

Does initial job status affect
midlife outcomes and mental health?
Evidence from a survey in Japan

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Purpose

To examine how initial job status following graduation affects the midlife outcomes and mental health in Japan.

Key result

Initial job instability signals a bad start for an individual in Japan; it reduces opportunities for future success and has a traumatic effect on mental health.

Background (1)

- A debate about the long-term consequences of a flexible market entry in Europe:
 - *The “entrapment” scenario:*
Once an individual begins working life with non-regular jobs, entrapment in such jobs is inevitable.
 - *The “stepping-stone” scenario:*
A flexible entry offers individuals opportunities to gain work experience, thereby allowing them to catch up with other entrants over time.

Background (2)

- Empirical studies in European countries have been largely supportive of the “*stepping-stone*” scenario.
e.g. Baranowska et al., 2011; Booth et al., 2002;
Gebel, 2010; McGinnity et al., 2005; Steijn et al., 2006
- In contrast, the “*entrapment*” scenario appears to be prevalent in Japan.
e.g. Kondo (2007) observed that failure to obtain regular employment at graduation has an adverse impact on subsequent employment status.

Hypotheses

- **H1**: Initial job status has a long-lasting impact on various midlife outcomes (not only current job status).
- **H2**: The impact of unstable initial job status on mental health remains significant even after controlling for the mediating effects of other life outcomes.
- **H3**: The impact of initial job status on midlife outcomes differs for men and women.

Data (1)

- Microdata collected from [Japanese Longitudinal Survey on Employment and Fertility](#) (LOSEF)
- Asked many questions about career history, current income and other socioeconomic variables, marital and family situations, and various aspects of SWB
- Linked with the administrative records reported in [Social Security Statements](#) (SSS), allowing us to mitigate recall errors

Data (2)

- Sample size
 - 5,935 respondents
 - 30s: 1,965; 40s: 1,916; 50s: 2,054
 - Men: 3,117; Women: 2,818
- Biases in the survey sample
 - Limited to those holding the SSS
 - Skewed toward those with higher educational attainment who lived in urban areas

Data (3)

Psychological distress

- Measured with a Kessler 6 (K6) six-item questionnaire about psychological distress in daily life (range 0-24)
(Kessler et al., 2002, 2010)
- $K6 \geq 5$: mood/anxiety disorder in Japan
(Sakurai et al., 2011)
- $K6 \geq 13$: serious mental illness
(Kessler et al., 2010; Furukawa et al., 2008)

Regression

Recursive bivariate probit models

$$\left\{ \begin{array}{l} \text{Midlife outcome} \\ = f(\text{Initial unstable job status, Covariates}) \\ \text{Initial unstable job status} \\ = g(\text{Instruments, Covariates}) \end{array} \right.$$

Variables

- Midlife outcome (binary variable)
 - Current unstable job status
 - Career instability
 - (proportion of years in unstable job status $>1/3$ or $1/2$)
 - Low household income (below the poverty line)
 - Staying unmarried
 - Psychological distress ($K6 \geq 5$; $K6 \geq 13$)

- Instruments for initial unstable job status
 - Prefectural Job openings-to-applicants ratio (Kondo, 2007)
 - Proportion of non-regular employees at the national level
 - both in the year of graduation

Assessing the mediating effects

$$\left\{ \begin{array}{l} \text{Psychological distress} \\ = f(\text{Initial unstable job status}, \text{Mediator(s)}, \text{Covariates}) \\ \\ \text{Initial unstable job status} \\ = g(\text{Instruments}, \text{Covariates}) \end{array} \right.$$

- Mediator(s)

- Each of Current unstable job status, Career instability, Low household income, and Staying unmarried
- All of them

Results

Prevalence

- Unstable initial job status
Men:14.6% Women:18.5%
- Unstable current job status
Men: 22.6% Women: 28.9 %

Differences in midlife outcomes: men

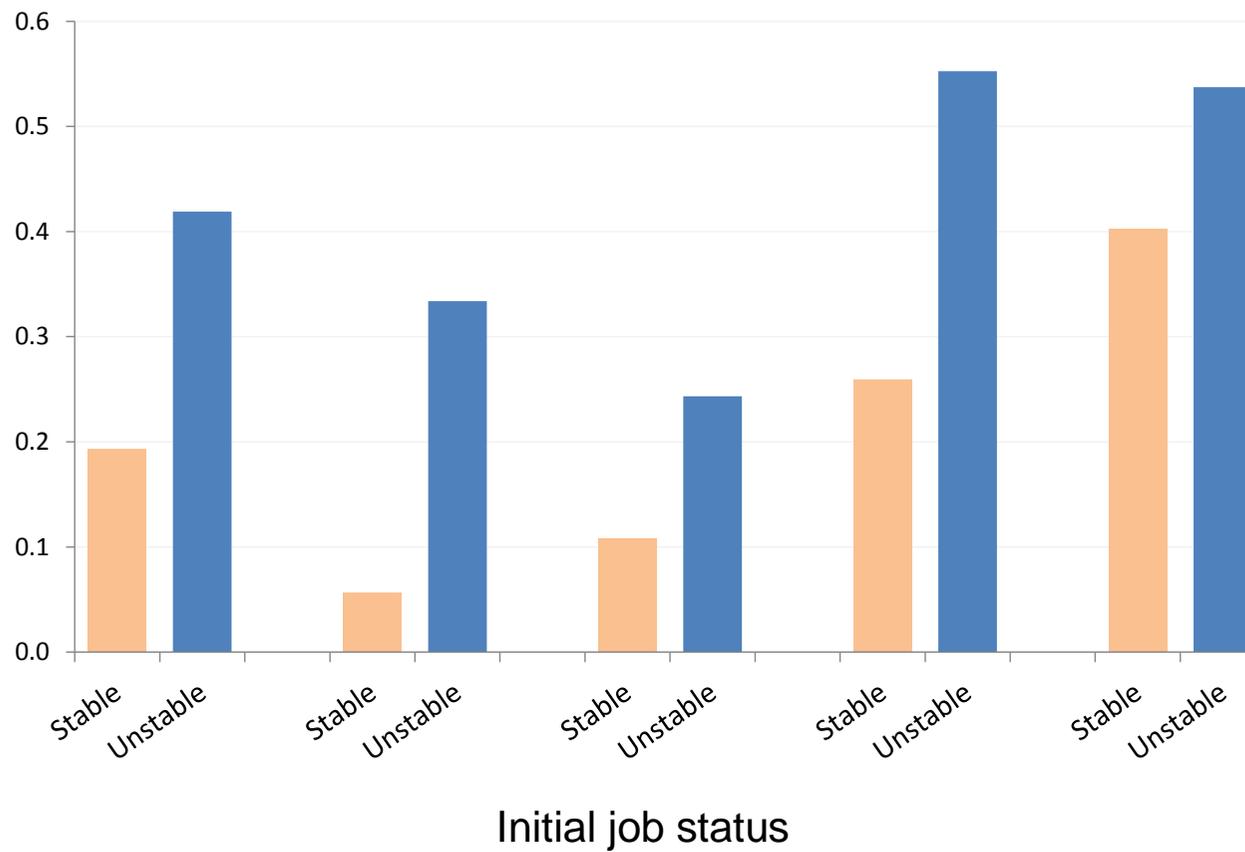
Unstable
current
job status

Proportion of
years in
unstable job
status

Household
income below
poverty line

Staying
unmarried

Psychological
distress
(K6 \geq 5)



Differences in midlife outcomes: women

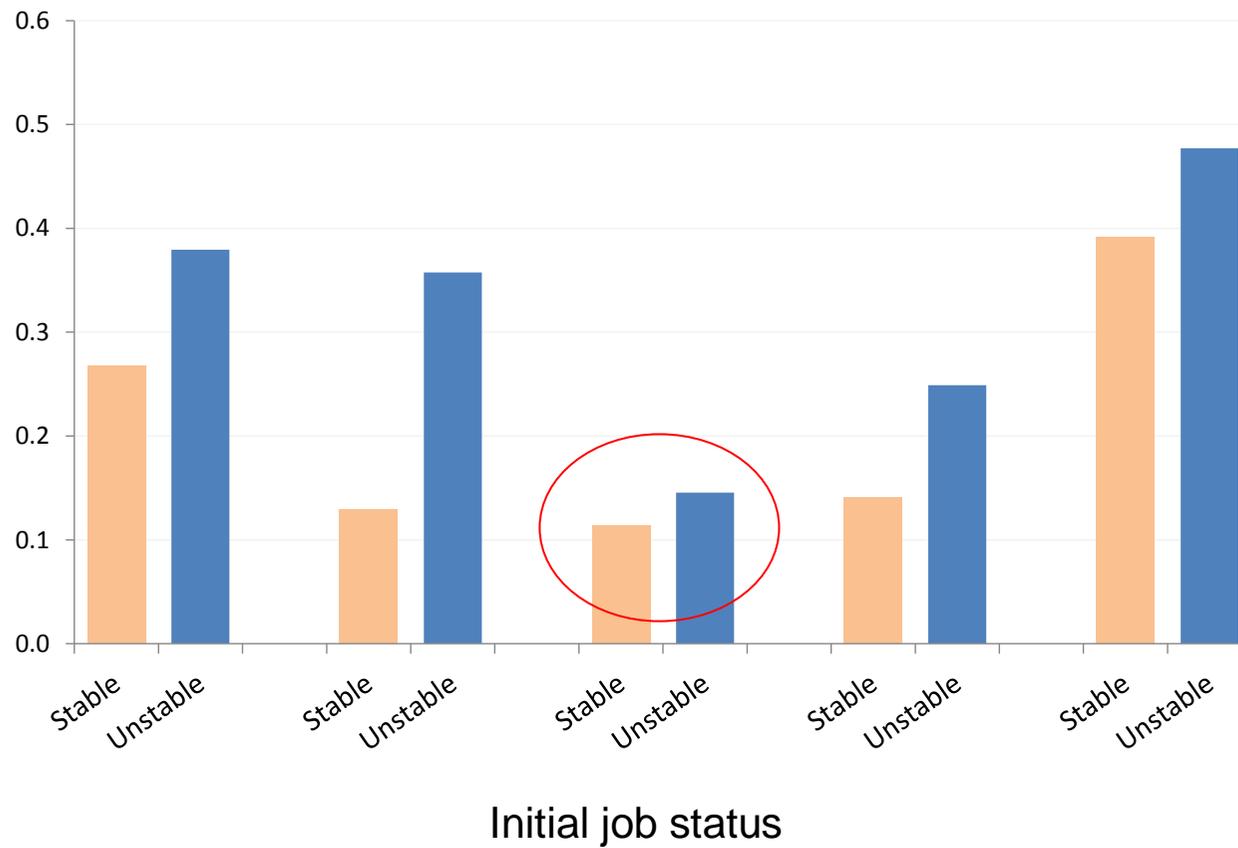
Unstable
current
job status

Proportion of
years in
unstable job
status

Household
income below
poverty line

Staying
unmarried

Psychological
distress
(K6 \geq 5)

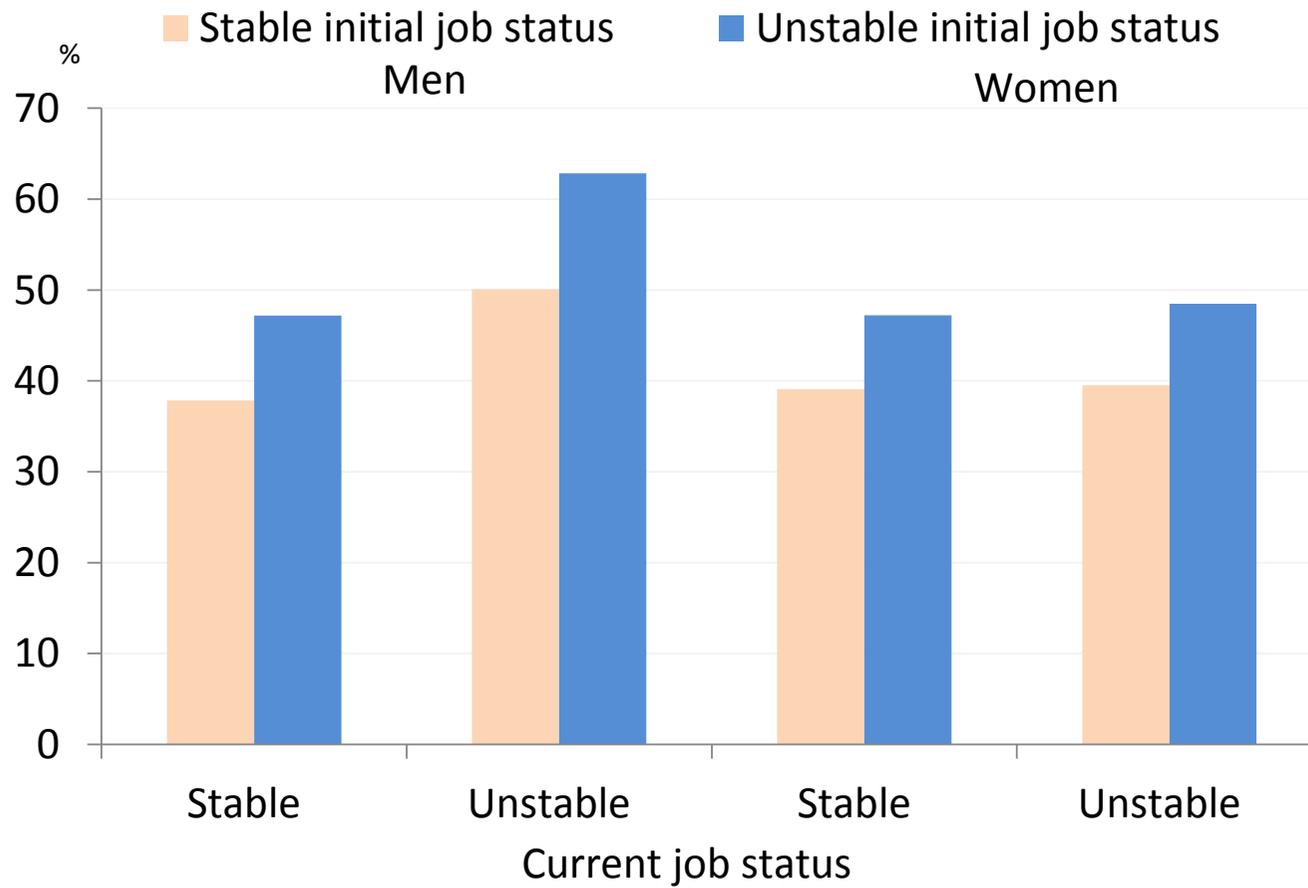


Estimated marginal effects of unstable initial job status on socioeconomic/marital status, obtained from the recursive bivariate probit models

	Men	Women
Unstable current job status	0.556 ^{***}	0.606 ^{***}
Career instability	0.463 ^{***}	0.781 ^{***}
Low household income	0.417 ^{***}	0.010
Staying unmarried	0.570 ^{***}	0.430 ^{***}
Psychological distress (K6 ≥ 5)	0.463 ^{***}	0.535 ^{***}
Psychological distress (K6 ≥ 13)	0.275 [*]	0.545 ^{***}

(^{***} $p < 0.001$, ^{**} $p < 0.01$, ^{*} $p < 0.05$)

Comparing psychological distress (K6 \geq 5) between those with stable initial job status and those with unstable initial job status, under the same current job status



Estimated marginal effects of unstable initial job status on psychological distress ($K6 \geq 5$), obtained from the bivariate probit models

Men

Model	1	2	3	4	5	6
Unstable initial job status	0.463 ^{***}	0.432 ^{***}	0.395 ^{***}	0.420 ^{***}	0.393 ^{***}	0.359 ^{***}
Unstable current job status		0.141 ^{***}				0.070 ^{**}
Career instability			0.118 ^{***}			-0.003
Low household income				0.201 ^{***}		0.133 ^{***}
Staying unmarried					0.167 ^{***}	0.127 ^{***}

Estimated marginal effects of unstable initial job status on psychological distress ($K6 \geq 5$), obtained from the bivariate probit models (continued)

Women

Model	1	2	3	4	5	6
Unstable initial job status	0.535 ^{***}	0.533 ^{***}	0.473 ^{***}	0.523 ^{***}	0.500 ^{***}	0.465 [*]
Unstable current job status		0.007				-0.036
Career instability			0.063			0.046
Low household income				0.111 ^{***}		0.100 ^{***}
Staying unmarried					0.103 ^{***}	0.087 ^{***}

Estimated marginal effects of unstable initial job status on psychological distress ($K6 \geq 13$), obtained from the bivariate probit models

Men

Model	1	2	3	4	5	6
Unstable initial job status	0.275*	0.177	0.124	0.196	0.174	0.073
Unstable current job status		0.100***				0.050***
Career instability			0.110***			0.027
Low household income				0.111***		0.053**
Staying unmarried					0.084***	0.051**

Estimated marginal effects of unstable initial job status on psychological distress ($K6 \geq 13$), obtained from the bivariate probit models (continued)

Women

Model	1	2	3	4	5	6
Unstable initial job status	0.545 ^{***}	0.496 ^{***}	0.498 ^{***}	0.401 ^{***}	0.478 ^{***}	0.363 [*]
Unstable current job status		0.031 [*]				0.011
Career instability			0.030 [*]			0.000
Low household income				0.089 ^{***}		0.071 ^{**}
Staying unmarried					0.056 ^{***}	0.035 [*]

Discussion and conclusions (1)

H1: Initial job status has a long-lasting impact on various midlife outcomes (not only current job status).

→ *Supported.*

- Unstable initial job status raised the possibilities of unstable current job status, career instability, low household income, unmarried status, and psychological distress, even after controlling for possible endogeneity of initial job status.

Discussion and conclusions (2)

H2: The impact of unstable initial job status on mental health remains significant even after controlling for the mediating effects of other life outcomes.

→ *Supported* (especially for women).

- Failure to obtain regular employment upon graduation stigmatised Japanese workers.

Discussion and conclusions (3)

H3: The impact of initial job status on midlife outcomes differs for men and women.

→ *Supported.*

- Higher impact on career and current job instability for women.
- Not significant impact on household income, and smaller impact on marital status for women.
- Higher and more traumatic impact on psychological distress for women.

Discussion and conclusions (4)

- Initial job instability signals a bad start for an individual in Japan; it reduces opportunities for future success and has a traumatic effect on mental health, in contrast with observations from previous studies in European countries.
- These results probably reflect employment practices and other socioeconomic circumstances in Japan, which tend to provide non-regular workers with limited chances to re-enter the labour market as regular employees.

Thank you for your attention!