Research on the Needs of Children with Autism Spectrum Disorder and Their Families: A Comparison of Japan, China and Vietnam

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Abstract

Our research aimed to clarify the special needs of children with Autism Spectrum Disorders (ASD) and their families in Japan, China and Vietnam through a comparative study using a questionnaire completed by parents of children with ASD. The main results of this study were as follows: (1) the parents in all three countries had difficulty making free time and going out with their children; (2) although parents' notification/suspicion of disability/disorder and informed detection to parents in Japan was earlier than in China and Vietnam, diagnosis in Japan was later than in the other two countries; (3) while most parents in China and Vietnam felt a heavier economic burden than parents in Japan, parents in all three countries had the same needs such as support for their children's disorder/disability, developmental support and improvements concerning staff with special knowledge. In conclusion it is suggested that in order to approach the issue of special needs in detail, it is necessary to conduct qualitative studies including interviews with parents of children with ASD.

Key Words: Autism Spectrum Disorder, Special needs, Comparative study, Japan, China, Vietnam

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At the "Seminar on the Treatment of Children with Developmental Disabilities Education Program Development in East Asia," which was funded by the Asia-Africa Science Platform Program (Japan Society for the Promotion of Science), research based on a questionnaire on the special needs of children with developmental disabilities and their families in Japan, China and Vietnam was conducted. Analysis of data obtained in each country is already underway, and some of the results have been reported at the June 2010 seminar in Shanghai and November 2010 seminar in Nanjing.

Regarding the survey results, because country specific analysis has already been made public, in this paper the focus is on a comparison of the three countries. In addition, what is reported here is limited to Autism Spectrum Disorder as a category of disability. Even when compared to other developmental disorders, although together with advances in basic research made in recent years great advances in early detection, diagnosis and intervention have been seen regarding ASD, at the same time many difficulties remain concerning the handling of children diagnosed with this disorder. In order to develop social policies and systems that will expand support for children with ASD and their families, it can be said that clarifying the needs of children with ASD and their families is a pressing concern. On this basis, here we will report only on the analysis of ASD. Our written questionnaire research, however, is also targeted at children with developmental disorders other than ASD, and we plan to present a comparative analysis of the three countries that will include disability categories other than ASD on another occasion.

1. Introduction

Ever since Kanner (1943) and Asperger (1944) presented early-stage case studies on autism, several major changes have taken place in the theories of pathology and causation regarding ASD, and various corresponding changes have thus also taken place regarding educational methods. Today, ASD is understood primarily as a social disorder condition, and it can be said that the view that it is caused by some type of functional or structural problem in the brain has become standard. However, even if there is some type of problem in the brain, various researches have also made it clear that with appropriate intervention from the early stages of development, the developmental process of a child with ASD can be transformed into something more desirable as a result of the child reciprocally interacting with an adjusted environment (Sugiyama, 1996). It has been pointed out that due to the standardization of early-stage intervention, the prognosis of children with ASD has become more favorable than in the past (Howlin, 1997). Also, through the accumulation of decades of research, it has been made clear that ASD will not be completely cured nor will there be a dramatic improvement in symptoms. However, therapeutic educational methods have been developed which are effective in facilitating better development in these children, and these methods have been widely adopted (Chawarska, Klin and Volkmar, 2008).

On the basis of the above, it can be said that in order to properly support children with ASD, it is necessary to intervene from an early stage using appropriate treatment methods and early detection. However, in order to make support truly effective, it is necessary to clarify the needs of the child receiving support and their family and create specific treatments and a system which takes these needs into account. This is where the significance of this report lies.

Regarding the support systems for children with ASD, there were naturally various differences in the three countries we studied. The differences which became

clear by analyzing the survey results reflect the differences in these systems, and we can assume that these differences will also reveal the issues to be resolved. In addition, we expect that support issues unique to the characteristics of ASD will also be revealed by the points of commonality found in these data.

Here, we need to point out that the upper age limit of the children targeted by this study was fifteen years, so we cannot take up issues pertaining to work or autonomous social life. These issues are extremely important from the standpoint of lifelong development, but the pursuit of the problems related to these points is an issue for future research.

Next, we would like to discuss what we paid attention to in our analysis. Our first focus was to elicit the various needs that exist in daily life. Several prior studies have already presented survey data on such diverse needs (Lu, Takahashi, 2006; Maeda, Arai, Inoue, Zhang, Araki, Araki, Takeuchi, 2009; Maeda, Kawano, Araki, Araki, Morimitsu, Yoshida, 2007; Song, Ito, Watanabe, 2004), and this study can also be situated as an extension of such prior research. What makes this study unique, however, is its comparison of three countries. Through this comparison, it is hoped clues to a more solid understanding of the meaning of individual needs can be obtained.

Another area we focused our attention on was various problems regarding early detection. In Japan, due to the spread of a health examination system that targets infants, it has become possible to detect various disorders at an early stage. However, regarding ASD, the assessment for detection is difficult, and, particularly in cases that are not accompanied by mental retardation, there is a tendency for it to be discovered late. It can be said that the timing of detection is a major factor in the future development of children with ASD. There are also issues to be examined regarding the amount of time between detection (indication) and diagnosis. According to Natsubori (2001), the parents of these

children have doubts, and even if the possibility of ASD is pointed out to them during a health examination, a comparison to children with Down syndrome made it clear that a lot of time passed before a definite diagnosis was made. Natsubori also pointed out that this might be one of the reasons that acceptance of the disorder was difficult.

Maeda, Inoue, Arai, Araki, Takeuchi and Araki, who analyzed the Japanese survey data a previous paper (2010), did a comparison of the data from the three countries in the present study and found that for children in the ASD group the "awareness" period was around the ages of 1-2, "indication" was from around the ages of 1-2 up to the ages of 3-4, and the "diagnosis" period was mostly around the ages of 3-4. This contrasts with the results from the mental retardation (MR) group, where most of the parents experienced "awareness," "indication," and "diagnosis" within six months of their child's birth. This suggests that the "time lag" unique to children with ASD is one reason that the parents of children with ASD experience anxiety and psychological conflict different from that of parents of children with MR.

It was found that there were many cases in which intervention began before a diagnosis was made, however, and this may have had a positive influence on the parents' perceptions of their children with disorders.

The third area we focused on was needs pertaining to specific support. The children targeted by this survey all had experience receiving some kind of support. Since the support system varies by country, a simple comparison cannot be done, but how the parents assessed the experience of receiving support is a valid point to examine from the perspective of improving support. Also, the experience of receiving support gives rise to awareness regarding areas where they felt a need but no support could be obtained. Clarifying what types of specific support they desire, regardless of whether they can be implemented immediately,

can be said to be an important step towards developing future improvements. Keeping these perspectives in mind, we will now present both the issues common to all three countries and particular to each country.

2. Purpose

The purpose of this study is to clarify the needs of children with ASD in Japan, China and Vietnam, and, through a comparison of these needs, to both clarify the issues related to support common to all three countries and examine the issues related to support particular to each country.

3. Method

3-(1) Participants

In the questionnaire regarding the special needs of children with developmental disorders and their families in three countries, Japan, China and Vietnam, valid responses were obtained from 209 people in japan, 224 people in China, and 249 people in Vietnam. In each country, the majority of the people targeted by this study lived in or near a major city (in Japan, in or near Kyoto City; in China, in or near the cities of Beijing and Shanghai; in Vietnam, in or near the cities of Hanoi and Ho Chi Minh City).

Table 1. Number of partipants analyzed in this research

	Participants in this research(%)	Total
Japan	108(51.7)	209
China	125(55.8)	224
Vietnam	94(37.8)	249

Among the valid responses on the questionnaire sheet, those who responded that their child had "a developmental disorder (autism, Asperger disorder)" as their primary disorder were targeted for analysis. In Japan, 51.7% of all valid

responses (108 people) were targeted for analysis; in China, the rate was 55.8% (125 people) and in Vietnam it was 37.8% (94 people). Table 1 shows the total number of valid responses in each country (Total) and the targets of analysis in this study (participants in this research).

Table 2 shows the number of participants analyzed by gender (%). As can be seen in this table, there was a high proportion of boys in all countries. Generally speaking the incidence rate of autism spectrum disorder is higher in boys than in girls, so we can assume that this trend appears here as well.

Table 2. Sex of participants (%)

	Male	Female	Total
Japan	87(80.6)	21(19.4)	108(100.0)
China	104(83.2)	21(16.8)	125(100.0)
Vietnam	87(93.5)	6(6.5)	93(100.0)

The affiliations of the children of the survey participants are shown in Table 3, and the number of children by age is shown in Table 4. When the age clusters were broadly divided into five years and under and six years and older, we can see that in Japan over 60 percent of the children of participants were six years and older. In China, however, the number of children in each of these two age categories was virtually the same, and in Vietnam over 60 percent were five years old or younger (Table 5). When thinking about the characteristics of the children whose parents participated in this study, whether they are not yet school-aged or school-aged is a factor to be considered. We will now examine the analysis of the characteristics of the children of the participants.

Table 3. The affiliations of the children of the survey participants (%)

	Day nursery or kindergarten	Institution/ day care for preschool children with special needs	Institution/ day care for preschool and school children with special needs	Elementary school	Junior high school	School for special needs	Home	Other
Japan	29(27.1)	13(12.1)	0(0.0)	19(17.8)	5(4.7)	40(37.4)	1(0.9)	0(0.0)
China	9(7.2)	29(23.2)	12(9.6)	1(0.8)	0(0.0)	67(53.6)	7(5.6)	0(0.0)
Vietnam	15(16.7)	6(6.7)	2(2.2)	5(5.6)	0(0.0)	57(63.3)	4(4.4)	1(1.1)

Table 4. The number of children by age

Age	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Japan	1(0.9)	4(3.7)	14(13.0)	19(17.6)	15(13.9)	4(3.7)	12(11.2)	8(7.4)	4(3.7)	5(4.6)	8(7.4)	5(4.6)	7(6.5)	2(1.9)
China	2(1.6)	21(16.8)	23(18.4)	20(16.0)	11(8.8)	9(7.2)	6(4.8)	6(4.8)	10(8.0)	3(2.4)	4(3.2)	2(1.6)	4(3.2)	4(3.2)
Vietnam	8(8.6)	17(18.3)	16(17.2)	18(19.4)	7(7.5)	9(9.7)	4(4.3)	5(5.4)	2(2.2)	3(3.2)	1(1.1)	2(2.2)	1(1.1)	0(0.0)

Table 5. Age-grouping of participants

		below 5 yr	above 6 yr	Total
JAPAN	Number	38	70	108
	%	35.2	64.8	100.0
CHINA	Number	66	59	125
	%	52.8	47.2	100.0
VIETNAM	Number	59	34	93
	%	63.4	36.6	100.0
Total	Number	163	163	326
	%	50.0	50.0	100.0

3-(2) Contents of the Survey

The written questionnaire consisted of 48 items in the following eight areas: 1) Basic Characteristics of the Child of the Participant, 2) Family Economic Situation, 3) Problems or Anxieties in Daily Life, 4) State of Child Rearing, 5) Desires for Economic, Lifestyle or Child Rearing Support, 6) The Child's Future, 7) Detection and Notification of the Child's Disorder, and 8) Early Treatment of the Child. Regarding the specifics of individual question items, we will discuss these to an appropriate extent in the Results section.

3-(3) Analyses

Our analysis consisted mainly of clarifying the features of each country by examining the differences and similarities between Japan, China and Vietnam regarding each item of the questionnaire. Analysis was therefore primarily conducted at the descriptive statistical level, focusing on indicating the number of people (%) in each category by country. However, regarding the variables "degree of necessity of nursing care" and "state of the family finances (amount

of extra money)," multiple regression analysis was conducted as necessary in order to seek out relationships with other variables in each country. SPSS 16.0J for Windows was used for statistical analyses.

4. Results

4-(1) Demographic Variables of the Children of Participants

Some of the children's demographic characteristics have already been shown in Tables 1, 2, 3 and 4 in the "Analysis of the Children of Participants" section. Here we would like to examine the children's living conditions and cohabitating family members. First, looking at the degree to which they are capable of independence (Figure 1), in all three countries "partial nursing assistance" was the most common response. While the proportion requiring "total nursing care" was less than 10% in Japan and China, however, it was a much higher 30% in Vietnam. Possible reasons for this difference include the fact that the percentage of survey participants with young children in Vietnam was comparatively large and that the degree of their disorder was severe.

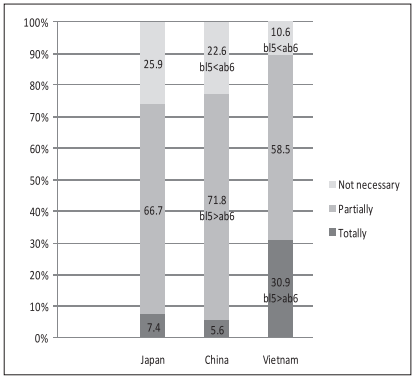

Figure 1. Degree of help needed for participants

When the relationship between the degree of personal independence and the two age groups (five years and younger and six years and older) was viewed through a χ^2 test by country, a significant relationship was seen in China and Vietnam. When residual analysis was then performed on the data from China and Vietnam, the differences presented in Figure 1 were seen. As anticipated, this suggests that the percentage of the "nursing help needed" group in Vietnam

made up of children five years old and younger was significantly larger than the percentage made up of children six years old and older.

Looking at the degree to which the children were able to communicate with others (Figure 2), China had the highest percentage who could not communicate with others (29.3%), and in Vietnam the percentage was 14%. Looking at these results, it can be inferred but cannot be said with absolute certainty that difficulties in communication affected the degree to which nursing help is desired and the percentage of those receiving assistance in Vietnam becoming high. In addition, when a χ^2 test was conducted on the relationship between age groups by country, no significant relationship was found in any of the three countries examined.

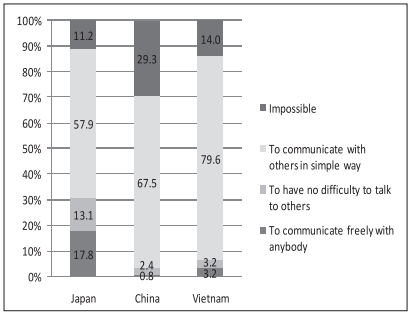

Figure 2. Communication ability lebel

Looking at Figure 3, difficulties in daily life, we can see that the percentage who "require assistance at all times" was highest in Vietnam. This trend can be said to be similar to the degree to which nursing assistance is required as was seen earlier. In addition, when a χ^2 test was conducted on the relationship between age groups by country, no significant relationship was found in any of the countries.

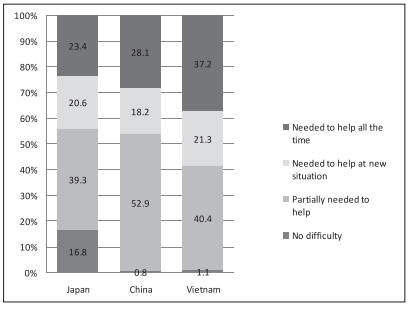

Figure 3. Difficulty in daily life

Next, we would like to look at the degree of hyperactivity. In this study hyperactivity was described in terms of three levels: "needs to be monitored at all times," "needs to be monitored in some situations," and "not hyperactive" (Figure 4). Looking at Figure 4, as expected the percentage of children with the most severe level of hyperactivity was highest in Vietnam.

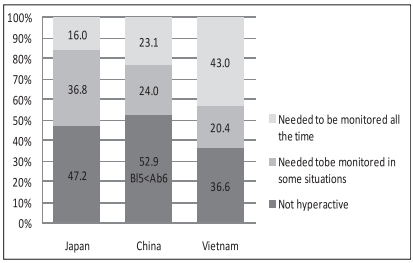

Figure 4. Level of hyperactivity

From these results it can be inferred that a high degree of assistance has a strong relationship to difficulties in everyday living and the degree of hyperactivity. Moreover, when a χ^2 test was conducted on the relationship between age clusters by country, a significant relationship was found only in China. When residual analysis was conducted, it was shown that in the group that was not hyperactive the percentage of children aged six years and over was larger than that of children who were five years old and younger.

Thus far we have examined the children's condition. Next, in order to see the relationship among the variables, multiple regression analysis was conducted by country with "degree of independence (degree of help needed)" as the dependent variable, and "age," "degree of communication ability," "degree of difficulty in everyday life," and "degree of hyperactivity" as the independent variables. The results of the multiple regression analysis are shown in Tables 6, 7 and 8. Looking at these results, all three countries showed sig-

Table 6 Regression analysis on "Help needed": Japanese data

	β
Age	0.25 **
Communicate with anybody	-0.28 **
Difficulty in daily life	-0.34 ***
HyperactiveLevel	0.01

a.dependent variable: Help needed
**: p < .01 ***: p < .001

Table 7 Regression analysis on "Help needed": Chinese data

	β
Age	0.37 ***
Communicate with anybody	-0.11
Difficulty in daily life	-0.32 ***
Hyperactive Level	0.04

a.dependent variable: Help needed
**: p < .01 ***: p < .001

nificant loadings regarding age and degree of difficulty in everyday life, but while the degree of communication ability was significant in Japan, Vietnam differed in that the degree of hyperactivity was significant.

Table 8 Regression analysis on "Help needed": Vietnamese data

	β
Age	0.47 ***
Communicate with anybody	-0.09
Difficulty in daily life	-0.25 **
HyperactiveLevel	0.17 *

a.dependent variable: Help needed
*: p < .05 **: p < .01 ***: p < .001

Table 9 shows the number and percentage of family members who live with the child in question in each country. In contrast to Japan and Vietnam, where the percentage of children who had one sibling was over 60 percent, the fact that in China the percentage was less than 20 percent can be assumed to be a reflection of differences in government policy. Also, the percentage living together with their grandparents was highest in China, and the percentage living with a grandmother in Vietnam was comparatively high at close to 40 percent.

Table 9. Family members who live with the child

	With father	With mother	Number of siblings living with				With grandfather	With grandmother	Number of relatives living with		
			0	1	2	3			0	1	4
Japan	100(92.6)	105(92.7)	32(29.6)	69(63.9)	6(5.6)	1(0.9)	15(13.9)	19(17.6)	104(96.3)	3(2.8)	1(0.9)
China	106(85.5)	114(92.7)	101(82.1)	22(17.9)	0(0.0)	0(0.0)	39(31.5)	52(41.9)	109(87.9)	15(12.1)	0(0.0)
Vietnam	83(91.2)	84(91.3)	33(35.9)	59(64.1)	0(0.0)	0(0.0)	16(17.8)	34(37.8)	62(69.7)	27(30.3)	0(0.0)

Table 10. Father's and Mother's occcupation(%)

		Specialist	Commerce/ service	Industry	Agriculture/ fishery	Officer	Day labor	Unemployed	Other
Japan	Father	20(20.6)	35(36.1)	23(23.7)	0(0.0)	8(8.2)	0(0.0)	0(0.0)	11(11.3)
	Mother	5(4.9)	7(6.9)	3(2.9)	0(0.0)	2(2.0)	2(2.0)	66(64.7)	17(16.7)
China	Father	43(34.7)	26(21.0)	19(15.3)	4(3.2)	8(6.5)	8(6.5)	4(3.2)	12(9.7)
	Mother	42(33.6)	12(9.6)	8(6.4)	5(4.0)	6(4.8)	4(3.2)	34(27.2)	14(11.2)
Vietnam	Father	33(35.1)	13(13.8)	17(18.1)	3(3.2)	15(16.0)	1(1.1)	2(2.1)	10(10.6)
	Mother	29(31.2)	13(14.0)	11(11.8)	1(1.1)	13(14.0)	0(0.0)	12(12.9)	14(15.1)

4-(2) Economic Situation of Families

Figure 5 shows the family's primary breadwinner. While the rate of responses of "father" was highest at 84.1% in Japan, in China and Vietnam the rate of "father" responses was also somewhat high at around 40%, and "both mother and father work" was close to 50%, exceeding 40% in both countries.

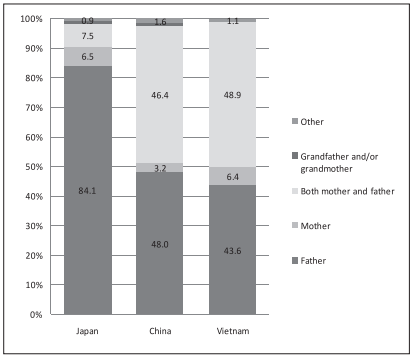

Figure 5. Who earns mainly for participants family

The results seen in China and Vietnam can be considered a reflection of the general working conditions in both countries. However, considering that in both countries "both parents work" is said to be the norm and that the mother bears the primary burden of supporting the child, it may be the case that the father has become the primary breadwinner in over 40 percent of households as a result of the mother having to assume this burden.

The parents' occupations are presented in Table 10. While the percentage of families in which both parents had professions was more than 30% in China and Vietnam, families in which the father had a profession exceeded 20% but those in which the mother had a profession remained at a mere 4.9% in Japan. Moreover, 64.7% of Japanese mothers did not work. The fact that even in China 27.2% of mothers did not work is worth noting.

Looking at "Type of Habitation" (Table 11), in contrast to a comparatively high ratio of home ownership in Japan and Vietnam, the ratio of collective housing ownership was high in China.

Table 11. Type of habitation (%)

	House of one's own	Rented house	Apartment/ flat of one's own	Rented apartment/ flat	Official residence	Living with participant's grandparents	Other
Japan	70(65.4)	5(4.7)	12(11.2)	15(14.0)	0(0.0)	5(4.7)	0(0.0)
China	17(13.7)	4(3.2)	54(43.5)	5(4.0)	12(9.7)	23(18.5)	9(7.3)
Vietnam	47(50.0)	17(18.1)	13(13.8)	1(1.1)	2(2.1)	13(13.8)	1(1.1)

Table 12. Major Living Expenses

		Food	Water and energy	Education and care for child(ren)	Transportation expense	Medical bill	Cost for habitatiomn	Repayment for loan	Other
Japan	Number	68	33	36	12	15	40	15	10
	%	63.6	30.8	33.6	11.2	14.0	37.4	14.0	9.3
China	Number	51	30	88	21	35	21	26	2
	%	41.1	24.2	71.0	16.9	28.2	16.9	21.0	1.6
Vietnam	Number	83	78	89	65	68	21	16	2
	%	89.2	83.9	95.7	69.9	73.1	22.6	17.2	2.2

Looking at "Major Living Expenses" (Table 12), in contrast to Japan where a majority of respondents selected "food," in China the percentage who selected "educational expenses" was highest. In Vietnam there were five responses selected by a majority of respondents: "food," "water and electricity," "educational expenses," "transportation costs," and "medical expenses."

Table 13. Household finances evaluation (Amount of Extra Money)

		Good	Somewhat good	Somewhat difficult	difficult
Japan	Number	5	47	41	13
	%	4.7	44.3	38.7	12.3
China	Number	8	32	52	32
	%	6.5	25.8	41.9	25.8
Vietnam	Number	10	33	39	12
	%	10.6	35.1	41.5	12.8

The "Household Finances Evaluation (Amount of Extra Money)" response data are presented in Table 13. Looking at this table, in China a high proportion of people choosing "difficult" can be seen. In order to see which types of living expenses contribute to the perception of "extra money," multiple regression analysis was conducted with the household financial situation as a dependent variable and the existence/non-

existence of specific types of daily living expenses as an independent variable. The loadings on each dependent variable are presented in Tables 14, 15 and 16.

Table 14. Multiple regression analysis: Japan (n=106)

	β
Food	0.120
Water and energy	0.104
Education and care for child	-0.146
Transportation expenses	0.041
Medical bill	-0.011
Cost for habitaion	0.157
Repayment for loan	0.285 **
Household cost-Other	0.004

Dependent variable: Amount of Extra Money
**: p < 0.01

Table 15. Multiple regression analysis: China (n=124)

	β
Food	-0.188
Water and energy	0.143
Education and care for child	0.173
Transportation expenses	-0.082
Medical bill	0.288 **
Cost for habitaion	-0.130
Repayment for loan	0.186 *
Household cost-Other	0.140

Dependent variable: Amount of Extra Money
**: p < 0.01 *:p < 0.05

Table 16. Multiple regression analysis: Vietnam (n=93)

	β
Food	0.245 *
Water and energy	-0.316 *
Education and care for child	-0.048
Transportation expenses	0.061
Medical bill	0.082
Cost for habitaion	0.406 ***
Repayment for loan	0.212 *
Household cost-Other	-0.123

Dependent variable: Amount of Extra Money
***: p < 0.001 **: p < 0.01 *:p < 0.05

Looking at the results of the multiple regression analysis, "repaying debt" demonstrated significant positive loading in all three countries, as did "medical expenses" in China and "housing expenses" and "food expenses" in Vietnam. Looking at the selection rate of items demonstrating significant positive loadings in Table 12, although "food expenses" was selected at a high rate in Vietnam at 89.2%, it was not selected as frequently in the other two countries. Considered from this angle, even when there are few items selected, it can be said that the participants who selected these kinds of items have a strong tendency to feel that their lives are difficult.

4-(3) Worries and Anxieties in Daily Life

Looking at Confidant/Consultant on Matters Related to Daily Life, Education, Medical Treatment and Welfare (Table 17), in all three countries most parents had "someone at a school or facility (a teacher or staff member)." Respondents in both Japan and Vietnam also had a strong tendency to confide in their spouse. In Japan there were also many respondents who confided in "other parents of a child with a disability."

Table 17. Confidant/consultant for daily life, education, medical treatment and welfare

		Spouse	Child's grandfather	Child's grandmother	Relative	Friend	Neighbor	Another parent with disablity child	Teacher	Colleague	Member of same religious	other
Japan	Number	76	19	49	12	50	13	67	74	5	1	5
	%	70.4	17.6	45.4	11.1	46.3	12.0	62.0	68.5	4.6	0.9	4.6
China	Number	41	12	18	15	28	12	31	76	8	1	14
	%	34.7	10.2	15.3	12.7	23.7	10.2	26.3	64.4	6.8	0.8	11.9
Vietnam	Number	65	11	16	15	17	8	40	61	14	1	2
	%	73.0	12.4	18.0	13.3	19.1	9.0	44.9	68.5	15.7	1.1	2.2

Looking at "Current Worries and Anxieties" (Table 18), "lack of free time" was frequently selected in all three countries (over 40% of respondents). In Japan there were no other responses with a higher selection rate, but in China and Vietnam, "not enough help" was selected by 56.1% and 43.0% of respondents respectively, and in Vietnam "cannot receive rehabilitation or training" was the most frequent response at 72.0%. Furthermore, in both China and Vietnam we saw that over 40% of respondents felt that "educational expenses are a burden."

Table 18. Current worries and anxieties

		Illness or accident of person earning living expense	Illness or accident of family member	Burden of care	Unable to receive rehabilitation	Burden of educational expense	Burden of medical expense	Low income	Paying off the debt	Lack of free time	Other
Japan	Number	17	27	18	5	21	8	24	22	44	30
	%	16.5	26.2	17.5	4.9	20.4	7.8	23.3	21.4	42.7	29.1
China	Number	36	30	69	42	60	34	40	19	51	13
	%	29.3	24.4	56.1	34.1	48.8	27.6	32.5	15.4	41.5	10.6
Vietnam	Number	37	31	40	67	40	19	33	11	39	5
	%	39.8	33.3	43.0	72.0	43.0	20.4	35.5	11.8	42.4	5.3

Concerning "Worries and Anxieties about the Future" (Table 19), in contrast to Japan and Vietnam where it was the most commonly selected response, "participant's employment" was not selected by very many respondents in China. In China, the responses that were chosen almost 50% of the time were "not enough help" and "educational expenses are a burden." The response that had the highest rate of selection in Vietnam was "parents' old age" (77.4%).

Table 19. Worries and anxieties about the future

		Illness or accident of person earning living expense	Illness or accident of family member	Burden of care	Unable to receive rehabilitation	Burden of educational expense	Burden of medical expense	Sibling's marriage	Participant's employment	Participant's marriage	Parents' old age life	Other
Japan	Number	39	47	18	2	23	9	37	85	46	49	18
	%	36.8	44.3	17.0	1.9	21.7	8.5	34.9	80.2	43.4	46.2	17.0
China	Number	58	48	60	46	56	46	10	42	51	19	0
	%	47.9	39.7	49.6	38.0	46.3	38.0	8.3	34.7	42.1	15.7	0.0
Vietnam	Number	44	38	34	57	33	18	12	58	36	72	5
	%	47.8	41.3	37.0	62.0	35.9	19.6	13.0	63.0	39.1	77.4	5.3

4-(4) The State of Caregiving

Regarding the "Primary Caregiver" (Table 20), in all three countries "mother" had the highest proportion of responses, but it is worth noting that in China and Vietnam the proportion of participants who responded "grandparents" was over 10%.

Table 20. Primary caregiver

		Mother	Father	Grandparent	Relative	Sibling	Housekeeper	No care giver	Other
Japan	Number	100	6	2	0	0	0	0	0
	%	92.6	5.6	1.9	0.0	0.0	0.0	0.0	0.0
China	Number	91	11	13	3	0	4	1	1
	%	73.4	8.9	10.5	2.4	0.0	3.2	0.8	0.8
Vietnam	Number	71	7	10	0	0	0	0	5
	%	76.3	7.5	10.8	0.0	0.0	0.0	0.0	5.4

Looking at "Burdens and Anxieties Related to Care giving" (Table 21), the most frequent selection in all three countries was "care related to outings." Many of the other responses also had a selection rate of 40% or higher in China and Vietnam Responses with a particularly high selection rate were finding care and treatment specialists" in China and "finding friends" in Vietnam.

Table 21. Burdens and anxieties related to care giving

		Caring of feeding	Cainr of bath and voidance	Caing of outing	Caing of going to school	Being as a companion to	Finding a friend	Finding a specialist on education	Finding a specialist on cure and care	Finding an institution available	Finding a service available	Other
Japan	Number	28	20	54	15	43	32	15	21	25	32	6
	%	26.9	19.2	51.9	14.4	41.3	30.8	14.4	20.2	24.0	30.8	5.8
China	Number	40	26	66	62	48	63	62	73	66	68	3
	%	32.0	20.8	52.8	49.6	38.4	50.4	49.6	58.4	52.8	54.4	2.4
Vietnam	Number	34	25	41	24	34	58	44	31	41	38	2
	%	37.4	27.5	45.1	26.4	37.4	63.7	48.4	34.1	45.1	41.8	2.1

The "Caregiver's Own Anxieties and Burdens (Table 22) can be considered relatively similar in all three countries. Two responses, "caregiver's own health" and "getting irritated easily" had a selection rate of over 40% in all three countries, and although the selection rate of "having little free time" was lower in Japan, it is still a concern many Japanese caregivers had in common with respondents from the other countries. In China, the percentage of participants who responded "getting tired of caring for the child" was 57.9%, and the fact that this percentage was markedly higher than in the other two countries can be said to be a distinguishing feature.

Table 22. Caregiver's own anxieties and burdens

		Parent's own health	Unable to go out	Unable to work	Easily getting irritated	Gettting tired of caring for child	Having little time on parent's side	Unable to find a confidant/ consultant	Other
Japan	Number	49	15	37	55	18	40	7	9
	%	47.1	14.4	35.6	52.9	17.3	38.5	6.7	8.7
China	Number	65	25	59	62	70	70	24	5
	%	53.7	20.7	48.8	51.2	57.9	57.9	19.8	4.1
Vietnam	Number	47	4	35	38	26	47	19	5
	%	51.1	4.3	38.0	41.3	28.3	51.1	20.7	5.3

4-(5) Desires Regarding Economic, Lifestyle and Caregiving Support

Regarding "Desired Economic Support" (Table 23), the response that had the highest selection rate in all three countries was "improvement/ increase in the family allowance for children with special needs." The percentage responding "improvement in aid for medical expenses" was high in all three countries, and this tendency was particularly evident in China. Regarding "Desired Support in Daily Life" (Table 24), the selection rate of "respite" (a short-stay service) was high in all three countries. This result can be assumed to

Table 23. Desired Economic Support

		To improve/ increase family allowance for child with special needs	To fix up a job for parent	To improve habitation	To improve in aid for medical expenses	Other
Japan	Number	72	37	17	40	5
	%	69.9	35.9	16.5	38.8	4.9
China	Number	111	20	15	78	15
	%	90.2	16.3	12.2	63.4	12.2
Vietnam	Number	79	23	17	38	3
	%	88.8	25.8	19.1	42.7	3.2

Table 24. Desired Support in Daily Life

		Informing about guidance office/center for children	Creating more windows for conultation	Introducing and sending a helper	Creating more short-stay service	Other
Japan	Number	37	44	31	55	4
	%	37.8	44.9	31.6	56.1	4.1
China	Number	46	53	45	99	9
	%	38.8	44.2	37.5	82.5	7.5
Vietnam	Number	28	34	59	63	3
	%	30.4	37.0	64.1	68.5	3.2

be related to the high levels of anxiety common to participants in all three countries seen in "Worries and Anxieties at Present" (Table 18) and the "Caregiver's Own Anxieties and Burdens" (Table 22).

In "Desired Support for Child Rearing" (Table 25), "improving child care centers" was the most common response in China and Vietnam, exceeding 80%, and it was comparatively high in Japan as well at 45.1%. The selection rate of "increasing the number of social workers/consultants" was also high in all three countries, having been chosen byaround 50% of participants in each country.

Table 25. Desired support for child rearing

		Increasing supports by volunteers	Increasing social workers/ consultants	Improving child care center	Other
Japan	Number	45	54	46	10
	%	44.1	52.9	45.1	9.8
China	Number	45	58	107	6
	%	36.6	47.5	87.0	4.9
Vietnam	Number	38	46	75	6
	%	41.3	50.0	81.5	6.4

4-(6) The Children's Future

In the "Primary Hope for Your Child's Future" item (Table 26), the selection rate for "be able to live independently" was the highest in all three countries. In a sense this response can be said to be a hope for the future that serves as a premise for and encapsulates the other selections.

Table 26. Primary Hope for Your Child's Future

		To become independent	To enter institution	To work at a workshop	To get a job and saraly	To get married	To be taken care for by child's own family	Other
Japan	Number	6.8	8	12	17	2	0	1
	%	63.0	7.4	11.1	15.7	1.9	0.0	0.9
China	Number	83	5	16	14	1	1	3
	%	67.5	4.1	13.0	11.4	0.8	0.8	2.4
Vietnam	Number	75	1	2	5	1	1	4
	%	84.3	1.1	2.2	5.6	1.1	1.1	4.5

4-(7) Detection and Notification of the Disorder

Looking at "Abnormalities during Pregnancy" (Table 27), we see that the occurrence rate in China was twice that of Japan and Vietnam. Regarding "Who Noticed/Suspected the Child's Developmental Delay or Disability for the First Time" (Table 28), in all three countries the most common response was "the mother." We also saw that in Japan the percentage was high for "public health nurse," and in China the percentage for "relative" was comparatively high.

Table 27. Abnormalities during Pregnancy

		Yes
Japan	Number	14
	%	13.1
China	Number	37
	%	30.6
Vietnam	Number	14
	%	15.2

Table 28. Who Noticed/Suspected the Child's Developmental Delay or Disability for the First Time

		Mother	Father	Relative	Neighbor	Friend	Public health nurse	Teacher at kindergarten/ day nursery	School teacher	Doctor	Psychologist	Other
Japan	Number	61	7	5	0	0	19	7	1	5	2	1
	%	56.5	6.5	4.6	0.0	0.0	17.6	6.5	0.9	4.6	1.9	0.9
China	Number	72	8	20	3	2	1	9	0	3	0	3
	%	59.5	6.6	16.5	2.5	1.7	0.8	7.4	0.0	2.5	0.0	2.5
Vietnam	Number	61	9	2	1	0	2	3	0	2	2	12
	%	64.9	9.6	2.1	1.1	0.0	2.1	3.2	0.0	2.1	2.1	12.5

Looking at the "When Did You Notice/Suspect Your Child's Developmental Delay or Disability for the First Time?" item (Figure 6), we can see that in Japan the "noticing" peak is half a year earlier than in the other two countries, occurring at one and half years of age.

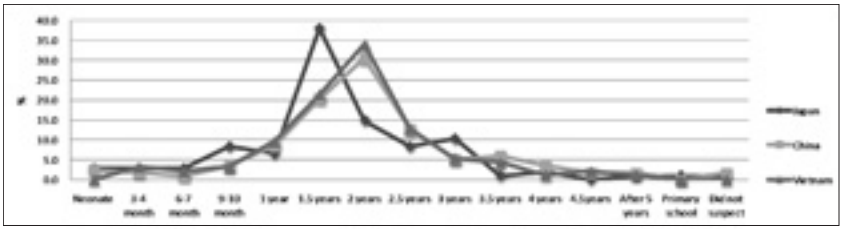

Figure 6. When did you notice/suspect your child's developmental delay or disability for the first time?

In Table 29, "Where Were You Informed of Your Child's Developmental Delay or Disability Based on a Diagnosis," in contrast to Japan, where "health care center" was the most frequent response, in China and Vietnam "hospital" was selected most frequently.

Table 29. Where were you informed your child's developmental delay or disability?

		Kindergarten or day nursery	Health care center	Hospital	Child consultation center	Counseling center at university	School	Other
Japan	Number	10	73	13	9	0	0	3
	%	9.3	67.6	12.0	8.3	0.0	0.0	2.8
China	Number	11	2	92	9	3	0	3
	%	9.2	1.7	76.7	7.5	2.5	0.0	2.5
Vietnam	Number	6	7	54	9	2	1	8
	%	6.4	7.4	57.4	9.6	2.1	1.1	8.5

Looking at the "When Were You Informed About Your Child's Developmental Delay or Disability" item (Figure 7), similar to what was seen in the case of "noticing," the peak is reached half a year earlier in Japan than in the other two countries, occurring at the age of one year.

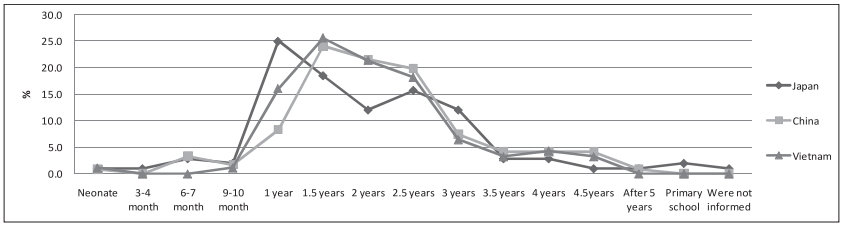

Figure 7. When were you informed your child's developmental delay or disability for the first time?

Regarding the "Type of Disability When Your Child Was Diagnosed" item (Table 30), in Japan all of the participants chose "has a developmental disorder" (autism or Asperger's disorder), and in Vietnam 80.6% also chose this response. Since the subjects of this study are only those who selected "has a developmental disorder" (autism or Asperger's disorder) in response to a question about their child's current condition, this may indicate that diagnoses are prudently issued in Japan. In China, however, the most frequent selection was "verbal development delay" at 87.6%. There are several possible interpretations of the Chinese results, such as that the initial diagnosis is not accurate or that the parents are not being told the name of their child's disorder.

Table 30. Type of disability when your child was diagnosed

		Delay of intellectual development	Delay of motor development	Delay of verbal development	Developmental disorder (ASD)	Developmental disorder (ADHD/LD)	Behavioral problem	Other	Not yet diagnosed
Japan	Number	0	0	0	108	0	0	0	0
	%	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0
China	Number	1	0	99	11	2	0	0	0
	%	0.9	0.0	87.6	9.7	1.8	0.0	0.0	0.0
Vietnam	Number	2	0	12	75	3	0	1	0
	%	2.2	0.0	12.9	80.6	3.2	0.0	1.1	0.0

Looking at the "When Were You Informed About Your Child's Developmental Delay or Disability" data (Figure 8), unlike what was seen in the case of "noticing" and "indication," the notification of a diagnosis was quicker in China and Vietnam, with the peak occurring one year later in Japan.

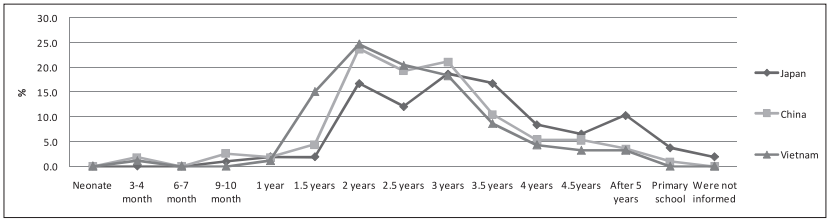

Figure 8. When were you informed your child's developmental delayor disability based on diagnosis?

Regarding "What Did You Feel When You Were Told the Diagnosis" (Table 31), the most frequent responses in all three countries were "felt shocked" and "became anxious about the future." Looking at the distinguishing characteristics of responses in each country, in Japan the selection rate was comparatively high for "thought the diagnosis made sense," in China "unable to accept the diagnosis" was a comparatively frequent response, and "wanted to make the child more like a normal child" was selected with greater frequency in Vietnam.

Table 31. What did you feel when you were told the diagnosis

		Unable to accept	Shocked	Convincing the diagnosis	Getting anxious for the future	Feeling at ease not because of caring	Decreasing energy for child care	Having a dislike/ prejudice for the child	Wanting to make the child like a normal one	Pondering how to make the child recover	Other
Japan	Number	15	64	50	62	19	11	3	39	42	11
	%	14.0	59.8	46.7	57.9	17.8	10.3	2.8	36.4	39.3	10.4
China	Number	62	51	18	77	2	3	1	7	79	8
	%	53.0	43.9	15.4	65.8	1.7	2.6	0.9	6.0	67.5	6.8
Vietnam	Number	14	59	30	74	1	5	0	73	73	19
	%	14.9	62.8	31.9	78.7	1.1	5.3	0.0	77.7	77.7	8.5

Looking at the "Good Points When You Consulted a Doctor for Your Child's Disability/Delay" item (Table 32), in all three countries "getting good and specific advice on child rearing" and "getting good and specific advice on the child's disability/disorder" had the highest selection percentages. In Japan and Vietnam "received consultation on points of concern about the child" was also frequently selected.

Table 32. Good points when you consulted a doctor for your child's disabilityb /delay

		Getting a good and specific advice for bringing-up	Getting a good and specific advice for disability/ disorder	Getting accepted our feeling	Consulting about what you concern on your child	Nothing	Not yet consulted
Japan	Number	50	73	30	66	6	0
	%	46.7	68.2	28.0	61.7	5.6	0.0
China	Number	49	51	17	23	29	5
	%	43.0	44.7	14.9	20.2	25.4	4.4
Vietnam	Number	77	55	18	65	1	1
	%	82.8	59.1	19.4	69.9	1.1	1.1

Regarding "Desires Concerning Hospitals and Special Instruction" (Table 33), several responses had high selection rates in all three countries: "increase the number of specialist doctors," "provide support for parents," and "suggest what parents can do for the child." "Increase the number of institutions which can diagnose disabilities" was a frequently selected response in Japan and China, and "allow enough time for diagnosis and counseling" was a frequently selected response in China and Vietnam.

Table 33. Desires Concerning Hospitals and Special Instruction

		To increase special doctor	To support for parent	To increase institution which can diagnose disability	To uniform criteria of diagnosis	To make explanation much easier	To make enough time for diagnosis and counseling	To tell what parents can do for the child	Other	Nothing
Japan	Number	68	43	60	17	22	41	57	19	2
	%	63.6	40.2	56.1	15.9	20.6	38.3	53.3	17.8	1.9
China	Number	73	48	79	27	27	43	81	3	0
	%	73.7	48.5	79.8	27.3	27.3	43.4	81.8	3.0	0.0
Vietnam	Number	41	71	37	30	31	38	74	0	1
	%	43.6	75.5	39.4	31.9	33.0	40.4	78.7	0.0	1.1

4-(8) Early Intervention and Early Education

As can be seen in Table 34, around 85-92% of the children of the participants in this study had received some type of early intervention or early education. The results of the "When Did You Receive Some Form of Intervention/Early Education Program for the First Time" item (Table 35) were largely the same in all three countries, and we can see that first interventions/treatment programs were concentrated between the ages of two and four.

Table 34. Did you receive any intervention/early education program

		Yes
Japan	Number	98
	%	90.7
China	Number	105
	%	85.4
Vietnam	Number	85
	%	92.4

Table 35. When did you receive any intervention/early education program for the first time

		Birth to 6 months	6-12 months	1-2 years	2-3 years	3-4 years	4-5 years	5-6 years	6-7 years	> 7 years
Japan	Number	0	0	18	29	29	14	5	1	0
	%	0.0	0.0	18.8	30.2	30.2	14.6	5.2	1.0	0.0
China	Number	3	2	6	38	46	6	4	0	1
	%	2.8	1.9	5.7	35.8	43.4	5.7	3.8	0.0	0.9
Vietnam	Number	1	1	9	38	23	9	1	2	3
	%	1.1	1.1	10.3	43.7	26.4	10.3	1.1	2.3	3.4

Regarding the "Where Did Your Child Receive Early Intervention/Early Education Programs" item (Table 36), in contrast to Japan, where many respondents selected "public education center (fee based)," in China and Vietnam many selected "private education center." When asked to choose between group or individual therapy to describe their child's early intervention and early education program, in Japan many respondents selected group therapy, and in the other two countries, while the most common selection was "both," "individual therapy" was the second most frequent response (Table 37).

Table 36. Where did you receive any intervention/early education program

		Public training center - free for charge	Public trainig center - need to pay charge	Private traning center	Regular class in kindergarten/ day nursery	Special class in kindergarten/ day nursery	Nursery in school for children with special needs	Hospital	Counseling center at university	Home	Other
Japan	Number	31	47	22	26	3	1	11	5	3	7
	%	32.0	48.5	22.7	26.8	3.1	1.0	11.3	5.2	3.1	7.2
China	Number	2	22	68	17	13	7	19	2	18	1
	%	1.9	21.0	64.8	16.2	12.4	6.7	18.1	1.9	17.1	1.0
Vietnam※)	Number	4	4	26	3	9	13	8	10	3	6
	%	4.7	4.7	30.2	3.5	10.5	15.1	9.3	11.6	3.5	7.0

※) Only one item was chosen

Table 37. Type of program your child received for early intervention or early education

		Group therapy	Individual therapy	Both
Japan	Number	48	8	42
	%	49.0	8.2	42.9
China	Number	19	34	51
	%	18.3	32.7	49.0
Vietnam	Number	5	19	61
	%	5.9	22.4	71.8

Looking at the contents of the programs (Table 38), in contrast to Japan, where "no one particular therapy" was frequently chosen in addition to "play therapy," in China and Vietnam various specific therapies was selected.

Regarding the period of time participating in the program (Table 39), in contrast to the other two countries, in Japan it was possible for children to participate in a therapy program for a comparatively long period of time.

Table 38. Contents of the program

		Speech therpy	Occupational therpy	Behavioral therpy	Play therapy	Sensory integration therapy	Music therapy	Training for daily life	Not specific	Other
Japan	Number	29	40	11	44	23	21	25	11	7
	%	30.2	41.7	11.5	45.8	24.0	21.9	26.0	11.5	7.3
China	Number	64	61	68	31	71	28	43	4	4
	%	60.4	57.5	64.2	29.2	67.0	26.4	40.6	3.8	3.8
Vietnam	Number	75	15	66	51	45	30	65	1	2
	%	86.2	17.2	75.9	58.6	51.7	34.5	74.7	1.1	2.1

Table 39. How long have you received intervention/early education program

		< 6 months	6-12 months	1-2 years	2-3 years	3-4 years	4-5 yearas	5-6 years	> 6 years
Japan	Number	6	10	19	25	21	8	9	0
	%	6.1	10.2	19.4	25.5	21.4	8.2	9.2	0.0
China	Number	18	21	24	16	10	9	6	0
	%	17.3	20.2	23.1	15.4	9.6	8.7	5.8	0.0
Vietnam	Number	18	15	21	10	14	3	4	1
	%	20.9	17.4	24.4	11.6	16.3	3.5	4.7	1.2

Regarding the burdens related to their children receiving treatment (Table 40), all three countries had many respondents who selected the response "time." While both "manpower" and "money" was the most frequently selected burden in China, only "money" was the most frequently selected burden in Vietnam. "Could manage somehow" also had high selection rates in Vietnam.

Table 40. What were the burdens for received intervention/early education program

		Man power	Money	Time	Could manage somehow	Little burden	Other
Japan	Number	14	15	39	9	38	7
	%	14.4	15.5	40.2	9.3	39.2	7.2
China	Number	73	72	68	18	3	7
	%	69.5	68.6	64.8	17.1	2.9	6.7
Vietnam	Number	31	42	51	43	8	2
	%	37.3	50.6	61.4	51.8	9.6	2.1

Looking at the results concerning the good points of treatment programs (Table 41), all three countries had a high selection rate for "child developed." China and Vietnam both had high selection rates for "child's disability got better" and "child acquired basic life skills (eating, independence)," and "family members learned how to deal with the child" were common responses in Japan and China. Looking at the

Table 41. Good points when you received intervention/early education program

		Child developped	Child's disability/ disorder became better	Child acquired ability in daily life	Child made friend	Family member made cooperation with each other	Family member learned how to do with the child	Other
Japan	Number	53	16	29	12	24	65	18
	%	55.8	16.8	30.5	12.6	25.3	68.4	18.9
China	Number	74	75	73	10	27	59	4
	%	70.5	71.4	69.5	9.5	25.7	56.2	3.8
Vietnam	Number	73	49	37	19	27	17	3
	%	82.0	55.1	41.6	21.3	30.3	19.1	3.2

Table 42. Level of satisfaction with intervention/early education program

		Much satisfied	Satisfied	Less satisfied	Not satisfied
Japan	Number	13	48	27	8
	%	13.5	50.0	28.1	8.3
China	Number	2	55	38	7
	%	2.0	53.9	37.3	6.9
Vietnam	Number	18	45	27	1
	%	19.8	49.5	29.7	1.1

degree of satisfaction with treatment programs, in all three countries a majority of respondents gave affirmative responses ("very satisfied" or "satisfied"). "Less satisfied" was seen comparatively more frequently in China (Table 42).

Regarding "Person Whom You Consult the Most About the Developmental Support of Your Child" (Table 43), a high selection rate for "spouse" (husband or wife) was shared by respondents in both Japan and China. Respondents in China and Vietnam also shared a high selection rate for "teacher at an institution." In addition, the selection rate for "teacher at school" was high in Vietnam.

Table 43.Person whom you consult the most about the developmental support of your child

		Spouse	Relative	Neighbor	Friend	Doctor	Public health nurse	Psychologist	Teacher at kindergarten/ day nursery	Teacher at school	Teacher at institution	Administrator	Other
Japan	Number	39	1	0	12	6	0	10	2	16	17	1	1
	%	37.1	1.0	0.0	11.4	5.7	0.0	9.5	1.9	15.2	16.2	1.0	1.0
China	Number	23	7	0	4	7	0	5	4	13	44	0	8
	%	20.0	6.1	0.0	3.5	6.1	0.0	4.3	3.5	11.3	38.3	0.0	7.0
Vietnam	Number	4	1	0	0	10	0	17	5	25	22	0	5
	%	4.5	1.1	0.0	0.0	11.2	0.0	19.1	5.6	28.1	24.7	0.0	5.6

"Kind of Support You Require at Present" (Table 44) had high rates of selection for many items. Respondents in all three countries had high selection rates in common for three items, "support for the child's disability/disorder" "support for the child's development," and "improvements regarding specialist staff." Respondents in China and Vietnam had high selection rates in common for "financial support," "support for learning." High selection rates were also shown for "support for decreasing the burdens of families" in China and "improvement of educational programs" in Vietnam.

Table 44. Kind of support you require at present

		Asupport for the child's disability/ disorder	Developmental support for the child	Financial support	Support for learning	Support for making friends and playmate	Support for decreasing burden of family	Enrichment of educational program	Enrichment of staff with special knowledge	Enrichment of pulic officer	Other
Japan	Number	46	65	39	38	34	38	34	65	37	6
	%	44.2	62.5	37.5	36.5	32.7	36.5	32.7	62.5	35.6	5.6
China	Number	71	97	69	90	58	64	33	79	19	2
	%	58.2	79.5	56.9	73.8	47.5	52.5	27.0	64.8	15.6	1.6
Vietnam	Number	37	62	41	64	63	28	50	54	9	3
	%	40.2	67.4	44.6	69.6	68.5	30.4	54.3	58.7	9.8	3.2

5. Discussion and Conclusion

Points Examined on the Basis of the Results

(1) "Degree of help needed" for the children in question was similar in all three countries and was related to "low age" and "degree of difficulty in daily life." This item was also related to "poor communication ability" in Japan and "severity of hyperactivity" in Vietnam. These results may be related to the fact that a comparatively large proportion of participants in Japan were parents of school-aged children while in Vietnam a comparatively large proportion of participants were parents of infants.

(2) In contrast to Japan, where many "fathers" (84.1%) were the primary breadwinners, in China and Vietnam this was the case in less than 50% of participants' families, and there were an almost equal number of families in which "mothers and fathers both working" was selected. This likely reflects the general conditions in both of these countries where it is normal for both spouses to work. However, if both spouses working is taken to be a general trend, there is the possibility that the employment rate for mothers among those surveyed was lower than normal. This is ultimately speculation, but there would seem to be

many situations in which a mother must be involved in the care and support of her child.

(3) In contrast to Japan, where the most frequently selected response concerning burdens on household finances was "food expenses" (63.6%), in both China and Vietnam it was "educational expenses" (71.0% and 95.7% respectively). This difference may be related to problems concerning public educational support for children with disabilities. In multiple regression analysis where the "degree of the tightness of the household finances" was a dependent variable and burdens in the household budget were independent variables, however, there were significant relationships with "repaying debt" in Japan, "medical expenses" and "repaying debt" in China, and "housing expenses," "food expenses," and "repaying debt" in Vietnam. Those who felt burdened by these items can be assumed to feel the pinch of household finances. Generally speaking, it is natural that "debt repayment" was common to all three countries. The differences between the three countries regarding the other items may reflect the specific circumstances in each country.

(4) Regarding "current worries and anxieties" and the "caregiver's own burdens and anxieties," the most frequently selected response in all three countries was "not being able to have free time." This worry may be linked to the high "time burden" common to participants in all three countries when their children were receiving therapy. In addition, more specific worries manifested themselves as "not enough help" in China and "cannot receive rehabilitation or training" in Vietnam. The frequency of the responses "caregiver's own health" and "getting irritated easily" suggest that supporting one's own child sometimes becomes a heavy burden. Another burden (burdens and anxieties related to caregiving) common to all three countries was "care related to outings." In China and Vietnam several other responses were also selected. These results suggest that these respondents had a variety of burdens.

(5) What did the parents want for their children? In terms of money, in all three countries they wanted an "expansion of special childcare allowances." The next most frequently selected response in all three countries was "support for medical expenses." Naturally, the monetary burden of medical expenses is a big problem. Regarding desired support related to daily life, many respondents in all three countries chose a "respite care (temporary stay) system," and this is likely related to participants' worries about having too little free time mentioned above. "Expansion of consultation centers" was another frequently chosen response in all three countries. Being able to consult with someone about their child with a disability could play a major role in reducing the burden on parents. Regarding "support for caregiving," all of the countries shared a high selection rate for the "expansion of child rearing centers," and this was particularly evident in China and Vietnam. It can be inferred that this is related to the need for someone to talk to and the need to receive treatment. The fact that participants in all countries shared a high selection rate for "increasing the number of consultants" is also consistent with this desire for the expansion of child rearing centers.

(6) Regarding when the parents noticed their child's problem, when their child's difficulties were pointed out to them, and when their child was diagnosed, while "noticing" and "having difficulties pointed out" were earlier in Japan than in China and Vietnam, "being diagnosed" was later in Japan than in the other two countries. In Japan there were many cases where early intervention began at public or private facilities as soon as the disorder was pointed out even if a diagnosis had not yet been made. Experiencing intervention for a while before receiving a diagnosis may have allowed the parents to acknowledge and accept their child's disorder more easily, but on the other hand a later diagnosis may have prolonged the period of anxiety and made it more difficult for the parents to gain an opportunity to realize on their own what they should do as parents. The features of responses given by parents in each country regarding their feel-

ings when notified of their child's diagnosis were probably affected by whether the diagnosis was early or late.

(7) Regarding treatment, the majority of parents in all three countries gave affirmative replies to the question of whether they were satisfied with the care their child was receiving, and we can assume this is because the parents understood the significance and effectiveness of treatment (e.g., "Child's development was promoted"). Although both quality and quantity are required in intervention, we must not forget the question of what should be done about the time and manpower burden this care places on the parents.

(8) Looking at the "kind of support you require at present," in all three countries the most frequently selected responses were "support for the child's disability/disorder," "support for the child's development," and "expansion of specialist staff." These were not, however, the only desires expressed by the participants; "financial support," "educational support" and "wants their child to make friends" were frequently chosen by both Chinese and Vietnamese parents. "Specialist staff" means staff with the specific knowledge and experience needed to deal with children with ASD. As ASD is a disorder that is difficult to understand, the staffs who have knowledge and experience concerning ASD should be people the parents can rely on.

Conclusion

To begin with, regarding issues related to lifestyle, it is difficult for parents to take time for themselves, and problems such as it being difficult to go out were seen in all three countries. Regardless of the differences between the support systems, these can be said to be problems common to caregivers of children with ASD in all three countries. In addition, in connection to the support conditions in each country, the size of the economic burden was particularly

conspicuous in Vietnam and China. Regarding the support sought by parents of children with ASD, support for the disorder, support for development, and an increase in specialist staffs were needs expressed by participants in all three countries. In particular, as ASD is a disorder that is still not understood by many people, the need to increase the number of experienced and knowledgeable staff was shared by parents in all three countries.

In conclusion we would like to characterize our results and mention some of the issues that remain to be addressed. In this report, we were able to clarify the needs of children with ASD and their families to a certain degree based on quantitative data. However, the needs that were clarified here remain at a general, surface, descriptive level. In order to take a closer look at more specific needs and address them it is necessary to further clarify the actual needs of the people in question in specific, individual cases on an ongoing basis. Our research group has already interviewed parents in these three countries. By combining quantitative and qualitative research we hope to be able to clarify the kinds of support/aid that are truly needed.

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