

**Kwansei Gakuin University, Institute of Disaster Area Revitalization,
Regrowth and Governance Evacuation Research Group**

**National survey of people evacuated due to the nuclear accident
(summary) latest version¹**

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Objective:

Almost 10 years have passed since the accident at the Fukushima Daiichi Nuclear Power Station of the Tokyo Electric Power Company caused by the Great East Japan Earthquake. The Evacuation Research Group presided over by the Kwansei Gakuin University Institute of Disaster Area Revitalization, Regrowth and Governance has investigated the changes in family environment and health status, opinions on support measures by national and local governments, and the impact of COVID-19, with the objective of understanding how the people who were evacuated because of the nuclear accident have lived during the past 10 years.

Survey outline:

Survey participants were people who were evacuated from Fukushima Prefecture or other regions because of the nuclear accident. Questionnaires were sent to lifestyle reconstruction support bases (14 groups) and a voluntary group (1 group). They were sent by mail and distributed in newsletters of prefectures and municipalities. They were also distributed via social media, so participants who saw the questionnaire returned individual responses. Responses were anonymous and were returned in a return envelope provided to participants.

Period: July 17–September 10, 2020

Number of survey forms distributed: 4,876

Number of surveys returned: 694 (retrieval rate: 14%)

Contact information

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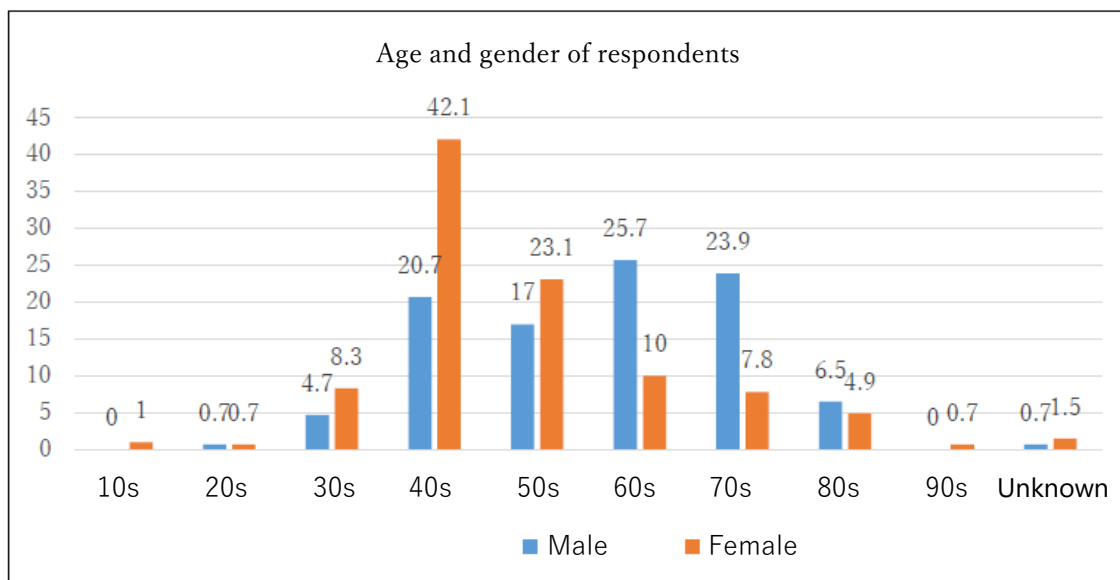
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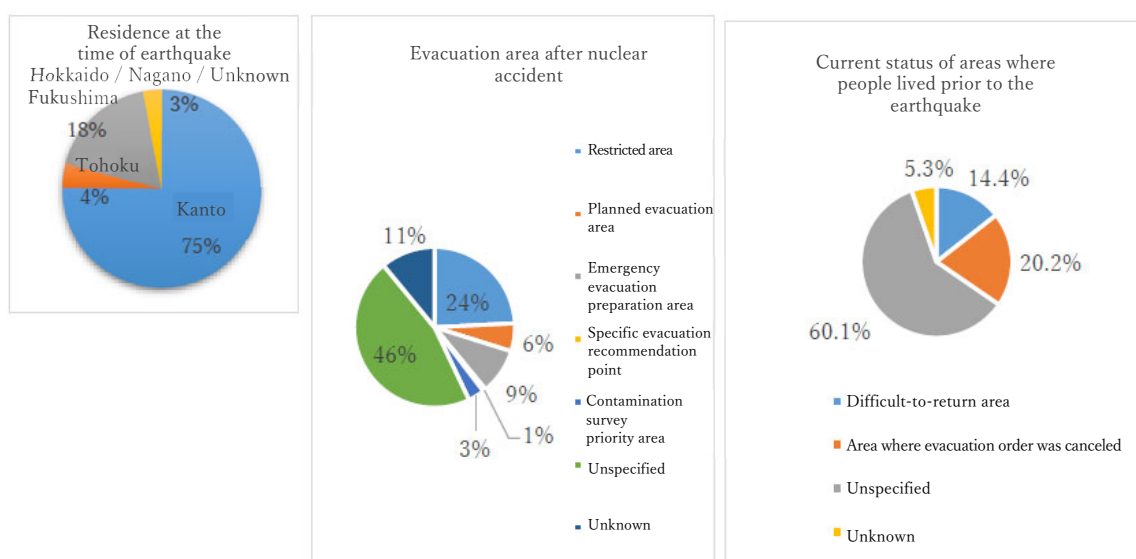
¹ In the latest version, 15 responses from the evacuation cancellation preparation area released on March 4 were summed.

1. Attributes

The age composition of the respondents was dominated by people in their 40s and 60s, comprising 54% of the total. The average age was 55.8 years. The gender distribution was 40% male and 60% female.



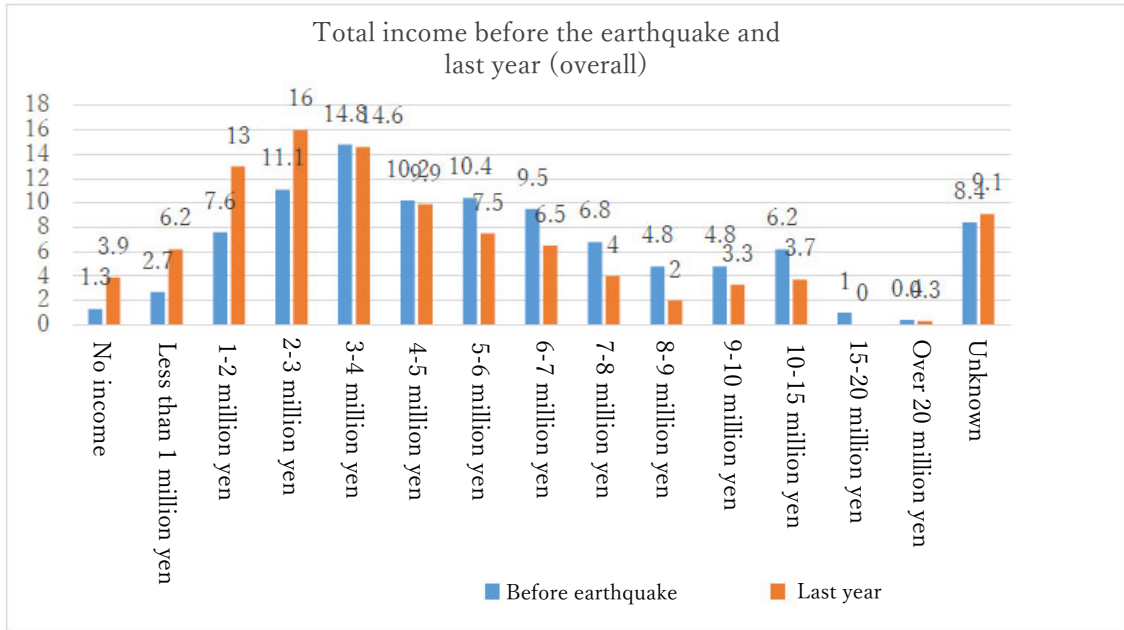
522 respondents (75% of the total) were residing at Fukushima Prefecture at the time of the earthquake. Additionally, 168 were from restricted areas (24%), 39 from planned evacuation areas (6%), 64 from emergency evacuation preparation areas (9%), 4 from specific evacuation recommendation points (1%), 23 from contamination survey priority areas (3%), and 320 from unspecified areas (46%). Furthermore, considering the current status of the areas where the respondents lived prior to the earthquake, 100 respondents lived in areas that are difficult to return to (14.4%), 140 respondents lived in areas where the evacuation order was lifted (20.2%), and 417 respondents lived in undesignated areas (60.1%).



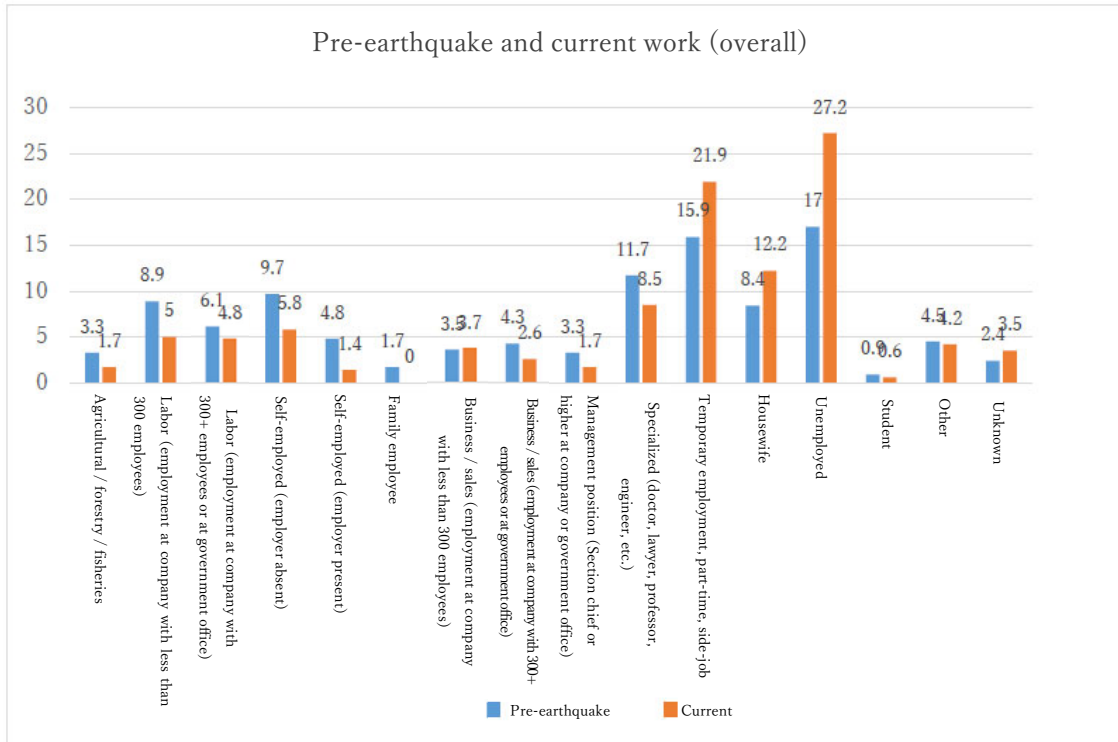
2. Overall situation

2-1. Decreased income

A comparison between total income before the earthquake and income of the past year showed that the respondents reporting income in all categories from 3–20 million yen and higher decreased and those reporting income in the categories from no income to 2–3 million yen increased.

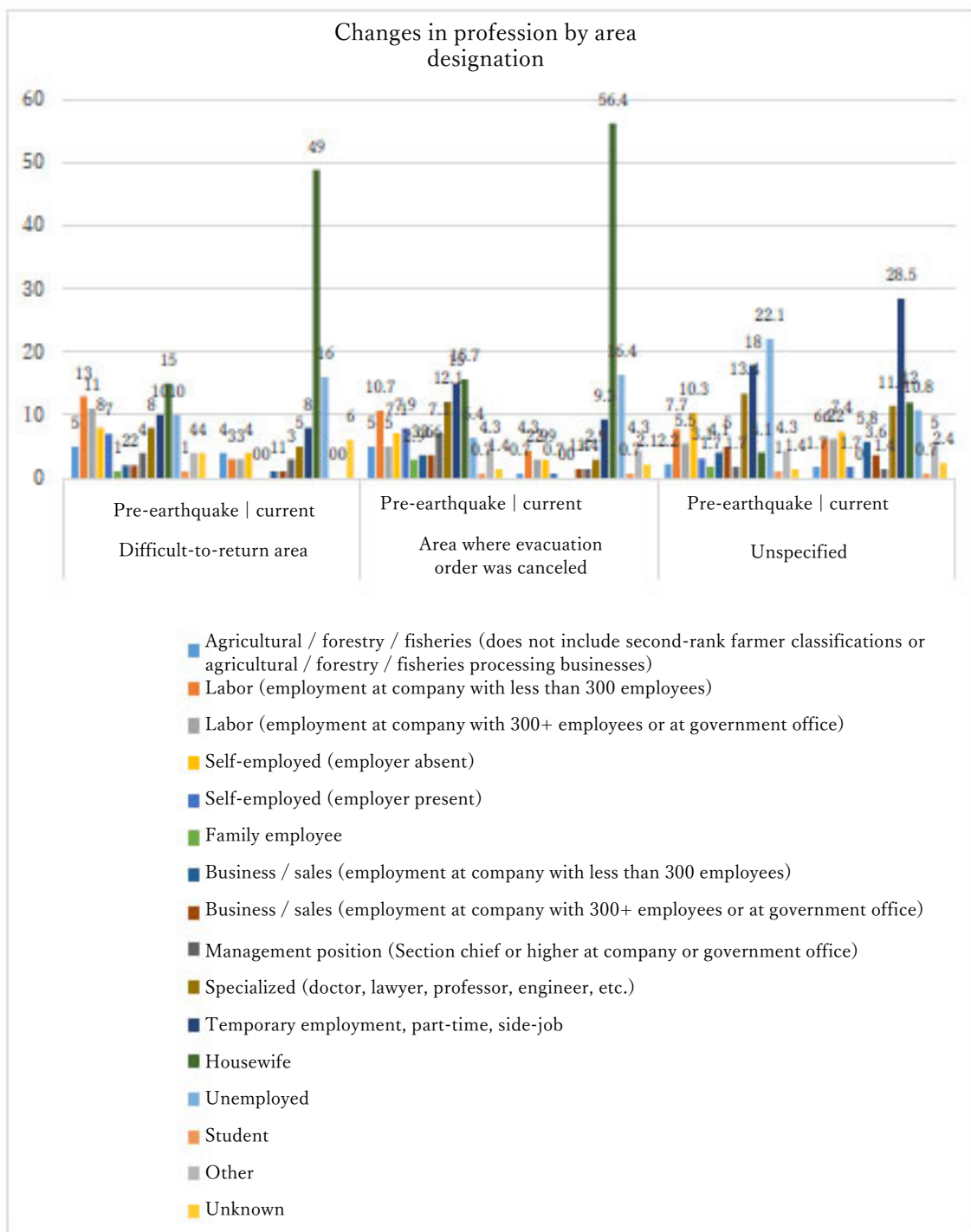


2-2. Occupational changes



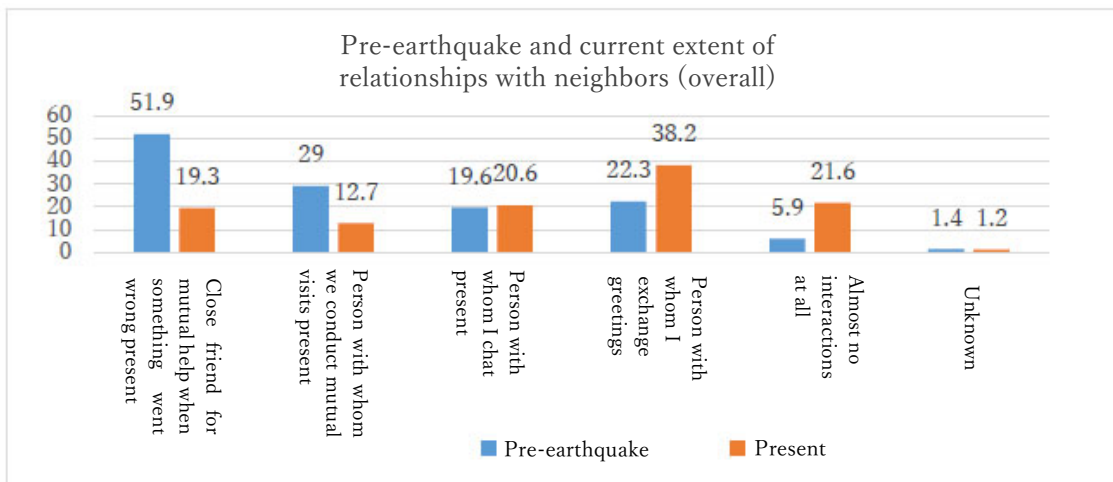
Questions about the currents and pre-earthquake occupations revealed that agricultural/forestry/fisheries jobs, company work, self-employed work, and specialized work decreased, whereas temporary work, part-time work, side jobs, full-time housework, and unemployed individuals increased.

Agricultural/forestry/fisheries jobs and self-employed work decreased in all area designations. The percentage of unemployed individuals increased significantly in groups with area designations.



2-3. Fewer human interactions

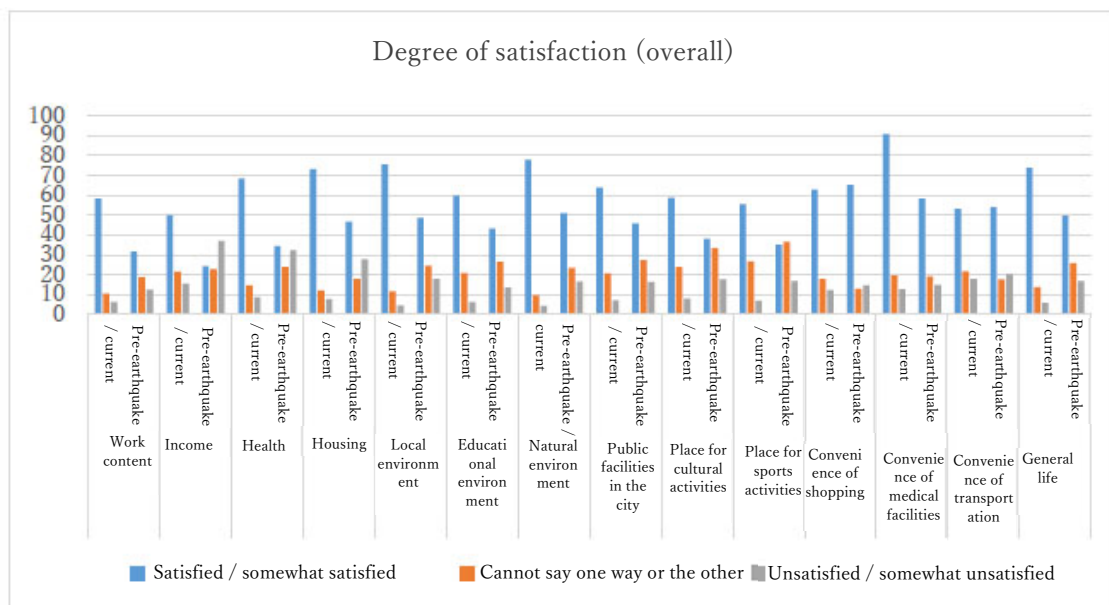
Regarding relationships within the neighborhood, the number of respondents having a close friend at the evacuation site for mutual assistance in time of need decreased significantly, whereas the number of respondents stating that they had only acquaintances with whom they exchanged greetings or had almost no interactions increased significantly.



2-4. Decreased life satisfaction

The degree of satisfaction for 15 domains (work content, income, health, leisure time, housing, regional environment, educational environment, natural environment, public facilities, places for cultural activities, places for sports activities, convenience of shopping, convenience of medical facilities, convenience of transportation, and general life) was as follows.

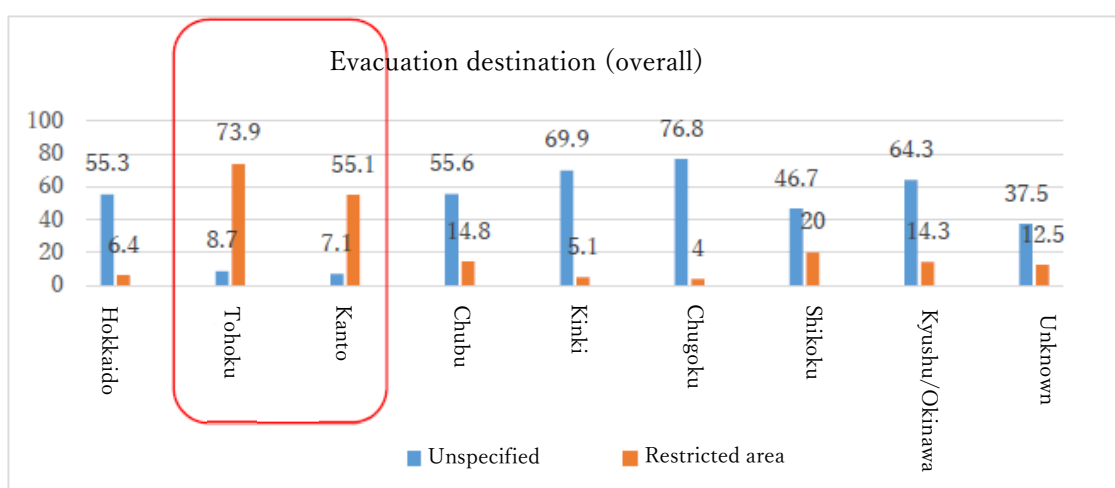
Convenience of shopping and transportation showed an increase in the “slightly satisfied/somewhat satisfied” category but also showed an increase in the “unsatisfied/somewhat unsatisfied” category. Furthermore, the “unsatisfied/somewhat unsatisfied” category was selected more frequently for all domains.



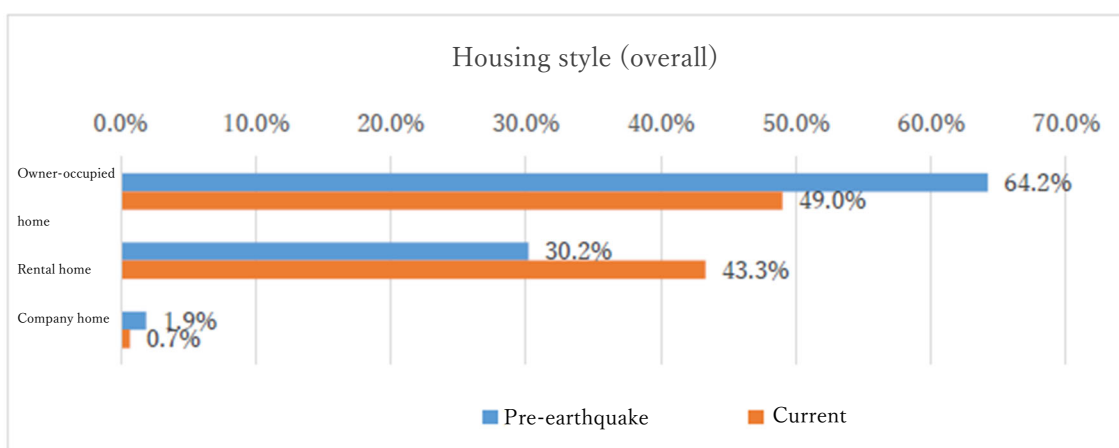
3. Status of individuals in forced evacuation areas

3-1. Evacuation destination

According to data from the Reconstruction Agency, the number of evacuees living outside of the prefecture of origin due to the Great East Japan Earthquake as of October 12, 2020, was 43,000, of which 29,441 were evacuated from Fukushima Prefecture. According to the data, most evacuees were in the Kanto region, followed by the Tohoku and Chubu regions. However, regarding the current location of residents in this survey, there were many responses from the Kanto (196 individuals), Chubu (142 individuals), Kinki (137 individuals), and Chugoku (99 individuals) regions. Most respondents from the forced evacuation area were in the Tohoku and Kanto regions (in red box), especially in Ibaraki Prefecture.



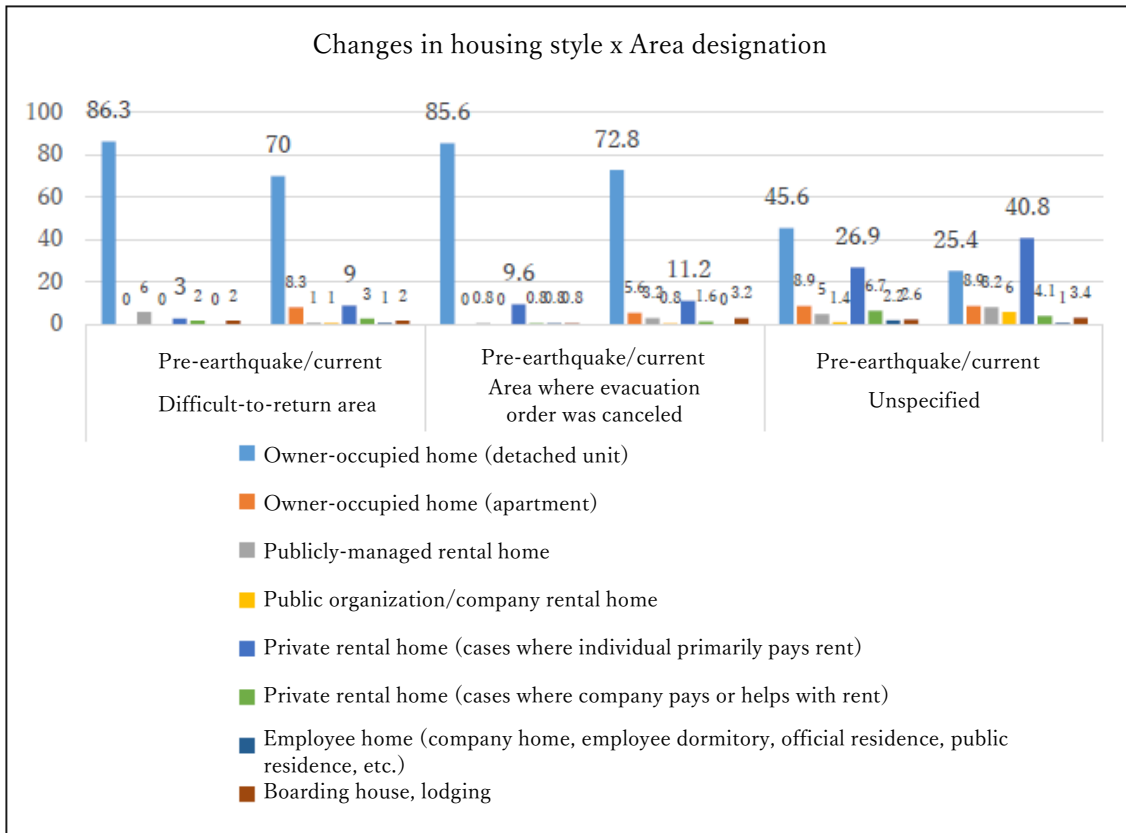
3-2. Home ownership rate



Compared to the pre-earthquake home ownership rate of 64.2%, the rate after the earthquake was lower at 49%.

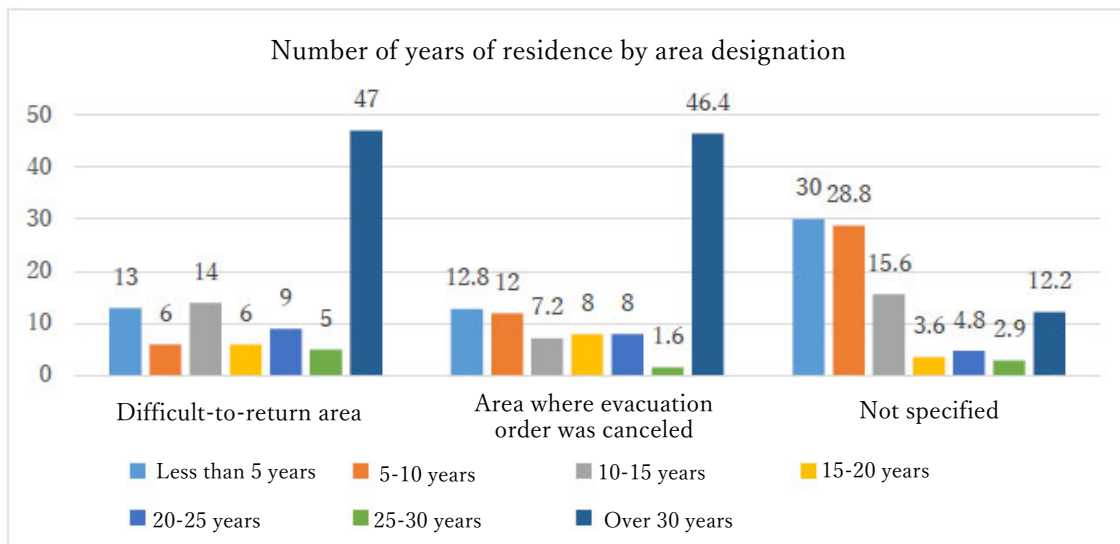
The home ownership rate of respondents from difficult-to-return areas decreased from 86.3% to 70%, but the number of respondents residing in apartments increased from 0% to 8.3%.

8.3%.



3-3. Feelings toward hometown

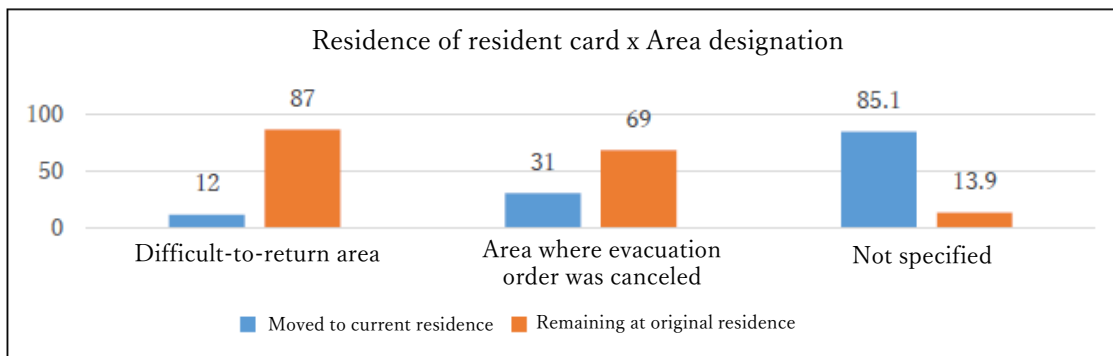
It can be seen from the figure that nearly half of the respondents in the designated areas had lived in the area for more than 30 years before the earthquake.



3-4. Residence card remains in hometown

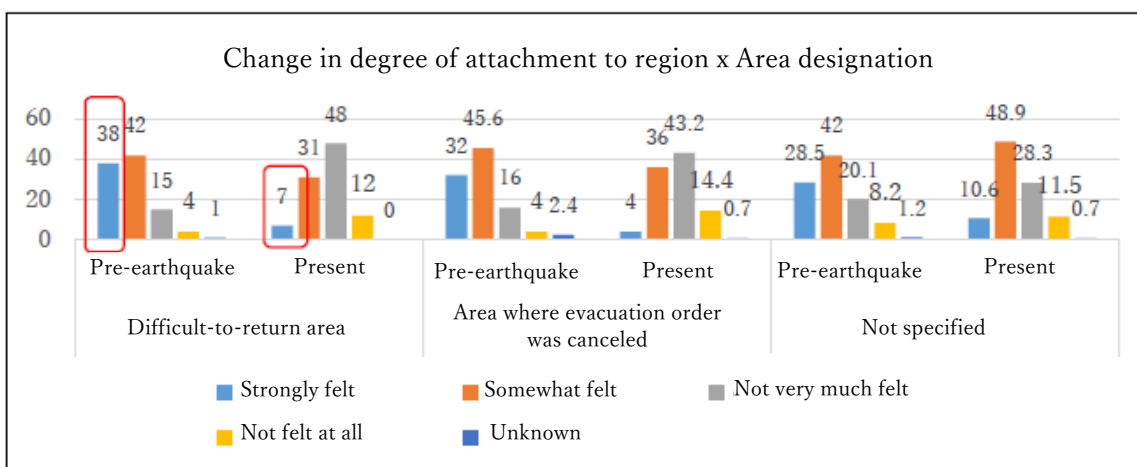
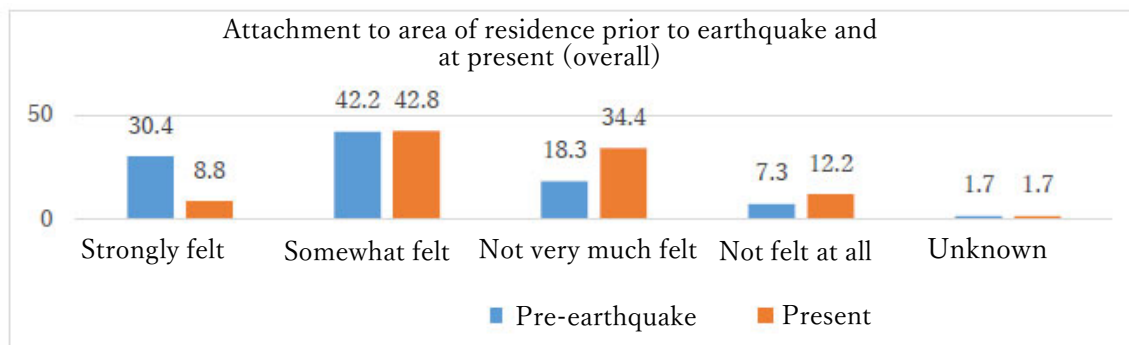
The survey showed that many of the respondents in the group with an area designated left their residence card at their original address. As concluded from the free-form answers, the

respondents intend to relocate their residence to their current location when support from their site of evacuation comes to an end (at present, there are tax exemptions from town prefectural tax, property tax, and others, and medical expenses for children 18 years and under are also free). Respondents expressed various attitudes, such as resistance toward transferring the residence card from the hometown in which they lived for so long.



3-5. Decreased attachment to evacuation sites

The number of respondents who "felt strongly" attached to their place of residence prior to the earthquake and their current place of residence has greatly decreased. Groups who were forcibly evacuated, such as those in difficult-to-return areas, have an especially low degree of attachment to their current region. The current degree of attachment among groups that were forced to evacuate, especially from difficult-to-return areas, was very low.



Some comments from forced evacuees (excerpts from free-form descriptions) are listed below.

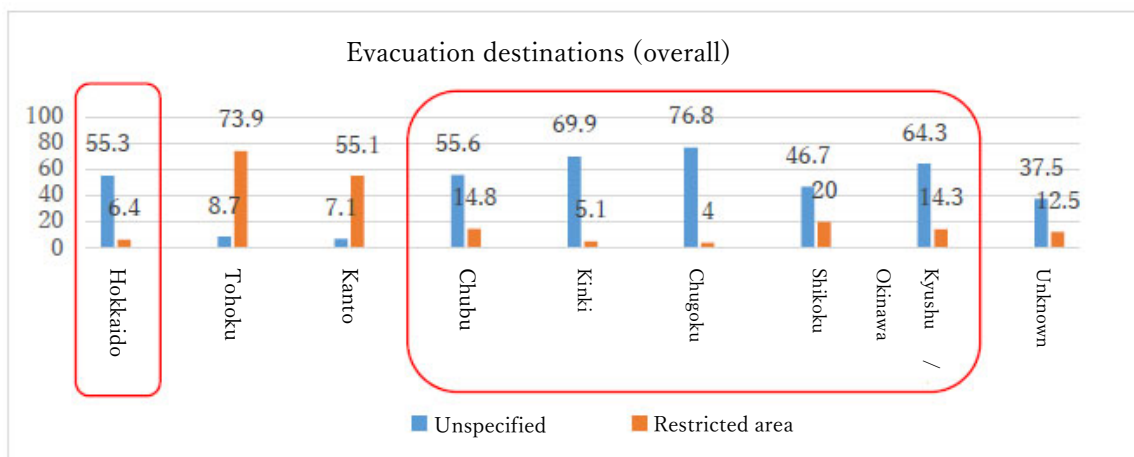
- The house was left unattended, became uninhabitable, and was demolished.

- I wonder what will be done with the land (rice paddies, fields, homes) remaining in Fukushima.
- I don't want Japan to ever forget its first nuclear power plant accident. I want people to know how difficult it is to lose the place where you were born and raised and to have to live in another prefecture. It is not just about the money.
- I see a psychiatrist. I want to return to my old home. I don't have anyone to talk to.

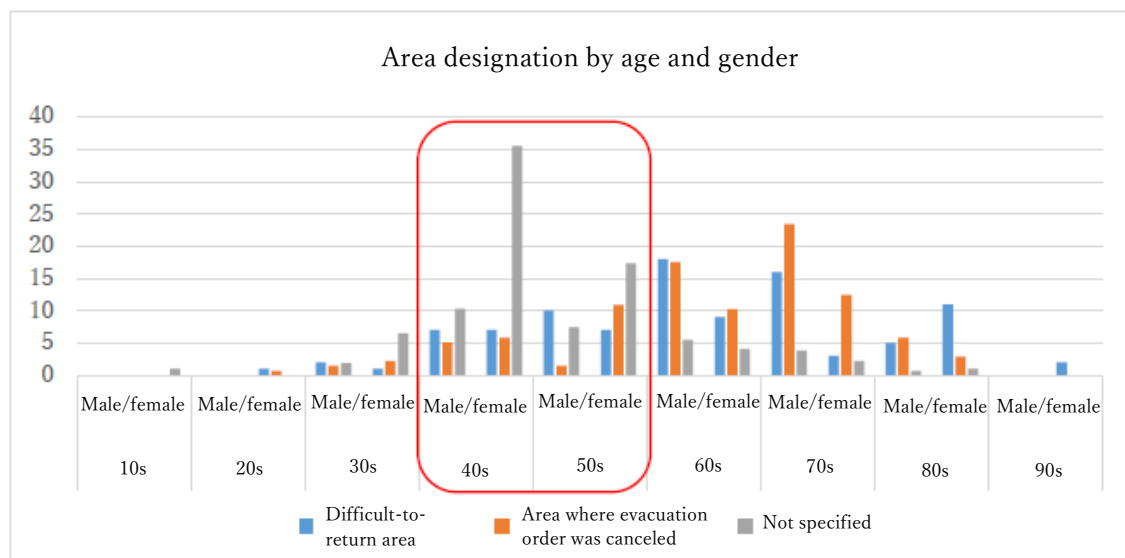
4. Status of unspecified (voluntary evacuation) groups

4-1. Evacuation areas

Most of the evacuees from the restricted area responded that they resided in the Tohoku and Kanto regions, but many of those who responded as voluntary evacuees indicated that they resided in Nagoya and farther to the west (in red boxes).



4-2. Respondent characteristics

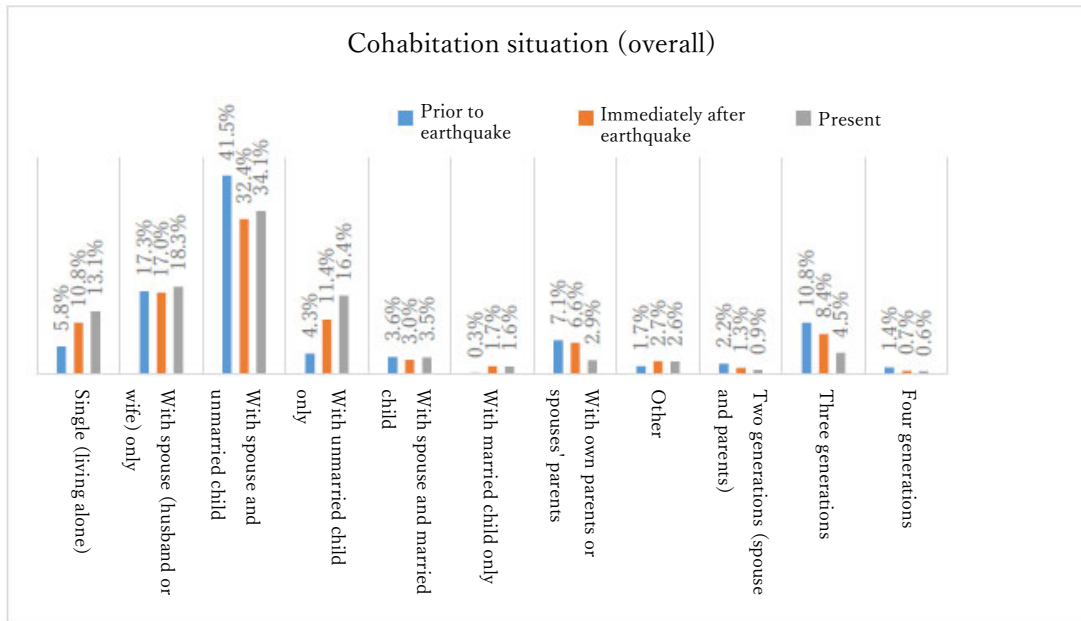


Respondents in the voluntary evacuation group were mostly women in their 40s and 50s.

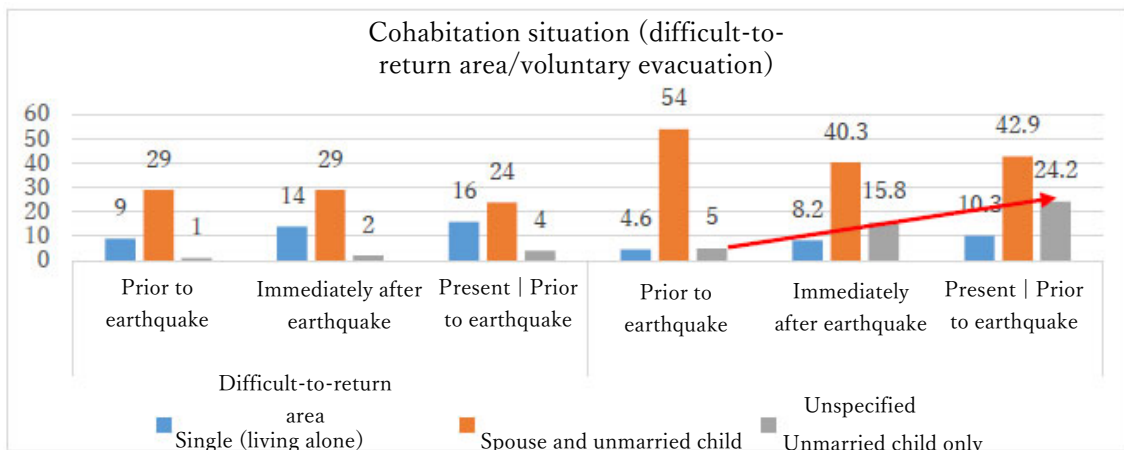
4-3. Increasing household separation and evacuation of mothers and children

When asked about the changes in their cohabitation situation before and immediately after the

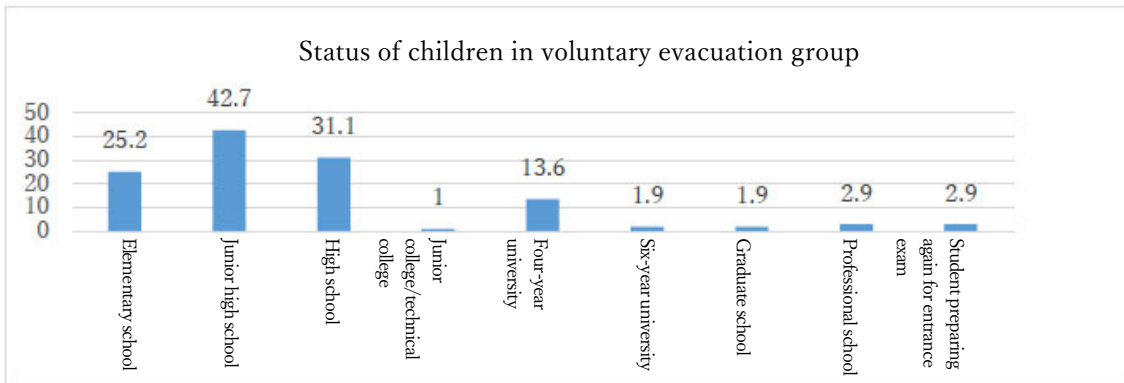
earthquake as well as at present, responses indicated that single-person households tended to increase, with percentages of 5.8% before the earthquake, 10.8% immediately after the earthquake, and 13.1% at present. Before the accident, 4.3% of respondents lived with an unmarried child, but this proportion increased by 3.8 times to 16.4% at present. Furthermore, the percentage of respondents who lived with their parents or with their spouse’s parents decreased from 7.1% before the earthquake to 2.9% at present. Those who lived in a three-generation household decreased from 10.8% before the earthquake to 4.5% at present, indicating increasing household separation.



From these respondents, we extracted the groups of respondents who were living alone, with their spouse and unmarried child, and with only their unmarried child. The percentage of people living with unmarried children before the earthquake was 5%, which has since then greatly increased to 24.2%. By comparing the cohabitation situation among the difficult-to-return group and the unspecified (voluntary evacuation) group, it can be seen that the percentage of respondents who either lived alone or with only their unmarried child increased from immediately after the earthquake to the present day. A total of 117 respondents stated that they were women and lived with only their unmarried children. Among these, 103 (almost all) of these respondents were in the voluntary evacuation group.

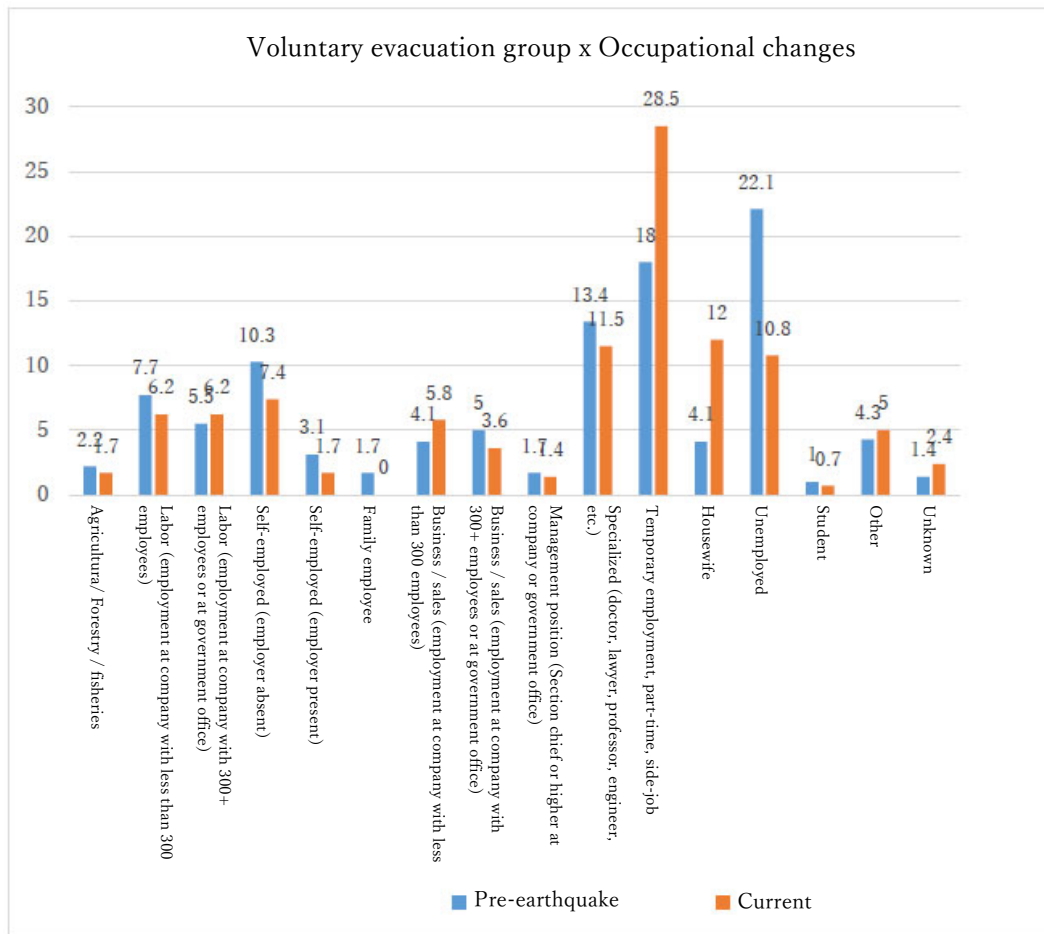


At the present time, 127 children were mentioned by voluntary evacuation group respondents. The percentages of elementary school, junior high school, and high school students were very high, probably because children were evacuated at a preschool or elementary school age.



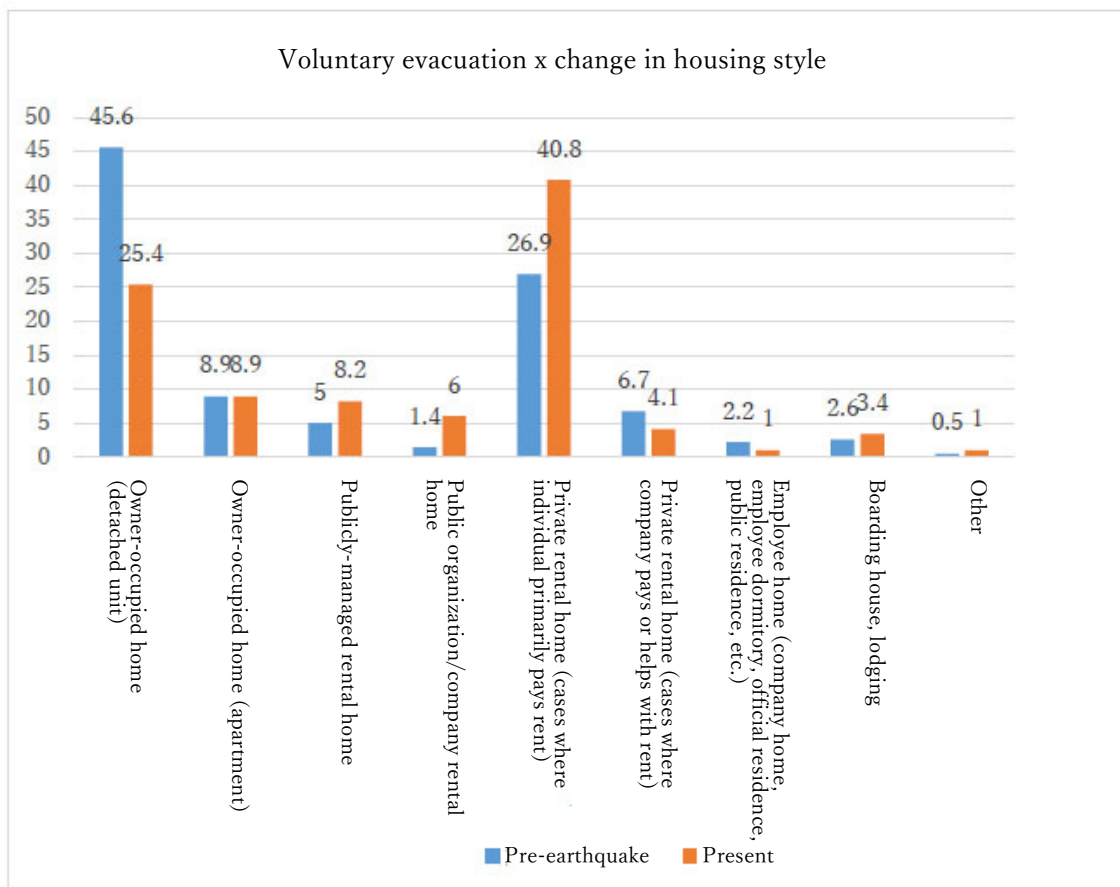
4-4. Occupational changes

In the voluntary evacuation group, the percentages of respondents who had temporary work, part-time work, side-jobs, or no job increased after the earthquake, but the percentage of full-time housewives decreased considerably.



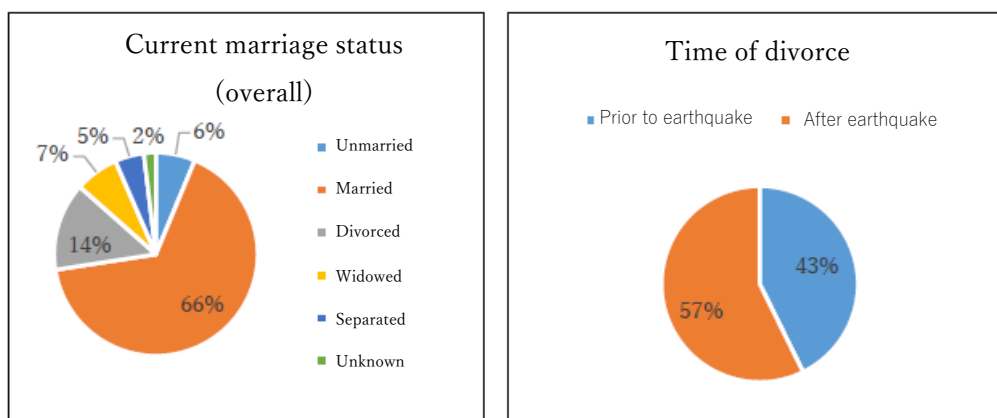
4-5. Changes in housing style

In the voluntary evacuation group, the rate of home ownership decreased by one-half, and renters increased (26.9 to 40.8%). Despite the higher utilization of rental housing by this group, 62 percent of respondents in the voluntary evacuation group stated that they did not receive the various housing subsidies provided at their evacuation destination after the earthquake. This result was higher than the 40.2% of respondents in the restricted area group who replied that they were not receiving subsidies.

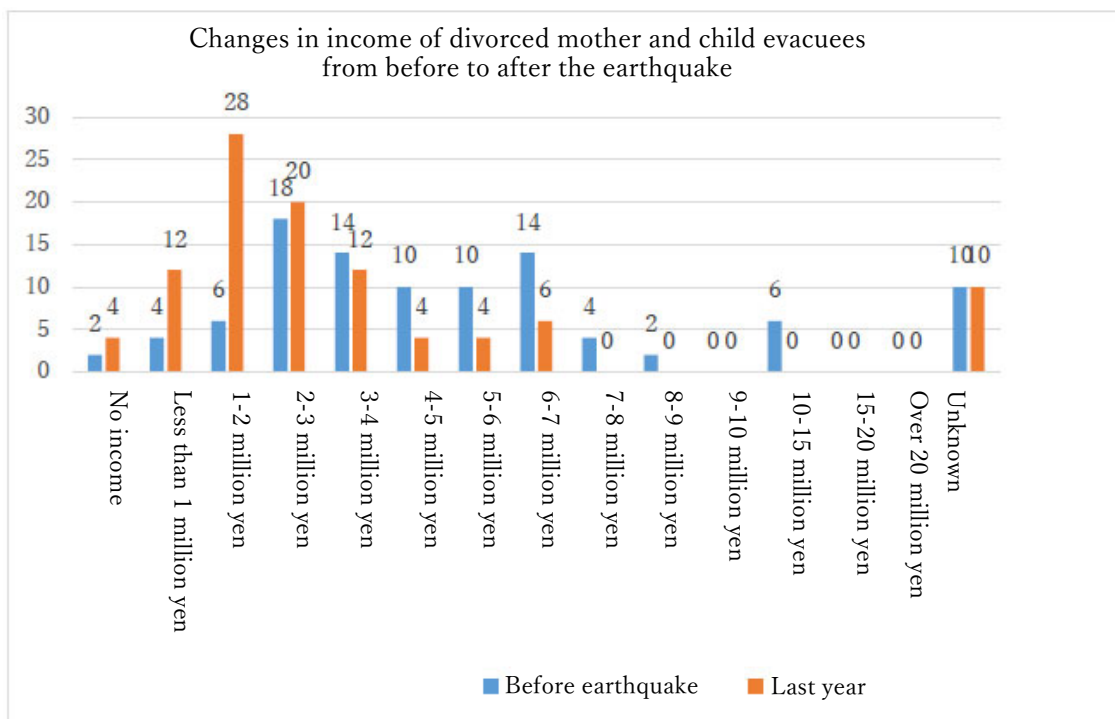


4-6. Increased divorce

There were 103 divorcees, and 59 of these divorced after the earthquake. The ratio of men and women was 19% men and 81% women. Of these, 83% of the divorced women said that they were raising one or more children from elementary school to university age.

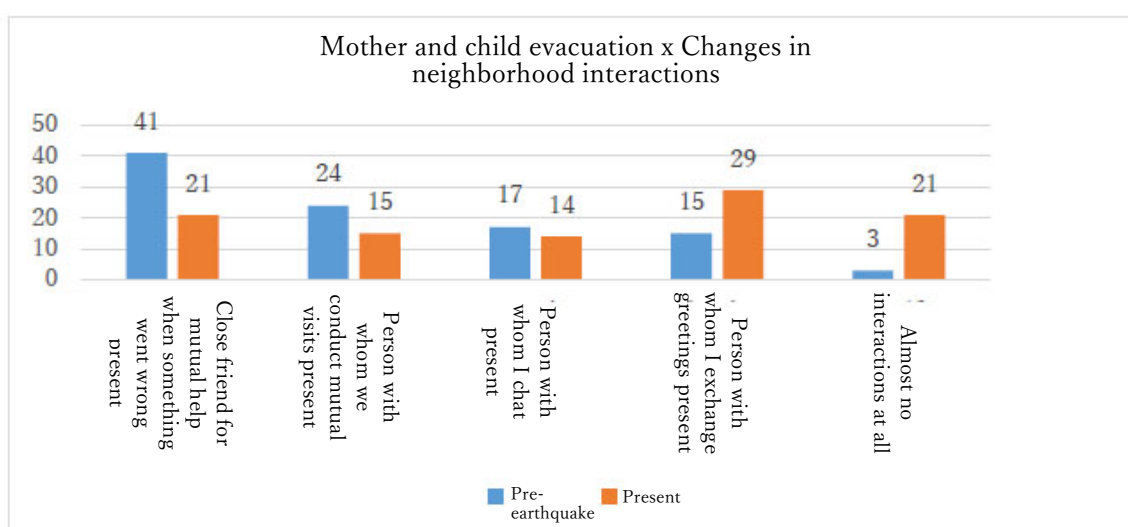


Comparisons of the incomes of divorced mother and child evacuees from before the earthquake to after the earthquake showed that the percentages of respondents in the categories of less than 1 million yen and 1 to less than 2 million yen increased considerably.



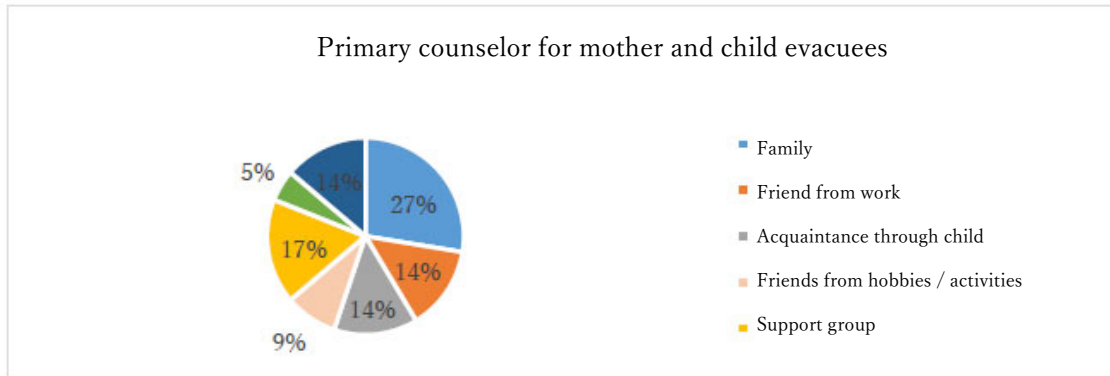
4-7. Status of mother and child evacuees

The changes in neighborhood relationships in the group with only mother and child evacuees indicated that more than half of the respondents had almost no interactions with others. The results in the figure exceed 100% because some people selected multiple answers other than “almost no interactions at all.” However, the respondents who answered that they have “almost no interactions at all” did not select other options.



Among these, 27% of the respondents selected family members as their primary counselor. The next most common response was a support group (17%). The role of the support group

was thought to be large.

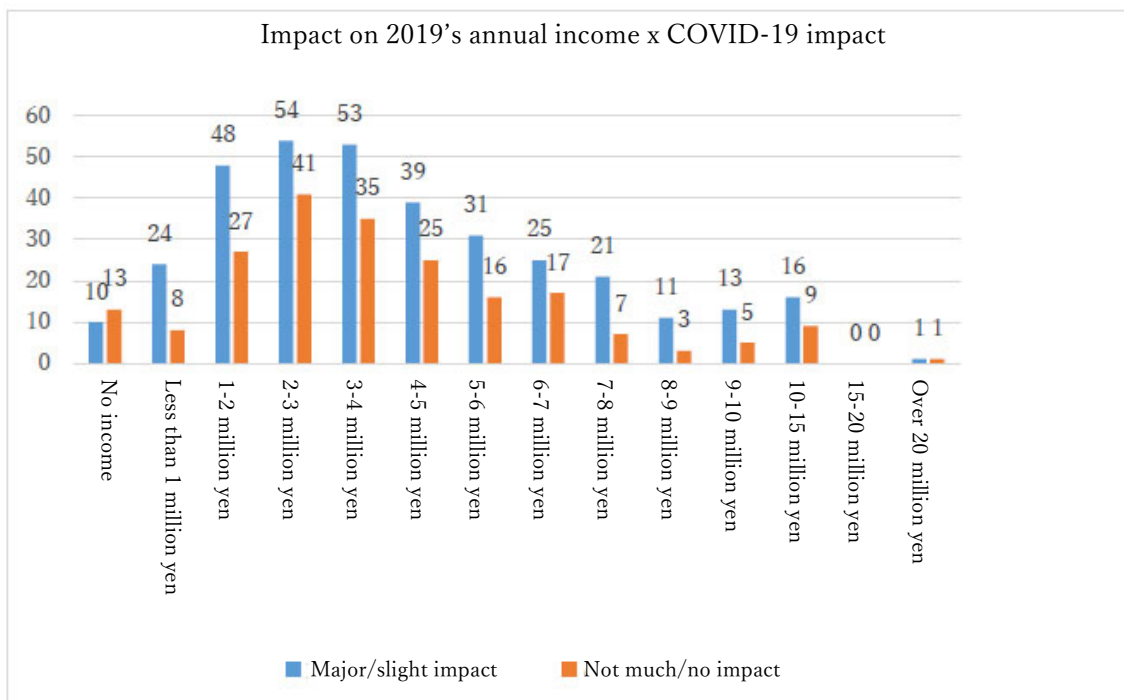


Comments from voluntary evacuees (excerpts from free-form descriptions)

- I live in a small room, where I intend to stay, but my child has gotten bigger, and the room is feeling even smaller. It's become more stressful. I want to speak with a counselor with the assumption that radioactive contamination is ongoing (various discussions about topics such as re-employment, future residence areas, child's advancement to school, transfer periods).
- I am living a double life as I support my child's education, so I can't afford to send my child to a cram school. Money and time are tight.
- I want to interact with people who are evacuating nearby.

5. Effect of COVID-19

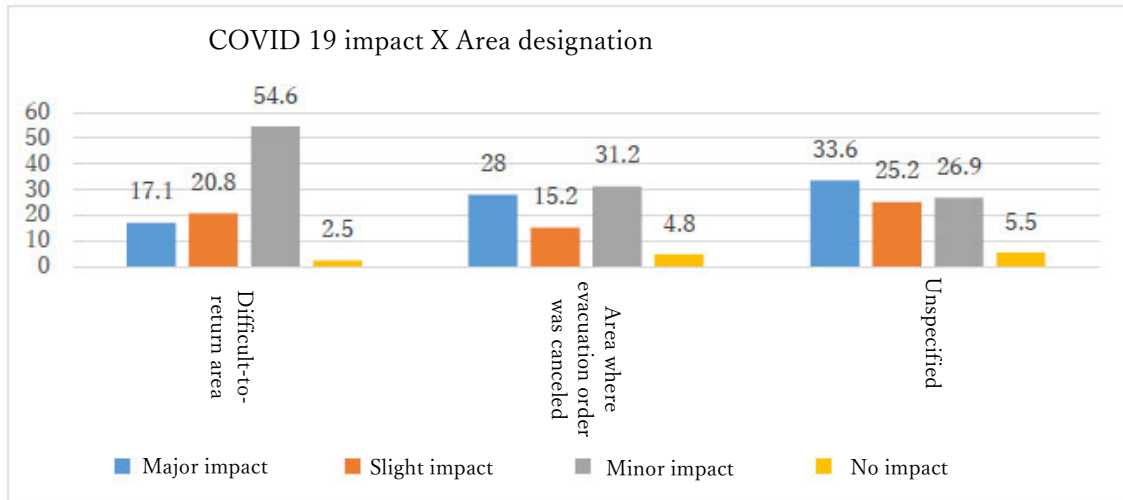
5-1. Major impact on low-income earners



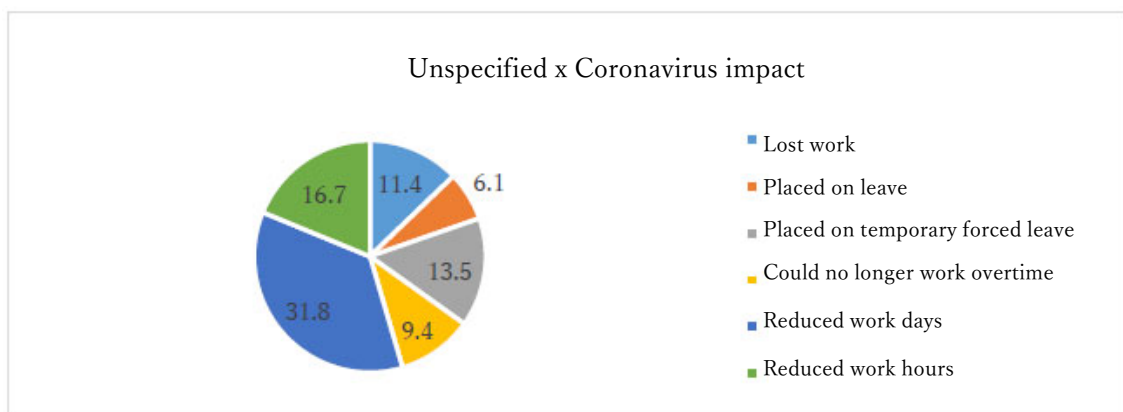
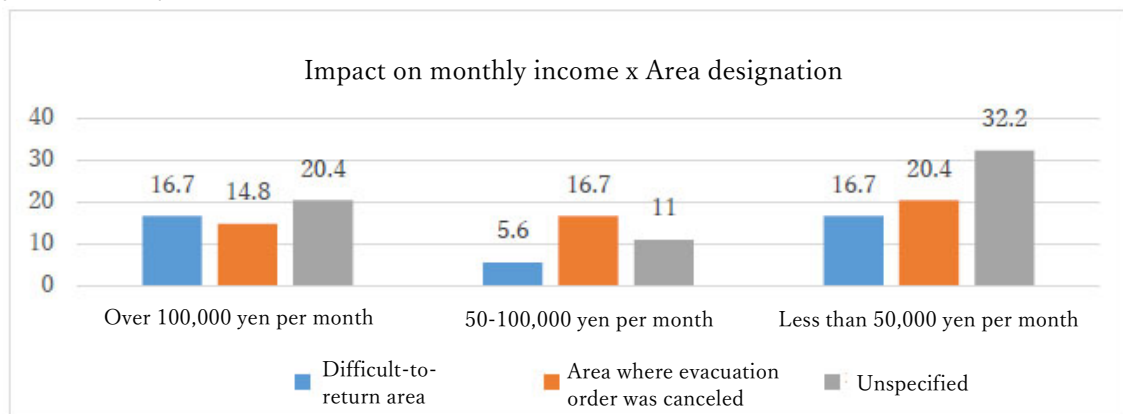
Based on 2019's annual income, 55% of the group that responded that there was a major or slight impact from COVID-19 had incomes of less than 4 million yen. The impact became

greater as respondents' incomes decreased.

5-2. Impact on voluntary evacuees



The voluntary evacuation group was more strongly affected by COVID-19. The percentage of voluntary evacuee respondents indicating that they were majorly or slightly impacted was 58.8%. The percentage who responded that their monthly income was affected by 100,000 yen or more per month was 20%.

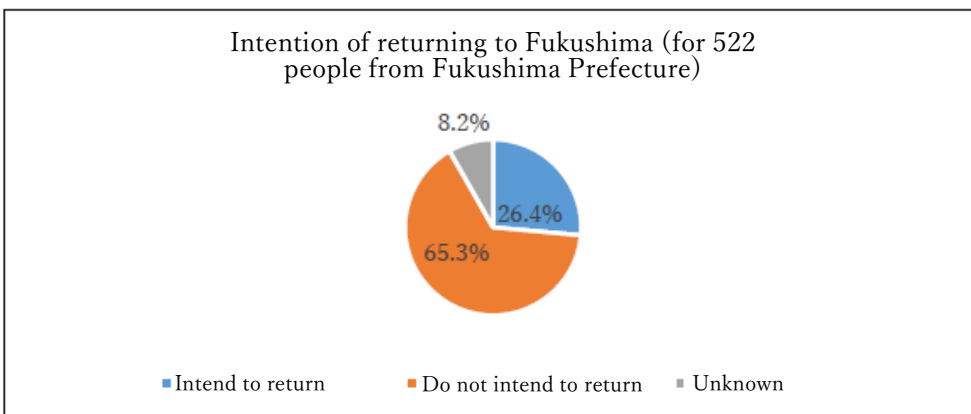
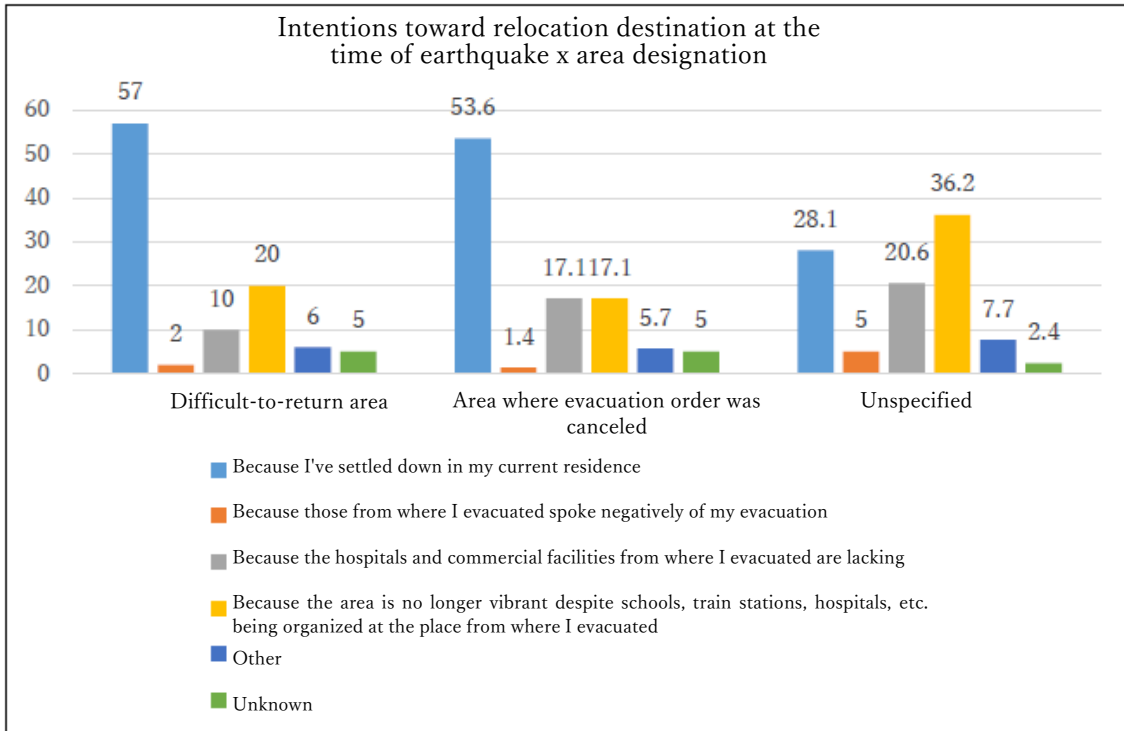


As an additional note, one respondent who was concerned about benefits stated, "They

had evacuated against the wishes of their original home, so they have no right to benefits.” Another respondent answered, “The head of the household received it and did not give it to me.” Previous surveys of Kansai-area evacuees also showed that repairing relationships after being accused of evacuation by friends, people at work, and parents-in-law is difficult.

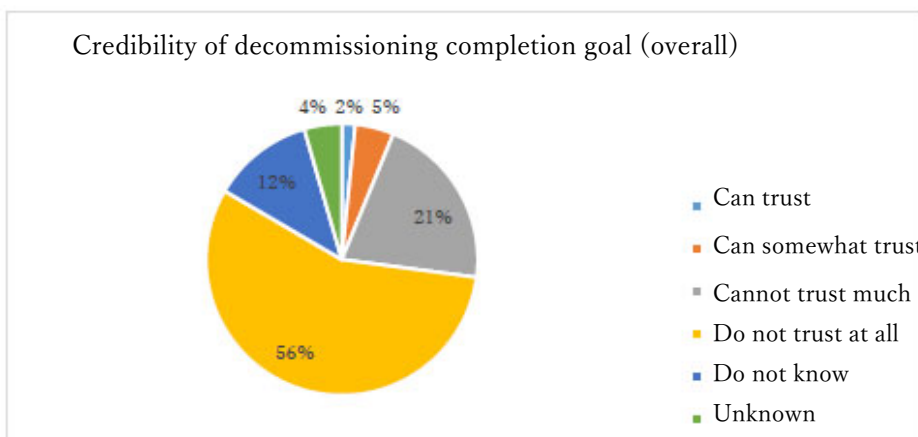
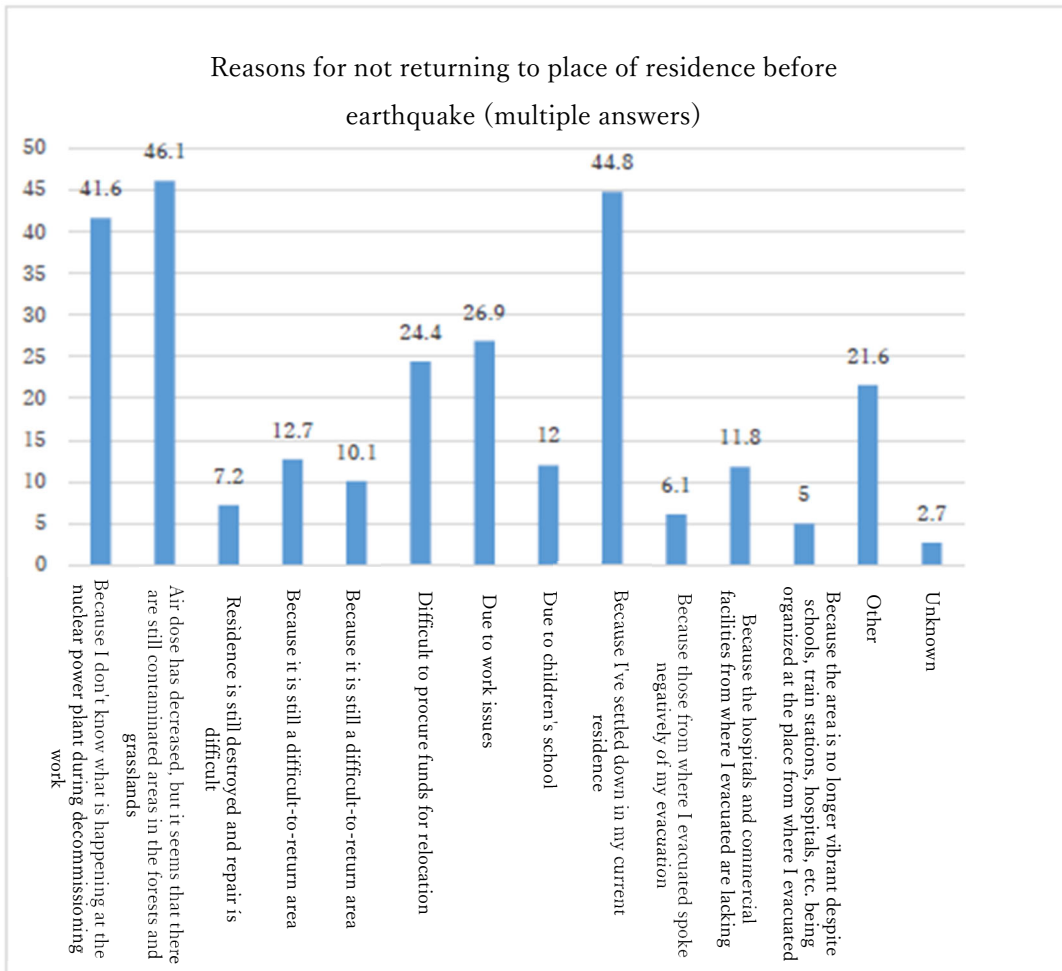
6. Unable to return home/distrust

Many evacuees, particularly those in the forced evacuation group, left their hometowns with the intention of evacuating temporarily.



When 522 subjects from Fukushima Prefecture were asked about their intention of returning to Fukushima in the future, 138 (26.4%) responded that they intended to return, 341 (65.3%) responded that they did not intend to return, and 43 (8.2%) were uncertain or other. The most common reason for not wanting to return was that the "air dose has decreased, but there are still contaminated areas in the forests and grasslands." Furthermore, many

responded that "they have settled in their current residence," which reflects the long 10-year duration of evacuation.



Furthermore, 77% of people did not have much or any trust in the decommissioning work being carried out by TEPCO and their completion target of 30 to 40 years. Moreover, there were doubts about future decommissioning work.

6. Comments from evacuees (excerpts from free-form descriptions)

- Are there evacuees similar to me in the neighborhood? I don't know about the other towns. I've always wanted to interact with others like myself.
- Even when I receive notifications about exchange meetings, I cannot go without a car. It's too far away to go by taxi. I can't do anything but just hole up at home. I wish that they would think of ways that we can participate.
- I don't understand the procedure for compensation, and it takes so much time.
- Even under such instability, I feel like I am finally able to take a step forward after 10 years, so I'd like to have support for a stable income so that I can start moving.

7. Interim summary

The "evacuation life" of those who were evacuated because of the nuclear accident has not yet come to an end. Even if they have built or purchased a house in the new location, their attachment to the land is lower, and their lifestyle satisfaction is also low. Particularly, voluntary evacuees and mother and child evacuees have lower incomes than they did before the earthquake and also have few interactions with neighbors. It was shown that various factors of wanting to return but not being able to return are entwined in a complex manner and that the realization of "human reconstruction" has not yet been attained. Although some respondents who wrote free-form descriptions said that they were now okay, there were many worrisome responses, such as "struggling to live," "have no counselors," and "worrying about children's tuition fees." Implementing welfare measures is not the solution. These are people who would not have fallen into such a situation had there not been an accident. We must consider a system in which everyone naturally retains a right to escape and can survive in a new location.

This survey is an interim report. The final analysis will be published as articles from each member in August 2021 in the Institute of Disaster Area Revitalization, Regrowth and Governance Bulletin *Disaster Reconstruction Research*.