How Does the Presence of Migrants at Worksites Shape Japanese Attitudes toward Migration?: An Analysis Using JGSS-2015

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職場の外国人の存在は外国人受け入れ意識にどのような影響を与えるのか？

—JGSS-2015 を用いた分析—

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Against the background of a current and expected increase of migrants in Japanese society, this study investigates whether and how the presence of migrant workers at worksites shapes Japanese attitudes toward migration. An emerging and growing body of the Japanese literature on public attitudes on migration has thus far failed to make a serious consideration of this issue. Using the logistic regression analysis of JGSS-2015 data, the results find an overall positive effect of the worksite presence of migrants on native-born citizens' attitudes toward migration, which provides a support for the intergroup contact hypothesis. However, the results also indicate that the occupational position of Japanese employees mediates this effect. More specifically, for those who are engaged in unskilled occupations, the presence of migrants at worksites actually leads to negative attitudes toward migration, which in turn offers credence to the threat hypothesis. If the Japanese labor market introduces a larger number of migrants in the future, it will be important to better specify the way in which the worksite presence of migrants leads to negative attitudes toward migration among the unskilled.

Key Words: Public Attitudes toward Migration, Intergroup Contact, JGSS-2015

日本社会において現在進行し、また将来的に予期される外国人労働者の増加を背景として、本稿では、職場における外国人労働者の存在が日本人の外国人受け入れ意識に与える影響を分析する。日本の外国人受け入れ意識に関する研究調査は、近年増加しつつあるものの、本稿での課題を主眼とした分析はほとんどない。JGSS-2015 を用いてロジスティック回帰分析を行った結果、全般的には接触仮説の予測と一致して、外国人が職場にいる人ほど肯定的な受け入れ意識をもっていた。しかし、従業員の職業上の地位がその効果を媒介していることも明らかになった。具体的には、非熟練労働者の間では、脅威仮説の予測に従って、職場に外国人がいる人ほど否定的な受け入れ意識をもっていた。今後、日本の労働市場がより多くの外国人を導入するならば、職場の外国人の存在が、非熟練労働者の間でどのように否定的な受け入れ意識につながるのかについて、さらなる理解が必要だろう。

キーワード：外国人の受け入れ意識、集団間接触、JGSS-2015

1. Introduction

During the last quarter century, Japan has witnessed a steady increase of the migrant population. Having held a restrictive policy of migration for decades in the postwar era, this country made important revisions in its migration policy around 1990 in the context of serious labor shortages. While the economic boom that created such labor shortages ended shortly after these revisions, since then, migrants in Japan have shown an important increase, including, for instance, the third-generation Japanese-origin overseas now able to settle and work as long-term residents, migrants recruited under a *de facto* temporary migrant worker program – the Foreign Technical Intern Program (hereafter, FTIP) – as well as other types of migrants from lesser developed Asian countries. The rate of this increase is remarkable. In 1989, the population of registered foreigners counted less than 1 million in Japan. However, in 2005, that population went over two million for the first time in postwar history. Additionally, the most recent data (as of this writing) from the Japanese Ministry of Justice shows that the number of registered foreigners reached its historic high of more than 2.2 million in 2015 (JMJ 2016), recovering from a decreasing trend after the economic recession in the late 2000s.(1) Certainly, the magnitude of this increase should not be too exaggerated since the relative proportion of migrants still remains small, constituting less than 2 percent of the total population. Nevertheless, the current increase of migrants still represents an important social change in contemporary Japanese society.

Accompanying the increase of migrants over the last few decades are the emergence and growth of the sociological literature regarding public attitudes toward migrants and migration in Japan (e.g., Green and Kadoya 2015; Mazumi 2015; Nagayoshi 2009, 2012-2013; Nukaga 2006; Ohtsuki 2006). The increasing availability of nationally representative samples such as the Japanese General Social Surveys (hereafter, JGSS) also assisted the growth of this literature. While this line of literature first developed in North American and Western Europe in the growing politicization of immigration issues during the 1990s,(2) researchers working on migration in Japan have utilized – and often moved beyond – theoretical insights garnered in previous research to shed light on the nature and character of Japanese attitudes on migration. Existing works in the Japanese literature have examined a variety of factors that shape public attitudes toward migrants and migration, including, for instance, education (Nukaga 2006), contact with migrants (Ohtsuki 2006), (self-rated) English ability (Green and Kadoya 2015), the degree of the local concentration of migrants (Nagayoshi 2009, 2012-2013), and the local degree and pace of aging (Mazumi 2015).

Against this backdrop, this study seeks to investigate whether and how the presence of migrants at worksites shapes native-born citizens' attitudes toward migration in Japan. Despite the recent growth of the literature, little research has scrutinized this issue. Exploring this issue has empirical importance nonetheless. First, as suggested above, the migrant population in Japan has been on a steady increase, which has created a greater number of chances for Japanese workers to encounter and work with their migrant counterparts. How then do such experiences influence the former's attitudes toward migration? Second, in the current context of the decline and aging of the native-born population, the increase of migrants may be further accelerated in years to come. In the last few years, the Japanese government has developed its interest in accepting a larger number of migrants in anticipation of future labor shortages. In March of 2015, for example, the cabinet approved a bill to extend the length of work for migrants introduced under the FTIP from three to five years, as well as to establish a new resident status of nursing care. In addition, twice in the last year, the government made an announcement to expand the FTIP by approving a wider range of occupations for technical interns, including such jobs as meatpacking, the production of prepared food, and the sewing of car seats.(3) More recently, in April 2016, a special mission committee on the securement of labor force,

organized by the ruling Liberal Democratic Party, began to work on a tentative proposal to call for the admission of migrants into industries such as nursing care, agriculture, and Japanese hotels (*ryokan*). This proposal noted that "a system must be established that can handle issues even if the number of migrant workers doubles from the current one of 908 thousand" (cited from Miyazaki 2016).

The current and expected increase of migrant workers in the Japanese society will generate more frequent encounters and contacts with migrants for Japanese workers. However, we know little about how such contacts may shape Japanese attitudes toward migration. This study fills this void in the literature through an examination of JGSS-2015.

2. The Effect of the Presence of Migrants at Worksites: Two Competing Views

What effect might the worksite presence of migrants have on Japanese attitudes toward migration? Will it contribute to more negative or positive attitudes? Different lines of literature offer two competing – if not contradictory – scenarios in this regard.

2.1 Negative Effect through the Activation of Threat

First, it may be predicted that the worksite presence of migrants leads to negative attitudes toward migration among native-born employees. An explanation for this prediction is that by having migrant colleagues at their worksites, native-born employees will develop the sense of threat that they might be displaced by migrants eventually or that their working conditions may deteriorate. In the context of Japan, where the relatively small proportion of migrants limits their frequent encounters with Japanese citizens in their daily life, these types of threat may be perceived only after Japanese employees actually have migrants as their colleagues at their worksites. It is important to note that these kinds of threat are not warranted despite their occasional appearance in public discourse. Previous qualitative studies find that migrants, including Japanese-origin South Americans (Kajita et al. 2006; Okubo 2005) and migrant technical interns (Kamibayashi 2015), play supplementary roles to native-born workers in the Japanese labor market. Furthermore, existing quantitative research that analyzed the effect of migration on regional labor markets finds at best mixed support for the negative effects of migration (Nakamura et al. 2009). Nevertheless, as far as the presence of migrants is perceived by native-born employees to be detrimental to their work conditions, it should lead them to have negative attitudes toward migration.

To the extent that the worksite presence of migrants has a negative effect on attitudes toward accepting migrants, another possible scenario is that this effect will not be observed among all persons who have migrants at their workplaces but will be limited only to those who engage in low-skilled occupations. Migrant workers in Japan – like in other migrant-receiving countries – tend to concentrate in low-skilled and low-paid occupations.(4) This fact may augment the threat perception especially for low-skilled native-born workers. At the other end of the skill spectrum, besides the scarcer presence of migrants, the types of work that migrants do will further limit the threat perception of native-born workers, since they are not likely to place native-born workers in direct competition with their migrant counterparts. For instance, due to their language, cultural background and knowledge, Chinese high-skilled migrants are assigned by Japanese employers to a bridging role, where they take charge of communications and negotiations with Chinese companies to expand business opportunities for their Japanese companies (Liu-Farrer 2011). Given the disparity in the proportion and role of migrants in Japan's labor market, the negative effect of the worksite presence of migrants may be only observed among low-skilled native-born workers.

2.2 Positive Effect through the Facilitation of Understanding

In contrast to the prediction above, the presence of migrants at worksites may actually enhance positive attitudes toward migration. Intergroup contact theory posits that direct exposure to migrants will facilitate greater understanding and acceptance of migrant individuals among native-born citizens while at the same time dispelling unsubstantiated negative stereotypes and rumors about migrants. To the extent that this is the case, exposure to migrants at worksites should also foster the reduction of prejudice against migrants among Japanese workers, leading to their greater support for increasing migration.

Early studies reject such a simplistic view. In a now-classic and influential work on the intergroup contact theory, for instance, Allport (1961) proposes four conditions that make contact conducive to reduction in prejudice: equal status between groups, the pursuit of common goals, intergroup cooperation, and the presence of institutional support. For him, the above conditions must be marked for the contact to reduce prejudice. However, many subsequent studies that analyzed attitudes toward a wide range of social groups find a positive effect of contact to be present even when the above conditions are absent (Pettigrew 1998). In a series of research on public attitudes toward migrants and migration, studies show that having migrant friends or acquaintances is associated with positive views of migrants in the United States and Europe (e.g., O'neal and Tienda 2010; Schlueter and Scheepers 2010). In the case of Japan, where the relative size of migrants is even smaller, friendship with migrants may not even be needed for reducing anti-migrant attitudes. A study by Ohtsuki (2006) finds that, in addition to having migrant friends, even more cursory and limited contact, such as seeing and greeting migrants in the area of residence, has a positive effect on respondents' attitudes toward migration. To the extent that contact cultivates positive attitudes, worksite contact with migrants should also play the same role.

With the above two competing hypotheses in mind, this study analyzes what effect the presence of migrants at worksites have on Japanese attitudes toward migration.

3. Data and Method

In order to investigate the effect of the presence of migrant workers at worksites on attitudes toward migration, this study utilizes JGSS-2015 as its dataset. JGSS-2015 offers a nationally representative sample of Japan. Its respondents include a total of 4,500 Japanese men and women whose age range from 20 to 89. The sample was selected by the two-stage stratified sampling method. The response rate is 52.4 percent (2,079 cases). Excluding 173 cases that contain non-response in variables used in the analysis, this study focuses on 1,906 cases.

This study employs logistic regression analysis to examine the effect of the worksite presence of migrant workers. JGSS-2015 contains a question that asks about respondents' attitudes toward migration ("Are you for or against the increase of migrants in your area of residence?"), with respondents being given two answer choices (1=for, 2=against). I created a dummy variable from this question (1=for, 0=against) in order to use it as a dependent variable. JGSS has continuously asked this question since its first survey (JGSS-2000), and many previous studies that employ the JGSS dataset make use of this question as a proxy for attitudes toward migrants or migration in Japan (e.g., Nagayoshi 2009, 2012-2013; Nukaga 2006; Ohtsuki 2006).

The independent variable of primary interest is the presence or absence of migrant workers at respondents' worksite. When respondents have a job, JGSS-2015 asks whether or not they have person(s) from abroad (*gaikoku shusshin no hito*) – i.e., migrant(s) – working at their worksites. I produced a dummy variable from this question (1=Yes, 0=No). The analysis below focuses on whether

this variable has a positive or negative effect on the dependent variable above.

Other independent variables, which serve as controls in this analysis, relate to sex, age, education, household income, political orientation, occupation, and size of area of residence. The sex variable is dichotomous, where 1 indicates male and 0 female. Education denotes the types of school that respondents attended last, including: (1) junior high school, (2) junior college (including technical college), and (3) university (reference=high school). Household income consists of dummy variables that denote the range of amount of income. Respondents who stated that they did not know or did not want to answer the household income constituted about 24 percent of the total valid respondents. I chose to create dummies for income for the sake of keeping these cases in the analysis. Specifically, income dummies involve: (1) less than 3.5 million yen, (2) more than 6.5 million yen, and (3) do not know or do not want to answer (reference=more than 3.5 million and less than 6.5 million yen).(5) Party affiliation is used as a proxy for political orientation, which consists of categorical variables including: (1) the Liberal Democratic Party (LDP), (2) the Democratic Party of Japan (DPJ), and (3) other parties (Other) (reference=have no party affiliation or do not know). The occupation variable consists of eight dummies, which involve: (1) Professional, (2) Management, (3) Sales, (4) Skilled, (5) Semiskilled, (6) Unskilled, (7) Agriculture, and (8) Do Not Work (reference=Clerical). Lastly, the size of area of residence has three dummy variables which respectively denotes the population size of the municipalities in which respondents live: (1) large cities, (2) cities with more than 200 thousand, and (3) towns or villages (reference=cities with less than 200 thousand).

In the analysis that follows, I first look at whether the presence of migrants at worksites will have an overall positive or negative effect on attitudes toward accepting migrants. Then, I move on to see if that effect may vary depending on whether respondents have a low-skilled job, as suggested by the second scenario of the threat hypothesis. Doing so enables the analysis to gain a detailed picture with regard to the effect of the worksite presence of migrants in the Japanese labor market.

Table 1 shows the descriptive statistics of the dataset used in this analysis. It suggests that 43 percent of respondents support accepting migrants in their area of residence, which in other words means that more than half of respondents oppose increasing migration – a result more or less similar to previous JGSS series.(6) As for the proportion of those who have migrants at their worksites, Table 1 indicates that 14 percent of all respondents (including those who do not work) work where migrant employees are present. Admittedly, this figure may appear relatively high given the proportion of migrants in Japan, which is still lower than 2 percent of the total population. A possible reason may be that respondents provided a positive answer to the question even when they had migrant(s) working in the same building of their companies, not necessarily when they had migrant(s) working together in the same department or room.

Even so, the percentage of respondents with migrants at their worksites shows important differences by their occupational position. Figure 1, leaving aside respondents who do not work, indicates the proportional distribution of respondents who have migrants at their worksites by occupation. It suggests a somewhat polarized picture as to the presence of migrants at worksites. Among eight occupations, the proportion is the highest in management (36 percent). In addition to the presence of migrant colleagues in managerial positions, this result might have been driven by the fact that managers have a wider organizational conception as to what constitute their “worksite” because of the character of their occupation, which is to manage and supervise corporate tasks within or even across divisions or departments. The second and third highest are “Professional” and “Unskilled” (28 and 25 percent, respectively). These results may not be so surprising given the occupational distribution of migrants that tends to cluster at the two ends of the skill spectrum. These results suggest

Table 1 Descriptive Statistics of the Analytic Sample

Item	Mean Value	S.D
For or Against Increasing Migration (For=1)	.43	.50
Presence of Migrant(s) at Worksite (Yes=1)	.14	.34
Sex (Male=1)	.46	.50
Age	53.10	17.30
Eduation (Ref=High School)		
Junior High School	.12	.32
Junior College	.10	.30
University	.27	.44
Household Income (Ref=More Than 3.5 Million and Less Than 6.5 Million Yen)		
Less Than 3.5 Million Yen	.23	.42
More Than 6.5 Million Yen	.25	.43
Do Not Know or Do Not Want to Answer	.24	.43
Party Affliation (Ref=Have No Party Affiliation or Do Not Know)		
LDP	.28	.45
DPJ	.07	.25
Other	.10	.30
Occupation (Ref=Clerical)		
Professional	.10	.30
Management	.03	.18
Sales	.09	.28
Skilled	.09	.29
Semiskilled	.07	.25
Unskilled	.05	.23
Agriculture	.01	.12
Do Not Work	.38	.49
Size of Area of Residence (Ref=Cities with Less Than 200 Thousand)		
Large Cities	.25	.43
Cities with More Than 200 Thousand	.24	.42
Towns or Villages	.10	.30
N	1,906	

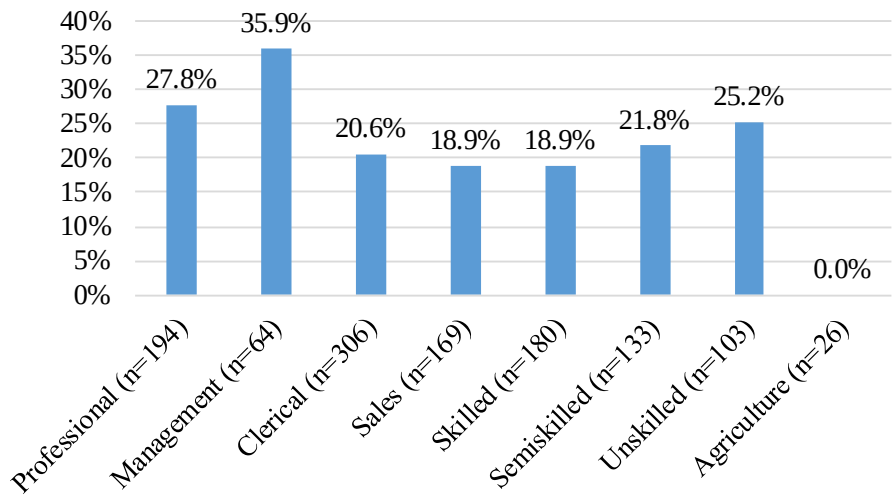

Figure 1 Pecentage of Respondents Having Migrant Workers at Worksites by Occupation

that the professional and the unskilled are the ones that have more encounters and contacts with migrants at worksites in Japan.(7)

4. Results

Tables 2 shows the results of the logistic regression analysis of attitudes toward migration. Model 1 of the table focuses on the overall effect of the presence of migrant workers at workplaces. It illustrates that five factors have a significant effect on attitudes toward accepting migrants. First and foremost, the presence of migrants at worksites shows a significantly positive effect. This means that those who have migrant employees at their worksites are more likely to welcome the local increase of migrants than others (including both those who do not have migrant employees and who do not work). This result corresponds to an expectation of intergroup contact theory. Having migrant workers at worksites will make it almost inevitable for Japanese employees to have some sort of interaction and/or communication with migrants. Such workplace contact leads to greater knowledge and understanding of migrants, helping Japanese employees to reduce unwarranted images and stereotypes about migrants that they might have had beforehand. The result of Model 1 signals that such contact also leads the Japanese to develop more favorable attitudes toward migration.(8)

Other independent variables that indicate a significant effect involve sex, age, education, and the size of area of residence. Sex has a negatively significant effect, which means that men are more likely to oppose the increase of migrants. The reason is not clear here, but this outcome is different from a previous study that investigated attitudes toward accepting migrant workers using JGSS-2008 (Mazumi 2015). Age also matters, since higher age is associated with more negative attitudes, corroborating the connection between higher age and conservatism. Among education variables, those who did not go to high school are more likely to oppose increasing migration. This suggests the possible fear that these respondents have about labor market competition with migrants. An alternative interpretation is that more education cultivates tolerance toward different cultures. It should be noted, however, that the attitudes do not significantly differ between those whose last school of attendance is high school and those whose one is either junior college or university. Lastly, respondents living in cities with more than 200 thousand are more receptive to increasing migration.

On the other hand, no variable in household income, political orientation, and occupation indicates a significant effect. The labor market competition theory posits that lower income and lesser skilled jobs are associated with greater opposition toward increasing migration since the labor market positions of those respondents are more likely to put them in direct competition with migrants. Despite the intuitive appeal of this theory, this paper, as well as other previous works (see Hainmueller and Hopkins 2014), fail to find a significant effect of related variables. Political orientation does not show a significant effect either, though it should be mentioned that the affiliation with DPJ is significant at least at the level of 0.1 percent ($p=0.055$).

The result of Model 1 lent credence to the intergroup contact theory, showing that those who have migrants at their worksites are more likely to favor increasing migration. Before reaching this conclusion, however, an important issue still remains. It concerns the mediating role of occupational position in shaping the relationship between the worksite presence of migrants and attitudes toward migration. To put differently, does the positive effect of the migrant presence hold true for any occupational group including the low skilled, who are presumably more vulnerable to competition with migrants at worksite?

Model 2 of Table 1 delved into this issue by adding the interactions between the worksite presence of migrants and two occupation variables – semiskilled and unskilled. It provides a partial yet

Table 2 Logistic Regression of Attitudes toward Migration on Key Predictors

	Model 1		Model 2	
	B	S.E	B	S.E
Intercept	.407	.232	.375	.233
Presence of Migrant(s) at Worksite (Yes=1)	.307	.145 *	.437	.163 **
Sex (Male=1)	-.265	.109 *	-.255	.109 *
Age	-.013	.003 ***	-.013	.003 ***
Eduation (Ref=High School)				
Junior High School	-.349	.170 *	-.348	.170 *
Junior College	.047	.164	.069	.165
University	-.026	.125	-.034	.125
Household Income (Ref=More Than 3.5 Million and Less Than 6.5 Million Yen)				
Less Than 3.5 Million Yen	.167	.138	.174	.139
More Than 6.5 Million Yen	-.045	.135	-.044	.135
Do Not Know or Do Not Want to Answer	-.102	.133	-.097	.134
Party Affliation (Ref=Have No Party Affiliation or Do Not Know)				
LDP	-.144	.113	-.135	.113
DPJ	.373	.195	.392	.195
Other	.151	.164	.159	.165
Occupation (Ref=Clerical)				
Professional	.131	.189	.123	.190
Management	.248	.292	.229	.293
Sales	-.124	.199	-.123	.199
Skilled	-.074	.202	-.077	.203
Semiskilled	.284	.217	.271	.239
Unskilled	-.135	.239	.217	.265
Agriculture	.479	.422	.502	.422
Do Not Work	.116	.155	.143	.156
Size of Area of Residence (Ref=Cities with Less Than 200 Thousand)				
Large Cities	-.048	.121	-.044	.122
Cities with More Than 200 Thousand	.258	.122 *	.257	.122 *
Towns or Villages	-.106	.170	-.113	.170
Interaction Variables				
Presence of Migrants at Worksite*Semiskilled			.042	.463
Presence of Migrants at Worksite*Unskilled			-1.513	.549 **
N	1,906			

intriguing support for the idea that the occupational position mediates the effect of the worksite presence of migrants on attitudes toward migration. According to Model 2, the interaction with the semiskilled occupation variable does not have a significant effect. However, the one with the unskilled occupation variable does, and the vector of direction is negative. This suggests that the positive effect of the presence of migrants significantly diminishes among the unskilled. Additionally, with this interaction term inserted, the effect of the worksite presence of migrants has now become even more positive, showing a statistical significance at 0.01 level. This result supports the argument that the occupational position plays a mediating role in shaping the effect of the presence of migrant workers.

Model 2 still leaves a question, however. That is, does the presence of migrants only have an insignificant effect on attitudes toward migration for the unskilled, or does it even have a significantly negative effect? If the threat hypothesis holds true, the effect of the worksite presence of migrants should be significantly negative for the unskilled. Table 3 investigated this question, doing the logistic

Table 3 Logistic Regression of Attitudes toward Migration on Key Predictors (Respondents Having Unskilled Occupations Only)

	B	S.E	
Intercept	1.435	1.040	
Presence of Migrant(s) at Worksite (Yes=1)	-1.642	.667	*
Sex (Male=1)	-.331	.507	
Age	-.047	.019	*
Eduation (Ref=High School)			
Junior High School	-.362	.940	
Junior College	.295	1.538	
University	1.028	.664	
Household Income (Ref=More Than 3.5 Million and Less Than 6.5 Million Yen)			
Less Than 3.5 Million Yen	1.548	.687	*
More Than 6.5 Million Yen	2.696	.961	**
Do Not Know or Do Not Want to Answer	1.030	.612	
Party Affliation (Ref=Have No Party Affiliation or Do Not Know)			
LDP	.071	.601	
DPJ	-.377	1.476	
Other	.167	.711	
Size of Area of Residence (Ref=Cities with Less Than 200 Thousand)			
Large Cities	-.548	.590	
Cities with More Than 200 Thousand	.239	.663	
Towns or Villages	-.087	.822	
N	103		

regression analysis by focusing on respondents who have unskilled occupations with the same set of independent variables as Table 2 (except for the occupational variables that are excluded here). The result of Table 3 reveals that the presence of migrants has a significantly negative effect among unskilled respondents. This means that, contrary to the overall tendency depicted above, the worksite presence of migrants leads to more negative attitudes toward migration for the unskilled.

The result of Table 3 also helps resolve the problem of causality. As observed in Table 2, the overall effect of the presence of migrants at worksites is positive. However, this outcome *per se* is not able to tell whether the presence of migrants is a cause or result of positive attitudes toward migration. One way to figure out which is more plausible is to see whether the positive effect of the worksite presence of migrants can be observed for any occupational group. If the positive attitudes toward migration that native-born workers have mean that they tolerate the presence of migrants at worksites, a positive correlation between these two factors should be seen for any occupational group. As observed in Table 3, that is not the case. Among the unskilled, the worksite presence of migrants is associated with more negative attitudes toward migration. This result will allow this study to conclude that, with regard to the causal relation between the presence of migrants at worksites and attitudes toward migration, the former represents a cause and the latter a result – not *vice versa*.

To summarize, the analysis presented above offers support for both the contact and threat hypotheses. The former gains credence for the overall positive effect of the presence of migrants on Japanese attitudes toward migration. On the other hand, the latter also holds true, albeit with limited applicability, because of the negative effect of migrant presence at worksites on native-born unskilled

workers. These results demonstrate the intricate nature of the effect of migrants at worksites on the formation of Japanese attitudes toward migration, as the worksite presence of migrants leads to nurture two contrasting attitudes depending on the position in the occupational hierarchy.

5. Conclusion

This study explored whether and how the presence of migrant workers at worksites shapes public attitudes toward migration in Japan. Not only has the number of migrants shown a steady gain in the last twenty years, it is also expected to further increase in the future in the context of the accelerating decline and aging of the native-born population. Despite these demographic dynamics, little research on public attitudes on migrants and migration examined the effect that the worksite presence of migrants might have on these attitudes. Making use of JGSS-2015, this study analyzed whether the presence of migrants at worksite would lead to positive or negative attitudes toward migration among the Japanese.

The results of the analysis revealed that, while apparently competing, the two hypotheses that guided this study were not contradictory. First, the analysis provided overall support for the intergroup contact hypothesis, showing the positive effect of the presence of migrants on Japanese attitudes toward increasing migration. Nevertheless, second, it also demonstrated that this effect was mediated by occupational position. Hence, among the unskilled, the worksite presence of migrants actually led to more negative attitudes toward migration. This second finding follows what the threat hypothesis predicts. According to this view, a larger proportion of migrants who do low-skilled work, as well as the nature of jobs that can be performed with limited training and experience, place native-born low-skilled workers in more direct competition with their migrant counterparts. This activates the fear of the job displacement or the deterioration of work conditions among these workers, leading them to oppose increasing migration.

To what extent, however, does the proportion of migrants really matter? In order to offer an adequate answer to this question, future research should address at least the following issues. First, while the limitation of the dataset of this study makes it unable to directly address the issue here, research will be needed that delves into the relationship between the worksite proportion of migrants and attitudes toward migration. As long as the migrant proportion matters, it may have a curvilinear relationship with attitudes toward migration. Specifically, in that case, a large proportion of migrants should facilitate negative attitudes while a small one should lead to positive views because, following an insight obtained from this study, the greater understanding of migrants, rather the perception of threat, may be generated in workplaces where a relative proportion of migrant employees is small. Second, factors other than the proportion of migrants should also be analyzed. It is possible that migrant workers have systematic differences in their social characteristics, such as national origin or legal status, depending on which segment of the labor market they work at. Future studies should analyze how these differences may also be related with the formation of Japanese workers' attitudes toward migration.

At any rate, the fact that the worksite presence of migrants is associated with the opposition toward increasing migration among unskilled workers poses a concern since future labor shortages, and thus demand for migrant workers, will first become salient in the segment of labor market in which these workers work. If, in the context of the population decline and aging, the Japanese labor market introduces a larger number of migrant workers in the future, it will be important to better specify the way in which the worksite presence of migrants leads to negative attitudes toward migration among the unskilled. Doing so would contribute to the fuller understanding of the

multiethnic Japan of today and future.

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[Notes]

(1) Note that the number of registered foreigners provided by the Japanese Ministry of Justice includes Japanese-born "foreigners" as well, namely, those who were born under foreign parents and are not naturalized. The Japanese citizenship is based on *jus sanguinis*.

(2) For a review, see Ceobanu and Escandell (2010) and Hainmueller and Hopkins (2014).

(3) http://www.jitco.or.jp/press/index.html?fy_eq=2015. As of April, 2016, the total of 74 occupations and 133 tasks are approved for the introduction of technical interns.

(4) On the other hand, the size of high-skilled migrants remains small. According to author's calculation from an annual report by the Japanese Ministry of Health, Labour and Welfare (JMHLW 2016), among approximately 908 thousand migrants who the Ministry confirmed to have a job in Japan in 2015, those who do so with a professional or technical work visa made up 18 percent of the total.

(5) Initially, I categorized those whose household income are less than 3.5 million into two groups according to whether or not they depend on pension as a main source of income, since my previous work using JGSS-2008 (Mazumi 2015) demonstrated that attitudes toward labor migration varied between these two groups. That analysis showed that, with age controlled, only those whose income source is not pension (which implies that they are in their productive years) oppose labor migration. However, no significant difference was observed in this current analysis. For the sake of simplicity, I put these two groups together here and show a unified result.

(6) For the results of previous surveys, see the following link: http://jgss.daishodai.ac.jp/surveys/table/QFNRINCR.html

(7) While no migrants are present for agricultural occupations, this may be in part due to the small size of respondents in this category (n=26).

(8) The issue of causality may well be brought up at this point, since the result might simply mean that the favorable attitudes toward migrants are the reason why native-born employees tolerate working with migrants at the same worksite. I will get back to this issue later in this section.

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