2381	29.2%	1451	25.6%	1876
High school student	7.4%	370	5.9%	443	6.8%	337	6.3%	464
Junior College Student	16.7%	834	17.5%	1326	37.0%	1839	39.2%	2871
Ronin	11.7%	585	9.2%	699	5.2%	258	4.4%	320
University	23.3%	1166	30.9%	2340	17.6%	875	21.0%	1535
Total	100.0%	4998	100.0%	7579	100.0%	4972	100.0%	7323

As shown in the Table 1, the most notable difference between the full sample and the analytical sample appears in the category of university entrants. A substantial share of individuals in this category do not live with their parents, likely reflecting relocation associated with higher education.

In general, individuals who leave their parental home to pursue higher education are more likely to reside in urban areas and to come from relatively advantaged backgrounds. Because our analysis primarily compares *ronin* with those who proceed to higher education, this sample selection may lead to an underestimation of the relative advantage of *ronin* in terms of social background. This potential selection bias should therefore be taken into account when interpreting the results.

Analytical Strategy

In this study, we test the hypotheses by comparing the social background of individuals in the 18-year-old school cohort (Table 1) across six current-status categories, including *ronin* and university enrollment. Social background is measured by parental education, parental occupation, and equivalized household income, and all analyses are conducted separately for men and women. We begin by presenting descriptive statistics for each category, followed by a more rigorous analysis using multinomial logistic regression, in which current status is treated as the dependent variable and other covariates are controlled.

In the multinomial logit analysis, parental education and parental occupation are not included simultaneously in their original forms due to concerns about multicollinearity. Instead, parental education is operationalized as a combined measure of both parents' attainment, categorized as: both parents holding a university degree or higher, one parent holding a university degree or higher, and neither parent holding a university degree[3]. Parental occupation is represented primarily by the father's occupational category, with an additional dummy variable indicating whether the mother is employed or a full-time homemaker. When only one parent is present in the household, we include dummy variables for father absence and mother absence.

Because coefficients in nonlinear models cannot be interpreted as constant marginal effects, we report average marginal effects (AMEs) (Mize 2019). Although the models are estimated separately by gender, gender differences are formally tested by including interaction terms with gender in pooled models. All estimates are weighted using survey weights.

[3] When constructing the measure of parental education, we took into account the relative position of educational credentials in parents' generation and treated junior college attainment as equivalent to a university degree for mothers. Alternative specifications of parental education were also examined, including a four-category measure (both parents university-educated, father only, mother only, and neither), and a measure based on the highest educational attainment of the two parents. The substantive results were robust to these specifications.

Descriptive analysis

Figure 4 depicts the distribution of current status among the 18-year-old school cohort by parental education and gender. As a general pattern, the proportion of children entering university increases with parental education. Similarly, the share of *ronin* also tends to be higher among those with more highly educated parents, and this tendency appears to be stronger for men than for women.

From an alternative perspective, looking at the distribution of parental education within each current-status category, the pattern differs somewhat by gender. Among men, *ronin* tend to come from slightly more highly educated family backgrounds than university entrants, whereas among women, the reverse pattern is observed: university entrants come from somewhat more highly educated backgrounds than *ronin*.

Overall, these results suggest that the social background of *ronin* is at least comparable to that of university entrants, providing greater support for Hypothesis 1b than for Hypothesis 1a. In addition, the tendency for *ronin* to be more prevalent among those with highly educated parents appears to be somewhat stronger among men than among women. This pattern is consistent with Hypothesis 2 and suggests that investment in the *ronin* strategy as a class-based educational strategy varies by the gender of the child.

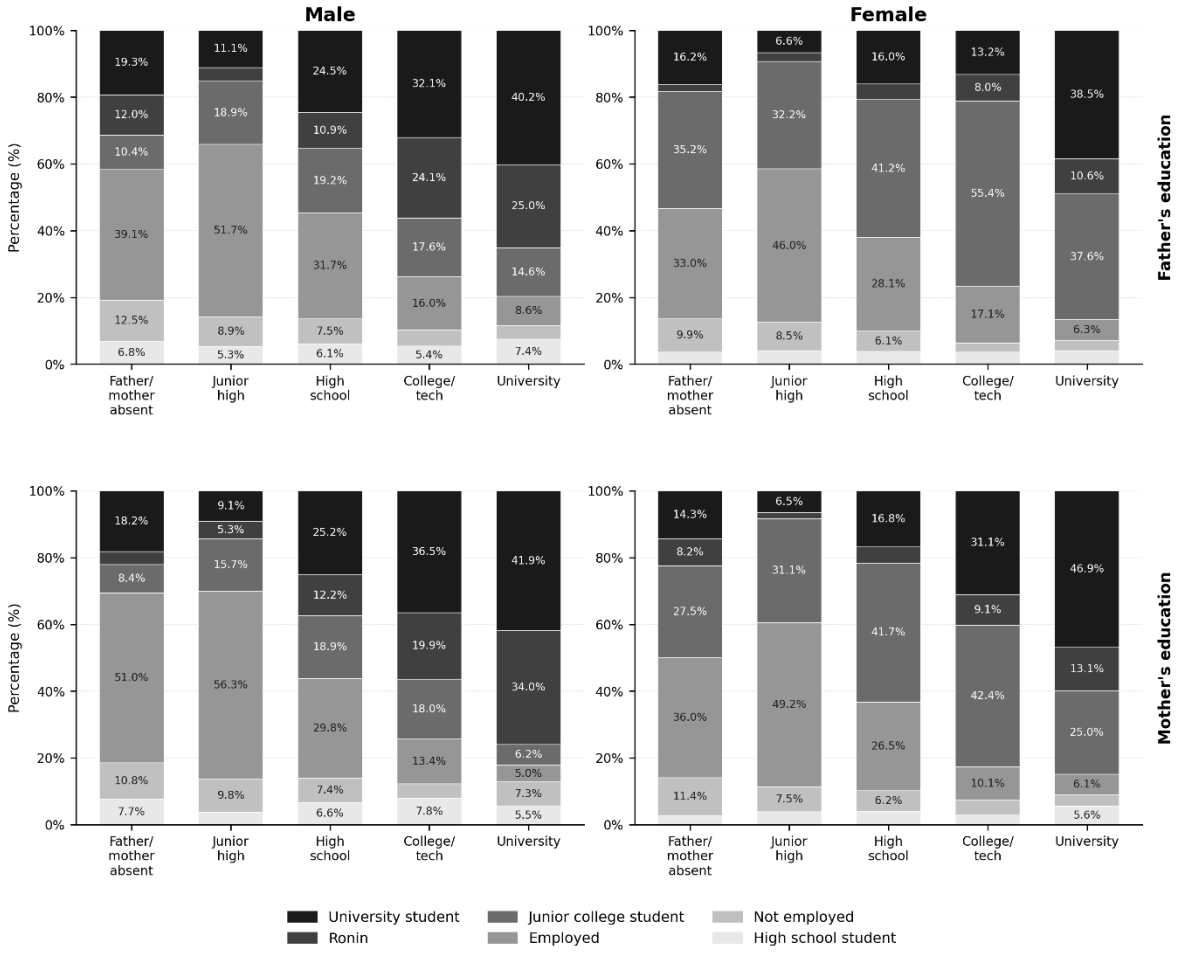

Figure 4 Respondents' status by educational backgrounds of the parents (weighted)

Figure 5 depicts the distribution of respondents' current status by the occupational categories of fathers and mothers. The overall pattern is similar to that observed in Figure 4.

Fathers' occupations indicate that university attendance in the 18-year-old school cohort is highest among children of professional and managerial workers, followed by those from other white-collar occupations such as clerical and sales positions. Although the positive association between higher occupational class and university entry is observed for both men and women, it is noteworthy that the proportion of *ronin* increases more markedly with occupational status among men than among women. In particular, among children whose fathers are in professional occupations, the proportion of *ronin* exceeds 20 percent.

In addition, the effects of fathers' and mothers' occupations differ in ways that are distinct from the patterns observed for parental education. While having a mother in a professional occupation is associated with higher rates of both university entry and becoming *ronin*, it is also notable that children of non-employed mothers exhibit relatively high rates of university entry and *ronin*. This pattern reflects gendered divisions within firms in Japanese society, as well as the persistence of a norm, especially among relatively well-educated groups, whereby women withdraw from the labor market upon marriage and invest in their children's education as full-time homemakers (Hirao 2001; Yu 2009). Although this pattern may have weakened in recent years, it likely reflects the limited opportunities for continuous full-time employment after childbirth among the cohort of mothers in this study (Nishimura 2018; Mugiyama 2024).

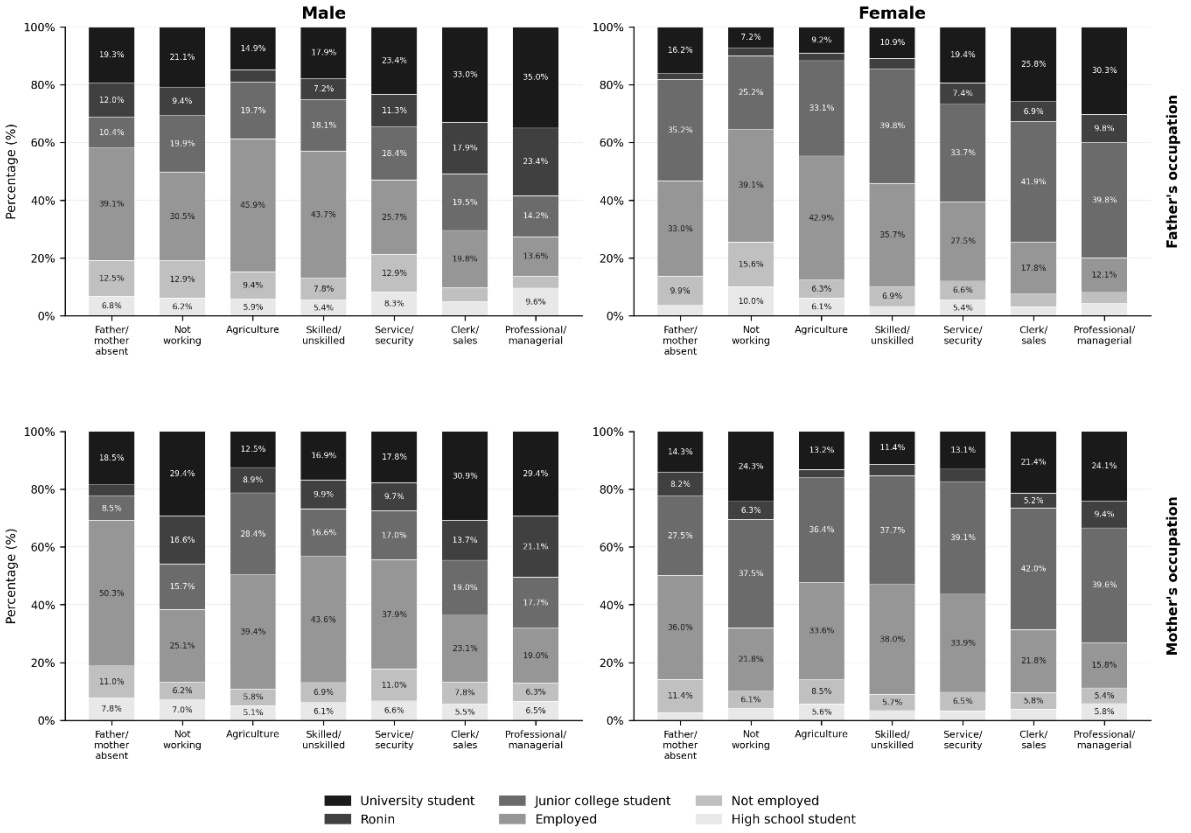

Figure 5 Respondents' status by occupational backgrounds of the parents (weighted)

Table 2 presents household income at age 18 and equivalized household income, calculated by dividing household income by the square root of household size. The results show that household income is substantially higher among those who are employed than among those who are not, likely reflecting the respondents' own earnings.

Excluding this effect, the overall pattern is broadly consistent with the trends observed thus far. Among men, household income is highest for *ronin*, whereas among women, it is higher for those enrolled in higher education than for *ronin*.

Table 2 Distribution of the household incomes of 18 academic years-old (weighted)

Male	household income		equivalent household income		Female	household income		equivalent household income	
	mean	std.dev	mean	std.dev		mean	std.dev	mean	std.dev
Not employed	728.5	422.2	368.3	209.8	Not Working	712.9	375.8	356.8	178.0
Employed	853.0	369.3	428.2	173.1	Working	828.9	363.8	412.8	166.3
High school student	851.6	414.8	435.2	209.6	High School	797.5	413.4	404.4	206.5
Junior college student	867.5	373.9	430.4	177.0	College	891.6	387.3	443.7	188.6
Ronin	1007.4	428.8	510.7	212.6	Ronin	1004.8	399.5	503.2	201.0
University student	965.3	417.7	484.4	206.0	University	1028.1	407.9	519.0	210.2
Total	895.4	405.1	449.9	197.1	Total	892.7	396.0	446.3	193.5

Note: Values are in units of ten thousand JPY.

Taken together, the descriptive results indicate that *ronin* are more prevalent among individuals from relatively advantaged family backgrounds, suggesting that Hypothesis 1b is better supported than Hypothesis 1a. Moreover, consistent with Hypothesis 2, the tendency for children from higher-status families to adopt the *ronin* strategy appears to be more pronounced among men than among women. This gender difference can be interpreted as reflecting the institutional characteristics of the Japanese labor market, in which the expected returns to educational investment differ by gender.

While these descriptive patterns are suggestive, they do not account for the

interrelationships among social background variables. To examine these associations more rigorously, the next section employs multinomial logistic regression to assess the effect of social background on becoming *ronin* while controlling for other factors.

Multinomial Logit Analysis

We next examine the results using multinomial logistic regression, controlling for other variables. Table 3 reports the results in terms of average marginal effects (AMEs). Because the same estimates are easier to interpret when visualized, Figure 6 presents a graphical representation of these AMEs along with their 95% confidence intervals. The figure displays both the magnitude of the estimates and their 95% confidence intervals. Estimates whose confidence intervals do not include zero (i.e., those statistically significant at the 5% level) are indicated by filled markers, whereas non-significant estimates are shown as hollow markers.

Among men, there is a significant tendency for individuals from more highly educated family backgrounds to be more likely both to enter university immediately after high school and to become *ronin*. Although a similar pattern is observed among women, the effect of parental education on becoming *ronin* is somewhat weaker, and there is no statistically significant difference between those whose parents are both non-university graduates and those with one university-educated parent. While the effect of parental education on university enrollment does not differ significantly by gender, there is a significant gender difference in the effect of having one university-educated parent on becoming *ronin*[4].

In addition, parental occupation and equivalized household income are more clearly associated with becoming *ronin* among men than among women. After controlling for other

[4] Following Long and Mustillo (2021), we compare average marginal effects (AMEs) across separately estimated models for men and women. The AME of having one college-educated parent on the probability of being a *ronin* is significantly larger for men (AME = 0.068) than for women (AME = 0.016). This suggests that the educational resources associated with partial parental college education translate more strongly into *ronin* enrollment strategies for men than for women.

variables, having a non-employed mother—that is, a full-time homemaker—does not have a statistically significant effect on becoming *ronin*.

Overall, men from relatively advantaged backgrounds—particularly those with higher parental education, higher-status paternal occupations, or higher household income—are more likely to become *ronin* rather than enroll directly in university, whereas women are less likely to adopt the *ronin* strategy relative to university enrollment even when they come from similarly advantaged backgrounds.

Taken together, the results confirm that, for both men and women, *ronin* tend to come from social backgrounds comparable to those of university entrants, as suggested by Hypothesis 1b. However, there are notable gender differences in this pattern, as proposed in Hypothesis 2. Men who become *ronin* are more likely to come from more advantaged backgrounds than their female counterparts, and the prevalence of *ronin* also differs by gender. These findings suggest that the tendency to adopt the *ronin* strategy as a means of pursuing more prestigious educational opportunities is more pronounced among men than among women, reflecting the institutional linkage between education and employment in Japanese society in the 1990s.

Table 3 Average Marginal Effects of Multinomial Logistic Regression on Respondents' Status, by Sex

	Not employed		Employed		High school student		Junior college student		Ronin		University student	
	Male	**Female**	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**
Parental education (ref: neither college)												
One parent college	-0.020*	0.008	-0.165**	-0.167**	0.017	-0.003	0.017	0.056**	0.068**	0.016+	0.083**	0.090**
	(0.010)	(0.011)	(0.017)	(0.016)	(0.011)	(0.008)	(0.017)	(0.020)	(0.014)	(0.009)	(0.018)	(0.015)
Both parents college	0.013	-0.025*	-0.275**	-0.276**	0.018	0.019	-0.053**	-0.022	0.112**	0.075**	0.184**	0.229**
	(0.017)	(0.012)	(0.016)	(0.014)	(0.013)	(0.013)	(0.019)	(0.025)	(0.018)	(0.016)	(0.024)	(0.023)
Father's occupation (ref: clerical/sales)												
Father: not working	0.031	0.048	0.096+	0.188**	0.000	0.053	-0.039	-0.165**	-0.023	-0.040**	-0.065	-0.083*
	(0.034)	(0.033)	(0.056)	(0.054)	(0.030)	(0.034)	(0.035)	(0.046)	(0.034)	(0.014)	(0.041)	(0.034)
Father: agriculture	0.028	-0.000	0.186**	0.171**	0.013	0.027+	-0.032+	-0.098**	-0.088**	-0.026*	-0.107**	-0.074**
	(0.020)	(0.015)	(0.029)	(0.029)	(0.018)	(0.016)	(0.019)	(0.027)	(0.013)	(0.011)	(0.020)	(0.019)
Father: skilled/unskilled	0.019	0.012	0.171**	0.105**	0.009	-0.002	-0.036**	-0.030	-0.068**	-0.014+	-0.094**	-0.070**
	(0.012)	(0.011)	(0.018)	(0.018)	(0.011)	(0.008)	(0.013)	(0.019)	(0.011)	(0.008)	(0.015)	(0.013)
Father: service/security	0.079**	0.011	0.008	0.055+	0.038+	0.014	-0.037+	-0.095**	-0.033+	0.015	-0.055*	0.001
	(0.028)	(0.019)	(0.033)	(0.032)	(0.023)	(0.017)	(0.021)	(0.031)	(0.018)	(0.016)	(0.024)	(0.024)
Father: professional/managerial	0.003	0.011	-0.059**	-0.045+	0.064**	0.020+	-0.028+	0.007	0.020	0.012	0.000	-0.006
	(0.015)	(0.015)	(0.023)	(0.023)	(0.017)	(0.012)	(0.016)	(0.023)	(0.013)	(0.009)	(0.017)	(0.014)

Mother's occupation												
Mother: homemaker	-0.011	0.004	-0.016	-0.030*	0.009	0.001	-0.027*	-0.017	0.018+	0.002	0.028*	0.040**
	(0.009)	(0.008)	(0.015)	(0.014)	(0.008)	(0.006)	(0.012)	(0.016)	(0.011)	(0.007)	(0.014)	(0.012)
Parental absence												
Father absent	0.030+	0.014	0.140**	0.078**	0.022	-0.007	-0.128**	-0.082**	-0.000	-0.025**	-0.064**	0.021
	(0.018)	(0.015)	(0.029)	(0.030)	(0.016)	(0.011)	(0.014)	(0.027)	(0.015)	(0.008)	(0.019)	(0.020)
Mother absent	0.030	0.036	0.120**	0.019	0.028	-0.015	-0.103**	-0.120**	-0.059**	0.045	-0.017	0.035
	(0.025)	(0.028)	(0.042)	(0.046)	(0.025)	(0.015)	(0.026)	(0.045)	(0.019)	(0.029)	(0.036)	(0.039)
Equiv. household income (JPY 1M)	-0.014**	-0.014**	0.017**	0.006	-0.004*	-0.005**	-0.013**	-0.006	0.008**	0.002	0.005	0.018**
	(0.003)	(0.003)	(0.004)	(0.004)	(0.002)	(0.002)	(0.003)	(0.004)	(0.003)	(0.002)	(0.003)	(0.003)
N	4,950	4,926	4,950	4,926	4,950	4,926	4,950	4,926	4,950	4,926	4,950	4,926

** p < 0.01, * p < 0.05, + p < 0.10.

Notes: Entries are average marginal effects (AMEs) from weighted multinomial logistic regression models estimated separately by sex. Standard errors in parentheses. Reference categories: parental education = neither parent college-educated; father's occupation = clerical/sales (fo3). Household income in units of 1 million JPY. Weights: normalized individual survey weights.

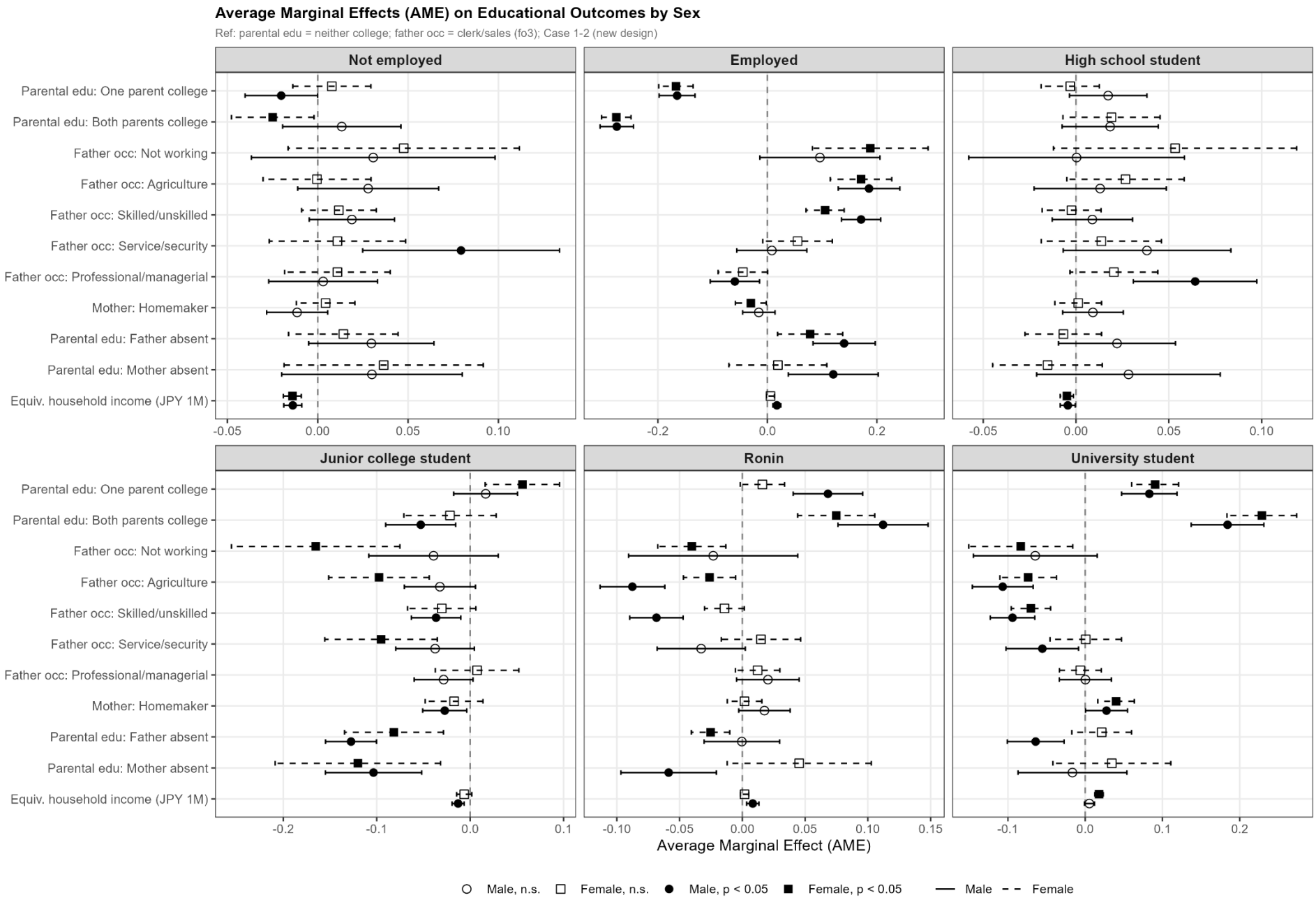

Figure 6 Average marginal effects (AMEs) on respondents' status by gender (weighted)

Discussion

This study examined *ronin* as a class strategy within the context of Japan's highly standardized education system. Previous studies have described the *ronin* phenomenon primarily as a culturally specific feature of the Japanese education system and have shown that students who attend preparatory schools (*yobiko*) often come from relatively advantaged social backgrounds. However, most existing research has relied on case studies of *yobiko* students or retrospective survey data limited to individuals who eventually entered university. Using nationally representative microdata, this study provides the first systematic examination of the relationship between social background and becoming *ronin*.

The results indicate that becoming *ronin* is associated with relatively advantaged social origins comparable to those of students who enter university directly after high school. *Ronin* are more likely to come from families with higher parental education, higher household income, fathers in white-collar occupations, and mothers who are not employed. These findings suggest that becoming *ronin* is not simply the result of academic failure but may function as a strategic investment in educational attainment. Families with greater resources may be more willing and able to support an additional year of examination preparation in order to improve their children's chances of entering more prestigious universities within the Japanese institutional context.

At the same time, the analysis reveals clear gender differences in the use of the *ronin* strategy. Although men from higher social backgrounds are more likely to become *ronin*, women are less likely to adopt this strategy even when they come from similarly advantaged families. This finding is consistent with previous studies suggesting that educational investment and career opportunities are gendered in Japan. Because career

opportunities are often concentrated at the point of initial labor market entry, delaying educational transitions may involve different costs and expectations for men and women.

This pattern is closely related to a distinctive feature of Japan in a comparative perspective. While many advanced societies have moved away from vertical gender inequality between universities and junior colleges toward more horizontal differentiation across fields of study (Bradley 2000; Charles and Bradley 2002, 2009), Japan continues to exhibit a comparatively rare pattern in which women's access to four-year universities remains more constrained. Under a system characterized by firm-specific skill formation, gender-segregated employment practices, and strong internal labor markets—conditions that tend to disadvantage women—the incentives to invest in strategies such as becoming *ronin* differ by gender. Moreover, children who grow up observing such employment structures may internalize these norms, potentially reinforcing a cycle in which gendered expectations shape educational investment strategies.

These findings contribute to the literature on educational stratification in several ways. Much of the existing research has focused on stratification mechanisms within schools, particularly in decentralized systems such as that of the United States, where families actively negotiate educational opportunities. In contrast, Japan represents a highly standardized system in which educational selection is formally based on academic performance measured by standardized examinations, leaving limited scope for negotiation within schools. Nevertheless, this study demonstrates that class-based strategies can operate outside the formal school system, for example through postponing university entry to improve examination outcomes.

Research in the United States has shown that students who delay college entry—similar to what Hypothesis 1a would predict—tend to come from disadvantaged

backgrounds and face negative consequences for later status attainment. In contrast, the findings of this study suggest that delaying entry into higher education in Japan occurs within a very different institutional context, such that the meaning of this behavior differs substantially even when similarly operationalized. Rather than treating class-based strategies as fixed forms of cultural capital, it is therefore important to consider how what counts as "capital" varies across fields and how habitus may differ accordingly. From this perspective, identifying the culturally embedded logics through which class strategies operate in specific institutional contexts is a promising direction for future research, and comparative approaches such as the one adopted in this study are particularly valuable.

Recent research on shadow education has expanded rapidly; however, it remains difficult to integrate the diverse forms of education provided outside schools within a single analytical framework. In the present study, some *ronin* attend *yobiko* and thus fall within the scope of shadow education, whereas many others do not. Distinguishing the effects of *yobiko* attendance, an issue not fully addressed here, represents an important direction for future research. At the same time, it is equally important to examine the conditions under which shadow education expands or reduces inequality within specific institutional fields. While previous studies have focused primarily on participation in private tutoring or cram schools, this study highlights the importance of broader strategies that involve delaying educational transitions.

In societies where selection based on standardized academic performance is highly competitive, phenomena similar to *ronin* can be widely observed. Strategies such as academic redshirting (Pong 2009), which delay educational progression to mitigate disadvantage, may be understood in a similar analytical framework. By directing attention not only to processes within schools but also to strategies that extend beyond school

boundaries, this study underscores the importance of analyzing how such strategies function as forms of capital within specific institutional fields and of uncovering the cultural logics that underpin them.

Several limitations should be acknowledged. First, the Employment Status Survey does not directly identify *ronin* status, and therefore *ronin* respondents were identified indirectly using information on employment status and school attendance. Second, because the survey only provides household information for respondents living with their families, individuals living independently could not be included in the analysis of social background. Finally, the analysis does not take into account the prestige of universities that students aim to enter or eventually attend. Future research should examine how the selectivity of target universities shapes the decision to become *ronin* and the consequences of this strategy for later educational and occupational outcomes.

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