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Identity, Nostalgia and Happiness among Migrants: The Case of the Kōshien High School  
Baseball Tournament in Japan

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**ABSTRACT**

High school baseball is very popular in Japan. All games of the high school baseball tournaments are publicly broadcasted. This paper hypothesizes that high school baseball influences the happiness level of the Japanese. Individual level data in Japan was used to test this hypothesis. The key findings of the study were as follows. (1) The number of wins of a team representing a prefecture increased the happiness level of its residents. (2) This effect was only observed for residents of large cities and not for other areas. (3) For migrants who had moved from rural to urban areas, the effect of their home team wins was greater than that of the wins of the team representing their current residence. This effect was significant in cases where the cultural climate of the host area differed from that of the migrant's home area. The findings of this study support the argument that a scarcity of goods related to the residential community increases the influence of high school baseball on happiness. Further, nostalgia for home influences migrants' happiness, and this influence is greater than the attachment they form to their current residential community.

JEL classification: L83; I31; Z10; Z13;

**Keywords:** migrants, happiness, identity, baseball, social capital

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## 1. Introduction

It is widely acknowledged that people's experiences of past events such as marriage, divorce, and unemployment influence their level of happiness (Clark et al. 2008; Clark and Georgellis 2013). Whether these influences persist over a long period, however, depends on the type of experience. For instance, an increase in happiness that is caused by a marriage declines as the marriage progresses (Lucas et al. 2003; Stutzer and Frey 2006). On the other hand, unemployment decreases happiness and its negative effect on happiness persists (see, e.g., Clark et al. 2001; Clark and Oswald 1994; Clark et al. 2008; Clark and Georgellis 2013). Moreover, various experiences seem to be connected with a place and an era regardless of the type of experience. For instance, listening to songs by the "Beatles" prompts people to recall not only social events of the 1960s, but also their own personal events that occurred during this period when they listened to this music. Re-reading an old textbook from their school days often leads people to think of various experiences during their school lives such as words of praise from a teacher, friendship with classmates, and lost love. Migrants who move from rural towns to urban cities are likely to continue to eat the food of their local district, not only because they prefer its taste, but also because they are attached to their hometown. On the other hand, for teenagers at 2010s, listening to the Beatles is never associated with personal events even if they enjoy this music. Similarly, even if the contents of a contemporary text book are similar to those of the particular book that was used during a person's own school days, the current text book is unlikely to evoke recollections of that person's school days. Foods of a particular locality are less likely to be eaten by strangers than by migrants from that locality even if both have similar food preferences.

Current life events involving, for example, happiness and preferences, have different impacts on individuals' perceptions according to whether these events are connected with the epoch or the place in which they have grown up (Bryant 2005). That is, an identity formed through

childhood experiences may possibly change the effects of current events on subjective happiness. Nostalgia, rooted in an individual's identity, can affect consumers' perceptions and behavior (Nawas and Platt 1965). This is considered as an important issue from the perspective of population mobility, because the cultures of the migrants' home countries influence their behavior and perceptions.<sup>1</sup> This issue has not been sufficiently explored in existing studies that have focused more, for example, on the influence of ethnic identity on their employment outcomes (Gorinas 2014) and the relationship between identity and happiness (Manuela and Sibley 2013).<sup>2</sup>

Thus, it is worthwhile to investigate how events that are tied to an individual's hometown influence his or her level of happiness, and the degree of their influence. With this objective, this paper presents a novel case study of a high school baseball tournament held in Japan. Although it is merely an amateur sporting event, it appears to be even more popular than professional sports events. Furthermore, in this tournament, the selected teams represent each locality. Thus, each team appears to be associated with a localized Japanese identity. It can, therefore, be inferred that because of the importance of a team's association with a particular identity, its result in the competition influences happiness levels<sup>3</sup>. By matching individual level data with the results of this high school baseball tournament, known in Japan as the Kōshien tournament, this study considers how the results of these games influence an individual's happiness level. It

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<sup>1</sup> Absenteeism and misconduct are more prevalent in southern Italy (Putnam 1993). Ichino and Maggi (2000) have provided evidence that workers who move from the southern region to the northern region continue to exhibit this deviant behavior. The norms of the region in which individuals have been raised, therefore, persist even after they have moved to other regions with different norms. Moreover, these cultural values may be further transmitted to a second generation of immigrants (Algan and Cahuc 2010; Fernández and Fogli 2006; Fernández and Fogli 2009).

<sup>2</sup> Some researchers have examined the effect of the current place of residence on happiness (see, e.g., Luttmer 2005; Clark et al. 2009; Shields et al. 2009). A number of studies also suggest that there is a positive correlation between happiness (or life satisfaction) and social capital such as trust and community participation (Bjørnskov 2003; Helliwell 2006; Sarracino 2010, 2012; Grillo et al. 2010; Kuroki 2011; Portela et al. 2013).

<sup>3</sup> The seminal work of Akerlof and Kranton (2000) suggested the identity played a great role on individual's behavior and subjective perception.

was found that the number of wins of a team from a residential prefecture increased the happiness level of residents in that prefecture. However, this effect was only observed for residents in large cities and not in other areas. Further, for migrants, the effect of their home team's wins was greater than the effect of wins of the team from their current residential area.

The paper is organized as follows. In section two, I describe the Japanese setting, and propose testable hypotheses. In section three, I describe and explain the data set, and present a simple econometric framework. I then present and discuss the results of my estimations in section four, and offer my concluding observations in the final section.

## **2. The setting and hypotheses**

### **2.1. The Japanese setting**

Baseball has been and continues to be a very popular sport in Japan (Yamamura and Shin 2008; Yamamura 2011). The Japanese are attracted not just to professional baseball, but also to amateur baseball games. During the annual spring and summer seasons in Japan, the national high school baseball tournament is held at the Kōshien Stadium.<sup>4,5</sup> Especially during the summer tournament, 49 teams are selected to represent 47 prefectures.<sup>6</sup> A Japanese prefecture is the equivalent of a state in the United States, or a province in Canada, and there are a total of 47 prefectures. The duration of the summer tournament is 15 days over a span of which about 50 games are held. The total attendance at the summer tournament is usually around 800,000 people.<sup>7</sup> Despite this being an amateur sporting event, all of the games of the

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<sup>4</sup> The Kōshien Stadium is located in Hyogo prefecture in the western part of Japan.

<sup>5</sup> The spring and summer tournaments have been held annually since 1915 and 1924, respectively, with a hiatus of several years occurring during World War II. The summer tournament is formally known as the National High School Baseball Tournament, whereas the spring tournament is formally called the National High School Baseball Invitational Tournament.

<sup>6</sup> The method of selecting teams is as follows: a multistage process is organized in which national knockout teams must compete at progressive levels of play from the local to national. Thus, the initial inclusiveness presages a rigid and unforgiving elimination process. The teams that are finally selected come to the Kōshien Stadium as prefectural representatives (Kelly 2013, 85).

<sup>7</sup> For the spring tournament, teams are more restricted to some prefectures than for the summer tournament. Hence, the number of teams is around 32 and total attendance at the tournament is

two annual Kōshien tournaments are broadcasted throughout Japan by the Nippon Hoso Kyokai, or Japan Broadcasting Corporation (NHK), which is Japan's only public broadcasting agency. Moreover, the summer tournament is sponsored by the Asahi Newspaper<sup>8</sup>. Every game is reported on, not only in the Asahi Newspaper, but also in other media. Some of the US Major League players, such as Hideki Matsui, Daisuke Matsuzaka, Yu Darvish, and Masahiro Tanaka, were previously star performers of the Kōshien tournament. Hence, they were more popular and better known than the more banal professional players in Japan even when they were just high school players. Apart from high school baseball, other amateur sports are never broadcasted nor given the same special attention when they are reported in the media. For most other high school sports, only the results are briefly reported, even for the final game of the tournament.<sup>9</sup> Without doubt, for the Japanese, the Kōshien tournament is regarded as the most popular sports event. In Japan, “for decades, then, the single word, Kōshien, like Wembley, Lord’s, Wimbledon and Heysel, has called up in much of the national population the poignant display of idealized virtues by the nation’s male adolescents” (Kelly 2013, 80).

Here, a question naturally arises: Why is high school baseball so popular even though the skills and performances of the players are far below the professional level? Baseball has been very popular in Japan since the end of World War II, partly because of the permeation of American culture which upholds baseball as a major sport. Baseball gained further acceptance during the American Occupation (Kelly 2013, 86). Consequently, during the post-war period, it took a deep hold in Japan. Furthermore, rapid economic growth was achieved during the same period, enabling Japan to catch up with developed countries. In tandem with this process, a large number of migrants moved from rural areas to urban areas such as Tokyo, partly because

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around 400,000. The spring tournament is thus smaller in scale than the summer tournament. The source of this information is the website of the Japan High School Baseball Federation. (<http://www.jhbf.or.jp/sensyuken/spectators> (accessed on February 1, 2014))

<sup>8</sup> The Asahi newspaper is widely distributed in Japan.

<sup>9</sup> Football became a popular sport after the emergence of the J-League (Japan Professional Football League) in 1993. However, in the case of the Japan High School Football Tournament held from the end of December to January, only the final and semi-final games are broadcast throughout Japan.

of differences in expected wages or the subjective probability of finding a job in urban settings (Inoki and Suruga 1986; Tabuchi 1988). Extensive population mobility accelerated urbanization. With such drastic societal changes, “the locality of school teams and the provincial basis of representation were counterweight to the wartime and post-war dislocation and then ongoing waves of urban migration” (Kelly 2013, 86).

It is also important to pay attention to the timeframe of the Kōshien tournament while considering its significance for the Japanese. This is because “the national summer tournament is always held during the middle two weeks of August. This is the annual school holiday month, but more symbolically, it [is] the time of Obon, the Buddhist festival equivalent to the Christian All Souls Day, when the family ancestors return and when city people revisit their own rural ancestral homes” (Kelly 2013, 84). The Obon might be especially important for those returning home from distant current places of residence since they rarely return home. Therefore, migrants are likely to identify sentimentally with their roots through their support of a team from their locality participating in the Kōshien games.

## 2.2. Hypotheses

The argument that “urbanization, industrialization, and immigration had undermined neighborliness” (Putnam 2000, 379) is well known. Interpersonal relations appear to have become weaker as a consequence of urbanization, resulting in social isolation and loneliness. In other words, social capital, defined as social networks, trust, and community participation, has declined with the progress of urbanization (Putnam 2000; Costa and Kahn 2003). Inevitably, social capital is considered to be scarce in urban spaces. However, along with attachment to the community, its importance persists to decrease the social isolation experienced in an urban place. Joint consumption of goods by urban residents, for example, with colleagues or neighbors, is thought to result in a higher level of happiness than solitary consumption, because people who are intimate can share joy, for instance, through bowling together (Putnam 2000).

Urbanization increases the demand for games played by local teams, because these can be collectively enjoyed with local colleagues. In urban areas, because of the scarcity of social capital, the effect of consuming goods with colleagues is greater. Thus, the following hypothesis is posited:

*Hypothesis 1.*

Wins by a team representing a residential area increase the happiness of the residents, with this effect being greater in urban areas.

Immigration leads to stress, social isolation, and depression, thus having a detrimental impact on the mental health of migrants (Aichberger et al. 2010; Coid et al. 2008). Such psychological costs for migrants are incorporated into theoretical models in the economics literature (Sjaastad 1962). Recently, Barrett, and Mosca (2013) empirically measured psychological costs using individual level data. They found that those who lived away from their home areas were more likely to suffer from alcohol problems than those who stayed in them. Nostalgic goods are thought to decrease the psychological costs for migrants living in unfamiliar places. Acharya et al. (2009) posited that people have nostalgia for wilderness areas if they grew up in a rural area and, as adults, were living with the pressures of city life. They consequently found that the demand for wilderness trips was higher among migrants who had moved from rural to urban areas than among other groups. In this paper, I examine the influence of nostalgic goods in reducing psychological costs, based on the assumption that an increase in happiness can be interpreted as a decrease in psychological costs. According to my inference, the larger the psychological cost, such as the solitude felt by migrants living in unfamiliar places, the greater the effect of nostalgic goods on happiness. People are more likely to be unfamiliar with a place that is more distant from their home than with one closer by, because the greater the distance between their home and their host area, the less the similarity between them. Further, the greater the distances between migrants' current residential areas and their original

homes, the higher their costs to visit their home areas, thereby increasing their nostalgia for home. Thus, my second hypothesis is proposed below:

*Hypothesis 2.* The greater the distance of the move away from home for migrants, the stronger the effect of nostalgic goods on their happiness.

### 3. Data and methods

#### 3.1. Data

Prefectural-level data on wins during the summer Kōshien tournament were collected from the Baseball Magazine (2005) and the website of the Japan High School Baseball Federation.<sup>10</sup> Individual level data was obtained from the Japan General Social Surveys (JGSS).<sup>11</sup> Almost every year since 2000, these surveys have been conducted throughout Japan. JGSS respondents are asked standard questions concerning their individual characteristics during face-to-face interviews. A two-stage stratified sampling method is used and respondents consist of adults aged between 20 and 89 years. For this study, the dataset covered 2000, 2001, 2002, 2003, 2005, 2006, and 2008.<sup>12</sup> The sample size used in estimations was 9,296, which is considered large. Furthermore, for each year, the period of data collection was from October to November. That is, the data were collected just a few months after the conclusion of the summer Kōshien tournament. Therefore, people retained vivid memories of the Kōshien games, making the JGSS data an appropriate data sample for directly measuring the influence on happiness of the Kōshien tournament.

Researchers can obtain information from the JGSS data relating to happiness levels, marital

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<sup>10</sup> <http://www.jhbf.or.jp/sensyuken> (accessed on October 1, 2013)

<sup>11</sup> Data for this secondary analysis from “Japanese General Social Surveys (JGSS), Ichiro Tanioka,” were provided by the Social Science Japan Data Archive, Information Center for Social Science Research on Japan, Institute of Social Science, The University of Tokyo.

<sup>12</sup> Surveys were not conducted in 2004 and 2007. Although they were conducted in 2009 and 2010, data for these years are not available.

status and age, job status, annual household income,<sup>13</sup> and years of schooling. Regarding information on the residential place, the following was available in the JGSS records: the prefecture of current residence of the respondent and the prefecture of residence at the age of 15 years. Out of the total sample of 9296 respondents, the prefecture of current residence was different from the prefecture of residence at the age of 15 years for 2,532 respondents. Therefore, 27.2% of the sample could be regarded as migrants. Each prefecture includes cities, towns, and villages, and is collectively composed of various municipalities. In addition to information about residential prefectures, the JGSS data also included the sizes of municipalities in the current prefectures of residence. There were three categories: (1) a large city with a population of 0.5 million or more; (2) a city with a population of less than 0.5 million; and (3) a town or village. The number of wins of the prefecture's team could be matched with the respondent's prefecture of current residence and the prefecture of residence at 15 years of age. This enabled me to investigate the influence of game results of teams that represented current residential prefectures of respondents, or the prefectures where they resided at the 15 of years, on their happiness.

The variables used in the regression estimations are shown in Table 1, which provides definitions and basic statistics (means and standard deviations). The key dependent variable was the degree of happiness (HAPPY). In the JGSS, the following question was asked: "Are you happy?" The possible choices for responding ranged from 1 (Unhappy) to 5 (Happy). This was used as the dependent variable. As observed in existing studies, the level of happiness not only depends on economic conditions, such as income level and experience of unemployment, but also on social conditions such as experience of marriage and divorce, gender, and age (Clark et al. 2001; Clark and Oswald 1994; Lucas et al. 2003; Stutzer and Frey 2006; Clark et al. 2008; Clark

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<sup>13</sup> In the original dataset, annual earnings were grouped into 19 categories. The assumption in this study was that all respondents in each category earned the midpoint value. For the top category of "23 million yen and above", the assumption was that all respondents earned 23 million yen. Of the 9,296 observations used in the regression estimations, there were only 79 observations in this category. Therefore, the problem of top-coding should not be an issue here.

and Georgellis 2013). To control for economic conditions, household income, years of schooling, and job status, for example, unemployment, dummies were included. Further, marital status, number of children, age, and gender were also included to capture the social condition.

Figure 1 suggests the distribution of the happiness level. It implies that a large proportion of respondents felt happy. Figure 2 illustrates the distribution of wins at the Kōshien tournament. A value of 0 was most frequently observed, and the distribution was obviously skewed towards the left. This is because the Kōshien games are played within a tournament. Figure 3 demonstrates the positive relation between the average happiness level of a prefecture and the wins of its representative team in the Kōshien tournament. The positive relation was thus consistent with *Hypothesis 1*.

Table 2 shows differences of the key variables between residents in large cities and other areas (others). The table indicates that WIN (wins of the team representing the prefecture where respondents currently resided) for the residents in large cities exceeded that for the other areas by 1.08 points and was statistically significant at the 1% level. This can be interpreted as follows. A prefecture that includes large cities evidently has a larger population than a prefecture without large cities. Talented players are more likely to be found in the more populated prefecture. As a result of the condition of only one team being selected for each prefecture, the team representing the more populated prefecture is inferred to be stronger.<sup>14</sup> This inference is consistent with the records of the summer Kōshien tournament. Throughout the history of the summer tournament, eight prefectures have never advanced to the finals.<sup>15</sup> In these prefectures, there is no city with a population of more than one million. On the other hand, six prefectures have advanced to the final more than ten times and become champions more

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<sup>14</sup> With the exception of Tokyo and Hokkaido, only one team can be selected to represent each prefecture.

<sup>15</sup> These prefectures are: Iwate, Yamagata, Yamanashi, Toyama, Fukui, Tottori, Shimane, and Nagasaki.

than seven times.<sup>16</sup> With the exception of Wakayama prefecture, these prefectures include cities with populations over one million.<sup>17</sup> Even after splitting the sample into local people (who were not migrants) and migrants, a similar significant difference was observed. By contrast, the value of WINHOM (wins of the team representing the prefecture where respondents resided at the age of 15 years) was lower for residents of large cities than for other areas by 0.17 points, and was statistically significant at the 5% level. This might be because migrants to the urban areas originated from rural areas. Thus, the number of wins of their home prefecture was relatively small. On the other hand, as for happiness level, no significant difference was found between a large city and other areas, although the average value for a large city was slightly higher than that of other areas. That is, the happiness level does not depend on the scale of the residential area.

### 3.2. Econometric framework to examine happiness level.

For the purpose of examining the hypotheses proposed in the previous section, the estimated function of the baseline model takes the following form:

$$\text{HAPPY}_{im} = \alpha_0 + \alpha_1 \text{WIN}_{mt} (\text{and } \text{WINHOM}_{mt}) + \alpha_2 \text{SCHOOL}_{imt} + \alpha_3 \text{MARRY}_{imt} + \alpha_4 \text{CHILD}_{imt} \\ + \alpha_5 \text{INCOM}_{imt} + \alpha_6 \text{WIFSTU}_{imt} + \alpha_7 \text{UNEMP}_{imt} + \alpha_8 \text{AGE}_{imt} + \alpha_9 \text{MALE}_{im} + k_t + u_{im},$$

where  $\text{HAPPY}_{im}$  represented the dependent variable for individual  $i$ , year  $t$ , and prefecture  $m$ . Regression parameters were represented by  $\alpha$ . As explained earlier, the value of HAPPY ranged from 1 to 5 and an ordered probit model was considered appropriate for the estimations. The error term was represented by  $u_{im}$ .<sup>18</sup> To capture  $k_t$  (unobservable year-specific effects such as

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<sup>16</sup> These prefectures are: Osaka, Aichi, Wakayama, Hiroshima, Tokyo, and Hyogo.

<sup>17</sup> The preliminary tournament phase in a prefecture with a smaller population is less competitive when proceeding to the final level of the Kōshien tournament. This provides an incentive for players to enter the high school team in a less competitive prefecture, because they are eager to play at the Kōshien Stadium. It has been observed that after 2000, some players have migrated from more competitive prefectures to less competitive prefectures (Ashiya 2006).

<sup>18</sup> It is reasonable to assume that observations may be spatially correlated within a prefecture as the

macroeconomic shock), year dummies were included. Based on *Hypothesis 1*, the sign of the coefficient of WIN was expected to be positive. Further, according to *Hypothesis 2*, the sign of the coefficient of WINHOM was predicted to be positive when using the sample of migrants. Furthermore, the marginal effect of WINHOM increased when a sample of migrants from a more distant place was analyzed.

#### 4. Estimation results and their interpretation

Table 3 reports on results obtained after analyzing the full sample. Tables 4 and 5 present results based on samples of residents in large cities and in other areas, respectively. In Table 4 (and Table 5), results for the entire sample are reported in columns (1) and (2). The sample of residents in large cities was further sub-divided into a group of local people, who were not migrants, and a group of migrants. The results obtained for the local group are reported in column (3) and those for migrants in columns (4)–(6). Table 6 focuses on the effect of wins at the Kōshien tournament on migrants by exhibiting results obtained for the sample of migrants.

The coefficients of independent variables reflect the magnitude of the effect of an independent variable on a dependent variable. However, the coefficients of independent variables cannot simply be interpreted as marginal effects, and are difficult to interpret in an ordered probit model. To determine their economic significance, marginal effects should, therefore, be considered. These can be calculated using the values of a dependent variable. To use HAPPY as an example, the values ranged between 1 and 5. Thus, the marginal effects of the dependent variables varied according to the values of HAPPY. Tables 3–6 exhibit the marginal effects of independent variables, based on the probability that HAPPY had a value of 5.<sup>19</sup>

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happiness of one agent may well relate to the happiness of another in the same prefecture. To consider such correlation in line with this assumption, I used the Stata cluster command and calculated z-statistics using robust standard errors. The advantage of this approach is that the magnitude of spatial correlation can be unique to each prefecture.

<sup>19</sup> Apart from the marginal effects reported in each of these tables, it is possible to calculate marginal effects based on the probabilities of HAPPY being 4, 3, 2, and 1, respectively (Greene 2008, 831–835). These marginal effects were not reported because of space limitations. Results concerning

In Table 3, consistent with the prediction, the coefficient of WIN was positive and statistically significant. This indicated that the number of wins of the team representing the prefecture increased the residents' happiness level. On the other hand, the sign of the coefficient of WINHOM was also positive and statistically significant. Therefore, the wins of the teams representing the prefectures where respondents resided at the aged of 15 years increased their happiness. However, it is unclear whether a respondent's current residential prefecture is equivalent to the residential prefecture at the age of 15 years. To take an example of people resided in the Fukushima prefecture at 15 years, some people continued to reside in the Fukushima. In this case, a respondent's current residential prefecture is equivalent to the residential prefecture at the age of 15 years. Others relocated their residence to other prefectures and so a respondent's current residential prefecture is not equivalent to the residential prefecture at the age of 15 years. Hence, it is not known whether the effect of WINHOM was derived from nostalgia. The marginal effect was about 0.004 which implies that an additional win of the team led to a 0.4% increase in the probability that respondents would choose the fifth level of HAPPY. With respect to other control variables, SCHOOL, MARRY, and INCOM yielded positive coefficient signs and were statistically significant, whereas UNEMP produced a significant negative sign. These results were more or less consistent with the findings of existing studies.

Turning to Table 4, the focus is on results for key variables such as WIN and WINHOM. The results in columns (1) and (2), which were similar to those in Table 3, show that the signs of the coefficients of WIN and WINHOM were positive and statistically significant at the 1% level. Even after the sample was divided, WIN continued to have a significant positive sign for the local group. WIN was equivalent to WINHOM for local people, so results for WINHOM were not reported. On the other hand, for migrants, WIN values had positive signs in columns (4) and (6). However, they were not statistically significant in column (4) in which WINHOM was not

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marginal effects are, however, available upon request.

included. As reported in column (6), WIN became statistically significant once WINHOM was included, indicating that migrants were assimilated into their current residential place and so had developed an attachment to it. The sign of the coefficient of WIHOM was positive and statistically significant in columns (5) and (6). Furthermore, for local people, the marginal effect of WIN was 0.012. Hence, an additional win of the team representing the respondents' current residential prefecture resulted in a 1.2% increase in the probability that respondents would choose 5. On the other hand, as shown in column (6) for migrants, the marginal effect of WIN was 0.010. That is, the marginal effect of WIN was greater for local people than for migrants. This can be interpreted as implying that attachment to the residential place was stronger for local people than for migrants. It is interesting to observe that the marginal effect of WINHOM was 0.017. An additional win of the team representing the prefecture in which respondents resided at the age of 15 years resulted in a 1.7% increase in the probability that respondents would choose 5. Therefore, for migrants, wins of the team representing their home had a greater influence on their happiness than those of the team representing their current residential place. This suggests that migrants' attachment to their home is greater than their attachment to their residential area even if they are, to a certain extent, assimilated into their current residential areas. Turning attention to Table 5, WIN and WIHOM had positive signs in all of the columns. However, none of these demonstrated statistical significance. Therefore, the results of the Kōshien games had no effect on the happiness of residents in small cities, towns, and villages. This might in part have been because community-related goods were abundant, so the marginal effect was less.

During the tournament, teams approach the final as the number of their wins increases. Table 2 indicates that the teams representing prefectures that include large size cities were more likely to approach the final than teams belonging to other prefectures. In other words, the wins of the large city teams tended to occur during the higher rounds of the games compared with the wins of other teams in the tournament. The effect of an additional win can be

reasonably assumed to differ according to the round in which it occurs in the tournament. For instance, wins during the higher rounds have a greater effect on happiness than wins during the lower rounds. The most effective win is thus the win at the final. Therefore, the results of Tables 4 and 5 can be interpreted as reflecting this effect because, as shown in Table 2, the wins of the migrant's home town team were greater in the large cities than in other locations.

In order to closely examine whether positive effects of WIN in large cities reflect urban residents' attachment to their prefecture, I now focus on the results for the migrant sample presented in Table 6. In Japan, different prefectures share common cultural climates. To take an example, Tohoku region, which is made up of Aomori, Akita, Yamagata, Iwate, Miyagi, and Fukushima prefectures has a cold climate and usually experiences snowfall during the winter season. From a cultural perspective, inhabitants of this region are generally considered to have patient personalities. Japan can be culturally and geographically divided into several regions. Figure 4 depicts a map of Japan wherein the borders of prefectures are indicated by thin lines and the borders of each region by thick lines. Following widely used criteria, I have roughly divided Japan into 11 regions. If migrants come from a prefecture belonging to the same region as the prefecture in which they currently reside, nostalgia for their home prefecture is not so strong, because nostalgic goods are not scarce. Conversely, if migrants come from a prefecture that does not belong to the same region in which they currently reside, nostalgia for their home is strong. For example, a migrant who has moved from Aomori to Akita, both being within Tohoku region, is unlikely to have nostalgia for Aomori, whereas a migrant who has moved from Aomori to Tokyo is likely to have nostalgia for Aomori. The wins of the team representing the migrants' home prefecture are likely to have a positive effect on their happiness level when this prefecture and the one in which they currently reside belong to the same region. The effect of WINHOM on the happiness level of migrants is thought to be greater than when their home prefecture and current residential prefecture belong to the same region. Moreover, the strength of the migrant's nostalgia increases with the distance between their home prefecture and

current residential prefecture. The distance between a migrant's home prefecture and current residential prefecture thus appears to be important when considering the influence of wins of the home prefecture team. If this holds true, then the interaction term between WINHOM and distance is predicted to have a positive sign.

As reported in columns (1), (2), (4), and (5) of Table 6, for residents of large cities, WIN and WINHOM both had a positive sign. Moreover, for migrants coming from other regions, WIHOM was statistically significant, whereas WIN was not statistically significant. By contrast, for migrants from the same region in which they currently resided, WINHOM was not statistically significant, whereas WIN was statistically significant. On the other hand, for those who were not residents of large cities, neither WIN nor WINHOM were statistically significant. The marginal effect of WINHOM was 0.032 for migrants from other regions. This implied that an additional win of the team representing the home prefecture resulted in a 3.2% increase in the probability that respondents would choose 5. Its marginal effect was approximately two times greater than for all migrants reported in column (6) of Table 5. Therefore, the influence of home team wins for migrants evidently depended on the degree to which they could consume nostalgic goods. Moreover, as shown in Table 2, WINHOM was smaller for residents in large cities than in other areas. Thus, for WIHOM to be statistically significant for residents in large cities, and insignificant for others, means that nostalgic goods related to home increase migrants' happiness, and the effect of wins is greater than the effect of home team wins at the higher rounds in the tournament. Further, the cross term between WIHOM and DISTANCE yields a positive sign and is statistically significant for migrants in large cities, but is not significant for other migrants. This strongly supports *Hypothesis 2*. On the whole, the results shown in Table 6 suggest that the nostalgia of migrants for home was strong when their current residence was at a distance from their home, and was not characterized by a similar cultural climate. The stronger the nostalgia, the greater the migrants' level of happiness attributed to the home team's wins.

Based on the findings of my study, I argue that the NHK, by broadcasting the Kōshien games, plays a key role in increasing happiness in urban areas. During the post-World War II period, the percentage of the urban population rose from 32.7% in 1950 to 86.3% in 2005 (Statistics Bureau, Ministry of Internal Affairs and Communications 2006). Hence, population concentration within urban areas was a distinct trend during this period. This mainly occurred because of a massive outflow from rural to urban areas. Before the emergence of the Japan Professional Football League in 1993, Japan Professional Baseball (JPB) was regarded as the most popular professional sport. However, JPB teams were owned by private companies and functioned mainly as advertisement vehicles. A JPB team was not rooted in its home community, so there was no strong tie between the team and the community. For instance, the Yomiuri Giants team was based in Tokyo but was supported by fans throughout Japan. JPB teams were less likely to invoke nostalgia in migrants for their homes. As a result, through its public broadcasts, the NHK plays an effective role in increasing the happiness level in Japan, especially for migrants from distant rural areas.<sup>20</sup>

## 5. Conclusion

Population mobility has increased in the process of economic development. Globalization, in particular, has inevitably led to immigration policies becoming a major issue in our contemporary world.<sup>21</sup> How and to what extent migrants are assimilated into the host country is a key issue for policy makers and academic researchers (see, e.g., Silva and Vázquez-Grenno 2011; Hamermesh and Trejo 2013; Moehling and Piehl 2014). It is thus pertinent to undertake an investigation of migrant's attachment not only to their current place of residence, but also to their home of origin. Existing studies have not sufficiently investigated how events in the home

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<sup>20</sup> Apart from broadcasting the Kōshien tournament, NHK has attempted more broadly to promote Japanese nostalgia by broadcasting sports programs (Merklejn 2013).

<sup>21</sup> The migrant's home country network plays a critical role in the labor and marriage markets (see, e.g., Munshi 2003; Luke et al. 2004; Luke and Munshi 2006). Moreover, characteristics of the migrants' home countries have been found to influence their perceptions and behavior (Fisman and Miguel 2007).

area influence the happiness level of migrants. The case of the Japanese high school baseball tournament is a novel one for exploring this question.

To examine the impact of the results of Kōshien tournaments on happiness, this study integrated JGSS survey data with the results of the tournaments. Its key findings were: 1) A positive effect of the wins of the team representing the residential area was only observed for large cities and not for other areas. For migrants, the effect of wins of their home team was greater than for those of the team from the host area. The effect was even greater when the cultural climate of the host area differed from that of the migrant's home area.

Japan is generally regarded as a homogenous society. Thus, foreign migrants are fewer there compared with other developed countries such as the United States, United Kingdom, France, and Germany. However, population mobility within the country has been strongly evident, particularly after World War II. Therefore, the outflow of migrants from rural to urban areas has been significant enough to influence Japan's socioeconomic conditions. This study reveals that nostalgic goods have a significant effect on the happiness level. It provides evidence that the happiness of migrants in urban areas is related to events in their homes. This can be interpreted as meaning that nostalgia for home has a stronger influence in areas where nostalgic goods are scarce. On the other hand, migrants were also found to be attached to their host areas, suggesting that assimilation had occurred.

The findings of this study are based on Japanese data, and therefore, labor mobility is limited within one country. However, its argument can be extended to the case of international immigration. For instance, there is currently a massive outflow of migrants from less developed countries to developed countries. Therefore, it would be worthwhile to apply data pertaining to international migrants to explore the extent to which the argument of this paper holds true for them. This issue remains to be addressed in future studies.

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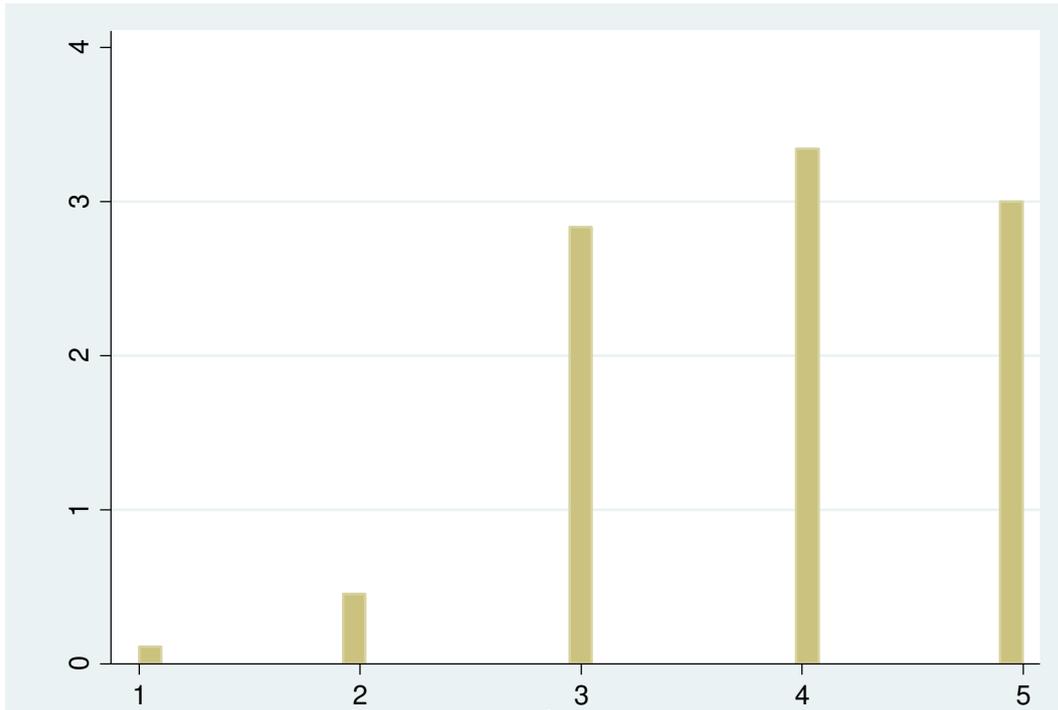


Figure 1. Density of of the happiness level.

Note: x-axis indicated the degree of happiness:1 (Unhappy) – 5 (Happy)

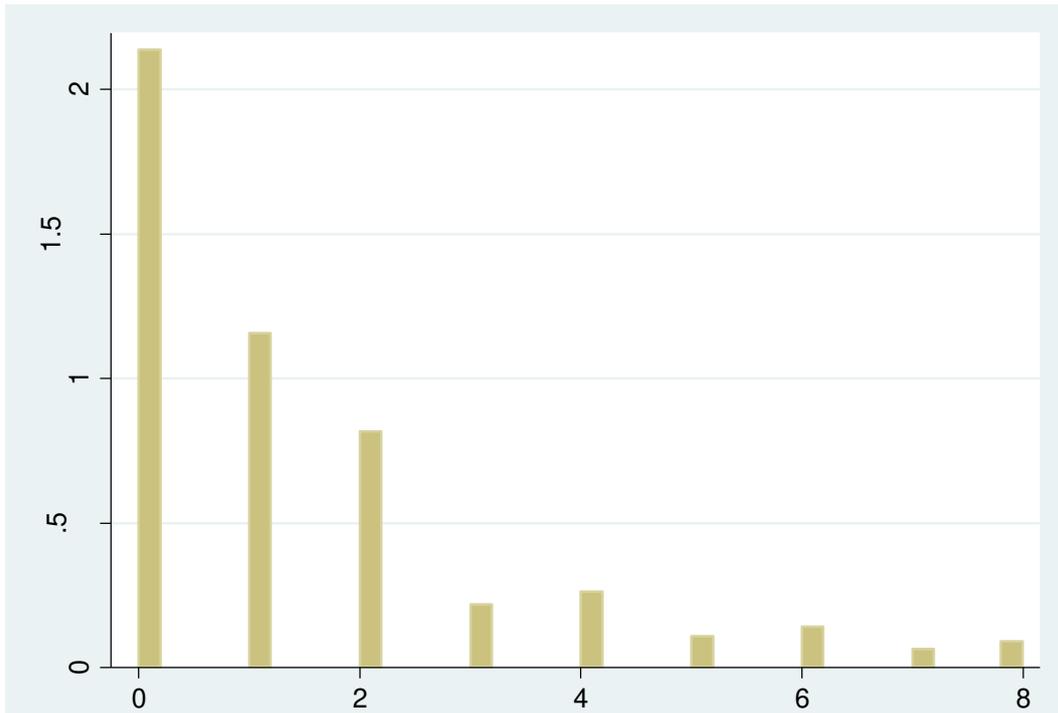


Figure 2. Distribution of wins of high school teams representing the prefectures where respondents currently lived.

Note: In the Kōshien tournament system, the maximum number of possible wins of a team is six. In some prefectures with large populations, two teams can participate in the tournament. In this case, the total number of wins can be greater than six.

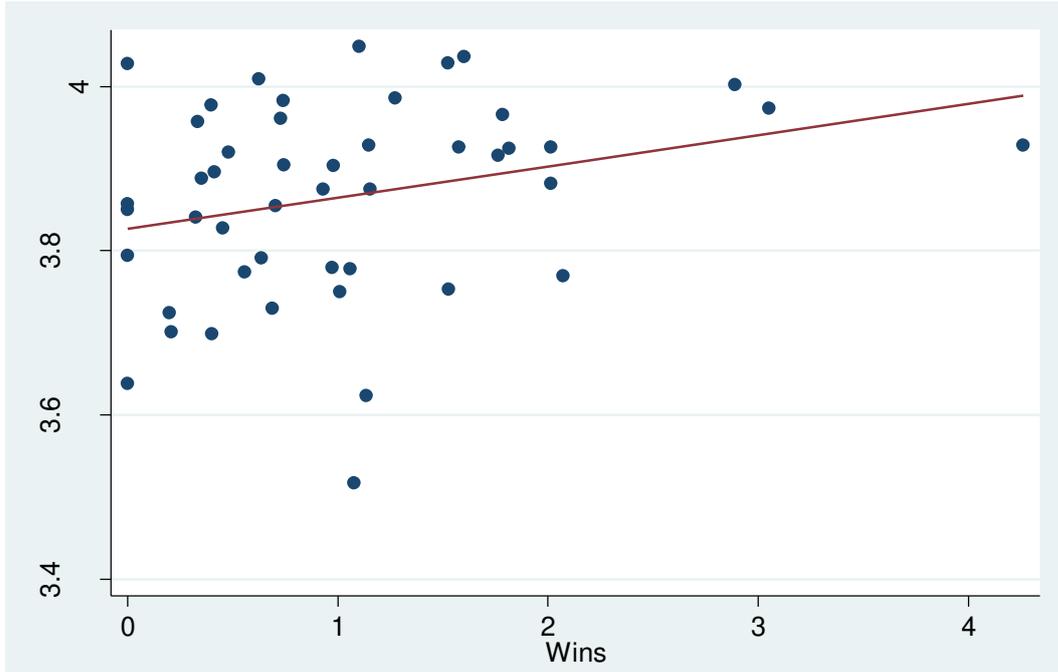


Figure 3. Association between the happiness level and wins of high school teams representing the prefectures where respondents currently lived.

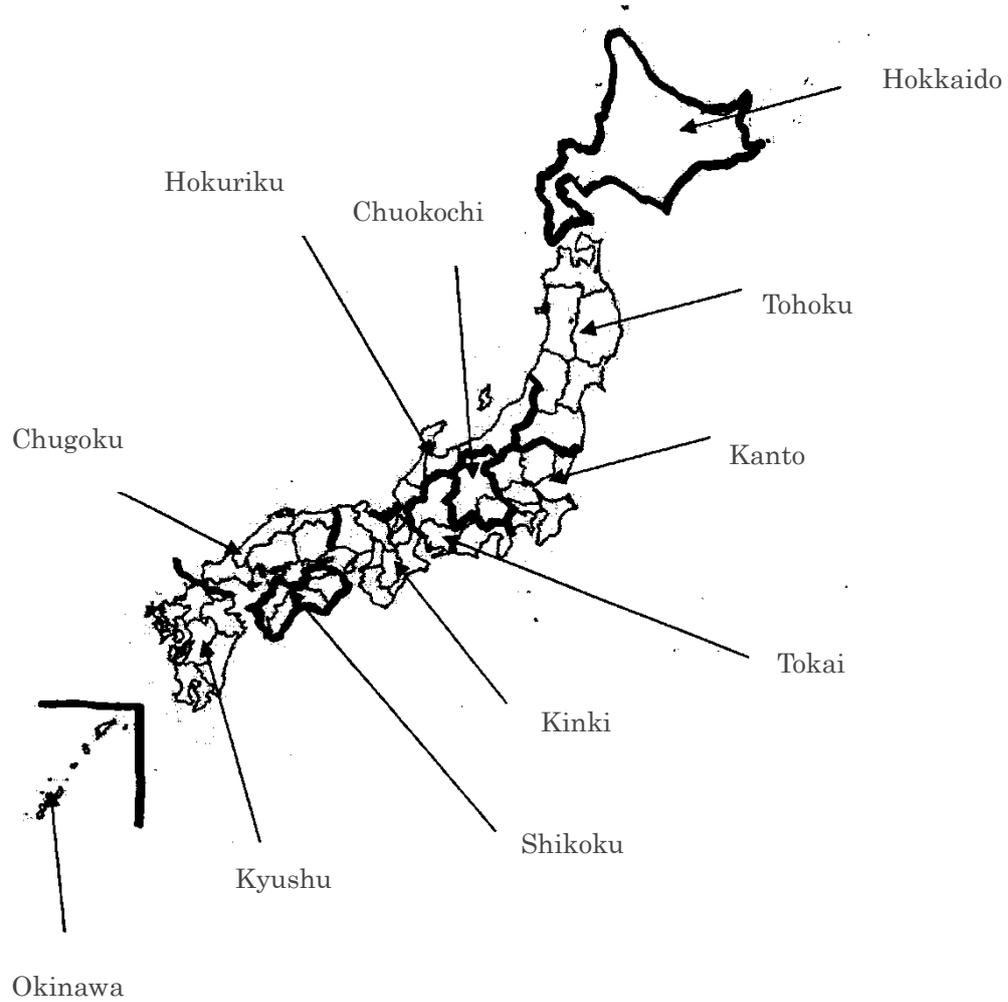


Figure 4. Map of Japan showing the borders of prefectures and regions.  
Note: There are a total of 47 prefectures distributed within 11 regions.

Table 1.

Definitions and basic statistics			
	Definition	Mean	Standard deviation
Regional characteristics			
WIN	Number of wins at the Koshien games of the high school team representing the prefecture where the respondent currently lives.	1.30	1.79
WINHOM	Number of wins at the Koshien games of the high school team representing the prefecture where the respondent lived at 15 years old.	1.24	1.73
Individual characteristics			
HAPPY	Degree of happiness (Question: Are you happy?) 1 (Unhappy) – 5 (Happy)	3.84	0.95
SCHOOL	Years of schooling	12.1	2.62
MARRY	1 if the respondent is currently married, otherwise 0.	0.78	—
CHILD	Number of children	1.71	1.16
INCOM	Individual household income (million yen)	6.11	4.17
WIFSTU	1 if the respondent is a non-working house wife or student.	0.36	—
UNEMP	1 if the respondents is currently unemployed, otherwise 0.	0.01	—
AGE	Age	52.3	16.6
MALE	1 if the respondent is male, otherwise 0.	0.45	—

Note: All observations in the sample were used. The absolute values of t-statistics are the results of a mean difference test conducted on high- and low-income household groups. The asterisks \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% levels, respectively.

Table 2

Comparison of key variables between “residents of a large city” and “others”

	Large city	Others	t-statistics
<b>Wins in Koshien games</b>			
WIN (full sample)	2.28	1.20	25.7***
WIN (sample of local people)	2.11	1.12	19.8***
WIN (sample of migrants)	2.52	1.43	13.5***
WINHOM (sample of migrants)	1.27	1.44	-2.28**
<b>Level of happiness</b>			
HAPPY (full sample)	3.91	3.88	1.31
HAPP (sample of local people)	3.92	3.87	1.43
HAPP (sample of immigrants)	3.91	3.90	0.06

Note: Large city inhabitants are those who reside in a city with a population that is **over 0.5 million**. T-statistics are the results of a mean difference test conducted on residents of a large city and others. The asterisks \*\* and \*\*\* indicate significance at the 5% and 1% levels, respectively.

Table 3. Determinants of happiness based on the full sample (ordered probit model)

	(1)	(2)
WIN	0.01* (1.87)	
WINHOM		0.01* (1.71)
SCHOOL	0.01** (2.46)	0.01** (2.44)
MARRY	0.40*** (12.7)	0.40*** (12.6)
CHILD	0.001 (0.08)	0.001 (0.05)
INCOM	0.31*** (9.38)	0.31*** (9.43)
WIFSTU	0.11*** (3.63)	0.11*** (3.63)
UNEMP	-0.30*** (-3.42)	-0.32*** (-3.43)
AGE	-0.0004 (-0.42)	-0.0004 (-0.43)
MALE	-0.10*** (-5.12)	-0.10*** (-5.15)
Marginal effect (WIN = 5)	0.004* (1.87)	
Marginal effect (WINHOM = 5)		0.004*** (1.72)
Log pseudolikelihood	-11688	-11688
Observations	9296	9296

Note: The values are coefficients. The numbers in parentheses are z-statistics calculated using robust standard errors clustered in the prefecture. The asterisks \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% levels, respectively. In all estimations, year dummies and dummies of the size of the residential place were included as independent variables, but were not reported because of space limitations.

Table 4. Determinants of happiness based on the sample of residents in the large city (ordered probit model)

	All		Local people	Migrants		
	(1)	(2)	(3)	(4)	(5)	(6)
WIN	0.02*** (3.03)		0.03*** (2.83)	0.02 (1.62)		0.03** (2.12)
WINHOM		0.03*** (3.31)			0.04** (2.21)	0.04** (2.30)
SCHOOL	0.02** (2.04)	0.02* (1.87)	0.04*** (4.91)	-0.01** (-0.46)	-0.01** (-0.62)	-0.01** (-0.64)
MARRY	0.39*** (4.68)	0.39*** (4.62)	0.40*** (4.21)	0.41*** (3.89)	0.41*** (3.63)	0.41*** (3.65)
CHILD	-0.01 (-0.68)	-0.02 (-0.75)	-0.01 (-0.60)	-0.02 (-0.78)	-0.03 (-0.86)	-0.02 (-0.82)
INCOM	0.29*** (5.52)	0.29*** (5.54)	0.22*** (3.02)	0.41*** (6.29)	0.41*** (5.96)	0.41*** (6.16)
WIFSTU	0.20*** (3.44)	0.21*** (3.48)	0.21** (2.29)	0.21*** (2.70)	0.22*** (2.63)	0.22*** (2.72)
UNEMP	-0.28 (-1.46)	-0.29 (-1.60)	-0.28 (-1.19)	-0.37 (-0.81)	-0.41 (-0.95)	-0.40 (-0.91)
AGE	-0.003** (-2.17)	-0.003** (-2.14)	-0.003** (-2.22)	-0.004 (-0.95)	-0.004 (-0.97)	-0.004 (-1.01)
MALE	-0.04 (-0.92)	-0.04 (-0.91)	-0.05 (-0.75)	-0.01 (-0.14)	-0.01 (-0.13)	-0.01 (-0.06)
Marginal effect (WIN = 5)	0.010*** (3.09)		0.012*** (2.91)	0.009* (1.67)		0.010** (2.20)
Marginal effect (WINHOM = 5)		0.012*** (3.32)			0.015** (2.03)	0.017** (2.23)
Log pseudolikelihood	-2225	-2207	-1302	-898	-897	-896
Observations	1792	1792	1052	740	740	740

Note: The values are coefficients. The numbers in parentheses are z-statistics calculated using robust standard errors clustered in the prefecture. The asterisks \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% levels, respectively. In all estimations, year dummies and dummies of the size of the residential place were included as independent variables, but were not reported because of space limitations.

Table 5. Determinants of happiness based on the sample of residents in a medium or small city, town, or village (ordered probit model)

	All		Local people	Migrants		
	(1)	(2)	(3)	(4)	(5)	(6)
WIN	0.006 (0.83)		0.003 (0.39)	0.01 (0.90)		0.01 (0.82)
WINHOM		0.002 (0.45)			0.01 (0.74)	0.01 (0.95)
SCHOOL	0.01* (1.75)	0.01* (1.77)	0.01* (1.93)	0.002 (0.29)	0.002 (0.26)	0.002 (0.23)
MARRY	0.41*** (12.3)	0.41*** (12.3)	0.46*** (11.8)	0.19** (2.36)	0.19** (2.28)	0.19** (2.29)
CHILD	0.004 (0.38)	0.004 (0.38)	0.003 (0.31)	-0.001 (-0.06)	-0.002 (-0.08)	-0.002 (-0.09)
INCOM	0.32*** (8.46)	0.32*** (8.46)	0.29*** (6.11)	0.42*** (5.65)	0.42*** (5.74)	0.42*** (5.61)
WIFSTU	0.09** (2.45)	0.09** (2.45)	0.07 (1.51)	0.15** (2.36)	0.15** (2.36)	0.15** (2.32)
UNEMP	-0.31*** (-3.10)	-0.31*** (-3.11)	-0.31*** (-3.22)	-0.42 (-1.10)	-0.42 (-1.10)	-0.42 (-1.12)
AGE	0.0003 (0.25)	0.0002 (0.25)	0.001 (0.68)	-0.001 (-0.69)	-0.001 (-0.72)	-0.001 (-0.70)
MALE	-0.12*** (-4.75)	-0.12*** (-4.76)	-0.12*** (-3.93)	-0.14*** (-3.52)	-0.14*** (-3.55)	-0.14*** (-3.52)
Marginal effect (WIN = 5)	0.002 (0.84)		0.001 (0.39)	0.004 (0.90)		0.004 (0.95)
Marginal effect (WINHOM = 5)		0.001 (0.45)			0.003 (0.75)	0.003 (0.83)
Log pseudolikelihood	-9466	-9467	-7232	-2213	-2213	-2212
Observations	7504	7504	5712	1792	1792	1792

Note: The values are coefficients. The numbers in parentheses are z-statistics calculated using robust standard errors clustered in the prefecture. The asterisks \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% levels, respectively. In all estimations, year dummies and dummies of the size of the residential place were included as independent variables, but were not reported because of space limitations.

Table 6. Determinants of happiness for migrants (ordered probit model)

	Large city			Other		
	From other region	Move within the region		From other region	Move within the region	
	(1)	(2)	(3)	(4)	(5)	(6)
WIN	0.01 (1.36)	0.06** (2.49)	0.03** (2.33)	0.02 (1.07)	0.01 (0.44)	0.01 (1.15)
WINHOM	0.09** (2.56)	0.01 (0.52)	-0.12 (-1.63)	0.01 (0.62)	0.01 (0.77)	0.001 (0.03)
WINHOM* DISTANCE			0.03** (2.07)			0.002 (0.27)
DISTANCE			-0.04 (-1.25)			0.03* (1.71)
SCHOOL	-0.02 (-1.35)	0.01 (0.31)	-0.01 (-0.73)	0.02 (1.30)	-0.02 (-1.18)	0.004 (0.47)
MARRY	0.25* (1.75)	0.69*** (3.15)	0.40*** (3.65)	0.16* (1.71)	0.23 (1.34)	0.19** (2.36)
CHILD	-0.05 (-1.06)	0.01 (0.42)	-0.02 (-0.83)	0.02 (0.81)	-0.04 (-0.77)	-0.002 (-0.08)
INCOM	0.46*** (4.77)	0.31* (1.72)	0.43*** (6.21)	0.35*** (3.19)	0.53*** (4.69)	0.42*** (5.54)
WIFSTU	0.28*** (2.88)	0.09 (0.67)	0.22*** (2.83)	0.13 (1.45)	0.20*** (2.72)	0.16** (2.41)
UNEMP	-0.54 (-1.02)	-0.15 (-0.12)	-0.42 (-0.99)	-0.29 (-0.74)	-1.51* (-1.65)	-0.41 (-1.13)
AGE	-0.005 (-1.11)	-0.001 (-0.18)	-0.004 (-1.06)	-0.0004 (-0.17)	-0.003 (-0.78)	-0.001 (-0.67)
MALE	-0.01 (-0.11)	-0.03 (-0.27)	0.01 (0.09)	-0.11 (-1.49)	-0.19** (-2.45)	-0.14*** (-3.61)
Marginal effect (WIN = 5)	0.006 (1.38)	0.020*** (2.72)		0.006 (1.06)	0.003 (0.44)	
Marginal effect (WINHOM = 5)	0.032** (2.45)	0.004 (0.53)		0.004 (0.62)	0.004 (0.77)	
Log pseudolikelihood	-602	-284	-894	-1338	-869	-2214
Observations	495	245	740	1085	707	1792

Note: In this estimation, the log of DISTANCE was used. The values are coefficients. The numbers in parentheses are z-statistics calculated using robust standard errors clustered in the prefecture. The asterisks \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% levels, respectively. In all estimations, year dummies and dummies of the size of the residential place were included as independent variables, but were not reported because of space limitations.