

Monetary and non-monetary benefits brought about by study abroad for a degree

a comparative study between study for a degree in Japan
and abroad

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Survey of Global Personnel Development and Long-term Impact of Study Abroad

Background of the Study

- There is a demand for personnel with the potential to play an active role in global society.
- The question of how to ensure that the quality assurance of education and the enhancement of learning lead to the concrete outcome of global personnel development is an urgent task for the higher education sector.

Aims of the Study

- It aimed at examining the impact of study abroad experiences on students' subsequent career development and lives.
- It also aimed at providing valuable implications for universities and companies working to address the urgent issue of developing personnel with global competencies.

Theoretical Framework

- Human Capital Theory (Schultz, 1963; Becker, 1964)
- Human capital is productive wealth embodied in labour, skills and knowledge. (OECD, 2001)
- Mobility Capital (Murphy-Lejeune, 2002)
- In this study, human capital theory is used as a framework to understand the monetary and non-monetary benefits of studying abroad at the undergraduate and graduate levels, compared with studying only in Japan.
- Cf. Signaling Model (Arrow, 1973; Spence 1973)

Retrospective Online Survey

Survey period and respondents

People **with** study abroad experience

Period: January-May, 2015

Number of respondents: 4,489

People **without** study abroad experience

Period: August-September, 2015

Number of respondents: 1,298

Selection Criteria

People **with** study abroad experience

- At the least, lived primarily in Japan during elementary and junior high school; **studied abroad for three months or more** after graduation from a Japanese senior high school.
- The aim of study abroad was to learn a language, obtain a degree, or earn credits

People **without** study abroad experience

- No experiences of studying or living abroad for longer than 3 months, did not live overseas as a child
- Had not acquired foreign language proficiency, did not use a foreign language at home, had not studied at an international school in Japan prior to entering a Japanese university
- Graduated from a Japanese university
- Working for a company located in Japan, housewife or unemployed

Survey Questions

Benefits		Online survey question items
Monetary benefits (3 items)		<ul style="list-style-type: none"> ● Amount of an annual income
		<ul style="list-style-type: none"> ● Study experience was helpful in obtaining a higher income ● Satisfaction with a current annual income
Non-monetary benefits (11 items)	Career-related benefits (7 items)	<ul style="list-style-type: none"> ● Study experience was helpful in planning a career ● Study experience was helpful in gaining a current job ● Study experience (degree) was valued by recruiters (employers) ● Gained foreign language competencies (skills) were valued by recruiters (employers) ● Gained specialized knowledge and skills were valued by recruiters (employers) ● Experience of communicating with foreigners (cross-cultural communication experience) was valued by recruiters (employers) ● Satisfaction with a current job
	Non-career-related aspects (4 items)	<ul style="list-style-type: none"> ● Satisfaction with study experience ● Satisfaction with life outside work (private life) ● Satisfaction with friendships ● Satisfaction with life

Research Questions and Data

Objective

This paper reports on a study of **the monetary and non-monetary benefits** of studying for **an undergraduate or graduate degree abroad** by comparing those who had studied on such programs with graduates of comparable programs at universities in Japan.

Comparative study on 4 groups: (1) UG abroad, (2) MA/PhD abroad, (3) UG in Japan, (4) MA/PhD in Japan

Respondent Groups

	Academic level and type	Period of study abroad	Number of responses
People <u>with</u> study abroad experience (SA Group)*	Undergraduate degree abroad	Longer than 3 years	416
	Masters/Doctorate degree abroad	Longer than 1 year	353
People <u>without</u> study abroad experience (Non-SA Group)**	Undergraduate degree in Japan	-	710
	Masters/Doctorate degree in Japan	-	528

*: Classified by the type of institution which they responded was their most important study abroad destination

** : Classified by the highest level of institution they attended

Respondent Groups: Gender and Age

		Gender		Age			
		Male	Female	20's or younger	30's	40's	50's or older
SA Group	Undergraduate degree abroad	52.4%	47.6%	9.6%	34.9%	42.1%	13.5%
	Masters/Doctorate degree abroad	58.9%	41.1%	6.2%	28.3%	37.7%	27.8%
Non-SA Group	Undergraduate degree in Japan	47.0%	53.0%	13.4%	32.0%	34.4%	20.3%
	Masters/Doctorate degree in Japan	54.5%	45.5%	15.7%	37.3%	34.5%	12.5%

SA Group Profiles: Field of Study (Masters/Doctoral degree abroad)

	Academic Fields	
	STEM	Humanities and Social Sciences
SA Group	15.6%	84.4%
Non-SA Group	39.4%	60.6%

SA Group Profiles: Study Abroad Destination

	United States	United Kingdom	Australia	Canada	Germany	France	China
Undergraduate degree abroad	78.1%	6.0%	2.2%	4.1%	1.9%	0.5%	2.9%
Masters/ Doctorate degree abroad	57.2%	21.5%	4.5%	2.5%	2.8%	2.3%	0.8%

SA Group Profiles: Period of Studying Abroad

	3-4 years	4-5 years	5 years or longer
Undergraduate degree abroad	41.1%	36.3%	22.6%

	1-2 years	2-3 years	3 years or longer
Masters/Doctorate degree abroad	36.0%	32.0%	32.0%

Methods of Analysis

Comparison of 4 groups: (1) UG abroad, (2) MA/PhD abroad, (3) UG in Japan, (4) MA/PhD in Japan

- **Average annual income: 8 categories**

1. 0-2 million yen
2. 2-4 million yen
3. 4-6 million yen
4. 6-8 million yen
5. 8-10 million yen
6. 10-15 million yen
7. 15-20 million yen
8. 20 million yen or more

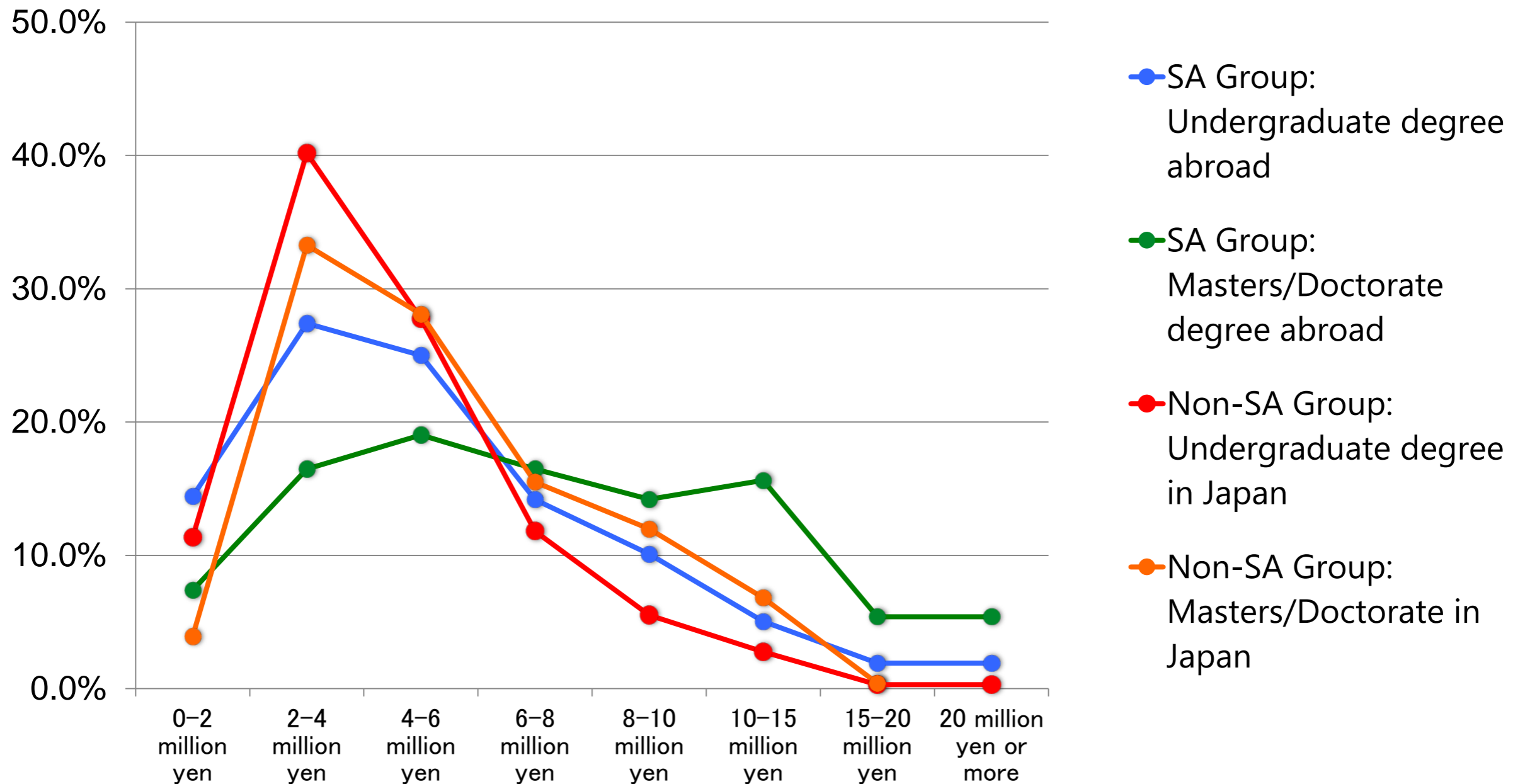
- **Monetary and non-monetary benefits: 4-point Likert scale**

- 4 = strongly agree
- 3 = tend to agree
- 2 = relatively disagree
- 1 = strongly disagree

- Comparing weighted averages, calculating income gap coefficients, and conducting one-way ANOVA of the four groups.

Results

Monetary Benefits of SA Experience: Average Annual Income of 4 Groups



*The answers of "housewives or unemployed" are not included in the study abroad groups. The answers of those who "do not want to answer" are not included in the non-study abroad groups.

Average Annual Income and Income Gap by Gender

	UG degree abroad (1)	UG degree in Japan (2)	Masters/ Doctorate degree abroad (3)	Masters/ Doctorate degree in Japan (4)	Income gap coefficients : UG degree (1) / (2)	Income gap coefficients : Masters/ Doctorate degree (3) / (4)	Income gap coefficients : Academic level (3) / (1)
Total	5.47M yen	4.49M yen	7.92M yen	5.53M yen	1.22	1.43	1.45
Male	6.45M yen	5.75M yen	9.54M yen	6.69M yen	1.12	1.43	1.48
Female	4.39M yen	3.37M yen	5.62M yen	4.10M yen	1.33	1.37	1.28

*PPP for GDP: US\$1 = JPY106 (OECD 2015)
1 million yen = US\$9,433

Average Annual Income by Age

	UG degree abroad (1)	UG degree in Japan (2)	Masters/Doctorate degree abroad (3)	Masters/Doctorate degree in Japan (4)	Income gap coefficients : UG degree (1) / (2)	Income gap coefficients: Masters/Doctorate degree (3) / (4)	Income gap coefficients: Academic level (3) / (1)
Total	5.47M yen	4.49M yen	7.92M yen	5.53M yen	1.22	1.43	1.45
50's or older	6.53M yen	6.08M yen	9.93M yen	8.06M yen	1.07	1.23	1.52
40's	5.64M yen	4.70M yen	8.25M yen	6.54M yen	1.20	1.26	1.46
30's	5.39M yen	3.89M yen	6.42M yen	4.67M yen	1.39	1.38	1.19
20's	3.50M yen	2.90M yen	3.72M yen	3.50M yen	1.20	1.06	1.07

*PPP for GDP: US\$1 = JPY106 (OECD 2015)

1 million yen = US\$9,433

Percentages of Those Who Are Working for a Foreign Company and in Management Roles

	Working for a foreign company	Management roles
Undergraduate degree abroad	24.6%	32.5%
Undergraduate degree in Japan	2.1%	17.2%
Masters/Doctorate degree abroad	22.4%	41.1%
Masters/Doctorate degree in Japan	2.1%	18.6%

The percentage in management roles is the total proportion of those in the “executive/board member class” and in the “managerial class”

Current Job

	Office Worker	Sales	Engineer	Researcher	Professional	Others
Undergraduate degree abroad	35.5%	14.5%	8.1%	2.5%	24.6%	14.7%
Undergraduate degree in Japan	47.0%	18.2%	18.4%	1.9%	10.6%	3.9%
Masters/Doctorate degree abroad	19.0%	11.2%	5.7%	25.3%	28.4%	10.3%
Masters/Doctorate degree in Japan	28.1%	6.3%	35.0%	14.8%	14.4%	1.3%

Average Income by Academic Field: Graduate Level

STEM abroad (1)	STEM in Japan (2)	Humanities & Social Sciences abroad (3)	Humanities & Social Sciences in Japan (4)	Income gap coefficient: STEM (1) / (2)	Income gap coefficient: Humanities & Social Sciences (3) / (4)
7.22M yen	5.77M yen	8.05M yen	5.14M yen	1.25	1.57

*PPP for GDP: US\$1 = JPY106 (OECD 2015)
1 million yen = US\$9,433

Self-evaluation of Monetary benefits: Results of One-way ANOVA

	UG degree abroad (1)		Masters/ Doctoral degree abroad (2)		UG degree in Japan (3)		Masters/ Doctoral degree in Japan (4)		F value	Multiple comparison
	M	SD	M	SD	M	SD	M	SD		
Study experience was helpful in obtaining a higher income	2.48	1.01	2.76	1.03	2.00	0.80	2.27	0.90	60.98***	2 > 1 > 4 > 3
Satisfaction with a current annual income	2.08	0.89	2.44	0.91	2.03	0.78	2.17	0.88	19.42***	2 > 1 2 > 3 2 > 4 4 > 3

1) F value: ***p <.001, **p <.01, *p <.05

2) Between groups: df = 3, Within groups: df= 2.003

3) The type of Post Hoc Test was Games-Howell (p <.05). The differences are shown by the inequality sign.

4) Multiplicity issues in the analysis were not considered.

Non-monetary benefits of study abroad experiences: Results of One-way ANOVA

	UG degree abroad (1)		Masters/ doctoral degree abroad (2)		UG degree in Japan (3)		Masters/ doctoral degree in Japan (4)		F value	Multiple Comparison
	M	SD	M	SD	M	SD	M	SD		
Study abroad experience was helpful in planning a career	3.24	0.85	3.47	0.72	2.23	0.82	2.66	0.90	230.74 ^{***}	2 > 1 > 4 > 3
Study abroad experience was helpful in gaining a current job	3.06	0.99	3.38	0.86	2.28	0.90	2.74	0.99	127.68 ^{***}	2 > 1 > 4 > 3
Study abroad experience (degree) was valued by recruiters (employers)	2.91	0.96	3.14	0.89	2.32	0.83	2.48	0.92	86.29 ^{***}	2 > 1 > 4 > 3
Foreign language skills acquired through study abroad were valued by recruiters (employers)	2.95	0.97	3.08	0.88	1.54	0.61	1.63	0.70	554.29 ^{***}	2, 1 > 4, 3
Specialized knowledge and skills acquired through study abroad were valued by recruiters (employers)	2.79	0.97	3.11	0.86	2.15	0.80	2.51	0.94	104.91 ^{***}	2 > 1 > 4 > 3
Experience of communicating with foreigners gained through study abroad was valued by recruiters (employers)	2.84	0.98	3.00	0.89	1.52	0.61	1.59	0.65	510.12 ^{***}	2, 1 > 4, 3
Satisfaction with a current job	2.56	0.95	2.84	0.85	2.41	0.81	2.48	0.82	21.18 ^{***}	2 > 1 2 > 3 2 > 4 1 > 3
Satisfaction with study abroad experience	3.17	0.82	3.23	0.77	2.57	0.80	2.83	0.80	76.66 ^{***}	2, 1 > 4 > 3
Satisfaction with life outside work (private life)	2.85	0.81	2.97	0.80	2.63	0.76	2.74	0.82	15.72 ^{***}	2 > 3 2 > 4 1 > 3
Satisfaction with friendships	2.87	0.79	3.00	0.75	2.56	0.71	2.66	0.78	33.56 ^{***}	2, 1 > 4, 3
Satisfaction with life	2.78	0.81	2.98	0.81	2.50	0.76	2.57	0.78	34.68 ^{***}	2 > 1 > 4, 3

1) F value: ***p <.001, **p <.01, *p <.05

2) 2) Between groups: df = 3, Within groups: df= 2.003

3) The type of Post Hoc Test was Games-Howell (p <.05). The differences are shown by the inequality sign.

4) Multiplicity issues in the analysis were not considered.

Summary and Discussion

Findings: Impact of study abroad on the increase of human capital

- The average annual income of respondents who studied for a graduate degree abroad was higher than that of those who graduated from graduate schools in Japan.
- The average income of respondents who studied abroad for an undergraduate degree was also higher than that of those who obtained a bachelor's degree in Japan.
- The self-perceptions of income-related aspects were significantly more positive among respondents who studied abroad for a graduate degree than among any other group.

=> Human capital gained through study abroad experiences seems to be helpful in increasing monetary benefits.

Monetary Benefits: An issue for those who studying abroad for undergraduate degree

Satisfaction with the current income was the same for two undergraduate groups, although the average income was high for those who studied abroad.

=> Those who studied abroad for undergraduate degree might be more ambitious of their income

=> Those who studied abroad for an undergraduate degree might feel dissatisfied at the Japanese traditional business custom of promotion such as the seniority-based wage system, which does not necessarily take one's ability and skills account for deciding the salary,

=> The cost of study abroad for undergraduate degree (1.6 - 4.4 times higher than that of studying in Japan) might have also affected the results.

=> This is a similar result with the previous studies in the West (Janson, Schomburg & Teichler, 2009; Schmidt & Pardo, 2012), indicating that study abroad experience is not necessarily helpful for enhancing monetary benefits.

Impact of Study Abroad: Comparison of the Undergraduate and Graduate Levels

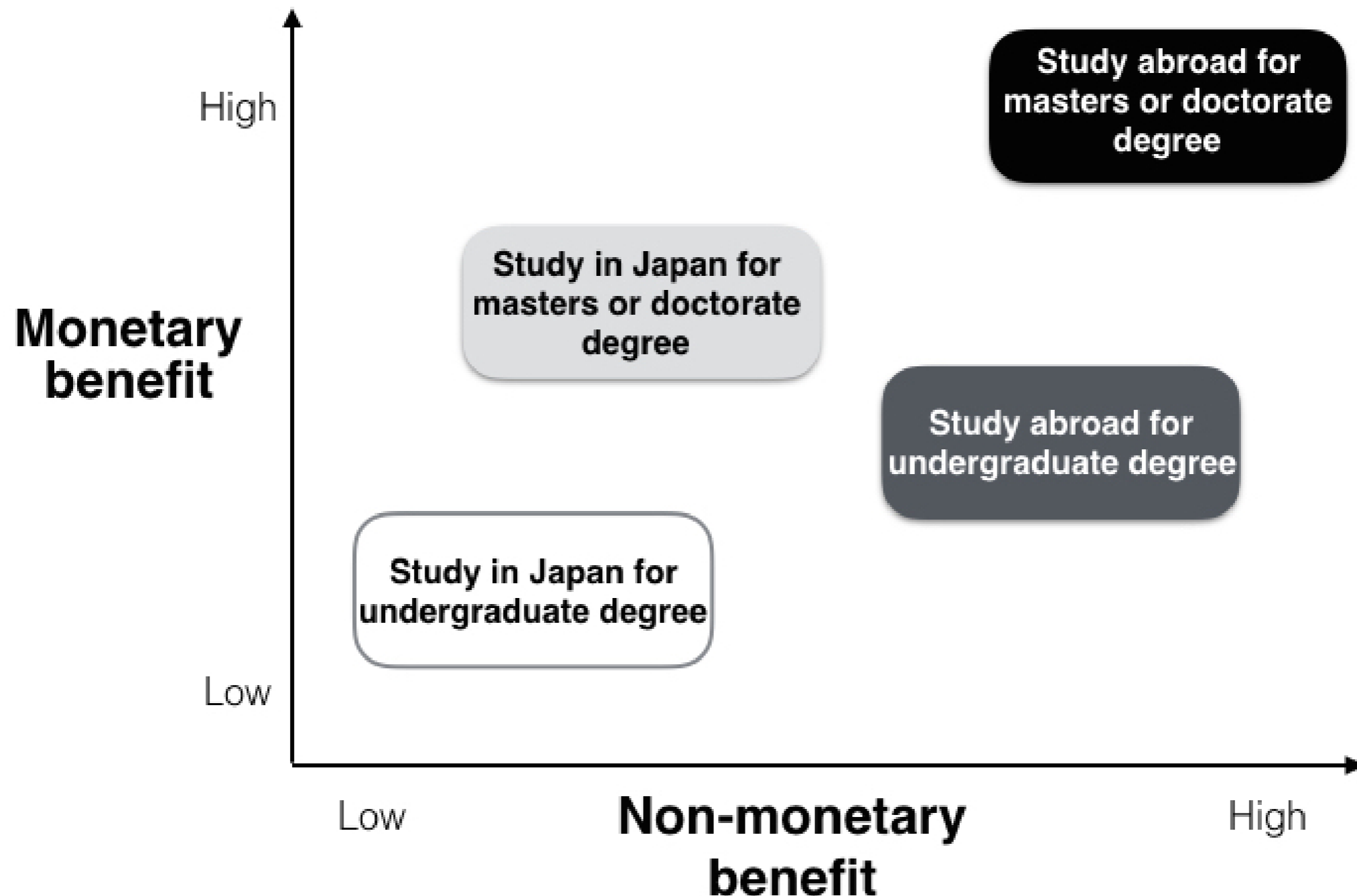
- Monetary and non-monetary benefits are both greater for people with study abroad experience at the graduate level than those who studied at the undergraduate level
 - => Gaining knowledge and skills in professional fields through graduate study might be helpful in finding a professional job that requires those knowledge and skills, which consequently might enhance their annual income (monetary benefits).
 - => In the case of undergraduates, an acquisition of transversal human capital, such as foreign language skills and communication skills, seems to be evaluated highly by the employers.

Non-monetary Benefits

The self-perceptions of non-monetary benefits were significantly more favorable among respondents in the study abroad groups, at both undergraduate and graduate levels, than among those in the non-study abroad groups.

- Non-monetary career-related benefits: study abroad experience was helpful for career planning and job-hunting
- Non-monetary, non-career-related benefits: satisfaction with life outside of work (private life), friendships, and life in general

Model of Benefit of Study Abroad for Undergraduate and Graduate Degrees and Study in Japan



Comparison of Benefits of Studying Abroad by the Academic Level and Other Profiles

1. Graduate Level

- Seem to be more beneficial in both monetary and non-monetary aspects than undergraduate level

2. High monetary benefits

- High income: 40's or more, graduate level, social sciences and humanities (including MBA)

3. High non-monetary benefits

- Graduate level: professional and other general skills are highly evaluated by employers; high self-evaluated satisfaction with their study abroad experiences and lives in general including private lives
- Undergraduate Level (basically same as the graduate level): Foreign language skills and communication experiences with foreign people are highly evaluated by employers; high self-evaluated satisfaction with their own study abroad experiences and their friendship

Thank you for your attention.

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