# 日本における学歴結合・婚前妊娠が出生力格差に与える影響

# Educational Assortative Mating, Bridal Pregnancy, and Childbearing in Contemporary Japan

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## Introduction

This study examines the impact of educational assortative mating on fertility outcomes in contemporary Japan. Previous studies argued that the relative improvement of women's better access to higher education accompanies an increase in the number of women having stable jobs and marrying a partner whose socioeconomic status is same or lower than themselves. However, little is known about the consequence of "the end of hypergamy" (van Bavel 2012) on demographic outcomes.

Nomes and van Bavel (2016) provided three causal paths to hypothesize that hypogamic unions are negatively associated with fertility. First, opportunity cost of childbearing could be considerably high in households where women outearn their husbands. Second, there are differentials in marital timing between the lower and higher educated. Third, women's preference towards the number of children might be associated with expected spouse pairings. Women who want to have more children might project to rely on husband's earning potential, while highly educated women without preference for childbearing selectively choose partners whose status are lower than themselves. Therefore, women of hypogamic unions are assumed to have fewer children compared with wives of other types of assortative mating.

In the Japanese context, however, an alternative hypothesis could be proposed. In Japan, a relative increase in bridal pregnancy (BP hereafter) has been paid attention in demography. Related to assortative mating, Raymo and Iwasawa (2008) argued BP is associated with the likelihood of non-normative unions (i.e hypogamy). To add, if this type of marriage is really 'unexpected', as the marriage preceded by pregnancy is associated with lower marital quality (Teachman 2002), it is possible to assume that this unexpected and non-normative union would not produce additional childbirth. Therefore, this hypothesis predicts that hypogamy is positively associated only with the first childbirth, which is mediated by its linkage to BP.

### Data and Methods

Based on the research interest, this study examines the relationship between educational assortative mating and fertility outcomes possibly mediated by BP in Japan using Japanese General Social Survey Life Course Study (JGSS-LCS 2009), which allows us to capture the detailed information of respondent's demographic events and occupational careers at month level. We estimate the hazards by parity using discrete time event history model. The total sample used for the analysis is 1225 Japanese female aged 28 to 42 in 2008 who experienced marriage.

### **Results and Discussion**

Table 1 shows a result of the analysis. For the 1<sup>st</sup> childbirth, model 1 shows hypogamic unions in which respondents are not university graduates are more likely to have their 1<sup>st</sup> child than other types of couples. However, model 2, which omits cases of BP, indicates that this relationship is partly explained by the likelihood of hypogamic unions to experience BP. As we assumed, hypogamy does not affect 2<sup>nd</sup> and 3<sup>rd</sup> childbirth. However, model 3 and 4 suggest that BP at 1<sup>st</sup> childbirth is positively associated with additional child bearing but the effect is decreased and not statistically significant after controlling age at first childbirth, while model 5 and 6 present BP strongly predicts 3<sup>rd</sup> childbirth in spite of controlling the age at 2<sup>nd</sup> childbirth. We will discuss implications of these results and provide future perspectives.

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	1st Childbirth		2nd Childbirth		3rd Childbirth	
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Time at risk	-0.011***	-0.007***	-0.005***	-0.006***	-0.009***	-0.011***
Couple's pairing (ref: hypogamy)	0.000	0.000	0.000	0.000	0.000	0.000
Homogamy	-0.084	-0.187	0.056	0.010	-0.114	-0.264
Hypergamy	-0.328***	-0.247**	-0.069	-0.053	-0.193	-0.256
Both partners high educated	-0.366***	-0.198*	-0.028	0.026	-0.156	-0.134
Hypogamy (univ. educated women)	-0.512***	-0.519**	-0.215	-0.147	-1.050	-0.896
Bridal pregnancy			0.173**	0.076	$0.569^{***}$	0.397***
Age at the last child birth				-0.040***		-0.084***
Constant	-2.994***	-3.350***	-3.887***	-2.747***	-4.990***	-2.324***
Observations	32531	31217	36513	36513	41027	41027
Log Likelihood	-4116.449	-3360.394	-3400.705	-3394.681	-1329.781	-1323.216
Pseudo R2	0.015	0.006	0.006	0.008	0.018	0.023

Table 1. Results of Discrete Time Event History Model by Parity

Source: JGSS-2009, \* p<0.1 \*\* p<0.05 \*\*\* p<0.01 (all models include birth cohort as a control variable)

#### Acknowledgment

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