

700 Fukushima Mothers Speak
The Lives and Health of Parents and Children in the Nakadori region of Fukushima
Prefecture seen from the Freely Given Responses to the 2014 Questionnaire Survey

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1. Current State of the Problem

What types of impact did the Great East Japan Earthquake that took place on March 11th, 2011 and the accident at the Tokyo Electric Fukushima Daiichi Nuclear Power Plant (referred to as the "Fukushima nuclear accident" below) have on the lives and health of children and their mothers (or their guardians who are simply called "mothers" below) in the Nakadori area of Fukushima prefecture?

The children are a "group that is easily harmed" by radioactive disasters due to the longevity of radioactive contamination and the social and public health consequences that it causes. In particular, the Nakadori region of Fukushima prefecture was considered "outside of the evacuation zone," and dealing with the risk from radioactivity was entrusted to the judgments of individuals. Additionally, many people in this region are staying there as a region that is adjacent to the evacuation zone, and so the region is an area where it is likely to occur conflicts dealing with anxiety about radioactivity or behaviors to cope with risks to arise. As a result, even though 3 and half years after the Fukushima nuclear accident, the children and their mothers residing in the Nakadori region of Fukushima Prefecture are still dealing with anxieties in their everyday life about things like the foods they eat and playing outside. This anxiety about radioactivity is a normal reaction to the abnormal situation of a nuclear power accident.

Therefore, we here at the "Fukushima Children's Health Project" conducted a "survey about the health and lives of parents and children after the Fukushima nuclear accident" (referred to as "this survey" below). This survey was given to children born in 2008 (6,191) and their mothers whose addresses were in 9 cities, towns and villages in the Nakadori region of Fukushima prefecture in both January of 2013 and January of 2014. This survey gave a follow-up survey to the same children and their mothers living in the same homes. By clarifying things related to the children's lives and mental and physical health as well as the situation in the region and home while comparing them with other regions, the survey aims to clarify the influence of the nuclear power accident and propose necessary policies to create a living environment where children can grow healthily.

This text gives an analysis that looks at the things voiced by the mothers written in the free response boxes of the 2014 survey. In particular, it focuses on the portions that changed when compared with the analysis of the free responses in the 2013 survey.¹ There was a great variety of comments collected in the free response portion of the 2014 survey, but the general framework for

¹ Reference Woncheol Sung, Kayo Ushijima, Mitsuru Matsutani, 2014 "1,200 Fukushima Mothers Speak: The Lives and Health of Parents and Children in Nakadori seen from the Freely Given Responses to the 2014 Questionnaire Survey" *Bulletin of the School of Contemporary Sociology, Chukyo University* 8 (1): 91-194.

them was shared with the 2013 survey. Therefore, this text divided the mother's comments into the same 8 categories as the 2013 survey which were: (1) locations for living, (2) lifestyle (and food), (3) household economy, (4) raising children, (5) interpersonal relationships, (6) information, (7) reparations/damages, and (8) health. The following sections 2-9 are descriptions of the comments in each of these 8 categories and the characteristics of these comments, and section 10 organizes the opinions of the surveyed target group about this survey. Finally, section 11 is a discussion based on all of this. The free responses brought up in this text are comments from the first half-year of 2014. As of October 2014, there is a possibility that these opinions and the situations could have changed. Additionally, we would like to indicate the policy for publishing the free responses in this text. First, it was decided that the comments corresponding to each of the above-mentioned categories would be comprehensively published. However, any information that could specify an individual was left out of publishing. Specifically, publishing the names of the municipalities and names of the larger section of villages is unlikely to lead to specifying individuals, but any information that is more specific was omitted. In such cases, we published the comment of the individual that is difficult to specify the same but has the same idea. Second, as all of the comments written in the free response sections were written by hand, there were often mistakes and omitted words. It was decided to publish these things without any revision.

2. Locations for Living

(1) Related to evacuation

The comments related to evacuation about locations for living were divided into: (1) continued evacuation, (2) evacuated but returned, (3) wanted to evacuate but could not, and (4) did not evacuate.

A. Continued Evacuation

In the homes of mothers who were still evacuated, people voiced their anxiety about being separated from their family and pointed out the increased burden on the household economy.

- "We moved to Hyogo prefecture from Fukushima prefecture because of my husband's job transfer. The environment for raising children is good here, and we can go outside and we are free to play in the park without hesitation. I feel like the move was good for raising the children, but (our) parents and people we can rely on are not close by, and there are times where it is difficult because there aren't any people like friends who I can talk freely and casually with. Also, I am really perplexed with the difference in the language and the environment. This is a choice I made to protect my children, but it true that there are times where I am lonely. If Fukushima goes back to how it was, I would like to live there again."
- "Two years have passed since we evacuated to Yamagata... Families who similarly evacuated their mothers and children are rapidly going back to Fukushima. I don't want to go back, but when I think about my children's mental state, there seem to be a lot of reasons why we can't keep living separated from our family. We also plan to return by the

end of next year when the lease on the house we are renting is up."

- "We left my husband in Koriyama, and me and my two children independently evacuated to Niigata prefecture. Because of my parents in Fukushima and my own physical disability (class four in my legs), evacuating with my two children was very hard."
- "Our family is currently evacuated outside of the prefecture, and we are undecided if we will return to Fukushima in the future. When I think about my kids, I don't want to go back (because of their future health, not present), but I do also feel like going back because of my parents and siblings in Fukushima. In fact, I really want them to tell me the truth about if there is an impact of radioactivity without hiding anything. If I know that there is even a little impact, I don't want to go back so..."
- "Since evacuating I have miscarried three times. The doctor told me that if I went back to Fukushima I might be able to relax and not have a miscarriage. However, if we went back to Fukushima, I would be concerned about my two children's health."
- "Independent evacuation creates a large economic hardship. The moving expenses to go home to Fukushima are also quite large. Time has passed since the earthquake, and the end of the assistance is approaching, so we are getting scared that we will face even more anxiety."

Conversely, there were also comments that mothers were glad to evacuate. The reasons given for this were an improved living environment and a comparison with the conditions in Fukushima.

- "In April of 2013, we independently evacuated to Niigata city where my family home is. A disorder was found in my son's thyroid gland, and I felt that raising children in Koriyama was difficult. I asked my husband, and he quit his company and found employment in Niigata. The stress about radioactivity has decreased, and my son is playing energetically every day. Raising children has really become easier because my parents and siblings are nearby. Sometimes we go to my husband's home (in Koriyama), but it hasn't changed... I think it was good that we were bold enough to move."

B. Evacuated but returned

There were comments of mothers who evacuated but have returned to Fukushima. The reasons for this were the anxieties about being separated from their family, the increased burden on the household economy, poor physical health of the families, and having had a conflict of opinion but having lost the argument.

- "After the earthquake disaster, I and my child evacuated. My husband had his job and stayed in Koriyama. For the first year, we independently evacuated, but my child couldn't understand why he needed to be apart from his father, and why he couldn't be in Koriyama. When his father would come to see him he would not leave his father's side because he seemed aware of his father's time of departure. This was very hard to see. The life of evacuation ended, and about 2 years is about to have passed, but when my child has not been able to eliminate the anxiety that 'we might live separately again,' and even now when he sees my husband off to work, he sometimes cannot stop crying."
- "In May of the year of the earthquake disaster, we evacuated to a place with low doses [of

radiation]. After two years of living there, my husband's health was wrecked. The cause was that the commute to work from the place we evacuated to (2 hours round trip using the highway) was exhausting and stress built up. We thought about my husband's health and moved closer to his workplace. Where we moved to was a different location from the region where we were living when the earthquake struck."

- "We independently evacuated for approximately 2 and half years, but living a double life with half of the income was agonizing."
- "Immediately following the accident, I thought that I wanted to go to place with even a little lower radiation levels, and so we evacuated to my home of Aizuwakamatsu. 2 years passed, and the third year started. Naturally, I didn't plan to return until the radiation levels were lower. I thought it would be better for my child's health. However, my husband and my husband's parents said 'Koriyama is absolutely fine, so come back.' I wonder how could it be absolutely fine. The radiation levels in Koriyama are double those in Aizu but still... Radioactivity doesn't affect the body now but you don't know about the future... yet no matter what I said, they didn't understand me, and they thought of me as arguing for argument's sake, and I cried and cried and in August of 2013 I returned to Koriyama."

C. Wanted to evacuate but could not

There were comments of mothers who wanted to evacuate but could not. The reasons for this were the anxieties about being separated from their family, the increased burden on the household economy, work, a home loan, anxiety about a change of environment, feeling guilty about relatives, and the trouble of being subjected to surveys and examinations.

- "There are a variety of reasons we are going about our lives without leaving Fukushima (including the region we're living in). There are economic anxieties every day, and it is not just radiation. Looking at the differences of reparations within the prefecture, we cannot evacuate even if there is radiation. People might think, why evacuate now? It's too late. But if we had even a little leeway with time and money, we would want some time separated from Fukushima."
- "Moving to another prefecture was difficult for homeowners. Additionally, people who moved to another prefecture are looked at like they ran away saving only themselves and it has made it difficult for them to come back."
- "I just couldn't make a choice to evacuate with only me and my children and throw away the life I had in the home area where I was born and raised, and this was what has brought me to where I am now. Leaving a place that you are accustomed to living is not a simple thing."
- "On the day of the earthquake, my mother-in-law who lives in the same city was worried, and she came to get us. We were taken care of by my husband's family home, so we couldn't just evacuate ourselves. (My mother-in-law said she wouldn't evacuate)... I think that there were other people who were lost about whether or not to evacuate or who wanted to evacuate but could not."

- "Even assuming we could get far away, finding a different environment would be a financial difficulty, and I think about a new life, a new place, but... I don't want to destroy my children's friendships (I want my children to live in an environment they are used to where they can be carefree. I want to see trusted children nearby.) It just seems like everything is too much."
- "Because I am a local government employee, I had a sense of anxiety because I couldn't be near my children because I had to go to work during the disaster, and I thought about the people who would be looking at my parents and husband who is at the same workplace if I were to run away. This resurrected the feeling of hopelessness of not being able to escape with my children. Was this really okay?"
- "It wasn't an economic possibility to evacuate with everyone in the house, and even if I were to just evacuate with my children, it would have more or less impact on the family relationships. I think that it isn't good for the children to live with a scattered family. Every day, we are living with a variety of conflicts."
- "I couldn't evacuate and didn't. My husband is a science teacher, and I couldn't just consult with him because he said 'if it is this level of radiation, there is absolutely no problem.' Additionally, I wasn't bold enough to quit my own job and evacuate. As a result, not evacuating was chosen as the passive decision."
- "Immediately after the earthquake disaster, I started to worry about various things like food and radiation. But we have a home loan on the house, and there are other reasons like my son who is in elementary school not wanting to move. I think that for a while the only place for us to live is in our current house. If possible, I want to live outside the prefecture, but I have given up on this."
- "It's not like I don't have any anxiety about radiation, but I don't have the courage to leave the plot of land that I am accustomed to, and we also don't have economic leeway. Moreover, I don't want to change my children's environment, and I am also concerned about if I could make it while being separated from the people who give me support. I am not thinking about evacuating."
- "My husband decided that he would remain here, and I questioned if it was really okay to live separated from the children's father. Also, there aren't relatives outside the prefecture that I can rely on. I had anxiety about evacuating and bringing my two children with me alone, and I wasn't bold enough to do it."

D. Did not evacuate

There were comments that expressed the decision not to evacuate.

- "I don't have any expectations about security or evacuation. In the future, I will just do my best as a parent to live in an enjoyable manner with my children in our current location. I am worried about what my children will think and what they will say once they get bigger and come to understand a variety of things. As a parent, I don't know what is the best thing to do."
- "While I have concerns about the radiation, I still want to raise my children in the place

where I grew up. In these three years (since the earthquake disaster), it seems like these feelings have gotten stronger."

E. Characteristics

There has been an increase in positive comments from people who are still undergoing continued evacuation compared with the free responses given in 2013. Additionally, there was an increase in comments that clearly expressed the decision not to evacuate. However, there are still many comments stating people want to evacuate but cannot, negative comments from people who are undergoing continued evacuation, and comments from people who evacuated but have returned to Fukushima. Thus, the conflict surrounding evacuation is still continuing.

However, the total number of comments related to evacuation greatly decreased from 155 comments (2013) to 66 comments (2014). Conversely, the total number of comments related to decontamination greatly increased from 41 comments (2013) to 108 comments (2014). The interest of the survey target group is in the process of shifting from "evacuation" to "decontamination." There are a variety of problems with evacuation, and people cannot make the choice to relocate. Thus, it seems that instead of doing this, they have found an increased interest in decontamination.

(2) Related to recreation

The comments related to recreation were divided into the following three categories: (1) desiring the expansion of recreation programs, (2) wanting to obtain information related to recreation, and (3) being satisfied with recreation.

A. Desiring the expansion of recreation programs

There were comments about demands for and dissatisfaction with recreation programs. For example, comments about increasing the number of recreation programs, expanding the target group of these programs, the content of the recreation, and feelings of unfairness.

- "I have a child with a disability, and normal children bring home flyers from school about a variety of camps or places where they can be taken to play. However, there aren't any programs that my autistic son can participate in, and I really want them to have camps with activities where children with disabilities can go and play."
- "In any case, I want there to be an increase in recreation. Elementary school students take the same amount of money as adults, and I have often heard that they are economically difficult and have a hard time participating. Everyone is facing large amounts of physical and mental stress, and the recreation would help to handle this. I think I want them to establish a style of recreation that everyone can take part in."
- "Please give support with short term recreation. Single mothers have harsh economic and time constraints, and we cannot go to do long term recreational programs."
- "I want the recreation system to be expanded more outside the prefecture as well. I want a system that doesn't just have youth nature homes but also makes it possible for family units to go to resort facilities where there are people who can provide mental care and guide people around all sorts of places like the YMCA or youth hostels. I want it to be set

up so that it works for families with small children, families with children with disabilities, and children in families where the parents cannot take Saturday and Sunday off."

- "I thought that I wanted to bring my children for some recreation, and I brought my two children by myself, but now I am pregnant, and it has become difficult. I can't help but to feel that it is unfair. Only the people who can go out get to participate a lot, and now when I am thinking that as a pregnant woman I need recreation, I cannot go. If my husband takes time off of work, the household finances get strained."
- "I would be happy if I could refresh and care for my mind and body as a part of my life a bit more close by or at home."
- "Every year the 'Fukushima child support program' that gives assistance from the prefecture to use a long vacation is shrinking, and it is getting difficult to leave for an area with lower levels of radioactivity. While the surrounding environment has gotten lower radiation levels, I still have anxiety about letting my children play outside for a long time like they would before the earthquake disaster. So, I really want them to continue this project next year as well."
- "I really feel like if I didn't have a home loan, I would quit my job and go do recreation with my children. Much of the recreation is on weekdays or over a long period of time, so I often cannot participate. Am I the only one who feels that the more people work the more of a disadvantage they have? I would be happy if they could make more plans for recreation for working parents."
- "What I want now is obligatory recreation for children. It would be fine for primary school classes to go together, and if they were to go for 1 week to 1 month, their bodies would likely reset quite a lot. I want them to establish this as a right for the children and not just have children with money be able to do it."
- "I think that the mothers raising children in Fukushima are still filled with anxiety. Therefore, we try to go outside the prefecture even a little bit... However, leaving takes money. I want there to be an increase in recreation that can be utilized for free. Even day trips would be fine, and so I really want them to do something like this. When I found something like this, I applied, but my application was rejected so I couldn't go... Parents have it hard as parents every day... I want them to think about parents being refreshed."

B. Wanting to obtain information related to recreation

There were comments about not being able to access information about recreation.

- "I want to know about a lot of recreation, but there is no way to look into it. So I want them to recruit people using letters through schools or kindergartens."
- "I have an interest in weekend or short term recreational outings, but I don't know where to get information, and even when I find something, I don't know what type of place people are going to, and what will be done. This makes me have anxiety, and so I don't participate. I feel like if it was something the cities or towns were planning, I would relax and be able to, but..."

C. Being satisfied with recreation

Families that participated in recreational outings or have plans to participate express positive comments about recreation.

- "At the end of this month, I am going on a 10-day recreational trip through the Kumejima, Okinawa project for Fukushima children. The children go for free, and the guardians can enjoy themselves for 10 days for only the traveling expenses. I am grateful that these types of initiatives are being done. I am happy that there are many people who are being considerate of Fukushima. I and my children are looking forward to feel relaxed and play there without worries. If there are a variety of these sorts of chances, I think we will be able to live enjoyably and positively."

D. Characteristics

There continued to be many comments related to recreation since 2013. These comments are a reflection of the continuation of the situation where there are restrictions on children playing outside and the stress building up for both the parents and children. These comments point out that there is a lot of demand for recreation programs, and there are not enough opportunities for recreation. They also show dissatisfaction about these opportunities decreasing.

There also continued to be comments about not being able to access information about recreation due to some sort of reason. The number of these sorts of comments increased from 2013. It is necessary to devise a method for disseminating information.

(3) Related to decontamination

The comments related to decontamination were classified into the following four categories: (1) "somewhat satisfied with decontamination," (2) "unsatisfied with the decontamination that has been done," (3) "desiring decontamination," and (4) "has doubts about the effects of decontamination (regardless of whether or not it has been done)."

A. Somewhat satisfied with decontamination

First, we will check the comments that stated that a certain sense of security was acquired from decontamination.

- "Decontamination was done in front of our house as well. The radiation levels didn't decrease very much, but I am grateful that they did it very carefully."
- "Nearly 3 years have passed since the earthquake disaster, and schools and kindergartens have been decontaminated. Children are able to play outside again like they could before. Us adults have also stopped being as worried as we were before about the measured values of radioactivity, and I think we have returned to our former lives."

B. Unsatisfied with the decontamination that has been done

Next, we will look into comments that expressed dissatisfaction about decontamination. For example, these comments were related to the carelessness of the decontamination methods, the

processing methods after decontamination and the measured values of radiation after the decontamination.

- "Even if decontamination has been done, I am worried about the future of my children's physical health because it is buried in the premises around the house."
- "About the decontamination, it has been done on a large scale in nearby parks by digging up a hole and filling it in with earth, but for some reason, the values have risen to $0.01\mu\text{S/h}$. The city is investing large amounts of money on decontamination that doesn't even have an effect..."
- "Decontamination near the house has been completed, but I think that the order that they are doing it seems wrong (after the garden and parking lot they worked on the roof). Apparently, the contractors doing it are different, but when I see that sort of thing, I wonder if it is really ok?"
- "Also the slow progress of the decontamination. Well, I have doubts about if this has any sort of meaning. The park has put up a sign that says decontamination completed, but the grass and patches of dirt are left just like they were, and the trees are scattered around... I see a lot of conditions that seem like weren't decontaminated. In fact, this park has been written as having values of $0.10\mu\text{msv}$, but the benches that children seem to like, the area under the slide, and in the grass are at 0.6 microsieverts, and I am disappointed at how completely irresponsibly they did the job.
- "I feel dissatisfied with the way that the decontamination is being done. In May of last year, our house was decontaminated, and they set up a solidly built scaffold, but they didn't do anything on the roof but clean out the rain gutters. They didn't scrape off the top soil and just took the grass and cleaned it up for which they gave the reason that the embankment (slope) lining the house may crumble because of things like rain. I doubt that this can be called decontamination. Also, the only place that they decontaminated was right around the house. There is a slope that only our house uses, and that is the prefecture's land, so as of now, they haven't done any sort of decontamination on it. The portions of the asphalt on that slope that are cracking were at values of 5 microsieverts when they were high (they are currently at 3.5 microsieverts). This is a place the children pass every day when commuting to school or kindergarten. Progress has been made on residential decontamination, but people who live in places that aren't housing districts like us in the foothill regions are still filled with anxiety. Looking at the area that has been decontaminated on a map, it is just a small point. The surrounding areas are full of evergreen trees like cedars and bamboo, and doesn't the radiation just float in from there? In fact, the radiation levels around the house got higher than they were right after decontamination. Is it possible to do decontamination of the mountains? Are we just going to be told to put up with it like it is now? When I think about it, I get anxious and I feel like I'm going to go crazy."
- "The process of decontamination has started around my apartment, and the radiation levels are lower than they were, but the moment I felt joy about this, the contaminated dirt from around the apartment was put in front of my house (the first floor). When I open the

window, there is large blue sheeting, and so since decontamination, so I stopped hanging my laundry out to dry."

Also, there was dissatisfaction about the decontamination workers. For example, the worries about invasion of privacy, the personal appearance of the workers, and scandals (prowlers or people getting in fights) are noted in the comments.

- "Many contractors entered into the garden that was in an area that was being decontaminated to scrape off the contaminated soil, and I frequently saw them doing work. But I was very, very concerned if I could trust these people (they are on my private land, and could look at everything everywhere in fine detail). In fact, I think there are only a few people who I could really say I could trust. So having total strangers contracted by the city come onto our private property is scary. Last year there was a kidnapping incident perpetrated by one of the decontamination workers in Koriyama city. When I heard this news, I felt like 'see...'. While I strongly feel the necessity of decontamination, it is also true that I have strong sense of distrust with the people doing the work. I want them to make it so you can request contractors that you know."
- "I am grateful for decontamination, but I am scared of the behaviors of the people doing the decontamination (prowling or getting in fights), and I am hesitant to having them do the decontamination. I want them to stop having people from another prefecture come just to make money. I hate to say it, but they look vulgar and have poor manners."
- "The decontamination is moving forward, but there have been scandals with the laborers, and I saw on the television news that nearly 70 decontamination laborers who were arrested last year. I cannot trust that they are doing the work of the decontamination correctly."

C. Desiring decontamination

There were comments from people who wanted the decontamination to be done quickly. There were many comments that desired decontamination for everywhere people go in their lives like schools, kindergartens, commuting routes, and of course homes.

- "I want them to do thorough decontamination as soon as possible, and I want them to get rid of the situation where children cannot touch things so they can relax and play outside in the dirt or moss."
- "I want them to hurry to finish all of the decontamination. There are places where yellow tape has been put up around garden shrubs in the parking lots of the prefectural library. I don't know what the children think about this, but as a parent, when I explain that there are places we cannot get close to in order to go there, I remember March 11th. There are areas and places that are a priority for decontamination, but I want to request that they at least handle the places where people gather quickly."
- "In the area where I am living, there is a mountain known as Mount Shinobu. Its radiation levels are still high, and this gives me anxiety. Additionally, the Tohoku bullet train bridge is right in front of us, and after the nuclear accident, nothing had been decontaminated,

and there were very high radiation levels in drainage that ran off of the tracks and the drainage spout. So we couldn't go and play outside. Although the area is wide, I want them to at least do a little decontamination at a time for the bullet train route."

- "This area doesn't have low radiation levels by any means, and even after the house and garden had been decontaminated, the levels were 0.3-0.5, and there were areas higher than the evacuation zones in a certain sense. I think that poorly understood situation creates an excessive amount of stress. I want there to be some sort of annual reparations for areas that are over 1 millisievert, and I want them to conduct thorough decontamination. Going forward, I want them to divide the areas based on radiation levels."
- "I want them to quickly eliminate the radiation. The speed they are doing this differs depending on the cities or villages. Decontamination expenses should be paid house to house, and decontamination should be done individually. This would get it done quickly, and people would do things thoroughly."
- "It is good that they are doing recurring weeding and decontamination, but I want them to not do all the parks at the same time (during the same time period) but rather report and advertise using the newspaper or other sources when one park somewhere is completely finished. This might be difficult in the current situation."
- "I did the decontamination of the garden quickly without assistance. Now, the prefecture? or national government? has finally started the preparation stages for decontamination. This is too slow. If you don't live in Fukushima prefecture, you don't know, but I wanted them to do it that quickly (I wanted them to use money on that.)"
- "We live in a rental house, and the rental houses seemed like they were not the target of decontamination. Even though it is a rental house, there are trees and soil. The children often go and play out there. So I am worried. A lot of people in the younger generation live in rental houses, so I think they should be the target of decontamination going forward."
- "The other day our garden was decontaminated, and it seems like they are aiming for levels of 0.3 or lower. However, even after the process was completed, the areas with high levels of radiation were at 0.5, so I feel anxious. When I thought I could finally let the kids out into the garden, it is easy for radiation to collect in the areas with high levels of radiation, so it seems not to have changed anything. I don't want them to just do the decontamination once; I want them to do it regularly going forward as well."
- "The city's policy seems to be that the decontamination is being done by each area by giving preference to areas with high radiation levels. But I think that they should give priority to the decontamination of individual residences where small children live over places like night restaurant districts mainly used by adults and monthly parking lots (that are areas with high levels of radiation). An administration that decides the priority level of the decontamination of an area by using the radiation levels from one part of it and mechanically does the process only serves to invite distrust. The area that is only separated by a single road is decontaminated, but our own area will be done next year... It

is really messed up that there is only several meters difference in the locations but that the decontamination process gets pushed back by an entire year! I want them to handle things with very fine attention to detail and be more adaptive to the requirements of the moment."

- "Even now after three years have passed, the park right in front of us has not been decontaminated. Meanwhile, other parks were decontaminated right away. When I have asked the reason, I was told that the parks that were the property of Date city were decontaminated, but the park in front of where I live belongs to Fukushima prefecture so it hasn't been."
- "I am talking about the house next to my old family home, and only the house is still there and no one is living in it. Because the village (city and prefecture) cannot get into contact, I was told that decontamination cannot be done without permission. However, there are high levels of radioactivity between my old family home and the neighboring house, and so we cannot take the children outside to play. I want them to do something about this."

D. Has doubts about the effects of decontamination (regardless of whether or not it has been done)

There were comments that doubted the effects of decontamination.

- "I have become resigned to the radioactivity, and I am not thinking about it very much at all. The decontamination is planned to start in the city from now on, but I have given up because even if they do it, it won't mean anything."
- "The decontamination workers have said that the decontamination process doesn't mean anything."
- "Progress is being made on decontamination in a variety of places, but does it have any effect? They are spending a lot of money on the personnel expenses, and watching it makes me disgusted. The values will just come back."

E. Characteristics

The interest in decontamination by families that did not or could not evacuate is increasing because decontamination is one of very few methods to eliminate the anxiety caused by radioactivity. The decontamination started to be implemented in 2013; however, there are still a large number of comments stating: "I want them to quickly proceed with decontamination" or "I wish they would do decontamination." Thus, the sense of speed of the decontamination is generally rated as "slow."

In 2014, we started to see several comments saying that they "wanted decontamination to be done regularly." This gives us a glimpse of the problem where even if decontamination is done once the radiation levels return to how they were before. Also, people started to report their dissatisfaction regarding the decontamination workers. The situation is such that there have been people arrested for being prowlers, and this greatly increases the residents' anxiety.

3. Life (and eating habits)

(1) Food

The comments related to food were divided into the following three categories: (1) "not using locally produced food or tap-water as much as possible," (2) "using locally produced food or tap-water because there is no choice," and (3) "dissatisfaction with school lunch (or nursery school lunches)."

A. Not using locally produced food or tap-water as much as possible

There were many comments about food that stated that the mothers are purchasing ingredients produced in other prefectures or mineral water (even if it is expensive). The reasons given for this were radioactivity and their children's health. Also, it was noted that this resulted in an increased burden on the household finances.

- "Almost all families are buying water for their children. The water in Fukushima used to be really delicious, but now we are living off of water from the super market or CreCla. We spend 186,000 yen per year on water."
- "We lived with my husband's mother, but she looked at me with some prejudice because I was very tense about where food was produced. I was desperately trying to protect my kids. I did the shopping for everything at cost, and so I expressed my gratitude, and we lived under her roof."
- "I make the children drink the water that I have bought as their drinking water. When I look at the fields in the neighborhood that are supposedly safe, I don't feel like eating the fruit they produce. Because of the nuclear power accident, we have fewer chances to eat fish. The hardest thing is to have to worry because of food while being in the period of my life where I am raising children."
- "Because we live with my grandmother, the neighbors give us rice, vegetables and *miso*, but we don't eat them. Only my grandmother eats them. The people who give us these things know this, and it always makes the atmosphere awkward. No matter how much people say that the inspection has been completed, 10 becquerel or less will say "not detected," so I can't give them to my small children. My parents have also recently started inspecting home-made vegetables and bringing them home, so I am very stressed out."
- "One of the things that I enjoyed was cooking with vegetables I bought directly from the sellers, but because I am scared that radiation could be in these things, I avoid local vegetables. I am forced to use higher priced goods that are not even very fresh."
- "Financially, we still have a deficit every month. In order to increase the strength of our immune system, we get additive free food (more expensive than normal food), organic vegetables, and send away for western brown rice using the internet."
- "Progress has been made on local production for local consumption, but I am worried and cannot go for it. However, the price of things produced in other prefectures that are next to it is 1.5 times higher. Should we eat a lot of fresh vegetables? Or should we eat less and go for safe vegetables with smaller doses of radiation? It is truly stressful."

- "Almost all the items they sell at the supermarket are ingredients I want to avoid; the vegetables are produced in eastern Japan, and the fish was caught from the Pacific Ocean side of Japan. Shopping is stressful, and I learned that the ingredients in circulation are actually dangerous, so it is very scary."
- "Before the earthquake, I would toss ingredients into the basket, and I would finish up with my shopping quickly. So having many repeated days where I slowly look at where things are produced then hesitate to buy them is more stressful than I had thought it would be. This is probably something that people in other prefectures cannot truly get..."

B. Using locally produced food or tap-water because there is no choice

In the comments that stated locally produced ingredients and tap-water is being used, there were comments that noted their anxiety about health and comments that noted that locally produced food and tap-water was being used because there was no choice due to household finances or distribution situation for ingredients.

- "Even if we eat local vegetables, (because it is economically hard right now), I buy drinking water for the children."
- "Naturally, I am most concerned about our health. I am worried that we could be prone to getting cancer. I am also worried about the food. I am anxious about whether or not food that is made locally or food that we get from our neighbors is truly safe. Sometimes, against my better judgment I think I can't let it go to waste, and have the kids eat it too."

C. Dissatisfaction with school lunch (or nursery school lunches)

Additionally, there were a considerable number of comments describing dissatisfaction related to the meals children eat outside of the home such as school lunches. The reasons given for this were the use of locally produced ingredients and tap-water.

- "The school lunches already use ingredients made in Fukushima prefecture. They have been inspected and are said to be safe, but as a parent I still spend time thinking about my children's safety and how to give the safest products as much as possible. (I am concerned about where ingredients are produced, and I buy things from outside the prefecture even if they are expensive, I don't let them touch plants, rocks, or dirt needlessly, and on days off we go outside the prefecture as much as possible.) Yet, I feel like I am not being emotionally repaid."
- "The thing that I am most worried about is 'school lunch.' The prefecture and city are moving forward with local production for local consumption. I don't want them to use the children as "tools to make people feel safe and secure." (I have heard about things like if we say that it is used for school lunches, it will sell. This is something along the lines that if the children eat it and they are okay we will be too.) The Fukushima prefecture government office dining room has a detection limit of '1Bg/kg' while with school lunches it is '10Bg/kg' I think this should be opposite. (I feel like I would feel a little more relaxed than I am now if it was 1Bg/kg) I have given up on external radiation exposure to a certain extent. (To live here,) I think what we can do is to reduce internal radiation

exposure. The city is saying that we can relax because only rice that is inspected and is less than 10Bg/kg is used, but I don't want to feed my children rice every day that might have 9.9Bg/kg. In Koriyama city, the ingredients used for the school lunches are apparently local products like rice and vegetables. In Motomiya City, only the rice is produced within the city. There is also a difference between different cities, villages, and towns with regards to milk produced within the prefecture. I saw in the newspaper that subsidies are given if ingredients produced within the prefecture are used. (I don't remember if these came from the prefecture or national government.) (This was a little while ago.) In the near future, I am scared that things will be local production for local consumption. There are people who are not worried, and people who say that this is safer than products from the Kanto region that are not inspected, but if this is the case, I want them to use ingredients that are always nearly zero and make it 'safer.' I want them to protect the children. What's worse is that I have even been thinking about sending a box lunch, but the other children would look at them, and truthfully, bringing one's own lunch is difficult. (Because my child is self-conscious about things like this.)"

- "I am also a similar citizen, but people think of me as being someone who independently evacuated and who is nervous. This is a very difficult thought to bear. People are okay with things like changing the rice in school lunches to rice produced in Fukushima, setting the detection limit for rice to 25Bg/kg (Aizu rice) and not thinking about outdoor activities on days where there are strong winds. But as a parent of a small child, I get worried. A great majority of residents are living in the same way as they did prior to the earthquake disaster."

There were also an extremely small number of comments stating the opposite.

- "It seems that the ingredients for school lunches are being air transported from outside the prefecture, but I personally think that they don't need to go to such lengths anymore. (This must cost quite a lot too...)"

D. Characteristics

There was no change between the number of replies and content of replies for "A: not using locally produced food or tap-water as much as possible," and "C: dissatisfaction with school lunch (or nursery school lunches)" between 2013 and 2014. However, there was a reduction in the replies in the category of "B: using locally produced food or tap-water because there is no choice" from 10 comments (2013) to 2 comments (2014). As can be understood from these comments, there is an increase in people using locally produced ingredients among the "changes in lifestyles after the nuclear accident."

Additionally, 90% of all of the respondents answered that they were "not using locally produced ingredients" to other questions on this questionnaire survey "immediately after the accident." However, "three years after the accident in 2014," this percentage had reduced to around 40 percent. Yet, the fact that even now 40% of people are "not using locally produced ingredients" signifies that people feel strong anxiety about internal radiation exposure from food. They are even taking

real actions to avoid this risk.

(2) Laundry

There were some comments related to laundry saying that they do not hang laundry to dry outside.

- "There has been no private time or money spent on decontamination of the house or around the house. For this reason, I cannot let the children play outside of the house at all, and I don't hang up laundry to dry outside. It is inconvenient."

Conversely, there were also comments that stated people have started to hang laundry to dry outside again.

- "I still have worries about life. One thing that has changed is that I have started to hang laundry to dry outside again. However, the radiation levels in the air outside my house have not dropped at all and are still high."

4. Household finances

(1) Income

There were some comments seen related to decreased income due to things like unemployment.

- "In our house, my husband who came later has become depressed. While the moving of women went comparatively smoothly, the moving of men felt truly difficult. In the end, my husband ended up going back to Fukushima, and he had lost his job, so our house just has my income. The nuclear power accident really destroyed families."
- "The compensation for people who have lost their jobs like my parents who became unable to farm and people who made it through with their jobs (people working at companies) are the same. I think this seems crazy."

(2) Expenditures

The comments about expenditures were divided into the following seven categories: (1) "costs of evacuating/ living a double life," (2) "costs of countermeasures against radioactivity," (3) "replacements for playing outside," (4) "costs for purchasing water and food from another prefecture," (5) "taxes and public utilities charges," (6) "insurance," and (7) "housing costs."

A. Costs of evacuating/ living a double life

There were comments from families who had evacuated talking about costs of housing in the place they evacuated to and costs of purchasing household belongings. If only the mother and children evacuated, there were also comments about the generally increased living expenses for leading a double life.

There were the following comments in addition to those brought up in A and B of section 2 (1) that was concerning "continued evacuation" and "evacuated but returned."

- "Independent evacuation creates a large economic hardship. The moving expenses to go home to Fukushima are also quite large. Time has passed since the earthquake, and the end of the assistance is approaching, so we are getting scared that we will face even more

anxiety."

B. Costs of countermeasures against radioactivity

The decontamination expenses were brought up as costs of countermeasures against radioactivity.

- "I was worried about the radiation levels in the garden after the accident, and all of the areas that were dirt were covered in concrete. The premises are quite large, so this cost more than 1,000,000 yen, and after the accident, I think there was an increase in expenses that we didn't need to use, and the accident reverberated through our household economy."

C. Replacements for playing outside

Instead of playing outside which has been restricted, families are spending on recreation, lessons, and the use of indoor play areas that cost money.

There were the following comments about this in addition to those brought up in A of section 2 (2) that was concerning "desiring an expansion of recreation programs" and section 5 (1) C "a place to play indoors."

- "In order to prevent a decrease in the ability to concentrate and not build up mental stress, we are increasing expenses by having our children take lessons. Our lifestyle is more out of order than it was before."
- "Every year we take a long vacation to do a recreational trip to Yamagata during the break from kindergarten, but the expenses to travel and stay there are becoming quite a burden."

D. Costs for purchasing water and food from another prefecture

The cost of food materials suddenly jumped up because of the purchase of water and ingredients from another prefecture (reference 3 (1) "Food").

E. Taxes and public utilities charges

There is dissatisfaction about the burden of taxes and public utilities charges after the accident.

- "The price of electricity charges greatly increased, and this has been a large burden on the household economy."
- "Because the value of our land has fallen, I think it is strange that they take taxes out."
- "In April the consumption tax will increase, and this will put more and more pressure on the household economy."
- "I want them to make Fukushima prefecture municipal tax free."

F. Insurance

There were comments about enrolling in insurance for cancer.

- "I enrolled in insurance (cancer insurance) because I was thinking about my children's future (that we might become sick)."

G. Housing costs

There were comments stating that living in Fukushima required heavy expenses.

- "Since returning to Fukushima after the earthquake disaster, the city had rented almost all of the apartment buildings for evacuees, and I couldn't find one to rent. I had no choice but to buy a used home and this has made the household economy very strained."
- "I lived in Fukushima at that time, but during the earthquake, the walls of the house cracked, and you could see outside from inside the house. If that was all that had happened, we could have fixed it and still live in that spot today. However, because of the nuclear power accident, radioactivity got into the house... We had just renovated the house, but because the children were young, we built another house. We had two intense financial problems: the home loan and the renovation costs."

(3) Characteristics of household finances

There was no change observed compared with 2013. However, there was a new comment related to expenditure stating that "there were housing costs."

5. Raising children

(1) Playing

The comments about children playing were divided into the following three categories (1) "having them play outside," (2) "restricting playing outside," and (3) "indoor playgrounds."

A. Having them play outside

While the comments about children playing outside are generally pessimistic, there are also some comments stating that they were having the children play outside. However, at the same time, there were also comments that pointed out the anxieties about health that were caused by having the children play outside.

- "My child has been enrolled in kindergarten since this spring. Until then I had my child play in areas with low radiation levels like other prefectures or the Aizu region. Since their enrollment in kindergarten, the radiation levels in the kindergarten playground were 0.13-0.15 (at the monitoring post), and I have a little anxiety about the children playing without any restriction. But the children are lively. I feel that it is very important for children to be able to play outside freely. I still take them to indoor playgrounds, but this doesn't make them move their body very much. I feel very angry at Tokyo Electric Power Company because they polluted places that are important for children to play at."
- "Because of the nuclear power accident, the children's time playing outside has been reduced, and they play indoors more. There has been an increase in indoor playgrounds within the prefecture, but they cost money. So, we get to go less. It isn't good to be too worried! When I think this, I let my children play in the parks, but the impact of radiation doesn't show up right away, so I am a little worried about what will happen to my children in 10-20 years."

- "Now, I have gathered the courage to let my children play in the nearby park. On the weekends, it is crowded with many children brought by their families. When I see that sort of scene, it makes me very happy."
- "While people say that we have started to have our kids be able to play outside, there are various restriction like 'don't touch the sand or rocks,' 'don't pick up the leaves,' or the fruit of the trees or the bugs. And when I think about how this is unavoidable, I don't think that the current measures are enough. There are a lot of indoor playgrounds that have been built, but it isn't the same experience as playing outdoors. I am worried about every aspect like their physical strength, their interpersonal relationships, and sociality."
- "Three years have passed, and children are playing in parks that have yet to be decontaminated. This is a sad reality."
- "This isn't a happy place for evacuation, and I personally have no choice but to believe what the government says, so I am not restricting playing outside. The children are living their lives without feeling so much stress, but sometimes I am truly worried about 'what will I do if they get sick in the future. Or is what the government says true?'"
- "I am still very anxious about letting them play outside, but when I go to kindergarten, the children won't leave until I let them play in the playground. I also cannot say strongly in front of the other mothers."

A. Restricting playing outside

The majority of comments are pessimistic about the children playing outside. The reason for this pessimism is the anxiety about health due to the radioactivity. At the same time, the mothers feel stress because of not having the children play outside, and they are worried about the negative impact of this. For example:

- "Because I work, during the weekdays I cannot take my children to play, so I want them to play outside while they are at nursery school. However, there seem to be objections from the guardians at the nursery school, so they don't really get to play outside much. I feel like my children are getting insufficient exercise. When I think that my children are bad at exercise is because I did not allow them to play outside since the earthquake disaster, I feel guilty towards my children as a mother."
- "Very soon it will be three years since the incident, and when I think back on it now, I feel like the children were forced to have debilitating thoughts, they became nervous and oversensitive. It's getting better a little at a time. But, I feel bad for the children who were forced to have truly terrible experiences. Only people who have experienced having their freedom to play outside stolen at the most important time can understand the pain. I truly want Tokyo Electric to give recompense for their whole life. That thought has not changed."
- "My child is four years old but they still haven't practiced riding a bike. At 4 years old his two older siblings could ride a bicycle without training wheels. Because of the impact of the radioactivity, the children are not carefree to play. It is such a shame."
- "We hardly go to the park at all. This is because there are many things that are very

interesting to kindergarten age kids like leaves and acorns. I really don't like myself when I get mad and scold them saying 'don't touch it or throw it away and come here.' If possible I don't want to see mothers like that or show myself to be a mother like that. Accordingly, when we have gone back home, we spend plenty of time playing in nature. When I see my child truly enjoying themselves, I am worried about continuing to live in Fukushima."

- "In any case, I want to let my kids go on walks and play outside normally. I want to let them run with all their strength, look for bugs, and touch fallen leaves and snow. I want to give them a normal childhood."
- "The chances for the children to play outdoors have really decreased. I can definitely tell that children's physical strength has slipped, and there has been an increase in chubby kids."
- "There are particularly high values of radiation in Nakadori in Fukushima prefecture, and even now, they are high in a place where people are living normally. Even at my son's kindergarten, they can play outside for a total of 30 minutes per week (it recently finally became 1 hour). Playing outside every day is happiness for children, and it is essential to increase their physical strength and capacity for exercise. Yet, playing indoors day after day makes people's bodies susceptible to colds. Before the earthquake disaster, we would go to parks even on winter days, and I could let my son play. However, we can't go do this anymore, and his body has gotten weaker. Now, my son frequently catches colds, and it is really troubling. When he coughs, I'm not sure why but it seems like asthmatic symptoms are appearing. He didn't have any asthma until the earthquake disaster, and I'm not sure why but his body seems like it is weakening."
- "Children normally seem like they want to play outside. However, they have been warned not to directly touch the rocks or sand, and because it has been said since the earthquake disaster, the kids seem to have gotten used to it. So, there are times when they don't really listen to this warning."
- "I think it is truly unfortunate that the small children who could experience playing outside normally during their early childhood (the natural experience) are still restricted. I really want to let them play freely with flowers, fallen leaves, and the nuts of trees. Even in life environment studies in elementary school, they cannot go explore the nearby hills and fields, and they cannot do many activities that use natural materials. (There are things they cannot do in school because some parents are worried about radioactivity.) When I try to let them have those sorts of experiences, I need to get materials from other places or another prefecture, and it takes time and effort to go and get these things. It is necessary to plan out many things."
- "It is too late now, but if I could move to somewhere, I would like to move. As much as possible I don't want to let my kids play outside. The people in the administration or the people around me hear my opinion and say 'it's fine' or 'don't worry.' But is it really fine? No one really knows if it is fine, so how can they say it is fine? In my heart, I truly feel like I need to be worried!"

- "I think that my 5 year old son's physical strength is really considerably lower than his older brother and older sister. I truly feel just how much taking little walks and playing outside around the house has an impact on the children's physical growth. We leave on long holidays, and my son plays outside at kindergarten often, but when that is all there is, it seems like his body will become very prone to illness. He often has nosebleeds, and he seems to throw up more than the older children. I feel he has decreased basic physical health. He is used to playing inside of the house, and he is more and more enthusiastic about games. The decontamination of the region is not progressing, and I don't feel like actively letting him play outside. I don't see many children playing even at the parks that have been decontaminated."
- "Because there are few parents who let their kids play at parks, I feel like letting the kids play outside is bad. For this reason, I have them take lessons at coaching schools or learn indoor sports, and so every month there is a large financial burden."
- "While people say that we have started to have our kids be able to play outside, there are various restrictions like 'don't touch the sand or rocks' 'don't pick up the leaves ' or the fruit of the trees or the bugs. And when I think about how this is unavoidable, I don't think that the current response is enough. There are a lot of indoor playgrounds that have been built, but it isn't the same experience as playing outdoors. I am worried about every aspect like their physical strength, their interpersonal relationships, and sociality."
- "In all the municipalities in Fukushima prefecture, they all at least 'have' indoor playgrounds that have been built. It is good because the children at play are having fun, but... doesn't it seem like it is a strange scene? When it becomes completely natural, we stop being aware of the fact that it is strange. Where did the fun of playing outside and touching many different things go?"
- "Even when I feel like I want to let them play outside, the area around our house hasn't been decontaminated yet, and no one has done anything to it. Every day, it is not okay to touch the ground. When I brought my kids outside the prefecture to play, I still have a strong impression of my kids happily asking if it's okay to sit on the ground and on the concrete. Even when I want to bring them away again, I cannot guarantee the money considering the amount of money for a six person family, and games are becoming the norm in the house."

C. Indoor playgrounds

There are comments expressing demand for indoor playgrounds and dissatisfaction with them. For example, worries about the number of facilities, their location, and the content of playing in these playgrounds, the usage charge, and hygienic concerns.

- "There are few indoor playgrounds. Because our current address is in the town of Iino, the closest indoor playground is within the city, and so it takes a 20-30 minute trip in the car to get there. This costs money for gasoline, so I would be grateful if there was one built closer (if possible within walking distance)."
- "It seems that they are going to increase the number of indoor playgrounds by several new

facilities, and I feel like I want them to build them more quickly. I understand that it is difficult to do the surveys and such... but very soon it will already be 3 years from when the earthquake disaster took place."

- "I want them to increase the number of places where the children can play safely. Even if they make 1 indoor playground for the whole town, it will be dangerous because it will be crowded."
- "I have high hopes because they are planning to make several indoor facilities like the smiling kids hall, but I want them to make facilities where older kids like elementary and middle school students and adults can go to have fun so it is not just for little kids."
- "I want them to make facilities like Kidzania where small children can experience a variety of jobs and enjoy themselves. I think this materializes children's dreams, solidifies their goals, and makes them ambitious about working on their studies."
- "There is getting to be more facilities where kids can play indoors, but the places with well-maintained play equipment cost money. There are also places where the fee for adults is very expensive, and when small children use it, they need to be accompanied by adults, so there is no choice but to pay. My child has said they want to go many times, but it is financially difficult so I cannot meet their request. I feel like I want some sort of support in reducing the fees to such facilities."
- "I want them to increase the indoor facilities where kids can be carefree in playing and moving around in Koriyama. (I feel like it would be great if they had a place where adults could take a relaxing break and the kids have a place where they can play.)" H
- "During the winter, influenza and the Norovirus are things I worry about, and so I have been hesitant about the kids playing in indoor facilities."

D. Characteristics

In 2013, the categories with the highest number of responses, in order of most to least, were "B. restricting playing outside," "C. indoor playgrounds," and "A. having them play outside," but in 2014, "B" and "C" were reversed. However, because "B" and "C" are mutually related, this does not seem like a substantial change.

The change that was substantial was concerning "C. indoor playgrounds," and it was noted that there was an increased dissatisfaction about the target age of these playgrounds (from 3 instances to 12 instances). The content of these comments was frequently something along the lines of "I want them to be targeting elementary and middle school students and not just young children." It is normal for indoor playgrounds to target young children, but it seems like there is a mismatch because elementary and middle school children also have been restricted from playing outside as a way of coping with radioactivity.

(2) Response to radioactivity

The comments about the response to radioactivity for children were divided into the following three categories: (1) examinations of the children, (2) dosimeter (glass batch),

and (3) other.

A. Examinations of the children

There were many comments about dissatisfaction, distrust, and requests against the examination of the children.

- "I can't stand how worried I am about my children's health five or ten years down the line. I want them to do more examinations of their thyroid glands. Every day, my worries, anxieties, and concerns won't stop. I want them to do lots of examinations for the children and parents' sake."
- The ultrasound examination of the thyroid gland and the ultrasound imaging are hidden during the examination, and no matter what, they wouldn't show them to the parents. When I asked the doctor why they couldn't show my own child's ultrasound imaging to me, (a young doctor who seemed to have just finished his training at Fukushima Medical University), he said 'it is a rule that we cannot show them.' I had no choice but to wonder if they aren't collecting samples. More than a year has passed since the examination, and all I have received is a notification of [Determination A (no cysts)], and I haven't seen the ultrasound imaging."
- "I feel like I want them to continue doing mental and physical health examinations (the municipalities and national government)."
- "Until now, we have been examined by the prefecture and city government. I don't know whether or not I can trust them, and even looking at the results doesn't totally convince me. Hearing that there 'is nothing out of the ordinary' is the best, but even when they have written out this diagnosis, for some reason I doubt them... My three daughters are getting thyroid examinations every six months. We are consulting with the doctor about a variety of things as well. We are also getting his advice. This is a clinic where doctors who say that the 'prefecture's way of doing examinations isn't acceptable' gather. My children's precious future is on the line, so I am very worried... about a lot of different things."
- "We received the result of my child's thyroid examination that there was a cyst. Because it is currently not something to worry about, there will be another examination in 2 years, but I want something clear like proper assurances that there won't be any other disorders until that diagnosis or proper assurances if it becomes cancerous in the future."
- "The only examinations that are done on the children in Fukushima prefecture are a thyroid gland exam and a WBC. At a slight cost, Ibaraki's general health cooperative will do a blood test, and I think that how a child's safety and secure lives are handled is very different depending on the parents. However, I think they should allow a person the choice to do these examinations within the prefecture even if it is at some cost."
- "My children do not like going to hospitals, but since the nuclear power accident, there have been a variety of examinations. Every time they do an examination it makes them cry. Since the year before last, I have stopped having them get examinations because the children seem to hate it. I don't like the way the staff seems because when they see a crying child they say 'it's not okay today!!' This put me in a really bad mood, and got

upset saying 'I won't ever come back' and went home. But I am naturally worried about my children's health. I would be really happy if there was place that made it easy for the kids to get an examination that specialized in examining children..."

- "The examinations done by Fukushima Medical University only give results without any details. I have heard that they are being manipulated from various places. Even getting an examination from them doesn't put my mind at ease. I want there to be transparency, to have other prefectures take part, and conduct an assessment to give proper results."
- "They do a whole body counting and thyroid examination, but we only get vague results, and they won't tell you any of the details. Why won't they properly tell you the details (the numerical values etc.) ..."
- "For my kid's sake, I get examinations at the hospital in Hirata city in Fukushima. These examinations are free, but they do longer examinations than in those done in Fukushima city, and they properly examined my child. When my son (who is 5 years old now) had symptoms show up at this examination like reduced iodine in his urine and blister on his throat, I became anxious that might be due to the impact of radioactivity. At least the doctors their said it wasn't caused by radioactivity, but I became very anxious because they didn't find anything at the exam that was done in Fukushima city."
- "I want them to compare the results with an examination done in another prefecture."
- "I want to feel relief from being able to get high level medical care free of charge. Regular examinations are also necessary."
- "I want them to investigate the children's organs once every year for exposure to radiation."

B. Dosimeter (glass batch)

There were comments that expressed dissatisfaction about the dosimeter and that wanted to be able to be lent a different device.

- "We put on a glass batch, and the annual dose of radiation is measured, but it seems to be a mere consolation and I don't know if it has any real meaning."
- "I think that they should measure doses of radiation by distributing glass patches to children in Kanto and Tohoku (including Miyagi) and not just to children in Fukushima prefecture. If they don't do this, no matter how much they say that it is safe, they won't be able to get rid of the anxiety."
- "Even now, glass patches are being used to measure it. They are being brought into nursery schools. However, when you leave to go to places other than nursery schools almost no one is walking around with them. I previously often saw children with them hanging from their neck, but now I hardly see anyone with them. Now, when you wear them, you stand out. They seem to have a strong negative image of being a victim or being pitiful. They are regularly exchanged and a notification is given of the measured results. These notifications list a numerical value that seems to indicate there is no damage, but I don't really think that this alleviates the anxiety. There is a pamphlet that seems like an instruction manual that is enclosed with it, but it is hard to understand. I

have doubts as to whether the glass batch measurements themselves are actually valid."

C. Characteristics

However, the total number of comments related to "A. examination of the children" decreased from 52 comments (2013) to 18 comments (2014) (the percentage of such comments also decreased). However, their children's health is the parents' greatest concern, and it seems like a stretch to believe that their interest has waned. The 2013 survey was conducted right after the examination of the children was done, and so it seems like the respondent's had a strong and real sense of it, and it could be pointed out that this was why the comments related to the examinations were so frequent.

However, the total number of comments related to "B. Dosimeter (glass batch)" increased from 3 comments (2013) to 5 comments (2014) (the percentage of such comments also increased). Content showed an increase in comments about the doubts about the effectiveness of the dosimeter.

(3) Birth

The comments related to birth were divided into two categories (1) pregnancy/conception and (2) miscarriages.

A. Pregnancy/conception

Mothers feel anxious about conceiving or spending their pregnancy in Fukushima.

- "I am currently three months pregnant, and I am experiencing morning sickness. I'm not sure if my physical condition is unstable because of the earthquake disaster or because of the morning sickness. I feel anxious about spending my pregnancy in Fukushima, but I feel a stronger sense of security being with my husband and parents."
- "I want three kids, and last year I got pregnant, but unfortunately, I had a miscarriage. I still haven't given up, and I still think that I want the third child. I have the anxiety that I'm not sure that it is okay to raise that child for their whole life in Koriyama once born, but my desire to have another child has not changed. Why are we the only ones who have to feel anxiety and have to hesitate to have kids?"
- "I am pregnant with my fourth child, and I am full of anxiety about our future (old age) and the future of our children. With the household finances being tight, having many children makes it difficult to raise the children really well."
- "It seems that I conceived my third child in February. I haven't gone to the hospital yet, but I am naturally anxious. Because it is pregnancy that has taken place after the nuclear accident, I am worried about what type of impact there will be."

There are also people who have doubts about the impact of radioactivity causing infertility.

- "I want to get pregnant, but nearly a year has passed, and I have not been blessed with a pregnancy. I feel that the radioactivity has a considerable impact!!!"

B. Miscarriages

There are people who are pained for their whole life, they need to face the possibility that radioactivity has had an influence on them having miscarriages.

- "During the earthquake disaster/nuclear power accident, I was in early pregnancy. My due date was in September, but I had a stillbirth in August. The cause of the stillbirth is unknown. While I think that the causal relationship between the earthquake disaster and the nuclear power accident is not clearly proven and probably not related, I also feel like if there hadn't been the earthquake disaster and nuclear power accident, I might have safely given birth."
- "After the nuclear power accident, family planning went crazy. My eldest daughter is going to be 5 years old, but I am concerned that I couldn't produce a younger sibling because I was so worried about the nuclear power accident. 3 years have passed, and I thought I was going to be up to the challenge soon, but I have had two miscarriages, and I often think 'isn't this because of the nuclear power accident...'"

C. Characteristics

The total number of comments related to "A. pregnancy/ conception" decreased from 10 comments (2013) to 6 comments (2014), but the percentage of such comments remained nearly the same. The total number of comments related to "B. Miscarriages" increased from 1 comment (2013) to 2 comments (2014). The new content that we started to see in the comments was "having suspicions about radioactivity's impact on infertility."

The likelihood that radioactivity has an impact on this is unknown, and people are aware of this. However, because they cannot eliminate this doubt in their minds, they are suffering from seriously worrying about this. This worry is not something that they can lightly vocalize, and because it hasn't been asked about in any sort of questionnaires, it seems that it would be easy to overlook. Going forward, it is essential to properly focus on these sorts of comments.

(4) Other anxieties related to raising children

There are a great variety of anxieties related to raising children.

- "I am anxious that my own anxiety might have a negative impact on my children's mental state, and this just makes me more anxious."
- "While I have concerns about the radiation, I still want to raise my children in the place where I grew up. In these three years (since the earthquake disaster), it seems like these feelings have gotten stronger."
- "There are many problems and troubles that I have precisely because time has passed since the nuclear power accident and the great earthquake disaster, and I feel the difficulty of these problems and troubles. I am concerned about my children's future that the time has come where I can't just be positive that 'it will work out somehow' with regards to a variety of aspects. For this reason, I think that it is important for adults to properly think about the future, think about many people, and to raise children to grow into adults who do the best they can through their own efforts. I don't know what will happen, but I want

to live each day carefully and not recklessly."

- "There are times when children are hot-tempered and explode, and oftentimes I worry and spend time crying about raising children. I am exhausted from being busy with housework, childcare, and work every day, and I am irritated. So when my children want to receive love and care and I cannot do so due to irritation, I feel sorry for my kids. I am really troubled by a variety of things every day."
- "I am worried about my kids. Is it really okay to raise them here? Will they be able to keep up academically? Since the earthquake disaster, I have been raising the children while being irritated. People around me said that there was ill-treatment (at where we evacuated)!! Maybe this was the cause for my children being behind developmentally. I blame myself. But still, every day I scold at my child for "doing poorly."
- "I know that it won't be like it was before, but still, the reality is that I need to raise my children here in this location. My anxiety about what I can do to protect my children and how many resources I can give them... the anxiety accumulates."
- "Three years of time has passed since the nuclear power accident, and there has not even been a single day when my anxiety has gone away. I think that my anxiety will just worsen in the future as my children grow."

6. Interpersonal relationships

(1) Married couples and relatives

There are cases where, because there are differences in the ways of thinking between married couples and relatives, conflicting opinions develop and relationships deteriorate.

- "The ways of thinking by the people who evacuated and those who didn't are different, and I think they should be respected. I was criticized by my relatives for not evacuating, and even now, they talk about my poor children. I haven't told them that I am currently pregnant. I have different opinion with my husband as well, and I haven't talked to him about my pregnancy. He only knows that I am pregnant, and I want to avoid an argument, (my husband wants to do a treatment), so I haven't talked to my kids yet. I am currently 6 months. We are at the point where a treatment cannot be done, so I am thinking I will talk about it soon by including the gender of the child. Everyone has their own thoughts, and I think that this is fine. However, I want people to stop forcing their thoughts on others and criticizing people's opinions. When I have a variety of problems, I think about what a fair and proper response to this story would be and what god would want. I feel like by doing this, I will be able to become stronger."
- "I am still carrying vague anxiety, and I still haven't decided if it is okay to continue to live here without any guarantee of financial compensation or the future health of my children. I am just spending time. In my case, this is even more of an issue because I have a home in western Japan where I can return to. My husband who is a government worker is not interested in moving that is accompanied by changing jobs or in living with the family being separated, and I alone am spinning my wheels wondering what I'll do. Since the earthquake disaster, the gap in the ways of thinking within the marriage has really

gotten worse and worse, and I really miss the peaceful life we had before the earthquake disaster. I am the most exhausted of having to act cheerfully in front of the kids so they don't realize the state that their mother is in."

- "My husband's parents who I thought had an understanding of radioactive contamination have gradually changed. (Recently,) they have tried to have the kids eat home-grown vegetables that haven't been inspected and fish caught from sea fishing. Our plan was to live with them in several years' time, but if I cannot get their understanding about counter measures against contamination, I want to move the conversation away from living together... I feel a sense of crisis about people being used to the current state of affairs and not thinking about the children's safety."
- "Of course, I cannot fill in the gap between my parents' and husband's way of thinking about radioactivity. When I gave birth to my second child, I temporarily went outside the prefecture, and they didn't think well of it. They thought I was 'too worried.' This strengthened my symptoms of postpartum depression, and this showed up in my physical condition. There was a sudden decrease in my body weight, and I suffered hair loss. I cannot ever forget about that time. It really hurt me to be criticized for taking actions because I was thinking about my children."
- "At the end of last year, I got a divorce, and I am currently raising a child as a single mother. Over the course of a 15 year marriage, I think that there became a gap between our existences and ways of thinking little by little, and it seems like a large 'rift' was formed over how to protect our young child from the nuclear power accident after the earthquake disaster. Both of us had the parental love that considered our child, but this was different for a mother than it was for a father (different positions). In any case, harsh realities like work, appearances, and finances were thrust at me as a mother who just had the single desire to protect her own child, and I felt pathetic, because I knew that as a mother and child we were being seen as acting selfishly. I don't know where this big gap came from. However, I felt like we fell into a relationship where as a married couple we couldn't support and rely on each other physically and emotionally, and the parent and child (father and child) relationship had disappeared. It might not just have been the fault of the nuclear power plant, but I think it was the result of having the differences in our priorities in life and our way of thinking thrust out in front of us."

(2) Neighbors and acquaintances

There are also cases where, because there is a difference in the ways of thinking between neighborhood friends and acquaintances, conflicting opinions develop and relationships deteriorate.

- "The term 'radioactivity' has been made taboo among fellow parents and the children at schools and kindergartens. We still haven't gotten back to how it was, and we are still living a life filled with anxiety, yet the current state of things is such that we can only talk about this with our families. Since the earthquake disaster, I feel like it has become difficult to live here because I feel like we are in contact with our friends while sounding them out."

- "Talking about the earthquake disaster has stopped even with our friends. This is because we just bring up each other's anxiety again. The mothers who pretend everything is fine and act strong do this because they are in a position of supporting their family's health (and handing the household finances.) But really, they are anxious and want people to say it is okay. We don't want to be forgotten. If we don't pretend it is fine, we cannot continue to go on."
- "I have lost many friends because of the Tokyo Electric accident."

(3) The outside world

There were many comments about anxieties about prejudice and discrimination against people from "Fukushima." The content of these comments frequently identifies the possibility of being at a disadvantage when finding work or getting married.

- "The children haven't done anything wrong, and if in the future they are bullied or face discrimination caused by this nuclear power accident, it will be unforgivable. I want the role of nuclear power plants and the charm of the 'Fukushima' area to be disseminated. I want all of the children in Japan to understand that people continued to stay and lead their lives in an area contaminated by radioactivity to protect Fukushima. I hope that once the children become university students and working adults they will finally be able to flourish all across Japan."
- "In the future, when our children are getting married, if the other person is from outside the prefecture, they might be hesitant to have children or even get married. (Especially, the other person's parents)"
- "My cousin went to university outside the prefecture, went to an interview for a part-time job, and passed the interview. However, the surrounding people said they didn't want to be in contact with someone from Fukushima prefecture, so their employment was canceled. The current state is such that proper information hasn't reached everyone. The children will grow, and I think that it is possible that this sort of situation happens for them in things like finding employment, getting married, and having children. Even if the direct cause is different, this might not be conveyed to people outside of the Fukushima prefecture. I also have this sort of anxiety."
- "I am worried that being born in Fukushima might have an influence on entering university, finding employment, and getting married. My older children are growing up, so I have talked with them about the possibility of facing this sort of discrimination."
- "In the future, I won't have my daughter go to university or become a bride for someone outside of the prefecture. When I think that she will face these terrible feelings someday, it is heartbreaking. If she gave birth to a child and that child had a disability, people would absolutely say things blaming this situation. People like the other person's parents. Therefore, there is no choice but for her to get married in Fukushima and live her whole life in Fukushima. Because it is the world-famous FUKUSHIMA."
- "I am scared of bullying due to prejudice if we go to another prefecture. In particular, Kanto. The spread of the radiation not only damaged people's health, it also drove people

from their homes, created problems that cannot be seen in the local area, and caused prejudice and contempt from other prefectures. Additionally, people are even talking about the tax increases due to the decontamination costs. I think that the 'environment' has been truly adversely affected. Recently, life has gotten to be less difficult, but when I occasionally remember this, my heart aches."

- "There are times when I am surprised at the difference in values about radioactivity with people from outside the prefecture. Within the prefecture and the city, people say it is safe, but outside the prefecture, people do not think of it that way. When people clearly state that they don't want to raise kids in Fukushima, because I was born in this area and am bringing up my children here, I feel like am I not thinking about my child's future, am I not doing anything for them? I am truly anxious about living here like this, but because I am not taking any actions I feel helpless and guilty towards my children."

(4) The people treated differently with regards to evacuation/reparations

There were comments stating that people felt that other people were being given favorable treatment with regards to the delineation of reparations or compensation being given by Tokyo Electric and the administration. There were also comments about people feeling anger towards the people receiving these benefits.

- "The four towns of Futaba, Okuma, Tomioka, and Narahara supported the nuclear power plant and brought it here, so I think it is natural that they are suffering. And yet every month they get a large amount of money, and they don't work, play pachinko, eat out, and have as much fun as they want. They have bad manners, and I wonder if they are even citizens of the same Fukushima prefecture? I want to say because of these guys, we don't get any security, and our children's freedom has been stolen... I want to ask those national, prefectural and city governments and politicians if they understand!!"
- "We live in Koriyama city of Fukushima prefecture. It is within the same prefecture, and moreover, the radiation levels are very high. Yet, we were not issued an evacuation order, so we don't get any sort of security. I don't think that Koriyama city's response is really doing anything... People who evacuated received a lot of money, and they have selfish attitude in many respects, and put me in a bad mood. I want the evacuees to go away. They are truly a nuisance. I want us to have some security as well."
- "I feel dissatisfaction about the arrogance of the people who evacuated from the nuclear power plant areas. My own town has become cramped because of people from Namie. I am also dissatisfied with priority given to evacuees in real estate and at the hospital. I feel like I want them to give us security. I don't want people to think that every one of the citizens of the prefecture is living off security (compensation money) from the nuclear power plant. I don't want to hear about the dissatisfaction of the evacuees. (There are many people who complain in public places, and I hate it).
- "People who have moved into the neighborhood are receiving compensation money, and they are going overseas, playing pachinko, and buying cars. I feel the unfairness of it all. Probably some of them really want to go home and are having a hard time, but when I heard

my friend say that they were happy that they have financial leeway and were planning to leave that town anyways, so it helped them out, I got really angry."

(5) Characteristics

The total number of comments related to "(3) the outside world" greatly decreased from 79 comments (2013) to 29 comments (2014). The cause is unclear, but it is possible people simply didn't want to give repeated descriptions. In any case, comments related to "(3) the outside world" were most frequent within the comments related to interpersonal relationships. The anxiety about discrimination and prejudice is anxiety that concerns the children's futures, so it won't simply go away.

7. Information

(1) Gathering information

The comments related to gathering information were divided into two categories (1) distrust of information and (2) decreased concern.

A. Distrust of information

There were a great number of comments about distrusting information stating that people did not trust Tokyo Electric or the administration and that there are contradictions in the information that is circulating.

- "I want to know the truth about the nuclear power plant and the damage from radiation exposure (health damage). I want materials that allow us to judge how we can go on living without anything being hidden. As parents, we decided to live in Fukushima, so I want accurate information."
- "When I watch the news, I see that even now they found a water leak, but I don't feel anything about it even when people ask if it is flowing into the ocean. There is cover-up by the national government, the prefecture, and Tokyo Electric of situations that were found out somehow, and I cannot help but to think that the content of the information transmitted has not changed from the earthquake disaster until now. It is hard to give a forecast for the future."
- "Every time I hear a doctor or specialist say something, there are many things that are different. I honestly don't know what information I should believe. My siblings have heard a variety of things from school teachers, and what they say is honestly all over the place."
- "Information is too varied, and I honestly don't know what information I should believe. In order to not become too anxious, I even try not to listen to too much information."

B. Decreased concern

There were comments stating the feelings of decreased concern. Many comments noted anxiety about getting used to things due to the passage of time.

- "I feel anxiety about personally becoming accustomed to a life with radioactivity. I am anxious when I think that something important (information) might come out later on."

- "There are hot spots with dangerous levels in places like streets for students going to and from school. The elementary school students walk through there while smiling... Sadly, we have become accustomed to this type of scene... This makes it really hard for me, and while I am normally okay, sometimes, I am filled with incredible anxiety. Will my children be okay several years from now? There are days when I think this way and I cannot sleep. Things are starting to fade."
- "Within Fukushima prefecture, there are a wide variety of concerns and reactions depending on the situation and area, and I am amazed that I have become insensitive to radioactivity. As three years are about to have passed, everyone is at their own level of being exhausted with the response to the radioactivity that isn't moving forward. As it lengthens, we just do our best every day, and I am scared of the people around me and myself who try not think about it for securing our own mental health."
- "Almost every day, the TV is covering the polluted water, and now when I see it, I don't think anything of it. I am no longer impressed. I used to think 'this again,' but now, even that reaction is gone. I have just gotten exhausted of thinking about it."
- "Because we are continuing with our lives without having a sense of impending crisis, we have become accustomed to it, and our observing eyes have disappeared. I am anxious about if we will be able to protect our children in the future."

C. Characteristics

The total number of comments related to "distrust of information" greatly decreased from 62 comments (2013) to 10 comments (2014). The reason is a feeling of giving up, and it also seems because the concerned parties are being worn down.

The total number of comments related to "decreased concern" decreased (20 comments to 14), but the percentage of such comments slightly increased. However, the content of these comments is more important than this. Comments stating "we have become used to living with radioactivity," "the awareness of the issues has dulled," "we are not to thinking about it for our mental health," and "we are tired of thinking" were seen in these responses. When a family is faced with a situation that cannot be improved, thinking about doing something for the children doesn't amount to anything, and as time passes without any of the problems being resolved, it is inevitable that this change in people's mental state arises.

Accordingly, the reduction in comments related to distrust of information does not directly signify that there is a decrease in the distrust of information. In fact, the problem is very serious because as was noted above, there is a state of "giving up" that is taking place.

(2) Dissemination of information

There were a considerable amount of comments stating that the mothers want the current situation in Fukushima prefecture to be widely known.

- "Now, there are many people who leave Fukushima prefecture to go outside the prefecture. Also, the assistance is continuing. However, of those of us who are remaining in Fukushima, only some people are able to receive assistance from the refresh project. I have heard that it

was determined that 'evacuation=suffered damage and remaining= no damage.' This is truly unfair. I think I want them to give the same assistance given to people who evacuated outside the prefecture to those people who are remaining as well. Additionally, there are many people who are using this assistance for homes because an evacuated mother and child don't want to live with their parents or because the married couple's relationship is bad. This is strange... I think that these points should also be properly reported on. It feels really bad to have them say Fukushima is dangerous forever."

- "I want them to convey the safety of Fukushima nation-wide. As well as the current situation. When I looked at the local newspaper when I returned to my family home (outside the prefecture), they didn't report anything about news concerning the nuclear power plant. It was like they had forgotten that there still many people living while being impacted by x (2). This made me sad. I don't want them to forget about it."
- "When the elementary school student and children in kindergarten grow bigger, they will think about the earthquake disaster and nuclear power plant, and I want there to be opportunities created, at school or in lectures, to have them learn the importance of passing information down to the next generation."
- "There are too many differences in the coverage of 'Fukushima,' and it seem biased. The national news only reports bad news that is breaking as usual and they are only circulating the resentment and complaints about the evacuees. Therefore, the people who are normally living and raising children in Fukushima suffer a variety of disadvantages and unfair discrimination. I think that as a result, the damage caused by misinformation about Fukushima as a whole will not go away. I want them to report without bias dividing the safe and secure aspects and the dangerous aspects."

8. Reparations and compensation

(1) Reparations

A. Dissatisfaction regarding the end of reparations, and reparations for future damage to children

There is the anxiety about the dissatisfaction regarding the end of reparations from Tokyo Electric and if there will be proper reparations for future damage to the children.

- "Now the impact of the radioactivity is still continuing, but the securities are going away. Additionally, the price of electricity charges greatly increased, and this has been a large burden on the household economy. I think the feelings of unfairness will continue for a long time."
- "The children are lively now, but if in the future, the impact of the radiation arises, will the influence of the nuclear power plant be acknowledged and the securities are given? I am worried about if they will give various securities into the future and not just right now. I have gradually developed worries and a slight sense of resignation that the support and the accident will likely be forgotten."
- The decontamination around my house was put off because the radiation levels were comparatively low, and I realized that I felt like it might have spots that were higher than

other places. And yet the money from Tokyo Electric was quickly cut off, and I got mad because it seems like they just quickly disposed of their problem."

B. Dissatisfaction regarding the delineation of the range and target of the reparations

There was dissatisfaction about there not being reparations for real harm and the delineation of the range of the reparations.

- "Even now, the nuclear power plant cannot be made safe from leaking contaminated water. The people who did not evacuate are feeling a lot of anxiety and stress. It is unfair that only the evacuees received indemnities. The people who continued to live in Fukushima made many sacrifices in their lives."
- "Since the nuclear power accident, I have started to somehow feel like now more than right away, I want to resist going to other prefectures. There is a very large difference between the reparations, and it feels like this has been a cause of fights both inside and outside the prefecture. I want there to be some sort of annual reparations for areas that are over 1 millisievert, and I want them to conduct thorough decontamination. Going forward, I want them to divide the areas based on radiation levels."
- "The house next door has a baby the same age, but because ours was born two months later, there is a (total) difference between the security money for someone who was pregnant and someone who had just given birth of tens of thousands of yen. This is unfair. The time delineation is fuzzy, so it doesn't convince me. It feels like they decided there is a difference in the value of the children (even though they are the same), and when I think about this, it makes me mad."
- "Two years ago, I got pregnant, had a miscarriage, and had an intrauterine curettage procedure. The claims for reparations from Tokyo Electric include pregnant woman, but I had the procedure on the day before the standard date for receiving reparations, so I didn't get any money. If only the child inside of me had lived just a little longer, I would have been able to receive money, and when I think about this, I feel terrible and get really upset."
- "Even now, I feel dissatisfaction about the fact that the reparations from Tokyo Electric are the same amount of money whether a person evacuated or not. Maybe there isn't anything that we could do because we independently evacuated, but people who evacuated spent more money, so I think they should pay them reparations in keeping with what they spent."
- "If a person sues Tokyo Electric for the money it cost to evacuate, they can receive money. However, litigation costs money. The poor people who had no choice but to stay here and have no money are ignored by the federal and prefectural governments. Do only the people who have money receive money?"
- "Because I do not have a certificate of residence for Nihonmatsu city from March 11th, the day of the earthquake disaster, I cannot receive any of the securities from Tokyo Electric. I think it is unfair because I have been living in Fukushima prefecture since April of 2011. The people who have moved outside of the prefecture since March 11th receive securities, but there is nothing for people who came to Fukushima prefecture in April of 2011. This isn't very convincing to us."

C. Characteristics

The number of comments related to "ending of reparations" decreased from 46 comments (2013) to 22 comments (2014), and the number of comments related to the delineation of the range of reparations increased from 18 comments (2013) to 58 comments (2014). Because the 2013 survey was conducted immediately following the cutting off of reparations from Tokyo Electric, it is thought that there was a lot of dissatisfaction pointed out about this at that time. In the 2014 survey, there is the possibility that people did not want to repeatedly point out their dissatisfaction about the ending of the reparation, and additionally, there is also the possibility that there was a shift from dissatisfaction about the cutting off of reparations to dissatisfaction about the delineation of the range of reparations as a result of the information related to the reparations becoming widely known.

The dissatisfaction about the delineation of the range of reparations had a negative impact on the interpersonal relationships between people who have been treated differently regarding reparations. Actually, the total number of comments related to "interpersonal relationships" has hardly decreased at all, and it went from 10 comments (2013) to 8 comments (2014).

(2) Social security

A. The children's health

People want there to be proper implementation of preventive measures, discoveries, reparations, and compensation related to children's health.

There were the following comments in addition to those brought up in A of 5 (2) on "examinations of the children" (page 23).

- "When I think about Chernobyl, I remembered that the results of the influence on people's bodies showed up from the fourth year onwards. In order for that there won't be people saying "no causal relationship has been established" by that point, I want them to secure countermeasures for compensation now."
- "I don't know what will happen beyond this point (if there will be impacts that arise), but I hope that no matter what happens people continue to think about it without overlooking it. I want them to give protection by ensuring that we can properly receive medical-care insurance (that it does not go away)."

B. Burden on the household finances

People are desiring an allowance as a form of social security to combat the increase in the burden on the household finances.

- "I feel like I want to allow my kids to play outside the prefecture (on Saturday and Sunday). However, this isn't economically feasible... I spend almost all weekends at home. I would be happy if we were even exempted from the traveling expenses within the prefecture to allow our children to play safely."
- "I want them to raise the age of allowance for children to until they are 18."

C. Characteristics

The number of comments related to "social security" increased from 11 comments (2013) to 23 comments (2014), and this shows an increased interest in social security. This is thought to be an expression of the feeling of wanting the children's health and economic anxiety to be handled through the dimension of social security.

(3) Taxes

There is dissatisfaction about the burden of taxes after the accident (please refer to the previous section 4 (2) E. "Taxes and public utilities charges").

(4) Overall response

A. Dissatisfaction regarding the administration's response

There is dissatisfaction regarding the administration's response. For example, the slowness, inadequacy, and unreasonableness of the response were pointed out.

- "The bus stop for the kindergarten bus had levels higher than $1.2\mu\text{SV}$, and I made many requests to the disability welfare section that manages it and the kindergarten saying 'the bus stop has high radiation levels, so I want to get off and on the bus in front of my house.' However, they didn't do anything about it, and I waited for the bus with my child who is less than one year old in a level of 1 micro. There is a difference in the response for healthy children and disabled children, and they handled 'disabled children like it is okay for them to be exposed to radiation.'"
- "I want a consulting service at the town hall. A method of support is still being neglected, and there is not a balanced consulting service with someone who has a certain level of knowledge about the nuclear power accident for people including those who evacuated to other places. I feel like there is a qualitative difference in the regional services."
- "Fukushima prefecture has put all of its efforts into reconstruction, and they have not attempted to look at reality. The amount of children with thyroid cancer is actually rapidly increasing. However, they say things like 'there isn't a causal relationship between this and the nuclear power plant' or 'it is unknown.' They talk about 'financial damage caused by misinformation related to food or victims and beat these topics into the ground, but they don't look at the 'life' which is what needs to be handled with greatest care. As a parent, I cannot help but feel angry at the attitude that assumes there is no 'health damage.' The health damage is still rapidly increasing. I want them to stop trying to hide things just because radiation isn't something people can see with their eyes. Looking at Chernobyl, we know that the damage to people's health will increase as time goes on, and it is crazy that now people are saying 'it is nothing' and that there aren't any countermeasures being set up. I want them to be careful now for our futures and to protect the future of our children. As it is now, I shall regret being born and raised in Fukushima. I want the city and prefecture to have a response that makes me able to say that I love that I was born in Fukushima and I love it here. If we didn't have the current prefectural governor and had the previous

prefectural governor (Eisaku Satō), I think he would fight harder with the national government for the sake of our children and the sake of the citizens of the prefecture. I think that the current prefectural governor should take responsibility for accepting the plutonium-thermal reactor and resign."

- "I am concerned about the assistance for the medical expenses of Fukushima's children. There are a variety of responses in the cities, villages, and towns, and I am worried about how long they will continue with this assistance."
- "It has been nearly three years since then, and the response is so slow that it seems like it doesn't make any progress at all... I am anxious about if it is truly okay for us to keep on with our lives everyday while living here. No matter how I think about it, I can't help but be anxious about the fact that as a parent I will die before my kids and what type of pain will my surviving children face and what types of diseases will appear. As a parent, how can I protect my kids? Will the children be able to have dreams? I think about this too much... Every time that I hear the same thing, I think too much about the future, and I become very anxious and feel bad. Are we nothing more than an experiment as people in the surrounding areas say?"
- "Now, we have to keep going forward and have our future lives, so when I think about it, I think that all we can do is give up on them if the national government or the city doesn't do anything for us. I think that we need to do something for ourselves under our own power."
- "While I hear the prefecture and national government talking about how they are helping with making progress on support with raising children (since the earthquake disaster), I don't feel like they are doing this at all."

B. Dissatisfaction regarding the Tokyo Electric's response to the nuclear power accident

There is dissatisfaction regarding the Tokyo Electric's response to the nuclear power accident. For example, the slowness, inadequacy, and unreasonableness of the response were pointed out.

- "I feel like the awareness about radioactivity is fading away. Tokyo Electric is certainly doing this, and I want them to tell me why I should relax and feel relief with something more that I must be noticed."
- "I am fed up with Tokyo Electric because they are hiding the true information. Their plans end up being behind with everything, and I think they didn't take proper countermeasures; why didn't they seek foreign assistance more quickly?"
- "Tokyo Electric's apologies that are even a single word (commercials etc.) to the people who are still mentally scarred have disappeared, and I feel mad that they seem to think it is over."

C. The advisability of nuclear power plants based on the nuclear power accident

There were comments that described the experience of being harmed by a nuclear power accident and had a negative opinion about the advisability of nuclear power plants.

- "If the current state cannot be returned to how it was before, I think that we should stop with

nuclear power plants. People who don't live here saying they support nuclear power plants are awkward. I think they should live in Fukushima. I want to tell the people who still support nuclear power that they should make it so that we can play outside like we did before right now without delay!"

- "I want them to use safe energy. I want them to decommission and stop using nuclear power plants. We are playing outside, but we are gradually getting used to not entering the forests and woods. It seems like we are forgetting the radioactive contamination. Everyone in Japan is forgetting about it. I don't want them to forget it. I want Japan to do its best to make sure that the same mistake doesn't happen twice. I want people to think about how they would feel if a nuclear power accident took place where they were living. I want people to raise their children in a healthy way."
- "The people in Fukushima are living in these conditions, and I cannot believe that nuclear power plants are going to be made operational in other regions. Nuclear power plants are not a low cost means of power generation in any way, and I want society to consider things properly and not be trapped by immediate profits."

D. Doubts about the purpose for which donations are spent

There is a comment expressing doubt about the purpose for which donations are spent.

- "I believe that a lot of money has been donated, but I am irritated that I don't have any idea what it is being used for."

E. Characteristics

The total number of comments related to "the overall response" increased from 34 comments (2013) to 39 comments (2014). Comments about dissatisfaction with the administration (A), dissatisfaction with Tokyo Electric (B), and the advisability of nuclear power plants (C) all increased. The response by the administration and Tokyo Electric is absolutely indispensable; however, it seems that the dissatisfaction in it is increasing because it is insufficient.

9. Health

(1) Children

Comments have pointed out that while the causal relationships between the nuclear power accident is unknown, there are thyroid lumps (cysts), nosebleeds, lack of exercise and physical strength, obesity, skin conditions, susceptibility to colds, chest pains, and abnormalities in white blood cells.

- "I am prone to nosebleeds, my skin dries out, and it is easy for me to catch a cold. Once or twice a month I get an examination for a cold or at the dermatology department. I also feel like I'm starting to get fat because of insufficient exercise."
- "After the nuclear power accident, a job transfer brought us to Koriyama city, and a year and a half has passed. I have started to get worried about my children and other children around here decreased physical strength, reduced capacity for exercise and tendency to have more fat. My eldest son who is older than the twins is in third grade in elementary school,

and I have been worried that there are quite a few fat kids in elementary school in particular."

- "This might be because of his physical constitution, but my child frequently says they 'have a headache' and 'chest pains.' I am worried and anxious that he is starting to catch a cold or that his head hurts from daily exhaustion. It doesn't seem like it is continuously painful... At one point I went and consulted with a doctor in pediatrics about his heart, but they said 'there isn't anything irregular.' If the pain continues, I was told we should go to a bigger hospital. I have a four-year-old who will be five in march this year, and I am worried that it is not normal to have headaches and chest pains when you are this little."
- "When my elder daughter who is an elementary school student remembers that incident, she feels anxiety and feels a bit more tired. Her skin also itches."
- "I have three kids ranging in ages from 5 years old to 12 years old, and we previously got the thyroid gland examination. We found out that all three of them had a cyst, and as a parent, I am anxious if once every two years for an examination is okay."
- "The kid that I had after the earthquake disaster (one year old) has a genital disorder and convulsions with an unknown cause. I still am stuck wondering if it wasn't the impact of the radiation."
- "My youngest child who was born one month before the earthquake disaster has atopic dermatitis like, obviously."
- "My four year old child has said that his heart hurts. Since the earthquake disaster the older child (7 years old), has frequently started having nosebleeds, and these nosebleeds have lasted for around an hour where blood was gushing like the faucet had been turned on and couldn't be stopped. Now, they continue to take medicine in the morning and at night."
- "Since the end of last year (around the middle of October), my child has repeatedly had coughs and a fever, and because a high fever breaks out many times a month, I have taken them to the hospital to get examined. I am worried because temporarily the white blood cells were at a high value of 24,000 but when the re-examination took place, it was at 7,000 and I was told it's normal. Since then, the cough has continued. When I go to the hospital, they tell me it is a cold, and I just get cough medicine. I think that there is some relationship between the cough, the white blood cells and the radioactivity, and I am anxious that there might be some sort of abnormality in the thyroid gland."
- "Recently, I have felt that the lumps on both sides of my child's throat have gotten larger little by little, and all I can do is to go see the doctor and watch over my child while they take the medicine. Every day I think that this is very strange for lymph swelling. The other day there seemed to be an allergy and my child seemed to have strong itching sensations around their neck. I am worried because they were healthy and haven't had allergies until now."
- "I am worried because the older brother who is three years older than the child who is subjected to exams developed a psychological condition after the earthquake disaster. The child who is subject to exams is my third child and is very lively, so I am not particularly worried."

- "It took two whole weeks for the child who is the subject to exams and their elder sister in third grade of elementary school to recover... they experienced a cough and a sore throat... This was the first time it had been this bad for all of them. Until now, even when they got influenza, it only took 3-4 days for them to recover. I feel like their immune strength is dropping, and it worries me."

In addition to these comments, there were also comments that were hearsay that noted "fat," "thyroid cancer," "growths on the thyroid gland," and "leukemia."

(2) Parents

Poor physical health and miscarriages (stillbirths) due to stress and depression have been frequently reported.

- "There is the stress of work, and I have had terrible symptoms of psoriasis. I have also had alopecia areata (sudden hair loss). I have had headaches, and I cannot stop taking analgesics."
- "In may of the year of the earthquake disaster, we evacuated to a place with low doses [of radiation]. After two years of living like this, my husband's health was wrecked. The cause was that the commute to work from the place we evacuated to (2 hours round trip using the highway) was exhausting and stress built up. Husband."
- "With my own physical disability (class four in my legs), evacuating with my two children was very difficult. Since last year, my husband and I have started to have rapid heart palpitations. Last year, I had an abrupt 3cm tumor on my leg (fortunately it was benign), but I had to have it surgically removed."
- "Since the earthquake disaster, I have (their personality) started to change, and this is still happening. Before the earthquake disaster, I normally spent my time having fun, after (the earthquake disaster), I have felt feelings close to depression. I have had many days where I was spreading it to my child. I feel like I want to go to the hospital, but I have trouble finding time, and I stay shut up in my house. I am being careful not to spread it to my child, but because of the 'nuclear power plant,' I just can't feel better."
- "In the middle of February, all of the members of my family got influenza B, and I had a cough and sore throat for three weeks. Even now, I have phlegm, and my throat is not doing well. This was the first time it was this bad for everyone. Until now, even when they got influenza, it only took 3-4 days for them to recover. I feel like their immune strength is dropping, and it worries me. In particular, the exhaustion I have at night is horrible, and I feel like the sluggishness and sleepiness after a meal is a sickness."

In addition to these comments, there were also comments that were hearsay that noted "swollen lymph nodes" and "aplastic anemia." Additionally, there were some comments where it was not clear if it was regarding the parent or child.

- "When a person is in the medical world, you know that there has been an increase in people who had the impacts of radioactivity related to both their heart or heart disease."

- "Last year (2013), there was an increase in colds in the throat not healing, and I think there were many people around me who complained about it being difficult to heal. I cannot help but think that this was at least somewhat because of the influence of the radiation."
- "My family's health went down one after another, and I am sorry about the delay in sending this back."

(3) Characteristics

In a similar manner to with the 2013 survey, the issues of fatness and a lack of physical strength and exercise because of restrictions on playing outside were noted with regards to children's health.

In a similar manner to the 2013 survey, the issues of poor health caused by stress and anxiety were noted with regards to parents' health. There was an increase in comments that pointed out that they had reached a state of depression, and it is possible that this materialized as a specific symptom of the stress and anxiety that had piled up until now. There was also an increase in comments pointing out miscarriages (or stillbirths), and it is possible that this was caused by anxiety or stress.

10. Comments related to the questionnaire survey

Here we would like to introduce the comments from the target group related to "survey about the health and lives of parents and children after the Fukushima nuclear accident" conducted by "The Fukushima Children's Health Project" in 2013 and 2014. The comments about this questionnaire survey were divided into the following three categories: (1) discomfort concerning the questionnaire, (2) cooperative comments related to the questionnaire, and (3) comments and requests.

10. 1. 2013

In 2013, there were comments about this questionnaire survey were divided into (1) discomfort concerning the questionnaire (106 comments), (2) cooperative comments related to the questionnaire (110 comments).

Discomfort concerning the questionnaire

- "Every time that there is questionnaire like this, I feel like living or having lived in Fukushima is being made into the material for experiments. I think this will be valuable data, but I want it to be properly understood that this puts us into a complex mental state. I just want to live normally like I did before."
- "These types of questionnaire write a lot about behaviors, and writing out these sorts of things produces stress. I think that you are considering us, but I want it to be known that there are many people who think of this as stressful. Right now, it has been two years since the nuclear accident, and there is just anxiety about the future and nothing has changed. If this is the case, I just want to forget about the accident. I want to be left alone. I understand that you are doing a variety of things for us, but this misses the mark."
- "When this survey was done, there were instructions included in the envelope with it, but honestly, I had the doubt of wondering 'why are there documents coming to our children from

Fukuoka University?' This was because the assistance on the research expenses was given by MEXT, but personally, I want something in writing from the residential area (Nihonmatsu city) for them to do this sort of thing. Honestly, since the nuclear power accident, I feel like 'the citizens of Fukushima prefecture are research materials and the future guinea pigs.' Actually, we don't regret it cooperating by answering surveys or giving other forms of cooperating because we think it will be utilized going forward. However, honestly, we aren't happy when we have the above-mentioned materials suddenly sent to us from Fukuoka prefecture."

- "I don't know how much this one questionnaire will make an understanding of the current situation possible, but I can't help but feel each question opens up another wound. I don't think there is anyone who is raising children in Fukushima prefecture who doesn't have anxiety about it. We can only feel like what the questions are asking is being thrown at us from a perspective that is based on the impact of the nuclear power accident. Even if this isn't the case, we have anxiety. So, these questionnaires can make us feel like we are being blamed and think as a parent what can I do for my child and what am I doing for them. Our house is no longer measuring radiation levels. (In the house we lived in before that was completely destroyed we measured them.) The reason is that even if we follow the numbers, it doesn't have any meaning in our lives. Even if a person who has to continue living here knows the numbers, it just turns into anxiety. (Because it doesn't change the fact that we don't let our kids outside as much as possible.) I think that there is a way to be more kind to the target group while asking question when conducting a survey. Regardless of the fact that you got our address and name from somewhere and sent us a document, it feels strange. There wasn't enough of an explanation. (Because Koriyama city has not been put in as a support group.)"
- "The first time that we received a request for a survey (in a blue envelope) it was sudden, and I was filled with distrust about if this was from a group that could be trusted. It would be good if the cities, towns, or villages around here would give a bigger announcement that a survey was being done in advance through a newspaper or city administration. (In my case, I finally decided to cooperate with the survey when I got the postcard that was a "second request.") I pray that in the future more meaningful research can be done. It would be really helpful if research and studies could be done that don't treat our opinions as mere samples and don't forget the parents' feelings that have the strong desire to "have children live in a future filled with hope."

Cooperative comments related to the questionnaire

- "I feel anxiety about getting accustomed to the current situation even though nothing has changed, and I am conflicted because I might relax (or feel a sense of relief). Every day I don't know what to do. However, when people make these sorts of efforts, I am grateful that they are thinking of Fukushima. I hope that there is somehow an effective response going forward."
- "There isn't anywhere that listens to my anxiety about my children since the nuclear power accident, so I am glad to be given a questionnaire and be able to express my thoughts. Thank you very much."

- "Thank you for not forgetting about the earthquake disaster and creating a questionnaire that considers mental health; it was an opportunity for me to reflect on the events of that time without forgetting them. I feel like having an opportunity to take the time to stop and think in this way is very important. My responses might not have been sufficient, but it will be fortunate if they are useful somehow."
- "I am very grateful that the far-off Fukuoka is worried about Fukushima and taking actions. There are some citizens of the prefecture who feel 'bad that we are like guinea pigs,' but even though it is unfortunate, this was the first of such accident. I think it will be good if there is a proper investigation and study of this incident that connects it to the future."
- "Until now, there have been few places to spit out all my thoughts and feelings, and I wrote them all out illogically. I am very sorry. There have been questionnaires about the minds and bodies of our children, but I feel like there were few that asked for the mothers' stories and feelings. I am grateful you gave me this opportunity."

10. 2. 2014

In 2014, there were comments about this questionnaire survey that were divided into (1) discomfort concerning the questionnaire (30 comments), (2) cooperative comments related to the questionnaire (60 comments), and (3) opinions and requests (9 comments).

Discomfort concerning the questionnaire

- "Questionnaires related to the nuclear power plant come very often. I understand that the organizations and groups collecting the questionnaires are different, but I want them to be improved because taking questionnaires requires time and effort. Please avoid asking the same questions."
- "I wonder what these sorts of surveys are useful for. I had forgotten about the disaster and the nuclear power plant, yet remembering it to write about it doesn't feel good. Aren't there quite a few parents who feel excessive anxiety due to these sorts of surveys?"
- "I don't get the sense that income or academic background determines if child will get cancer. From the beginning, this questionnaire felt like it was looking down on us. If documents from faraway places like Fukuoka are going to ask about this and that, I truly want you to live in Fukushima prefecture and think about a health project."
- "This is impolite, but every time there is a questionnaire the word guinea pig goes through my head. How much will society understand us by answering these questionnaires? How much will information be disseminated? I am a bit dubious about this. Maybe, these questionnaires continue into the future. My heart aches when I think about the children getting older and growing up a bit and realizing that these sorts of questionnaire were given about them."
- "This questionnaire too had many detailed items, and is it really necessary to fill in the household finances, income, and employment situation?"
- "The person who delivers a maternal and child health handbook always delivers things like questionnaires, but each time I feel unpleasant thoughts because I wasn't able to give birth."

Cooperative comments related to the questionnaire

- "In the Q&A response form in enclosed with the questionnaire there was the sentence 'we feel like guinea pigs.' When several months had passed since the nuclear power accident three years ago and a thick booklet is sent from the prefecture that asks us to write our lives since March 11th in detail, I have felt like we are being the subjects of an experiment as people exposed to radiation. However, as one or two years passed, I felt a change in how I perceived these questionnaires. In the near future, me or my children might have health problems because of exposure to low doses of radiation. This gives me a lot of anxiety, but even so, based on the sequence of events for the Chernobyl nuclear power accident, we are able to minimize the internal exposure to radiation and are receiving thyroid examinations. If in a few decades another nuclear power disaster takes place somewhere, I will be happy if our data is useful to them in some form."
- "Sometimes, I forget about the radioactivity. I have slight anxiety that at this rate I might become careless about managing the health of myself and my children (regarding the radioactivity). I feel like I want them to continue doing physical examinations and tests for a long time. This questionnaire came when I had been forgetting about it, so I thought I need to be aware of the radioactivity."
- "I want to tell these thoughts to my own children, and I am hoping that these thoughts are conveyed to them. I want these thoughts to be left behind in some form. I hope that the people who started this project convey our generation's resolve and message to Fukushima, Japan, and the entire world when the children involved in this survey become adults and are feeling lost. If this happens, I want to cooperate, and I think it will be very meaningful. Of course, we are not guinea pigs, and I don't just want us to leave behind the results of a questionnaire. However, we don't have a way to have our voices heard, so please disseminate them to society for us and our children."
- "I am happy that I could understand things about other mothers and children. Also, I am grateful that our perspective can be exposed in this manner. If our voices and the current situation reach society, I feel like I can see a bright forecast for Fukushima's future."
- "I know that this is for work, but I am impressed that the connection between the mothers and children involved in the project will be developed into something big."
- "Thank you very much for the survey and support over a long time period. I think that it is important to leave behind this sort of data because no one knows what will happen. I feel like I am happy if there is some way that I can cooperate, and I plan on doing what I can."
- "As I mentioned in the previous survey, there were times that writing in the answers was painful, but I answered believing that this questionnaire will be useful as a means of saving the children of Fukushima. Just thinking that the target group of this questionnaire included my daughter's classmates who were very close to us in where we lived in Fukushima at that time, I remembered each of their faces. I thought back to the days of fun exchanges before 3.11, and it made my heart ache. Is there help for us? Since that day, we have been living in an ashen state of mind. We only have the desire people will be there to support in the future. Please help with this."

- "Even if it was for a study, I have not been asked about the psychological impact of the nuclear power accident in this much detail and an opportunity to give a response even once. As I answered the content of the survey, I was able to organize my mind, and I feel like I became able to see what I should do. I am grateful that I took this sort of survey."

Opinions/ requests

- "Since the nuclear power accident, there have been many opportunities to answer a variety of questionnaires, and every time that I answer a questionnaire, I think one thing. My child is more anxious and scared about the rumble in the ground before an earthquake and the vibrations of an earthquake than they are about the radioactivity from the nuclear power accident. It is certainly true that there is also anxiety about invisible things like radioactivity, but I think that it is important to minimize anxiety about earthquakes that small children who experienced the massive earthquake on 3.11 have. I personally want to know how much anxiety other children have about earthquakes."
- "This is something I also felt the last time I answered a questionnaire, but I have the impression that there is unreasonableness to responses in chronological order like "so many months or so many years later." Just because so many months or years have passed doesn't mean the response will change. The differences between the responses in this survey and the previous survey might simply be caused by the season or my mood. We are living every day. The 'fight we had with someone yesterday' or the 'weather today' has an impact. In the same way, I don't think that changes in things like the impact of the nuclear power accident can be measured simply by the passage of time. When the reports in the media stir up our anxiety, no matter how many years have actually passed, we are brought back to the anxiety we felt right after the accident."
- "I felt resistance or antipathy about the term 'recreation (as health preservation)' within the questions. I don't know any acquaintances from school or nursery school who uses this term. Apparently, some people frequently use this word, but it somehow seems like our city is viewed as dangerous and it even made me feel bad. (I answered "no" to question 12. If it was just a trip, I would go). This is a parent's state of mind and about the question that asked about the impact of radioactivity (question 14) ... I think that more than the radioactivity, a far greater impact on our mental state is caused by discrimination or harassment by part of the media or people on the web. There aren't any surveys about that, right?"

11. Considerations

1. Number of responses to each question

The number of responses to items in the categories listed below isn't the absolute number, and it is the number that was subjectively counted by the reader. Showing the number of responses is done only as a reference to perceive the "changes" between the 2013 and 2014 surveys.

	2013	2014
1. Locations for Living	233	214
(1) Related to evacuation	155	66
A. During Continued Evacuation	49	16
B. Evacuated but returned	35	9
C. Wanted to evacuate but could not	68	37
D. Did not evacuate	3	4
(2) Related to recreation	37	40
A. Desiring the expansion of recreation programs	33	33
B. Wanting to obtain information relate to recreation	3	6
C. Being satisfied with recreation	1	1
(3) Related to decontamination	41	108
A. Somewhat satisfied with decontamination	2	9
B. Unsatisfied with the decontamination that has been done	10	16
C. Desiring decontamination	24	74
D. Has doubts about the effects of decontamination (regardless of whether or not it has been done)	5	9
2. Eating habits	72	49
(1) Food	66	45
A. Not to using locally produced food or tap-water as much as possible	44	32
B. Using locally produced food or tap-water because there is no choice	10	2
C. Dissatisfaction with school lunch (or nursery school lunches)	12	11
(2) Laundry	6	4
3. Household finances	39	53
(1) Income	10	4
(2) Expenditures	29	49
A. Costs of evacuating/ living a double life	1	1
B. Costs of countermeasures against radioactivity	4	3
C. Replacements for playing outside,	6	4
D. Costs for purchasing water and food from another prefecture	12	30
E. Taxes and public utilities charges	3	8
F. Insurance	3	1
G. Housing costs	0	2
4. Raising children	267	136

(1) Playing	171	97
A. Having them play outside	29	15
A. Restricting playing outside	74	39
C. Indoor playgrounds	68	43
(2) Response to radioactivity	55	23
A. Examinations of the children	52	18
B. Dosimeter (glass badge)	3	5
(3) Birth	11	8
A. Pregnancy/conception	10	6
B. Miscarriages	1	2
(4) Other	30	8
5. Interpersonal relationships	114	59
(1) Married couples and relatives	9	9
(2) Neighbors and acquaintances	16	13
(4) The outside world	79	29
(4) The people treated differently with regards to evacuation/reparations	10	8
6. Information	102	38
(1) Gathering information	82	24
A. Distrust of information	62	10
B. Decreased concern	20	14
(2) Dissemination of information	20	14
7. Reparations and compensation	121	150
(1) Reparations	64	80
A. Dissatisfaction regarding the end of reparations and reparations for future damage to children	46	22
B. Dissatisfaction regarding the delineation of the range and target of the reparations	18	58
(2) Social security	11	23
A. The children's health	7	11
B. Burden on the household finances	4	12
(3) Taxes	12	8
(4) Overall response	34	39
A. Dissatisfaction regarding the administration's response	19	21
B. Dissatisfaction regarding the Tokyo Electric's response to the nuclear power accident	6	7
C. The advisability of nuclear power plants based on the nuclear power accident	8	10
D. Doubts about the purpose for which donations are spent	1	1
8. Health	79	36
(1) Children	57	23
(2) Parents	22	13

2. Overall changes from the 2013 survey to the 2014 survey

First, there was an increase in positive comments for people who were undergoing continued evacuation compared with the 2013 survey with regards to locations for living, and at the same time, there was also an increase in people who clearly expressed a decision not to evacuate. However, in the 2014 survey, there were still many comments expressing difficulties or trouble with continued evacuation, those expressing having evacuated but returned to Fukushima, and those expressing a desire but inability to evacuate.

Next, we will discuss the following various anxieties caused by radioactivity. (1) There were comments expressing anxiety about unborn children's health with regards to the health of the children. The following comments could be seen in the 2014 comments that were also in 2013. "Feeling anxiety about spending my pregnancy or conception in Fukushima prefecture," "not being able to eliminate the doubts that radioactivity was one factor in miscarriages." Additionally, a new comment that was seen in 2014 was "having doubts about the impact of radioactivity on infertility. (2) In the 2014 survey, the new comment that was observed related to the economic conditions was about the expenditure of "housing costs." (3) There was no change observed compared with the 2013 survey with regards to interpersonal relationships. (4) There was no change observed compared with the 2013 survey with regards to relief and compensation. (5) There was marked decrease in responses about the "distrust of information" in the 2014 survey in the section on information. This was believed to have been due to a "decreased concern." (6) In the 2014 survey, there was a decrease in replies about the "dissatisfaction about cutting off reparations, and conversely, there was an increase in replies about" dissatisfaction regarding the delineation of the range of the reparations." The 2013 survey was done right after the reparations were cut off, and it reflected the dissatisfaction for that. In the 2014 survey, the information related to the reparations had become widely known, and this caused a change from "dissatisfaction about the cutting off of reparations" to "dissatisfaction about the delineation of the range of reparations."

3. Changes in people's lives since the nuclear power accident as seen from the numbers in the questionnaire

(1) Changes in people's lives

The above was an analysis related to the freely given descriptions in this survey. Here, we would like to introduce the replies to questions in this survey related to the change in people's lives after the nuclear power accident. Three trends for the changes in people's lives after the nuclear power accident became apparent through the responses to the 2013 and 2014 surveys (reference the bar graph).

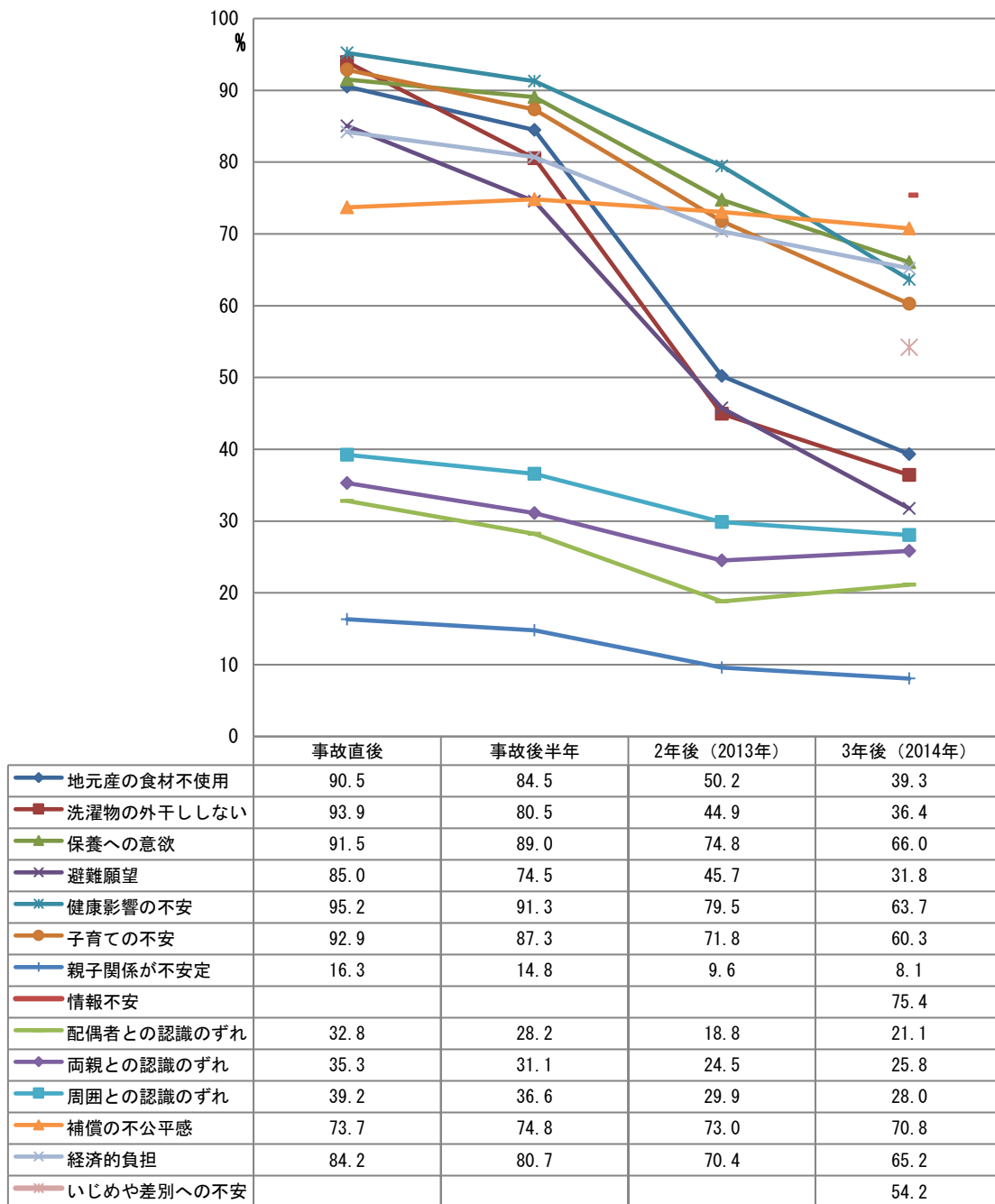
First, there were items that shifted while maintaining a high percentage. For example, "a sense of unfairness surrounding compensation (people feeling that the compensation for the nuclear power accident was unfair)," "a sense of economic burden (an increase in expenses since the nuclear power accident and feeling an economic burden)," "desire for recreation (wanting to go to places with low radiation levels for recreation/ health preservation)," "anxiety about health impacts (strong anxiety about the impact of radioactivity on health)," and "anxiety about raising children (feeling

anxiety about raising children in Fukushima)."

Second, there were items that suddenly decreased. For example, "not using local products for ingredients (not using locally produced food)," "hanging laundry to dry outside (not hanging laundry to dry outside)," "desire to evacuate (wanting to evacuate if it was possible)." However, as far as we can tell by looking at the free responses there were still many voices expressing anxiety in the 2014 survey for "not using local products for ingredients," and it doesn't appear to have suddenly decreased. Additionally, the data for the underlying causes for "not using local products for ingredients" of "anxiety about health impacts" and "anxiety about raising children" maintained high numerical values. Accordingly, the decrease in "not using local products for ingredients" seems like it could have been caused by other factors like a decreased concern or economic burdens rather than by people feeling secure in doing it.

Third, there were items that shifted while keeping a low percentage without decreasing. There were gaps in the awareness about dealing with the radioactivity between spouses, parents, and other people in the region or surrounding area. It became apparent that the gaps in the awareness about dealing with radioactivity were most likely felt between people in the region or surrounding area, and this was followed by parents and then spouses. The change in people's lives after the nuclear power accident weren't particularly reduced and continued as they were seeming to be the cause for making people's mental state unstable.

Upon newly investigating the anxiety about information with the item "don't know if the information about radioactivity is correct," the 2014 survey showed that this item was rated most highly. Additionally, more than 50 percent of respondents answered that "since the nuclear accident, they felt anxiety about discrimination or being bullied because they live in Fukushima."



* Changes in people's lives after the nuclear accident (total percentage answering "applies to me" or "if I had to say, it applies")

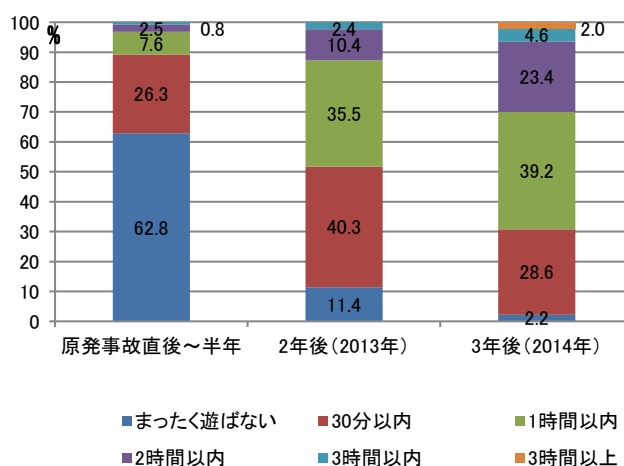
	Immediately after the accident	Half a year since the accident	2 years later (2013)	3 years later (2014)
Not using local products for ingredients				
Not hanging laundry to dry outside				
Desiring recreation/health preservation				
Desire to evacuate				
Anxiety about health impacts				
Anxiety about raising children				
Unstable mother and child relationship				
Anxiety about information				
Gap in awareness with spouse				
Gap in awareness with parents				
Gap in awareness with neighbors				
Feelings of unfairness about compensation				

Economic burdens				
Anxiety about bullying/ discrimination				

(2) Children playing outside

Next, we would like to introduce the numeric data related to the changes in children playing outside.

Figure 1



Immediately after nuclear accident; 2 years after (2013); 3 years after (2014)

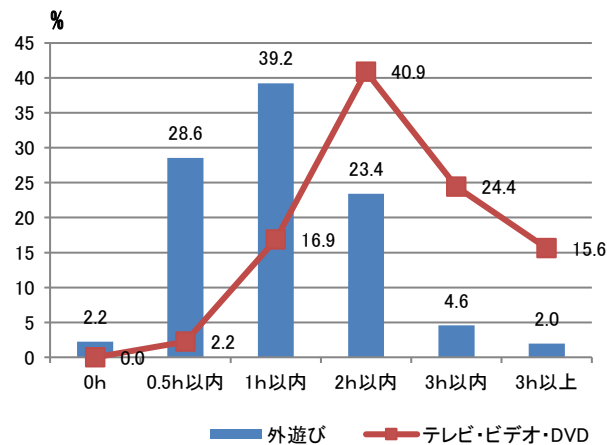
Doesn't play outside at all; 30 minutes or less; 1 hour or less

2 hours or less; 3 hours or less; more than 3 hours

Figure 1 is a graph that shows the transition over time of children playing outside. The children who "did not play outside at all" for 6 months immediately following the accident was 62.8%, and in contrast to this, two years later this fell sharply to 11.4% and 3 years later it fell again to 2.2%. This shows that the time playing outside increased.

On the other hand, according to the survey by Etsuko Watanabe that targeted children in city A in the Tohoku region ("the family and neighborhood environment that influences the time that young children spend playing outside on weekdays and the time they spend watching television" 'A study in exercise epidemiology' 2012), 75.4% of four year old children spend "1 hour or more" playing outside. In contrast to this, according to this survey only 30% spent "1 hour or more" Compared with other regions, the time spent playing outside is still low.

Figure 2



0 hours; 0.5 hours or less; 1 hour or less; 2 hours or less; 3 hours or less; more than 3 hours

Blue Playing outside

Red Watching TV, Videos or DVDs

Figure 2 is a bar graph that shows time spent playing outside and time spent watching TV, videos, or DVDs (referred to as TV below). The most frequent response for time spent watching TV was "2 hours or less" at 40.9%.

According to the survey by Etsuko Watanabe mentioned above, the percentage of four year olds who spent "2 or more hours" watching TV was 55.6%. In contrast to this, according to this survey this percentage was only 40%. There have been misgivings that the children in Fukushima are increasing the time spent watching TV while decreasing time spent playing outside, but this survey did not confirm any such trends.

Finally, this shows a breakdown of the place of residence and age range of the people who filled in the free responses as "relationship as seen by the child" and "the respondent was the mother." The "survey respondent" indicates the person who answered the questionnaire survey.

The number of free responses filled in for the first survey : 1203 (total number of responses possible 2627)=45.79%	The number of free responses filled in for the second survey : 707 (total number of responses possible 1602)=44.13%
Total number of characters: 252,047	Total number of characters: 152,707
Average number of characters per person: 209.5 characters	Average number of characters per person: 215.9 characters

[Relationship]

Relationship	First survey (2013)			Second survey (2014)		
	Person filling in the free response	Survey respondent	Percentage that filled it in	Person filling in the free response	Survey respondent	Percentage that filled it in
Mother	1195	2594	46.07	681	1524	44.69
Father	6	23	26.09	22	71	30.99

Grandfather	0	1	0.00			
Foster parent	1	1	100.00	1	1	100.00
Grandmother	1	7	14.29	3	6	50.00
Great-grandmother	0	1	0.00	0	0	0
All	1203	2627	45.79	707	1602	44.13

[Respondent were mothers: Breakdown by age range]

		First survey (2013): 2,594 people		Second survey (2014): 1,524 people		
Age range	Person filling in the free response	Survey respondent	Percentage that filled it in	Person filling in the free response	Survey respondent	Percentage that filled it in
20s	161	463	34.77	53	158	33.54
Ages 30-34	414	924	44.81	203	504	40.28
Ages 35-39	433	853	50.76	258	541	47.69
40s	179	342	52.34	162	310	52.26
50s or older	1	1	100.00	0	1	0.00
Anonymous	7	11	63.64	5	10	50.00
total	1195	2594	46.07	681	1524	44.69

[Respondent were mothers: Breakdown by place they were living]

		First survey (2013): 2,594 people		Second survey (2014): 1,524 people		
Name of the city, town, or village	Person filling in the free response	Survey respondent	Percentage that filled it in	Person filling in the free response	Survey respondent	Percentage that filled it in
Fukushima city	428	877	48.80	237	503	47.12
The town of Kori	22	34	64.71	13	21	61.90
The town of Kunimi	15	27	55.56	8	12	66.67

Date city	68	174	39.08	45	109	41.28
Koriyama city	464	1062	43.69	250	599	41.74
Nihonmatsu city	79	169	46.75	47	104	45.19
Otama village	15	41	36.59	10	26	38.46
Motomiya city	55	124	44.35	30	76	39.47
The town of Miharu	12	34	35.29	6	15	40.00
Outside these 9 cities, towns, or villages	37	52	71.15	35	59	59.32
Total	1195	2594	46.07	681	1524	44.69

Note

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