

# **Information Needs of Foreign Nationals Residing in Japan in Case of Tokyo Inland Earthquakes:**

From Group Interviews with Foreign Residents from Four Countries\*

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[http://www.nhk.or.jp/bunken/summary/research/report/2014\\_09/20140901.pdf](http://www.nhk.or.jp/bunken/summary/research/report/2014_09/20140901.pdf)

## 1. Preface

The Great East Japan Earthquake in March 2011 highlighted various problems concerning the provision of disaster information. Among them was the “vacuum of information” experienced by the socially vulnerable, such as the disabled, the elderly and foreign residents. Many foreigners, in particular, had trouble obtaining necessary information or took misguided actions because of inaccurate information. As the telephone survey of 600 foreign nationals conducted by the NHK Broadcasting Culture Research Institute revealed, they suffered greater damages or ended up in a panic state, because of this vacuum of information. (Yonekura, 2012)

To improve the provision of information to foreign residents it is essential to accurately understand their information behavior and what they need from the Japanese media. To this end, we conducted a group interview in March 2014 on the assumption that an earthquake occurs directly underneath Tokyo. Interview sessions were conducted with Chinese, Koreans, Japanese-Brazilians and Filipinos—the largest foreign national groups in Japan. All of them were medium- or long-term residents currently living in the Tokyo area. The interview was conducted in Japanese.

Regarding the content and method of the interview, I consulted Ritsu Yonekura, former Senior Analyst of the NHK Broadcasting Culture Research Institute (present Nihon University Associate Professor) and Akiyuki Kawasaki, Project Associate Professor of the University of Tokyo School of Engineering.

This paper introduces the result of the group interview, which revealed characteristics of foreign residents’ media use and information behavior in natural disaster and analyze what they require of the Japanese media.

The structure of this report is as follows: First, I will look at the overall trends of foreign residents in Japan and sort out their basic problems pertaining to disasters (Chapter 2). Then I will introduce the characteristics of foreigners’ information behavior with the assumption that an inland earthquake strikes Tokyo based on the result of the interview (Chapter 3), and analyze their needs for information from the Japanese media (Chapter 4). The final section provides summary of the report and consideration of future tasks. (Chapter 5).

## **2. Background and Outline of the Survey**

### **(1) Trend in the number of foreign residents in Japan**

Postwar Japan saw a constant rise in the number of foreign residents. The trend became even more conspicuous after the amendment of the Immigration Control and Refugee Recognition Act in 1990 with the influx of South Americans of Japanese descent and Asians under the status of “technical interns or trainees.” After hitting a peak at 2,210,000 in 2008, the number has been declining, partly with the influence of the economic slowdown triggered by the collapse of Lehman Brothers and the Great East Japan Earthquake. As of the end of 2012, 2,030,000 foreigners are residing in Japan. (The 2013 White Paper, the Ministry of Justice)

Following are the numbers of major foreign resident groups per nationality: Chinese, 650,000 (32%), Koreans, 530,000 (26%), Filipinos, 200,000 (10%), Brazilians, 190,000 (9.4%). Altogether, they make up nearly 80 percent of foreign residents in Japan.

Foreigners account for 1.59 percent of Japan’s population of 127.5 million. The ratio is not particularly high compared with major Western countries, for instance, the number is 7.1 percent in the United States, 7.4 percent in Britain, and 9.0 percent in Germany (OECD, 2013). As aging accelerates coupled with declining birthrate, some believe that we should accept more foreigners as nursing-care workers to make up for personnel shortage. Moreover, the construction and other sectors are expected to face labor shortage as demand increases with the reconstruction after the earthquake and the preparation for the 2020 Olympic and Paralympic Games in Tokyo. The Japanese government, for its part, has adopted the policy to extend the period of stay for foreign trainees from developing countries. The authorities are also considering designating the Tokyo metropolitan area as a Special Strategic Zone to increase the number of foreigners.

Since more than 40 percent of the foreigners in Japan are living in Tokyo and surrounding areas, a major earthquake in the metropolitan area might cause much larger confusions and damages than the Great East Japan Earthquake. Improving the overall provision of disaster information to foreign residents is a pressing task.

### **(2) Preceding survey after the Great East Japan Earthquake**

In March 2012, the NHK Broadcasting Culture Research institute conducted a telephone survey of 600 foreigners living in Japan (150 Chinese, Koreans, Brazilians and

Filipinos each) to understand their information activities at the time of the Great East Japan Earthquake. Let me introduce the survey's findings here. (Yonekura, 2012:73).

- Foreign residents' media environments and information behavior vary, according to their nationalities, Japanese proficiency, occupation and background. There is a great gap in the amount and quality of information they can access between those who are in advanced media environment and those who aren't.
- In disaster, as in peace time, foreign residents' primary source of information is the Japanese television. As for the usage of the Internet and newspaper, the tendencies are different, depending on their nationalities.
- They made varied assessment on whether they were able to obtain the information they wanted sufficiently according to their nationalities. There was possibly a correlation with their Japanese proficiency.
- Among the foreign residents in the areas affected by the disaster were great needs for information services provided other than in normal Japanese, such as their native tongues, English or simple Japanese. They also have strong desire to let people know about their situation.

### **(3) Purpose of the survey**

The previous survey focused on experience of the Great East Japan Earthquake gave us a general idea about foreign residents' media environment and their information behavior at the time of disaster, but such quantitative survey was not sufficient to find out details, such as differences caused by nationality or language ability as well as what they need from the Japanese media. Moreover, there might be differences in foreign residents' information needs and behavior in the event of an earthquake striking Tokyo from the time of the disaster in the coastal region in Tohoku, where major damages were caused by tsunami.

The purpose of the latest survey was to delve further into foreign residents' information activities based on the 2012 study on the assumption that an inland earthquake occurs in Tokyo. We aimed to find out about the awareness of foreigners in the capital area about the possibility of an earthquake in the capital, what kind of information they have to avoid confusion and panic, and what they expect from the local media, as a way to consider better provision of necessary information.

#### **(4) Survey outline**

Following is the outline of the survey.

Timing: March 2013

Methods: (1) A questionnaire to understand the interviewees' basic attributes. (2) Interview sessions with groups of five people (100 minutes for each session).

Target: Fifty foreigners residing in the Tokyo metropolitan area (fifteen Chinese and Koreans each, ten Brazilians and Filipinos each). The group interview was commissioned to Seed Planning Inc., which advertised on the Internet for foreigners who can cooperate. The interviewees were chosen with the following conditions;

- Those who came to Japan after the amendment of the Immigration Act in 1990 and currently live in Tokyo or surrounding prefectures,
- More than half of each group have experienced the Great East Japan Earthquake.

As the above conditions indicate, this survey was not targeted at tourists who stay in Japan only for a short time, but at people who make their livelihood in Japan.

We selected a total of forty adults at various ages (two groups comprising five people for each country). Additionally, we also interviewed students of unspecified gender—ten Chinese and ten Koreans (two groups comprising five people for each country). We assumed foreign students use the Internet in their everyday lives with Smartphones, PCs and tablet computers and can access broader information network than other adults do. Even though they are categorized as the vulnerable in disaster as other foreigners, we thought their situation might be different. We only chose Chinese and Koreans, because students from these two countries are much larger in number than those from Brazil and the Philippines.

### **3. Result of Group Interview**

#### **(1) Basic attributes of the interviewees**

First, I would like to introduce basic attributes of the interviewees. Table 1 shows their major attributes. Each nationality group shows different characteristics; for example, the Brazilian group shows a high ratio of men, and eight out of the ten interviewees had been in Japan for fifteen years or longer. Meanwhile, the majority of the Filipino group were women. Many of Filipino interviewees had been in Japan for ten years or longer. This data roughly match the trend of the Brazilians and Filipinos in Japan as a whole.

Women also constituted the majorities of the Chinese and Korean groups. The length of stay of most Chinese and Korean interviewees was less than ten years.

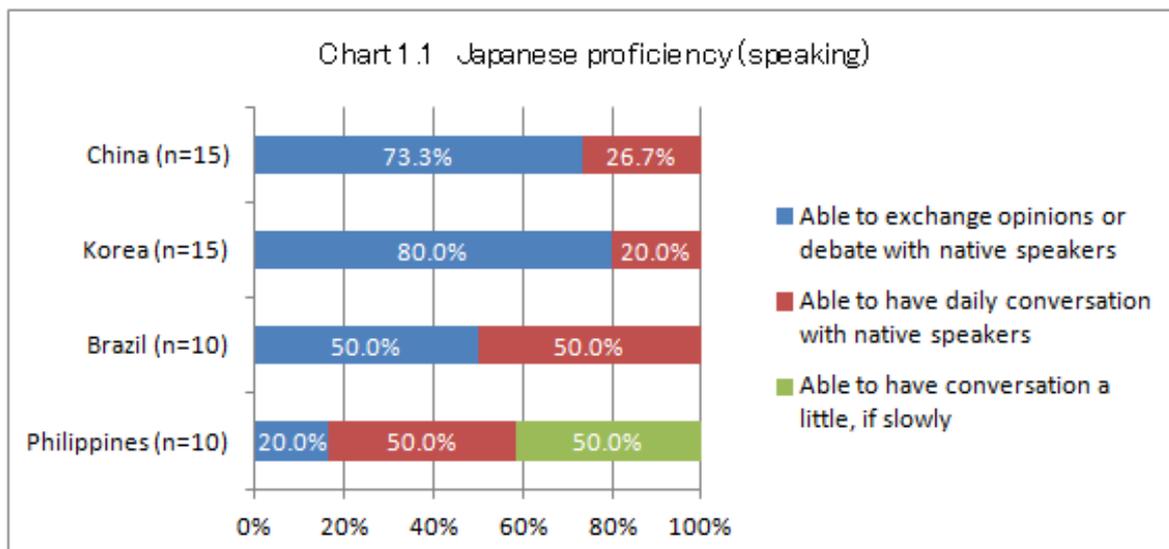
Table 1 Interviewees' basic attributes

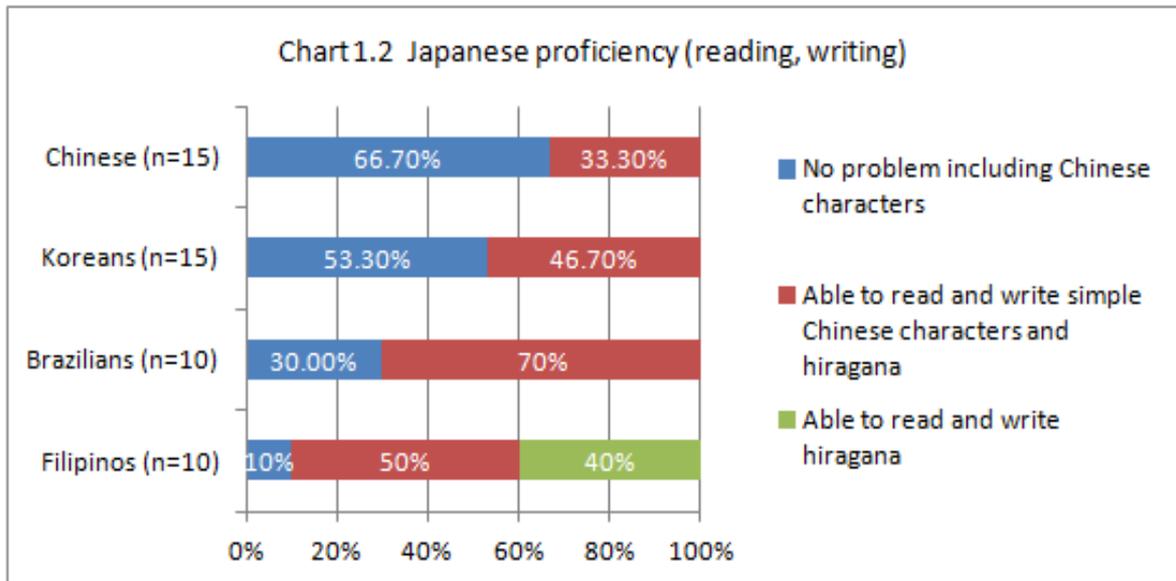
		Chinese (15)	Koreans (15)	Brazilians (10)	Filipinos (10)	Total
Classification	Non-students	10	10	10	10	40
	Students	5	5	0	0	10
Sex	Male	4	6	7	4	21
	Female	11	9	3	6	29
Age	20s	10	5	1	2	18
	30s	1	6	3	2	12
	40s	3	4	6	6	19
	50s	1	0	0	0	1
Duration of stay	Less than 5 years	6	3	0	1	10
	5 to less than 10 years	4	6	1	1	12
	10 to less than 15 years	1	2	1	3	7
	15 years or more	4	4	8	5	21
Japanese-Language Proficiency Test	Certified	14	12	7	6	39
	Not certified	1	3	3	4	11

## (2) Linguistic abilities

### The language for providing disaster information

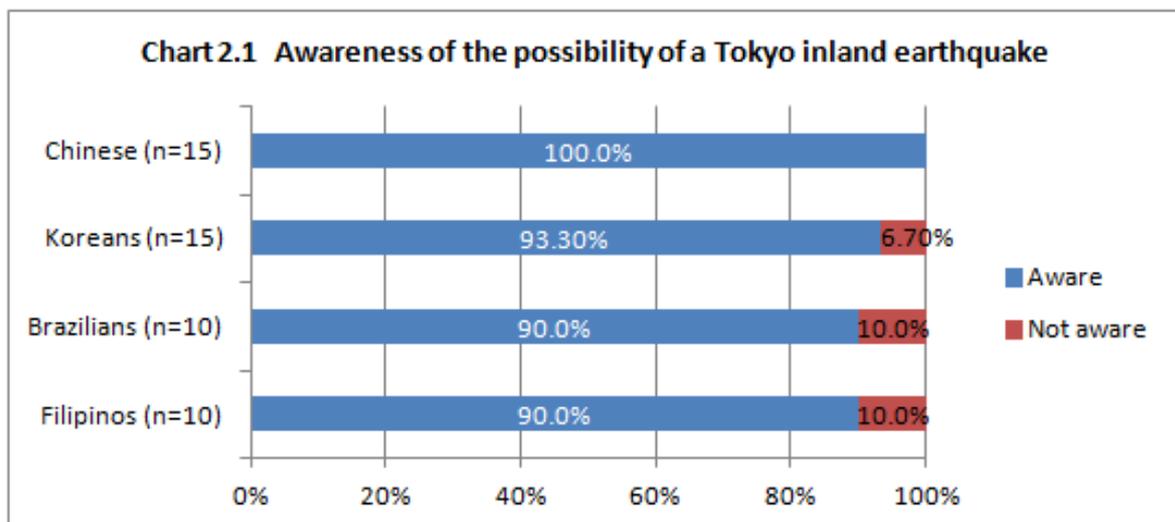
There was a marked difference in Japanese proficiencies among the interviewees. Charts 1.1 and 1.2 show the result of the questions about their language skills. The Chinese and Koreans possessed higher skill of speaking Japanese than their Brazilian and Filipino counterparts. The same was true with the skills of reading and writing, although most of the interviewees, regardless of nationality, seemed more proficient in speaking than in reading and writing.





Most of the Chinese and Koreans had qualifications of the Japanese-Language Proficiency Test, probably because they had received formal Japanese education. Most Brazilians and Filipinos, on the other hand, seemed to have acquired the language after coming to Japan through their work and living. Although many of the Brazilians and Filipinos had been in Japan for more than ten years, only about 30 percent of the Brazilians and 10 percent of Filipinos were comfortable reading and writing Japanese, including Chinese characters.

Chart 2.1 shows their awareness of the possibility of an inland earthquake in Tokyo. Most of them knew that Tokyo may be hit by a major earthquake in the future.



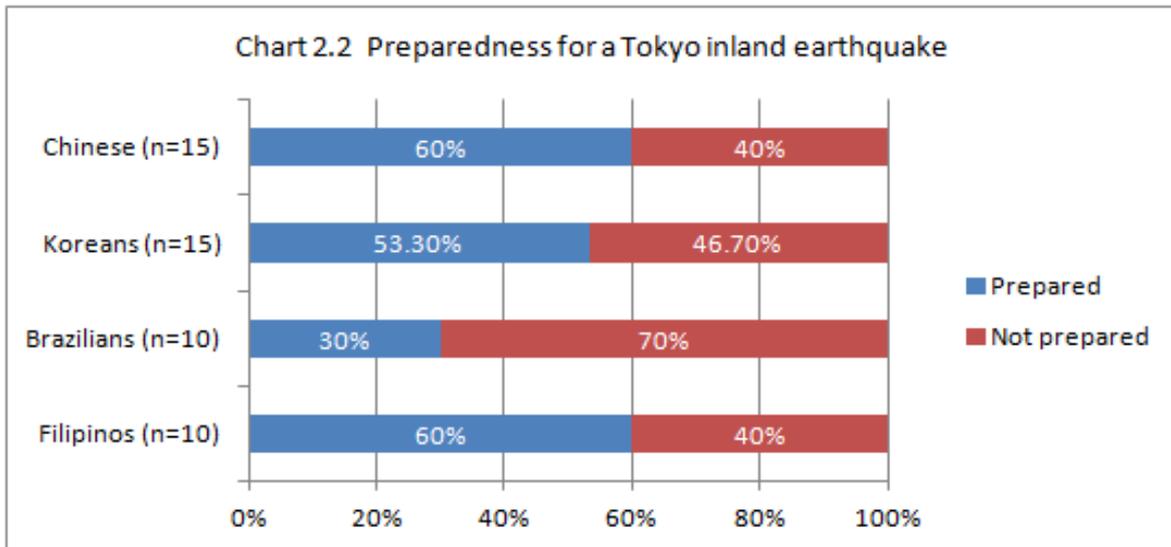


Chart 2.2 deals with the data about their preparedness for a large-scale earthquake. Sixty percent of the Chinese and the Filipinos each and 53.3 percent of the Koreans said they were prepared for an emergency. In addition to keeping extra stock of water and food at home, some were taking other kinds of precaution as follows.

Because I'm afraid of fire, I obtained a fire extinguisher for my home after the Great East Japan Earthquake (Chinese, female, 40s). I keep in my rucksack some tools, which I can use to break the window and get out of the room, as well as portable toilets and a helmet (Korean, male, 40s).

Many of the interviewees had first-hand experience of the 2011 earthquake. The high degrees of preparedness was probably because they had good knowledge about what a major earthquake is like and because they were aware of the possibility that Tokyo is struck by one in the future.

### **(3) Flow of the interview**

The interview was carried out with a focus on following points.

(a) Actions they took to collect information at the time of the Great East Japan Earthquake

(b) Incidents and problems they expect to face in an inland earthquake in Tokyo. (\*Video and pictures were presented.)

- Collection of information immediately after the occurrence of the earthquake and required information (contents, sources, methods).
- Collection of information in evacuation shelters (contents, sources, methods).

- Collection of information a week after the occurrence of the earthquake to take next action (contents, sources, methods).

(c) Desired information and future requests for the media

- Recognition of the NHK's broadcasting targeted at foreigners in the event of a disaster.
- Recognition and evaluation of the NHK News Web Easy provided in simple Japanese.
- Requests for Japanese broadcasters.



Group interview

First, we listened to their experience of the Great East Japan Earthquake, and then asked questions concerning an inland earthquake in Tokyo which might occur in the future. In the interview, we asked them to assume that the area they live was affected and their homes were damaged, and to think what actions they would take at the three stages: directly after the earthquake, when taking shelter, and when leaving the shelter. We also asked what they would need from the media as victims of an earthquake.

As materials to picture damages of an inland earthquake in Tokyo, we showed them computer graphics created by the NHK, which included images of collapsing buildings and fires. We also used snap shots of people taking shelter in gymnasiums and community halls after the Great East Japan Earthquake to show them the situation in evacuation centers.

**(4) Experience of the Great East Japan Earthquake**

We recognized considerable influence of the Great East Japan Earthquake in their responses. Many of the interviewees reported confusion and fear that they had after the massive earthquake.

## (5) In the event of a Tokyo inland earthquake

“Since cell phone was not working, I couldn’t contact my friends or family. I stayed at Shinjuku Station all night. I was so scared I kept crying at first, but seeing Japanese people acting calmly without panicking, I also calmed down. (Chinese, female, 20s)” “I didn’t know where I should go, so I went to a station. (Korean, male, 30s)” “ z I thought TV and other media should tell us about safe places and what we needed to do. (Chinese, male, 20s)” “I evacuated to Osaka by Shinkansen three days after the earthquake. In Osaka, I called my family in South Korea, who told me to return. I went back two days later. (Korean, female, 30s)”

Their answers regarding the media they used to gather information varied.

“I watched news on TV. I didn’t understand Japanese very well, but I could figure out what was going on by looking at the image. (Chinese, female, 20s)” “I didn’t watch TV so much. The NHK Radio was providing information in various languages, which I thought were helpful. I listened to Portuguese broadcasts. (Brazilian, male, 20s)” “I could not obtain any information for about a day following the disaster. In fact, people in the Philippines sent me information about the earthquake and tsunami. (Filipino, male, 40s)”

Table 2 Information activities immediately after the disaster

	Chinese	Koreans	Brazilians	Filipinos
<b>Anxiety factors</b>	<ul style="list-style-type: none"> <li>- Safety of family</li> <li>- water and food</li> <li>- Securing passport</li> <li>- Electricity</li> <li>- Job</li> </ul>	<ul style="list-style-type: none"> <li>- Safety of family</li> <li>- Gas explosion</li> <li>- Lack of safety measures</li> </ul>	<ul style="list-style-type: none"> <li>- Safety of family</li> <li>- Water and food</li> <li>- How to maintain livelihood</li> </ul>	
<b>Needed information</b>	<ul style="list-style-type: none"> <li>- Latest status</li> <li>- Disaster situation</li> <li>- Safety of family</li> </ul>	<ul style="list-style-type: none"> <li>- Epicenter, range of impact (to decide which way to run, whether to remain in the building or not)</li> <li>- Information for returning home (trains to the airport, flights, banks, reentry procedure)</li> </ul>	<ul style="list-style-type: none"> <li>- Situation in the neighborhood</li> <li>- Seismic intensity, epicenter, status of damages (to take an action)</li> </ul>	<ul style="list-style-type: none"> <li>- Status of damages</li> <li>- Range of damages, seismic intensity, magnitude</li> <li>- Information of evacuation center</li> <li>- Flight operations</li> <li>- Safe places</li> </ul>
<b>Sources of information</b>	<ul style="list-style-type: none"> <li>- TV and radio</li> <li>- Japanese written media</li> </ul>	<ul style="list-style-type: none"> <li>- Trust Japanese media’s information about the earthquake. *Watch TV to obtain latest information.</li> <li>- American, British and Korean media.</li> <li>- SNS to gather latest information about the neighborhood.</li> </ul>	<ul style="list-style-type: none"> <li>- Use TV first (faster than the Internet)</li> <li>- High degree of trust in the NHK (no influence from sponsors)</li> <li>- Compare news of the BBC, ABC and CNN.</li> </ul>	<ul style="list-style-type: none"> <li>- Check Facebook first</li> <li>- Utilize Twitter to obtain information in English.</li> <li>- Neighbors</li> <li>- In-town announcement</li> <li>- Friends, the embassy</li> </ul>
<b>Methods to obtain information</b>	<ul style="list-style-type: none"> <li>- TV, radio, Smartphone</li> <li>- Friends</li> <li>- Check with own eyes</li> </ul>	<ul style="list-style-type: none"> <li>- TV, PC, tablet, Smartphone and anything else that are available to obtain as much information as possible.</li> </ul>	<ul style="list-style-type: none"> <li>- TV (images are easier than written materials)</li> <li>- Smartphone (useful because it can be carried around)</li> <li>- PC</li> </ul>	<ul style="list-style-type: none"> <li>- TV (Easy to understand the situation with images without reading)</li> <li>- TV, PC, Smartphone and anything else that are available.</li> </ul>

Table 2 shows major opinions regarding their response to an earthquake. Assuming that a massive earthquake strikes Tokyo, we asked what information activities they would take right after the disaster.

Regardless of their nationalities, they commonly said they would ensure safety of their own and their family, and try to obtain a full picture of the damages.

“Lives are more important than information. I will protect my family. (Korean, female, 40s)”  
“I need to know the extent of the damage, the situation of my area, whether the trains are operating, and if I was injured, whether I could go to a hospital. (Brazilian, male, 40s)”

Information to take specific actions, such as where to evacuate or whether they can go back to their countries was also desired.

“I will turn on the TV and try to understand the situation first. I need to know what action I must take, what is happening and where it is happening, as well as the overall status of the damages. I will take action based on the gathered information. (Brazilian, female, 30s)” “I need to know basic information, such as the intensity and the epicenter of the earthquake. I don’t want to run toward the epicenter, so I will check and decide which way to go. (Korean, male, 30s)” “I think I will need information about the area I live. I need to protect myself. I will try to get the status of the train and what services the ward office is providing. The news media will focus on the areas with major damages. (Chinese, female, 20s)”

As for the method to obtain information, television was the most popular option, indicating that the television remains the major source of information as in the 2012 survey.

“If there is an earthquake, I will turn on the TV first. Information from the TV is the most reliable. (Chinese, female, 20s)” “TV is easy to understand. I might use the emergency radio, which I keep near my bed, but I think TV is easier because I can obtain information just by looking. (Brazilian, female, 30s)” “I will watch TV if it’s working. Even if it isn’t, people who can watch TV will post Tweets. (Filipino, male, 40s)”

They also said they will try to use multiple tools to gather information, instead of relying only on television.

“I will use TV, PC, tablet or whatever is available to gather information. (Korean, male, 30s)”  
 “I need to know the status of the earthquake, whether there will be aftershocks, and whether trains are operating. Sometimes I cannot obtain the information I need from TV, but I can find exactly what I want by searching on the Internet. I will also check Twitter. (Korean, female, 20s)”  
 “I use my Smartphone to check Twitter and other services. At the time of the Great East Japan Earthquake, the American and British embassies were providing information. (Filipino, male, 30s)”

In finding out overall status of the damages, they seemed to find Japanese television, particularly the NHK, reliable. Among the television’s merits for them were the provision of up-to-date information and ease of understanding thanks to visual images. In the meantime, they seemed to think it is important to compare information of the Japanese and overseas media. It was a matter of course for them to use multiple sources to collect information. In addition to the television, they seemed to find Smartphones useful for gathering information, because they can carry them around.

### (6) Information gathering before going to a shelter

Next, we moved on to the assumption that their neighborhood is damaged by the earthquake and it becomes difficult to remain in their homes. We asked them to imagine their information behavior when they take shelter. Table 3 is the summary of the result.

Table 3 Information activities at evacuation center

	Chinese	Koreans	Brazilians	Filipinos
Anxiety factors	<ul style="list-style-type: none"> <li>- Unfounded information, rumors</li> <li>- Difficulty to understand information that are not written in Chinese characters</li> <li>- Power supply, battery charge</li> <li>- When to be able to leave shelter</li> <li>- Whether the shelter is safe</li> <li>- Whether the company can continue business</li> <li>- Foods, blankets, medicine, emergency services</li> </ul>	<ul style="list-style-type: none"> <li>- Discrimination against foreigners (treatment in food shortage).</li> <li>- How to contact people in other shelters</li> <li>- Cold protection</li> <li>- Securing privacy</li> <li>- How to inform whereabouts to family back home.</li> <li>- Rules at the evacuation center</li> </ul>	<ul style="list-style-type: none"> <li>- How long the evacuation in shelter will continue</li> <li>- Recovery of waterworks</li> <li>- Food</li> <li>- Future life</li> </ul>	<ul style="list-style-type: none"> <li>- Location of evacuation center</li> <li>- Medical care, medicines</li> <li>- Care for people with chronic diseases</li> <li>- Water and food stockpiles</li> <li>- Toilets</li> <li>- Church</li> </ul>
Needed information	<ul style="list-style-type: none"> <li>- Status of damages</li> <li>- Train operations</li> <li>- Flight operations</li> <li>- Name lists of evacuees in shelters</li> </ul>	<ul style="list-style-type: none"> <li>- Embassy’s assistance</li> <li>- Procedure in case the passport has expired</li> <li>- Safety of family</li> <li>- Flight operations</li> <li>- Consultation service for foreigners (translation)</li> <li>- Water safety</li> </ul>	<ul style="list-style-type: none"> <li>- Food and water</li> <li>- Shower</li> <li>- Sanitation</li> <li>- Heating (Cold protection)</li> <li>- When the life infrastructure returns to normal</li> </ul>	<ul style="list-style-type: none"> <li>- English guidance for using an evacuation center</li> <li>- Translation services</li> </ul>
Information source	<ul style="list-style-type: none"> <li>- Embassy</li> <li>- Friends, acquaintances</li> </ul>		<ul style="list-style-type: none"> <li>- Friends, acquaintances</li> <li>- Japanese media</li> <li>- Japanese government</li> </ul>	

Most Japanese have some knowledge as to what to do when an earthquake occurs, for instance, to protect their head from falling objects, and to ensure fire has not broken out once the tremor subsides. If their homes are damaged, they will find an evacuation center to take shelter. But most of the foreigners participated in the group interview did not have such knowledge. Since it is hard for them to take appropriate actions to “protect themselves” or “evacuate,” they will likely get confused in a major earthquake.

“I don’t know where the shelter is or how to get there. (Chinese, female, 20s)” “I want to know where to go, where is safe. (Brazilian, male, 20s)”

Some also voiced concerns about the life in evacuation facilities. At the time of the Great East Japan Earthquake, the media reported the Japanese evacuees acting in an organized manner. Because of such image, they seemed to feel nervous about getting into a shelter.

“If an earthquake occurs, I might panic and run into a shelter with little more than the clothes on my back, but I don’t know the rules of the shelter. I want to know what kind of behavior is considered unacceptable. (Filipino, male, 40s)” “Since Japanese are polite, they will not scramble for supplies. I think I should follow their custom at a shelter. It’s also important to teach foreigners about Japanese customs. (Brazilian, male, 30s)” “I wish there was a manual for foreigners on staying at shelters. (Brazilian, male, 40s)”

While in shelter, they have strong desire to confirm safety of their friends and families whom they got separated and to know how to contact families back home. Some were also interested in what kind of assistance their countries’ embassies provide to those who wish to go home.

“I want to know how to let my family in South Korea know where I am. (Korean, male, 30s)” “If I get separated from my family, I would like to know which shelter they are. Since I’m a foreigner, I will also want information about how I can go back home and when. (Chinese, female, 40s)” “After the Great East Japan Earthquake, a rumor was going around that the embassy would make arrangements for the Chinese in the affected areas to return home as long as they have passports. I hope to obtain official information in emergency. (Chinese, female, 20s)”

I would also like to note that there was an opinion, particularly among Korean interviewees, that they would not want to enter a shelter in the first place. This is probably because going back home is relatively easy for them, compared with foreigners from other

countries. It was also likely that the strained relationship between Japan and South Korea influenced their opinion.

“I would not take shelter. If an earthquake directly hits Tokyo, recovery and reconstruction will take a long time, so I will leave Japan. (Korean, male, 30s)” “Taking shelter is the last thing I want to think about. (Korean, male, 20s)”

Many wanted to know rules and guidelines of evacuation facilities, probably because they were aware of cultural differences with the Japanese. Some of them said they would like to work as volunteer interpreters, if needed.

During evacuation, they are anxious to know how long they will have to stay in the shelter, and whether they can go back to work. They also need names of evacuees including those in other shelters, status of train and flight operations, and information about the embassies’ assistance measures. One thing characteristic about the Filipino interviewees was that they would like to know the location of a church.

#### (7) One week after the earthquake

Next, we asked them to assume they have stayed in a shelter for a certain period of time and try to decide whether to leave the shelter or to stay longer. Their responses about information activities when they consider leaving the shelter are summarized in Table 4.

Table 4 Information activities to make the next move

	Chinese	Koreans	Brazilians	Filipinos
Anxiety factors	<ul style="list-style-type: none"> <li>- Whether to be able to contact outside</li> <li>- Whether to be able to stay with family</li> </ul>	<ul style="list-style-type: none"> <li>- Telephone, power supply</li> <li>- Need for doctors and counselors</li> <li>- Whether moving to another city possible</li> <li>- Whether school or company are open as normal</li> <li>- Discrimination against foreigners</li> </ul>	<ul style="list-style-type: none"> <li>- High airfare to Brazil, the timing to come back after returning to Brazil</li> <li>- Whether to be able to stay with family</li> <li>- When to be able to return to normal life</li> </ul>	<ul style="list-style-type: none"> <li>- Whether there are jobs</li> <li>- Which areas are safe</li> </ul>
Needed information	<ul style="list-style-type: none"> <li>- Work</li> <li>- Safe places</li> <li>- Flight operations</li> <li>- Housing</li> <li>- Train operations</li> </ul>	<ul style="list-style-type: none"> <li>- Safety of friends and family</li> <li>- Mental care for victims</li> <li>- Medical care</li> <li>- Infrastructure</li> <li>- Transportation</li> <li>- Response of the government of home country</li> <li>- Available assistance</li> <li>- Reentry, visa</li> </ul>	<ul style="list-style-type: none"> <li>- Safe place to move</li> <li>- Assistance of the Japanese and home governments and procedures (life security for people who lost their job)</li> <li>- Flight operations</li> <li>- How to contact family back home</li> </ul>	<ul style="list-style-type: none"> <li>- Employment</li> <li>- Place to live</li> </ul>
Information source	<ul style="list-style-type: none"> <li>- Evacuation center</li> <li>- People in the neighborhood</li> </ul>	<ul style="list-style-type: none"> <li>- TV</li> <li>- Government</li> <li>- School</li> </ul>	<ul style="list-style-type: none"> <li>- BBC, ABC, CNN</li> </ul>	<ul style="list-style-type: none"> <li>- SNS</li> <li>- Seek information about job offers using Facebook and other media</li> <li>- Provide information as well</li> </ul>
Method			<ul style="list-style-type: none"> <li>- TV</li> <li>- Smartphone</li> <li>- One-segment broadcasting</li> </ul>	<ul style="list-style-type: none"> <li>- Smartphone</li> <li>- Facebook</li> <li>- Friends</li> </ul>

Their major concerns at this stage include whether they still have a job, whether they can stay with their family, and if they can return to their original home. Their next action is determined by the situations regarding these matters.

“Since I work for a company, I will commute from the shelter if my company is still in business. Otherwise, I will go back to China. (Chinese, female, 40s)” “(My concerns will be) when I can leave the shelter, if we can get back to normal lives, whether my children can go back to the same school or will have to move to a new school. (Brazilian, female, 40s)” “Whether I will leave the shelter or not depends on the situation of transportation services. I need information about the conditions of roads and trains. If transportation is disrupted, I will stay and take part in reconstruction activities. (Brazilian, male, 40s)”

As it becomes more likely that they have to stay in shelter longer, difference in their behavior depending on nationality starts to appear. Chinese and Koreans tend to consider going back to their countries and start seeking information for that purpose.

“I will return to China to wait and see. Once things get back to normal, I will come back. (Chinese, female, 20s)” “I will move to the Kansai area for a short time or go back to China. Staying in shelter is difficult, because there will be great mental stress. (Chinese, female, 20s)” “I will notify my whereabouts to people back home and see if I can get assistance from my country. (Korean, male, 30s)”

Chinese and Koreans tend to opt for going back home temporarily and wait until the situation improves. Some of them said they actually went back after the 2011 earthquake. Most Brazilians and Filipinos, on the other hand, do not consider going back home. Since most of them make their livelihood in Japan, paying high airfare to fly back home seems to be their last option.

“All of my nine siblings are in Japan. (Filipino, female, 20s)” “I have no relatives in the Philippines. (Filipino, female, 40s)” “If I can’t return home, I will stay in a shelter. I have a strong image that the Japanese people help each other in evacuation shelter. People help you when you are in trouble, and you can also help others. I would also seek information about the response of the Brazilian government, as well as how the Japanese government deals with foreign residents affected by the disaster. If I can’t work, what kind of support can I receive? (Brazilian, male, 40s)”

People who have been in Japan for a long time said they would rather need information about how to continue living in Japan safely, because it takes a major decision to go back to their countries after settling here with their families.

As it becomes difficult for them to restore lives before the disaster, many foreigners start considering moving, either back to their countries or elsewhere in Japan, and this is why the status of transportation services is particularly needed among various lifelines.

#### **4. Foreign Residents' Requests to the Japanese Media**

The latest survey indicated that foreign residents trust information provided by the NHK, but at the same time, it revealed their low awareness of NHK's services, such as the simultaneous English broadcasts provided after the disaster. Only few knew that NHK's international broadcasting service, NHK World, has become available for domestic viewers through some cable channels and that the NHK provided disaster information in multiple languages on Radio Channel 2 after the earthquake.

During the group interview, we asked what they want from the media to make their broadcasts friendlier to foreigners. I will report the result in this chapter.

##### **(1) Requests for the Japanese media (broadcasting stations)**

Table 5 shows their requests for the Japanese media, especially broadcasters.

Regarding where and how they seek disaster information such as prevention measures and actions to take in a disaster, they said providing pamphlets at airports where many foreigners disembark, Japanese language schools, and government offices would be helpful. Some wished to have Smartphone applications for that purpose. They also advised that the NHK should provide information not only on television, but also through Facebook and Twitter.

Most of their requests were related to language, indicating that the language barrier is a major challenge for them.

“Pictures and illustrations would be helpful for those who don't understand Japanese at all, for instance, using a figure to describe emergency or adding photos to explaining the situation. (Chinese, male, 20s)” “I think animation and manga should be used. (Chinese, female, 20s)”

Table 5 Requests for the Japanese media

	Chinese	Koreans	Brazilians	Filipinos
Information required in emergency (contents, form of expression)	<ul style="list-style-type: none"> <li>- Information helpful for foreigners not used to an earthquake to take specific actions.</li> <li>- Keywords rather than easy Japanese.</li> <li>- Chinese characters and English</li> <li>- Video and illustration</li> <li>- Simple emergency alerts, such as video showing a cartoon character escaping from tsunami.</li> <li>- Prepare instructions in case of earthquake, tsunami and other emergencies and show on the website when necessary.</li> </ul>	<ul style="list-style-type: none"> <li>- Announcement of specific instructions as to what to do.</li> <li>- "Ensure your safety" is too vague.</li> <li>- Provide the status of each area and necessary actions (specific information that helps decide what action to take).</li> <li>- Multilingual subtitles</li> <li>- Mobile application of disaster warning</li> <li>- Registration system to send disaster information to students from universities</li> </ul>	<ul style="list-style-type: none"> <li>- "Stay tuned for further updates." does not help. Need status regularly even if no updates.</li> <li>- Use of colors to indicate the levels of urgency, epicenter and evacuation orders.</li> <li>- Description in Roman characters</li> </ul>	<ul style="list-style-type: none"> <li>- English subtitles and keywords</li> <li>- Information in Facebook which people can check on their Smartphones</li> </ul>
Need for description in native language	<ul style="list-style-type: none"> <li>- Description in Chinese is necessary. Information should be provided in Chinese, Korean and English.</li> </ul>	<ul style="list-style-type: none"> <li>- Broadcasts in English and other major languages</li> </ul>	<ul style="list-style-type: none"> <li>- Audio in Portuguese for people who cannot read English or <i>hiragana</i>.</li> <li>- Radio broadcasts in Portuguese are useful and should be advertised more.</li> </ul>	<ul style="list-style-type: none"> <li>- English description is useful.</li> </ul>
Provision method	<ul style="list-style-type: none"> <li>- Advertise the News Web Easy on TV</li> <li>- Hand out pamphlets at Japanese language schools.</li> <li>- Hand out pamphlets at the airport when foreigners arrive.</li> <li>- Have city and ward offices send pamphlets to foreign residents.</li> <li>- Smartphone is better, because people who don't understand Japanese don't watch TV either.</li> </ul>	<ul style="list-style-type: none"> <li>- Regular provision of information by the ward offices and the government with direct mails, etc.</li> <li>- Broadcasting special programs to raise awareness about disaster prevention.</li> <li>- Smartphone application for disaster information.</li> <li>- Information of nearby areas rather than nationwide news.</li> </ul>	<ul style="list-style-type: none"> <li>- Foreigners should be informed of Japan's disaster countermeasures as they arrive in Japan.</li> <li>- Smartphone application for disaster information.</li> </ul>	<ul style="list-style-type: none"> <li>- Smartphone applications are useful, because people can check anywhere, even if they don't work in office.</li> <li>- Many Filipinos in Japan use Facebook and stay connected via communities.</li> <li>- Reliable information from the Japanese authorities (government, ward offices, etc.) in addition to information exchanged between Facebook users.</li> </ul>

## (2) How to overcome the language problem

The target of the latest interview had a high education in general with ten out of the fifty interviewees being college students, while eighteen had finished university or graduate school. Many of them had a job in Japan, from which they had a stable income. They were fluent in Japanese and had adapted to life in Japan. Supposing they were affected by a disaster and have to evacuate, most of them said they would choose the same shelter as Japanese victims, even if there was a facility for foreigners. But the language barrier still remains to exist.

In disaster or other life-threatening situations, it is hard to obtain a sense of security by understanding the situation only vaguely. This is why they have a strong desire to obtain information in their native languages.

### Provision of information in “easy Japanese”



“NHK News Web Easy”

In April 2012, the NHK started to provide some of the news stories of each day in easy Japanese on the Internet on an experimental basis, aiming to develop the service into a measure to provide disaster information to foreigners, but only few knew about this service.

We showed the website to the interviewees and asked their opinions. Table 6 is the summary of their responses.

While there were pros and cons about the NHK News Web Easy in general, they did not evaluate the service as a useful tool to obtain information at the time of disaster, even though they admit it might help their studies at normal times.

Asked to provide opinions and ideas freely, they gave some ideas for improvement, such as the use of more visual materials to make the information easier to understand without reading carefully, as well as a layout that can be viewed on mobile terminals and supplementary audio in English and other languages.

They also pointed out that honorific expressions make the sentences harder for them to understand, and that they don’t know, for example, what the phrase, “*ki o tsukete* (be extremely careful),” is advising them to do exactly. They also shared concern about reading Japanese calmly in emergency. Even if the news is provided in simple Japanese as in the Web Easy, supplementary images and explanation in their mother tongues and English were desired.

But that does not mean the News Web Easy is completely of no use. Since many interviewees said they seek information via SNS, if people proficient in Japanese see the website, translate the contents into their native languages and pass them to others through SNS, the information is disseminated in two steps, in which the website still has a role to play.

As a measure to provide disaster information to foreign residents, the authorities are considering establishing a system in the future to translate Japanese information into multiple languages automatically. For that purpose, it is important that the original information is written in simple, easy Japanese. (Meguro, Numada 2014). The News Web Easy might also be helpful as the basic source of information to be translated into various languages.

**Table 6 Opinions about NHK News Web East and ideas for improvements**

	Chinese	Koreans	Brazilians	Filipinos
Recognition	<ul style="list-style-type: none"> <li>- Have seen it introduced on TV</li> <li>- Used to see before but no longer using.</li> </ul>	No recognition	No recognition	No recognition
Merits	<ul style="list-style-type: none"> <li>- Useful for normal studies.</li> <li>- Helpful for people with low Japanese skills.</li> <li>- Audio is slow and easy to understand.</li> <li>- The use of color on words and explanations are helpful.</li> </ul>	<ul style="list-style-type: none"> <li>- <i>Hiragana</i> is helpful for those who can't read Chinese characters.</li> <li>- Useful for normal studies.</li> </ul>	<ul style="list-style-type: none"> <li>- People studying Japanese will appreciate <i>hiragana</i>.</li> <li>- Helpful for foreigners who stay in shelter for a long time.</li> </ul>	<ul style="list-style-type: none"> <li>- <i>Furigana</i> (description of Chinese characters' pronunciation) are helpful to look up on mobile phone.</li> <li>- Useful reference for office workers</li> </ul>
Drawbacks	<ul style="list-style-type: none"> <li>- Hard to read calmly in emergency</li> <li>- Need information in Chinese or other languages.</li> <li>- Better with audio in Chinese.</li> <li>- Some old people do not even understand <i>hiragana</i>.</li> </ul>	<ul style="list-style-type: none"> <li>- Native language is more assuring in emergency.</li> <li>- People who can't read Chinese characters may not understand <i>hiragana</i> either.</li> <li>- Photos are not visible because the titles are too large.</li> </ul>	<ul style="list-style-type: none"> <li>- Simpler methods to convey information are better.</li> <li>- People with low Japanese skills will not read websites containing many Chinese characters.</li> <li>- The display is not simple.</li> <li>- Hard to know where to click.</li> </ul>	<ul style="list-style-type: none"> <li>- Filipinos who can read Japanese are limited.</li> <li>- Chinese characters are difficult.</li> <li>- People working on a PC when a disaster occurs might see the site, but those who are out or at home will not.</li> </ul>
Ideas for improvements	<ul style="list-style-type: none"> <li>- Sites in major foreign languages including English, Chinese and Korean are necessary.</li> <li>- Information easy to understand just by listening is preferable.</li> <li>- Use of everyday words instead of honorific expressions; the elderly -&gt; old people deceased -&gt; died evacuate -&gt; run</li> <li>- Use of visual materials, such as video, anime, cartoons, photos, characters, and illustrations of earthquake, tsunami or fire.</li> <li>- Convey the most important information by keywords rather than describing in simple Japanese.</li> <li>- Make it easier to understand without reading everything.</li> </ul>	<ul style="list-style-type: none"> <li>- Have Japanese language schools introduce this website.</li> <li>- Easy Japanese is better than English for students</li> <li>- Organize the layout of photos, titles and contents better.</li> <li>- The display is too small for mobile terminals. Photos and images are easier to obtain information than reading the news.</li> <li>- Don't understand what "<i>jubun ki o tsukete</i> (be extremely careful)" exactly means.</li> <li>- The underlined words should have English explanations as well.</li> </ul>	<ul style="list-style-type: none"> <li>- Need information in native language in a disaster. Portuguese information is necessary.</li> <li>- Will not see the site unless it is interesting. (Possible to live without understanding Japanese because of the communities.)</li> <li>- Listening is easier than reading.</li> <li>- Use a larger icon on the top page about audio in Portuguese.</li> <li>- Audio translation of the written contents in emergency.</li> </ul>	<ul style="list-style-type: none"> <li>- English is faster in emergency, because it's easier to understand by just looking at the words.</li> <li>- Better with English description under Japanese.</li> <li>- Small dictionary on the left or right would be helpful.</li> <li>- Description in Japanese, <i>furigana</i> and English as in the Hiragana Times.</li> </ul>

## **5. Summary and Analysis**

### **(1) Summary**

Finally, I would like to sum up the findings of the group interview.

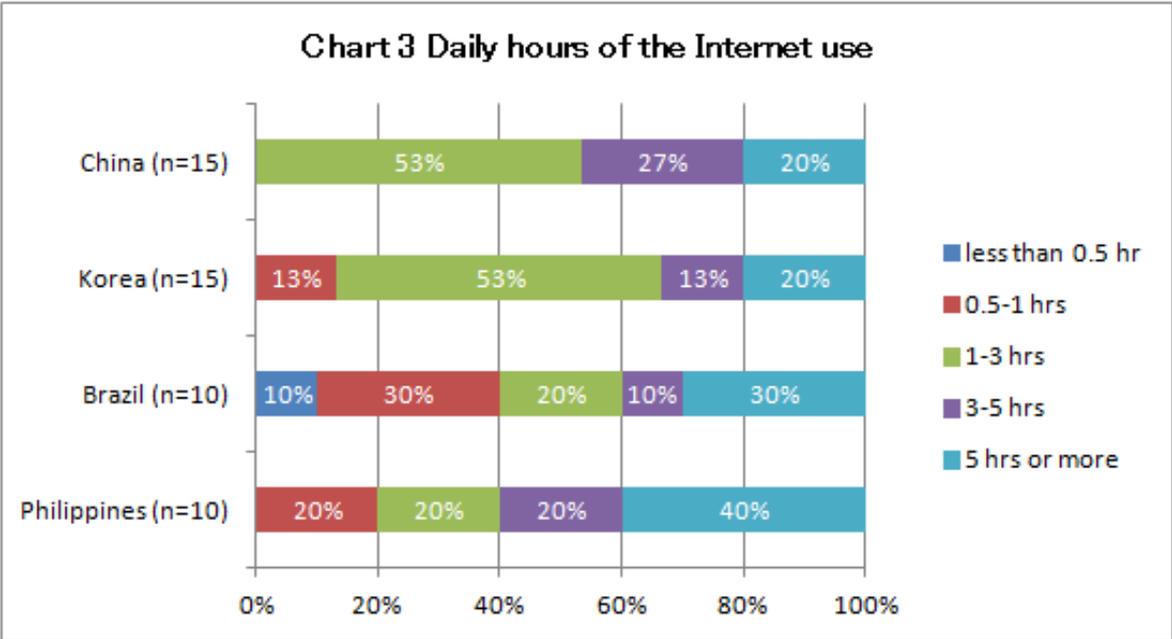
- Foreign residents have a high expectation for the television, particularly the NHK, as a source of information directly after the disaster. Many stated they would like to confirm the status of damages visually.
- In a disaster, foreign residents not only try to learn about overall situation, but also seek information about the areas they live. They also need information that helps determine what action to take.
- The Japanese take part in disaster drills since they are young, but people from other countries rarely hit by earthquakes might easily panic, because they don't know how to deal with the situation. It can be difficult for them to stay calm and read information written in Japanese. To decide next course of action or where to evacuate, they require information easy to understand with the use of description in their native languages and illustrations.
- Many foreigners feel cultural barrier in taking refuge at evacuation center and wish to know rules of shelters. While they hope to contribute to the reconstruction and recovery with the Japanese, they are also concerned that foreigners might be put on the back-burner when food supplies become short. They are also worried that they might receive discriminating treatment in hiring once reconstruction starts and people start looking for a job.
- Since most of them have the option of returning to their countries, even if temporarily, there are higher needs for transportation information than for information on other lifelines. They are particularly interested in the status of flight and train operations, embarkation and reentry procedures, and the assistance provided by the embassy.
- They use various measures to gather information. Especially when they make a decision on their lives after the disaster, they try to collect information from various sources, including television and other mass media as well as SNS.

### **(2) Multimedia's influence on foreign residents**

We cannot simply compare the result of the telephone survey of 600 people in 2012 and the latest group interview with 50 people, because the parameters and methods were different,

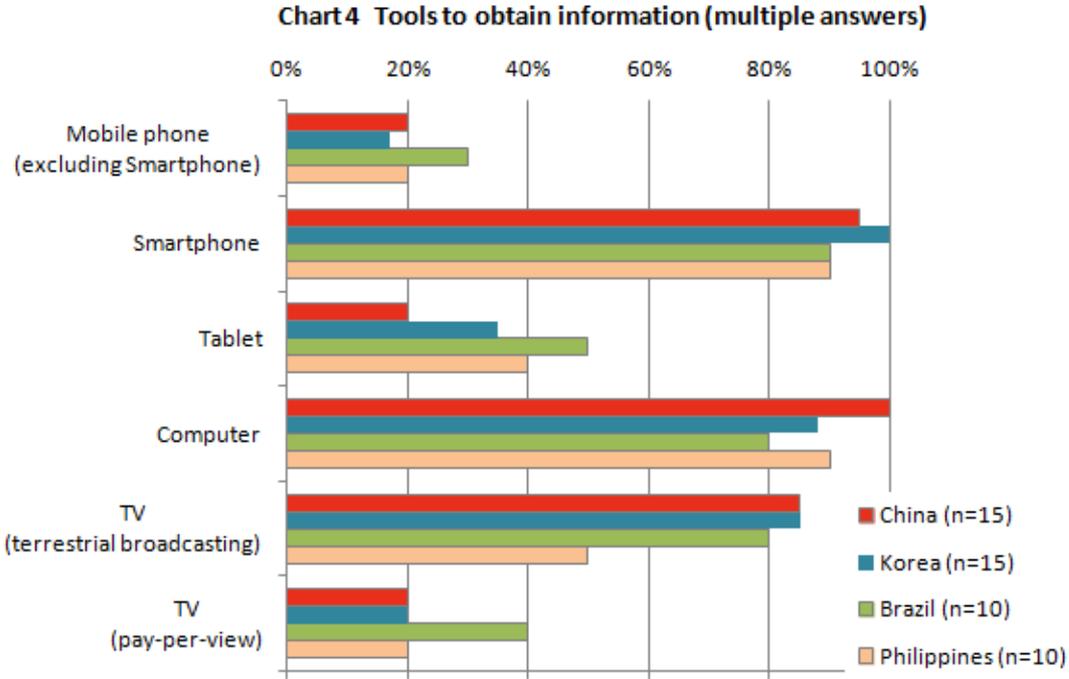
but as a reference, I would like to introduce the media environment of the foreigners we interviewed.

Looking at characteristics of the interviewees’ actions to gather information, we can see how the media environment can change the situation of those who were considered vulnerable in disaster. Chart 3 shows the result of the question about how many hours they use the Internet in a day.



More than half of the Chinese and Koreans said they use the Internet from one to three hours a day, while 20 percent of each group said they use five or more hours. The 2012 survey had also recognized that Chinese and Koreans use the Internet more than other nationals (Yonekura, 2012 : 66), but the recent interview highlighted a significant change in the behavior of the Brazilians and Filipinos. In the previous survey, 40 percent of the Brazilians and 13 percent of the Filipinos said they didn’t use the Internet very much or at all. In the latest survey, however, 60 percent of the Brazilians and 80 percent of the Filipinos said they spend one or more hours a day using the Internet, indicating that foreign residents are becoming increasingly familiar with the Internet. We can assume this is closely related to the spread of the Smartphone.

Chart 4 shows the tools they use to collect information. In the 2012 survey, television was most favored by all four groups, whereas in the latest survey, Smartphone and PC were as popular tools as the television, or even preferred.

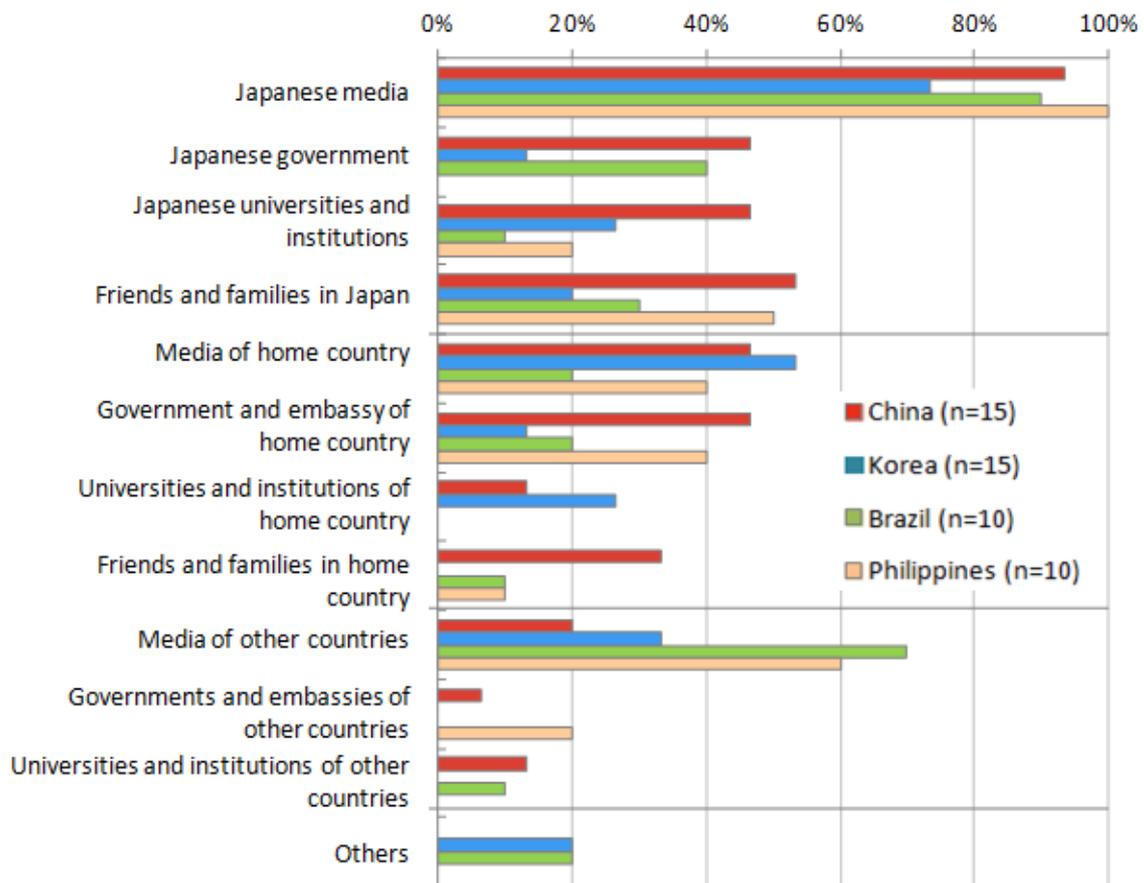


In the previous survey, 54 percent of the Koreans said they use websites in their native language and SNS, while those who gave the same answer accounted for 5 percent or less of the other three groups. We inferred that their main sources of information were limited to mass media, such as television and newspaper, because some people did not have access to the Internet in their everyday lives. (Yonekura, 2012 : 67)

The prevalence of Smartphones among foreign residents and increasing use of the Internet are important elements in considering the provision of disaster information.

Asked what they think were reliable sources of information, all the groups showed high confidence in the Japanese media, but when they need to decide what action to take, they resort to various sources, including the news media of their home countries, other overseas media, such as CNN and the BBC, and the embassies and other public organizations (Chart 5). Many foreigners who work or study in Japan have access to the television, Internet, SNS and other media, indicating that their environment has changed significantly since the time when they were associated with “information disadvantage.”

**Chart 5 Sources of information to rely on in a disaster in Japan (multiple answers)**



Before the interview, we had expected to see a large difference in the use of the media between students and adults, but as far as the result indicates, there was almost no difference between different age groups. All generations were using the Internet on a regular basis with their Smartphones and PCs.

Under that circumstance, foreign residents are no longer likely to face a “vacuum of information” in a disaster, but their problem now is to decide what to rely on in the flood of information.

After the earthquake in March 2011, the authorities remained cautious about disclosing information about damages, especially about the situation of the nuclear accident, so as not to cause panic. But foreign residents obtained information from US and UK broadcasts, in addition to the media in Japan and their home countries. This means that it is important in a disaster to provide information accurately, not only to people in the country, but also to overseas. According to the study of the NHK Broadcasting Culture Research Institute (Kowata et al., 2012), many foreign media used NHK’s news footage after the earthquake, indicating that the information provided by the NHK had an influence on the contents of overseas media.

Amid continued globalization and diversification of news media, information dispatched from Japan to overseas might be gathered by foreigners back in Japan. Since information is conveyed extremely complicated routes today, it is important in providing disaster information to not only focus on the foreigners living in Japan, but also keep influence overseas in mind.

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