Survey of the Impact of COVID-19 on the Lives of Young Children and Elementary School Students

(held in May 2020)

Due to the outbreak of the novel coronavirus disease (COVID-19), the Japanese government declared the State of Emergency in some areas across Japan for a certain period of time. Accordingly, many kindergartens, daycare centers, and elementary schools were closed. We conducted a survey on children at preschool and elementary school age to understand how the issue of COVID-19 crisis affected their living conditions during such a period, as well as the involvement and awareness of parents regarding their child's life and learning. In this report, we will explain the results of our survey including the impact of COVID-19 on children and their parents.

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Outline of this Survey

Purpose

To understand the impact of COVID-19 on families with preschool/elementary school children, including changes in their living conditions and home environment.

• Survey method Internet survey

Target areas Nationwide Period

Between May 22 and 24, 2020

Participants

2,266 mothers with children, from one-year-old (born in 2018) to sixth grade.

Ν	lumber of (Te	f prescho otal: 1,03		n	Number of elementary school children (Total: 1,236)				n	
I-year-	2-year-	3-year-	4-year-	5-year-	lst	2nd	3rd	4th	5th	6th
old	old	old	old	old	grader	grader	grader	grader	grader	grader
206	206	206	206	206						206

Survey items

Children's living conditions and behavior; mothers' anxieties and worries about childrearing; childrearing awareness and practices; prospects for childrearing and education, etc.

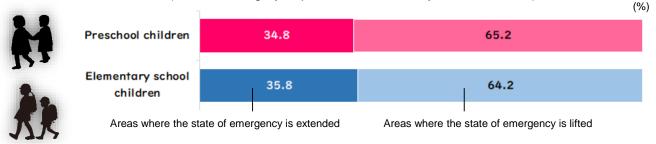
Notes:

- 1) In this report, children from first to third grade of elementary school are referred to as "lower graders," and those from fourth to sixth grade as "higher graders."
- 2) The term "at present" used in the questionnaires means the time of late May 2020 when this survey was conducted. We compare these answers with those at the time of January 2020 to identify any changes before and after the outbreak of the COVID-19 pandemic.
- 3) The term "COVID-19" used in this report means the disease caused by SARS-CoV-2.
- 4) The number of samples is omitted from certain charts where a 100% valid response rate is achieved for both groups of preschool children (1,030) and elementary school children (1,236).
- 5) All figures in percentage (%) on the charts are calculated by rounding to one decimal place; therefore, there may be cases where the total of these figures do not add up to 100.0.

Basic Attributes

(1) Target areas

Target areas are those areas under the State of Emergency as of May 2020 when this survey was conducted (for each category of preschool/elementary school children).



* We obtained answers from the participants living in the areas under the state of emergency at the time of implementing this survey, namely, Hokkaido, Saitama Prefecture, Chiba Prefecture, Tokyo, and Kanagawa Prefecture.

(2) Attributes of children

Gender, total number of siblings, birth order (for each category of preschool/elementary school children)

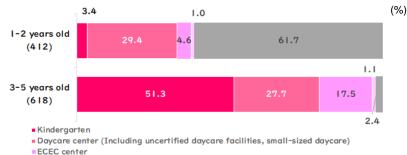
	Ge	Gender Total numb		er of sibling	S			Birth order	(%)	
	Boy	Girl	One	Two	Three	Four or more	First	Second	Third	Fourth or thereafter
Preschool children	49.9	50.1	54.5	37.3	7.5	0.8	71.6	24.4	4.0	0.1
Elementary school children	50.5	49.5	31.2	48.0	17.5	3.3	55.3	34.4	9.7	0.6

* The term "Four or more" in the column of "Total number of siblings" indicates "Four + Five or more," while the term "Fourth or thereafter" in the column of "Birth order" indicates "Fourth + Fifth or thereafter."

Basic Attributes

(2) Attributes of Children

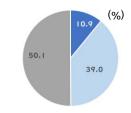
Enrollment status (1-2 years old and 3-5 years old)



Other childcare facilities (including family daycare)

■Not enrolled

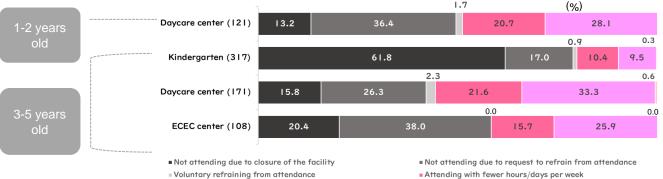
Attendance status (elementary school children)



Normal attendance = Staggered attendance = Non-attendance

* In this survey, the participants were asked whether their child attended school normally (i.e., "Normal attendance"), or in staggered shifts (i.e., "Staggered attendance"), or did not attend school (i.e., "Non-attendance").

Attendance status (1-2 years old and 3-5 years old)



Attending with fewer hours/days per week

Other

1.7

Note: The data of "Other kindergarten/facilities (including family childcare)" is omitted from the above chart due to an immaterial number of preschool children.

(3) Attributes of mothers

Working status (for each category of preschool/elementary school children)

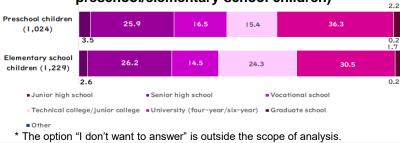


Attending as usual

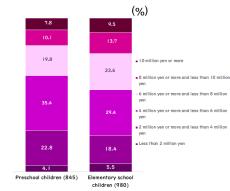
Solution (contracted/dispatched employee
 Self-employed (including family operated business)/working from home
 Employee on leave (e.g., childcare leave)
 Other

* The number of "Full-time/contracted/temporary employee" is a total of "Full-time employee (excluding those on leave)," "Contracted employee (excluding those on leave)," and "Dispatched employee (excluding those on leave)." The number of "Other" is a total of "Those on leave due to COVID-19" and "Other."

> Education background (for each category of preschool/elementary school children)



Household income (for each category of preschool/elementary school children)



* The options "I don't know" and "I don't want to answer" are outside the scope of analysis.

(%)

Children's Basic Daily Schedule



Around 21:30 After 23:30

Around 21:00 Around 23:00

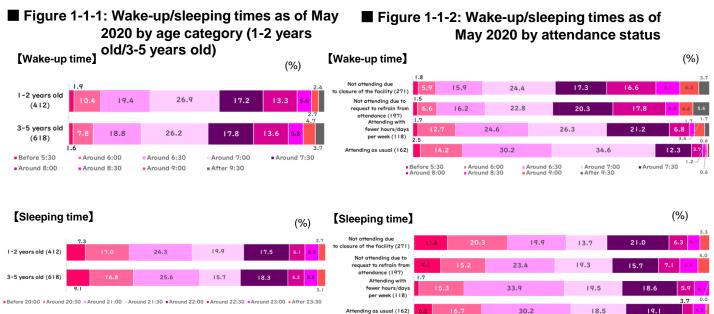
(1) Wake-up and sleeping times of preschool children

Following the outbreak of COVID-19, sleeping hours of children not attending preschool slightly increased

We asked the participants about the wake-up and sleeping time of children at the time of this survey (May 2020) and before the outbreak of the COVID-19 pandemic (January 2020). There is no change in wake-up and sleeping times for 1-2-year-old children, while there are differences among 3-5-year-old children, depending on their attendance status. Both wake-up time and sleeping time for children who do not attend preschool (due to closure of the facility or upon request to refrain from attendance) are more likely to be delayed following the outbreak of the COVID-19 pandemic.

After calculating the average sleeping hours based on the wake-up and sleeping times of children, it is revealed that the sleeping hours of children who do not attend preschool are 7-8 minutes longer since the outbreak of the COVID-19 pandemic.

Q: Please tell us about your child's wake-up time and sleeping time at present (at the time of this survey) and at the time of January 2020 (weekdays).



* The data of "23:30 or later" is a total of "around 23:30," "around 24:00," and "24:30 or later."

 * The data of "23:30 or later" is a total of "around 23:30," "around 24:00," and "24:30 or later."

Around 20:30
 Around 22:30

Before 20:00
 Around 22:00

■ Table 1-1-1: Average wake-up/sleeping times on weekdays as of January 2020 and May 2020 by age category (1-2 years old/3-5 years old) and attendance status

	Late May 20	Late May 2020 (at the time of this survey) [1]			January 2020 [2]			
	Average sleeping time	Average wake-up time	Average sleeping hours	Average sleeping time	Average wake-up time	Average sleeping hours	sleeping hours [1]–[2]	
1-2 years old (412)	21:23	7:11	9hr 48min	21:23	7:13	9h 50min	-2min	
3-5 years old (618)	21:22	7:18	9hr 56min	21:13	7:04	9h 51min	+5min	
Not attending due to the facility's closure (271)	21:20	7:26	10hr 06min	21:07	7:06	9h 59min	+ 7 min	
Not attending upon request to refrain from attendance (197)	21:26	7:25	9hr 59min	21:13	7:04	9h 51min	+8min	
Attending with fewer hours/days per week (118)	21:23	7:02	9h 39min	21:20	7:02	9h 42min	-3min	
Attending as usual (162)	21:19	6:49	9h 30min	21:21	6:52	9h 31min	—1min	

The average sleeping time is calculated by replacing the data of "Before 20:00" and "Around 20:30" with the data of "19:30" and "20:30," respectively. Likewise, the average wake-up time is calculated by replacing the data of "Before 5:30" and "Around 6:00" with the data of "5:00" and "6:00," respectively. Accordingly, the average sleeping hours are calculated based on the average sleeping time and the average wake-up time.

Children's Basic Daily Schedule

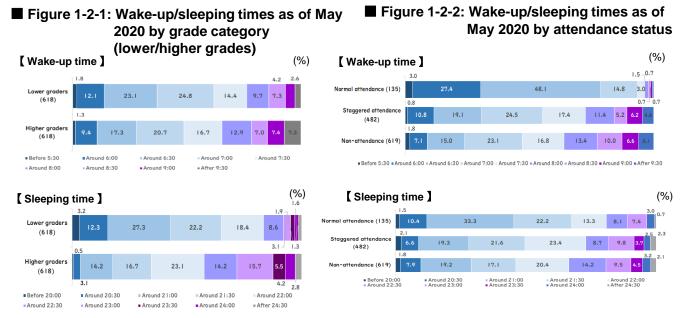
(2) Wake-up and sleeping times of Elementary school children

Following the outbreak of COVID-19, sleeping hours of children not attending elementary school increased

We asked the participants about the wake-up and sleeping times of children at the time of this survey (May 2020) and before the outbreak of the COVID-19 pandemic (January 2020). There are differences among children depending on their status of attending school (i.e., normal attendance, staggered attendance, and non-attendance). Both wake-up time and sleeping time for children attending school less frequently are more likely to be delayed following the outbreak of the COVID-19 pandemic.

After calculating the average sleeping hours based on the wake-up and sleeping times of children, it is revealed that the sleeping hours of children who do not attend school are 21 minutes longer and the sleeping hours of higher graders are 22 minutes longer following the outbreak of the COVID-19 pandemic.

Q: Please tell us about your child's wake-up time and sleeping time at present (at the time of this survey) and at the time of January 2020 (weekdays).



■ Table 1-2-1: Average wake-up/sleeping times on weekdays as of January 2020 and May 2020 by grade category (lower/higher grades) and attendance status

	Late May 20	Late May 2020 (at the time of this survey) [1]				January 2020 [2]			
	Average sleeping time	Average wake-up time	Average sleeping hours	Average sleeping time	Average wake-up time	Average sleeping hours	Difference in sleeping time [1]–[2]		
Lower graders (618)	21:32	7:10	9hr 38min	21:16	6:44	9hr 28min	+10min		
Higher graders (618)	22:11	7:27	9hr 16min	21:47	6:41	8hr 54min	+22min		
Normal attendance (135)	21:34	6:31	8h 57min	21:31	6:37	9hr 6min	—9min		
Staggered attendance (482)	21:52	7:18	9hr 26min	21:30	6:42	9hr 12min	+14min		
School closure (619)	21:55	7:29	9hr 34min	21:32	6:45	9hr 13min	+21min		

* The average sleeping time is calculated by replacing the data of "Before 20:00" and "Around 20:30" with the data of "19:30" and "20:30," respectively. Likewise, the average wake-up time is calculated by replacing the data of "Before 5:30" and "Around 6:00" with the data of "5:00" and "6:00," respectively. Accordingly, the average sleeping hours are calculated based on the average sleeping time and the average wake-up time.



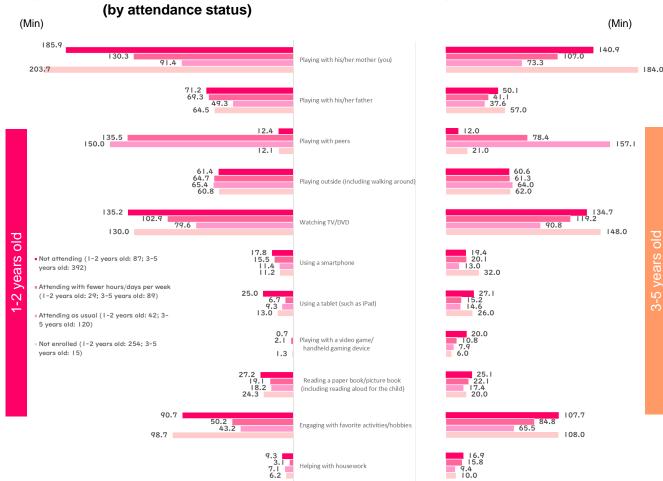
Children's Everyday Life and Development

(1) Length of time to play with someone/interact with digital media (at the time of this survey)

Children not attending preschool are more likely to have more hours to play with their mother and more hours to interact with digital media

We asked the participants about the length of time children spend to play and interact with digital media as of May 2020 (when this survey was conducted). It is revealed that children who do not attend preschool have more hours to play with their mother and fewer hours to play with their peers, compared to those who attend preschool. Likewise, children who do not attend preschool have more hours to interact with digital media such as a TV, DVD player, smartphone, and tablet, being engaged with their favorite activities and hobbies, compared to those who attend preschool. This trend is observed both in the group of 1-2 years old children and the group of 3-5 years old children.

Q: How much time on average per day do you think your child spends on doing the following activities at home as of May 2020 (when this survey is conducted)?



■ Figure 2-1-1: Average time to play with someone/interact with digital media as of May 2020

* The participants who answered "Other" to the question "Is your child attending an enrolled preschool facility at present?" are omitted from the scope of analysis.

* The answer "Play with father" is only chosen by the participants who live with the child's father: For 1-2 years old: Not attending (83); Attending with fewer hours/days per week (29); Attending as usual (38); and Not enrolled (249); For 3-5 years old: Not attending (377); Attending with fewer hours/days per week (88); Attending as usual (108); and Not enrolled (15).

Children's Everyday Life and Development



(2) Length of time to play with someone/interact with digital media (after this survey)

Children spend substantially more hours watching TV/DVD following the outbreak of COVID-19

We asked the participants if they recognized any changes in children's spending time to play with someone or interact with digital media during the period between January 2020 (before the outbreak of the COVID-19 pandemic) and May 2020 (when this survey was conducted). More than 50% of the participants with 1-2 years old children answered that children spend "more hours" watching TV/DVD following the outbreak of COVID-19. Likewise, about 70% of the participants with 3-5 years old children spend "more hours" watching TV/DVD, while about 60% answered that children spend "more hours" engaging with favorite activities/hobbies, and about 50% answered that children spend "more hours" playing with mother" following the outbreak of COVID-19.

Q: How much time on average per day do you think your child spends on doing the following activities at present (at the time of this survey)?

■ Table 2-2-1: Average time to play with someone/interact with digital media as of May 2020 (by age category: 1-2 years old/3-5 years old)

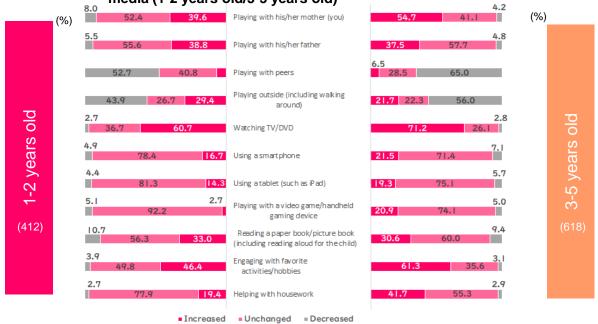
	I-2 years old (4I2)	3-5 years old (618)
Playing with his/her mother (you)	183.3	124.3
Playing with his/her father	64.8	46.6
Playing with peers	34.9	50.3
Playing outside (including walking around)	61.7	61.4
Watching TV/DVD	124.1	124.2
Using a smartphone	12.9	18.5
Using a tablet (such as iPad)	14.7	22.8
Playing with a video game/handheld gaming device	1.1	15.9
Reading a paper book/picture book (including reading aloud for the child)	24.0	23.1
Engaging with favorite activities/hobbies	87.9	96.2
Helping with housework	6.7	15.1

2

* The average value is calculated based on the following conversion method: "Not at all" = 0 minute; "15 mins" = 15 minutes; "30 mins" = 30 minutes; "One hour" = 60 minutes; "Two hours" = 120 minutes; "Three hours" = 180 minutes; "Four hours" = 240 minutes; "Five hours or longer" = 300 minutes.

Q: Do you recognize any change since January 2020 (weekdays)?

■ Figure 2-2-1: Changes in the length of time to play with someone/interact with digital media (1-2 years old/3-5 years old)



2 Children's Everyday Life and Development

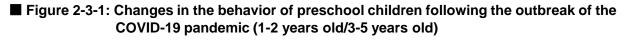
(3) Children's development and mental/physical stress

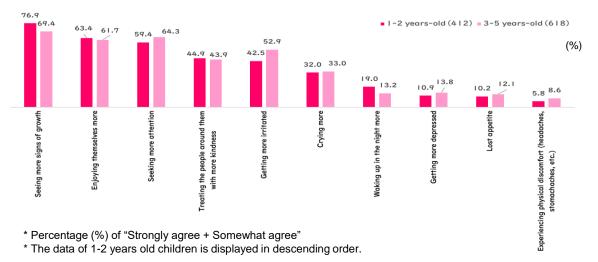


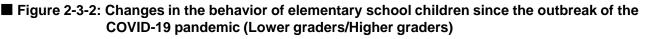
Mothers recognize children's growth while seeing more stress and emotional dependence in them

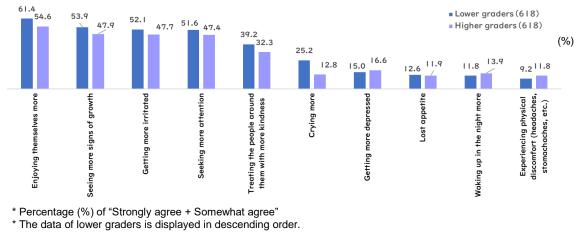
We asked the participants if they recognized any changes in children's behavior during the period between January 2020 (before the outbreak of the COVID-19 pandemic) and May 2020 (when this survey was conducted). About 70% of mothers with preschool children answered that they recognized children's growth and about 60% answered that they saw children enjoying themselves more. Meanwhile, about 60% of mothers answered they saw more emotional dependence in children, and about 50% of mothers with 3-5 years old children recognized increasing stress in children. Likewise, about 50% of mothers with elementary school children answered that they observed more stress and emotional dependence in their children.

Q. As a result of the changes in lifestyle due to the COVID-19 pandemic (comparing the time around January 2020 and the last two weeks or so), do you see the following changes in your child?









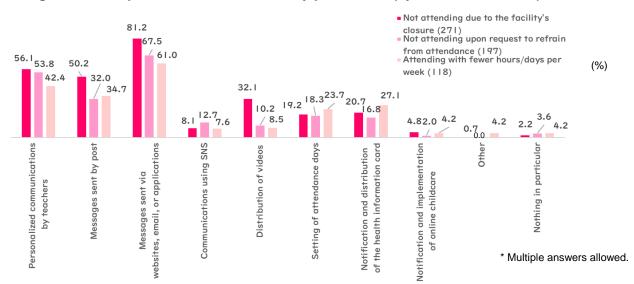
Response of Preschools/Elementary Schools

About 20% of elementary schools under closure maintain online classes

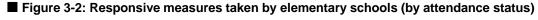
3

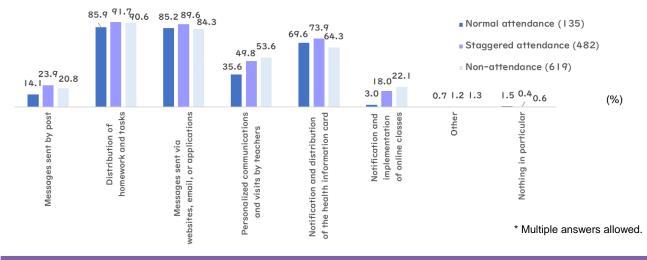
We asked the participants about responsive measures to the COVID-19 pandemic by preschools and elementary schools. It is revealed that preschools under closure were taking more responsive measures than those requesting children to refrain from attendance or reduce the number of attendance days. Such measures include personalized communications and messages using digital media. In addition, most schools maintain communications with students such as sending homework using digital media, regardless of the attendance status. It is also revealed that personalized communications and messages regarding online classes differ depending on the frequency of attendance (regular attendance, staggered attendance, and non-attendance). Children with less frequent attendance would receive more frequent messages from schools.

Q: Please indicate any of the following measures taken by your child's preschool (elementary school) since April 2020.



■ Figure 3-1: Responsive measures taken by preschools (by attendance status)





9

Learning Practices of Elementary School Children at Home



(1) Study materials and the length of study hours at home

Most children were engaged in homework activities

We asked the participants about the study materials children were using and the length of study hours at home. As for study materials, most children, regardless of their attendance status and grade, used school homework. For the question regarding school homework, 25% of children attending school normally, 50% of children attending in staggered shifts, and about 55% of children not attending school answered that their school homework (in print form) had increased. This result indicates that schools are trying to support the continuous development of children who cannot attend school. As for study materials other than school homework, the results differ depending on their attendance status. For the length of study hours at home, the overall average hours were about two hours, of which about 30 minutes were used for study using digital media.

Q: What kind of study materials (and play activities) is your child engaged in at present (when this survey is conducted)? Please choose all answers that apply.

	(555)	(564)	
Homework and tasks received from schools	⁹ 97.3	97.3	(%)
Self-study workbooks bought from shops 35.6 40.7 38.1	45.8	32.0	
Distance learning	35.1	29.6	
Private-tutoring schools (including homework and online classes)	13.1	24.1	
Free study materials offered online (websites, applications, etc.) 20.3 25.2	24.1	19.1	
Free study materials offered in print form	15.7	11.2	
Free entertainment/intellectual training content offered online (websites, applications, etc.)	11.5	5.7	
Normal attendance (135) Staggered attendance (482) Non-attendance (619)			

- * Multiple answers allowed.
- * The result of "Homework and tasks received from schools" was analyzed based on the answer "Distribution of homework and tasks" to the question regarding the response of children's schools since April 2020.
- * The result of "Distance learning" is a total of the results of "Distance learning (study materials in print/digital form offered by Benesse private-tutoring classes)" and "Distance learning (study materials in print/digital form offered by other private-tutoring classes)."
- Q: How much time on average per day do you think your child spends on doing the following activities at home as of May 2020? (overall; by attendance status; by lower/higher grades)

■ Table 4-1-1: The length of study hours at home as of May 2020 (overall; by attendance status; by lower/higher grades)

	Overall (1,236)	Normal attendance (135)	Staggered attendance (482)	Non- attendance (619)	Lower graders (618)	Higher graders (618)	
Doing school homework * Homework in print form/using digital media	71.1 [9.0]	40.8 [2.7]	67.2 [6.3]	80.7 [12.4]	64.3 [7.5]	77.9 [10.4]	(min)
Working on study materials other than school homework * Homework in print form/using digital media	41.2 [12.4]	17.5 [5.4]	37.3 [11.5]	49.3 [14.6]	32.4 [8.8]	50.0 [16.0]	
Taking online classes (including schools, enrichment lessons, private-tutoring schools)	[13.0]	[3.8]	[8.4]	[18.6]	[8.3]	[17.7]	
Total average study time at home	25.3 [34.4]	62. [.9]	2.9 [26.2]	148.6 [45.6]	105.0 [24.6]	45.6 [44.]	
Usage rate of digital media in learning	48.6	28.9	44.0	56.5	43.5	53.7	(%)

- * The overall number is used as a parameter (the answer "Do not study at all" is calculated as zero).
- n) all is calculated as zeroj.
 * The figures in brackets represent the length of study hours using digital media.
 - * The usage rate of digital media in learning is calculated based on any of the following answers chosen "Doing school homework (using digital media)," "Working on study materials other than school homework (using digital media)," and "Taking online classes (including schools, enrichment lessons, privatetutoring schools)."

Learning Practices of Elementary School Children at Home



(2) Children's daily habits and learning practices at home

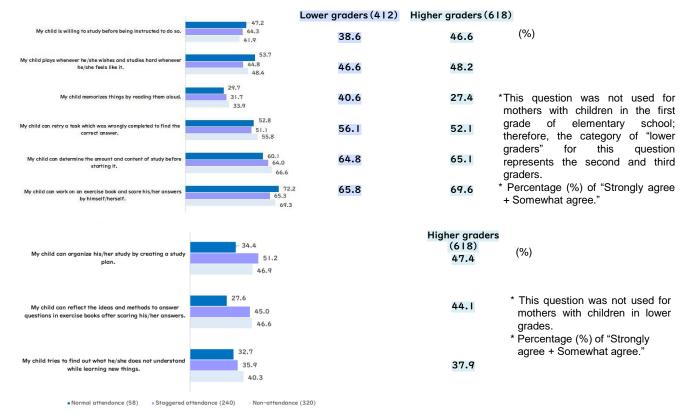
4

Sixty percent of children who do not attend school show disrupted daily habits

We asked the participants about children's behavior and learning practices at home. With respect to the attendance status, it is revealed that children who attend school normally show more motivation and concentration on learning than those who do not attend school. Meanwhile, children who attend school in staggered shifts and those who do not attend school show more organized learning practices, such as making study plans and seeking solutions after they receive test scores. In addition, about 50-60% of mothers with children who do not attend school answered they felt their child's daily habits and learning behaviors had been disrupted.

Q: How much do you think the following practices apply to your child's daily habits and learning at present (when this survey is conducted)?

Figure 4-2-1: Learning practices and methods as of May 2020 (by attendance status and lower/higher grades)



■ Figure 4-2-2: Changes in children's daily habits and learning practices since January 2020 (by attendance status)

(N) allohaanoo olalao)		Lower gruders	Higher gruc	
		(412)	(618)	*This question was not used for
My child's daily habits have become more disrupted than before.	- 41.4 56.9 60.9	52.1	62.3	mothers with children in the first grade of elementary school;
My child's daily study practices have become more disrupted than before.	39.8 46.6 52.0	49.1	48.4	therefore the category of "lower graders" for this question represents the second and third graders.
My child has become more able to devise ways of learning suitable for his/her needs than before.	26.8 28.4 30.1	28.1	29.7	*The term "Before" in this question means around January 2020 before the outbreak of COVID-19.
 Normal attendance (108) Staggered of 	ittendance (397) = Non-attendar	nce (525)		*Percentage (%) of "Strongly agree + Somewhat agree."

Learning Practices of Elementary School Children at Home



(3) Mothers' involvement and changes after the outbreak

Mothers with children who do not attend school are more involved in children's daily habits and learning

We asked the participants about their involvement in childrearing as of May 2020 (when this survey was conducted). For each question item, about 60-90% of mothers answered, "I often do" or "I sometimes do." This indicates that more mother-child interactions were observed during the COVID-19 pandemic. When looking at changes in mothers' involvement since January 2020 (before the outbreak of COVID-19) according to children's attendance status, more mothers living in the non-attendance areas answered "I am more involved" in all question items compared to those living in the normal attendance areas. In particular, more than 50% of mothers answered "I am more involved" in the items of "Ask my child to tidy up things," "Help my child's study," "Ask my child to study," "Score the answers my child wrote in exercise books," and "Talk about daily news with my child."

- Q: The following items are to assess your involvement in the child's daily habits and learning at present (when this survey is conducted). For each of the following, please indicate the degree to which they apply to you.
- Q: Is there any change since January 2020 (weekdays)?

Figure 4-3-1: Actual status and changes in mothers' involvement in their child's everyday life and learning

	(1) Actual status of mothers' involvement as of May 2020 (Overall elementary school children)					
	(%	atte	ormal ndance 108)	Staggered attendance (397)	Non- attendance (525)	
I praise my child when he/she studies hard.			8.0	42.8	40.8 (%)	
I talk to my child to make sure he/she gets up and goes to bed properly.	90		8.9	41.3	42.7	
I prepare well-balanced meals for my child.	89.	.4 2	27.8	35.8	35.0	
I ask my child to tidy up things after play-time or study-time.	89.	3	8.9	51.1	50.5	
I understand what my child is studying.	87.3	3	5.2	47.9	47.4	
I help my child's study.	87.0	4	8.1	62.5	63.4	
I ask my child to study.	82.9	5	0.9	60.5	58.7	
I score the answers my child wrote in exercise books.	81.1	3	37.0	52.6	52.2	
I create an environment where my child can concentrate on studying.	78.5		9.4	28.5	33.0	
I talk about social events and news with my child.	74.9	4	5.4	52.9	56.2	
I discuss with my child how to use a TV and play games.	74.8	3	8.0	42.3	43.6	
I make my child understand the meaning and importance of learning.	70.6	2	8.7	36.8	35.8	
I often interfere with my child's activities.	69.6	2	23.1	28.7	29.5	
I become emotional when scolding my child.	65.5	2	4.1	34.8	30.5	
I teach my child how to make a study plan.	63.5	2	9.6	45.1	45.9	
		* Percentage	(%) of	mothers' ar	nswer "I am mor	

* Percentage (%) of mothers' answer "I am more involved" to the question "Do you see any changes in your involvement since January 2020 (weekdays)?"

* Percentage (%) of mothers' involvement as "I often do" and "I sometimes do."

* The results are displayed in descending order.

* This question was not used for mothers with children in the first grade of elementary school; therefore, the answers were obtained from mothers with children from second to sixth grade.

Actual Usage of Digital Media and Changes in Awareness



(1) Actual usage of digital media by elementary school children

The amount of time watching video games and movies increased following the outbreak of COVID-19

We asked the participants about changes in the amount of time using digital media during the period between January 2020 (before the outbreak of COVID-19) and May 2020 (when this survey was conducted). It is revealed that overall elementary school children spend an average of 53.2 minutes per day engaged with video games and an average of 63 minutes per day with movies. These two items account for 60% of digital media usage. As for the average daily usage of digital media, higher graders spend more than 50 minutes compared to lower graders. In addition, more mothers answered "increased" in the items of "Watching movies (about 70%)" and "Watching video games (50%)" following the outbreak of the COVID-19 pandemic.

- Q: How much time per day (weekdays) does your child spend on doing the following activities using digital media (PCs, tablets (such as iPad), smartphones) at home at present (when this survey is conducted)?/
- Q: Is there any change since January 2020 (weekdays)?

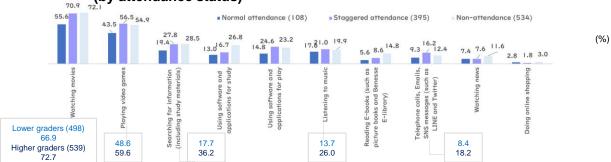
■ Table 5-1-1: Average daily usage of digital media as of May 2020 (weekdays) (Overall elementary school children; by attendance status; by lower/higher grades)

	Overall (1,037)	Normal attendance (108)	Staggered attendance (395)	Non- attendance (534)	Lower graders (498)	Higher graders (539)	(Mi
Watching movies	63.0	49.3	65.9	63.7	58.5	67.1	
Playing video games	53.2	40.8	53.9	55.2	42.4	63.2	
Searching for information (including study materials)	18.0	13.9	17.5	19.1	17.2	18.7	
Using software and applications for study	12.1	9.0	11.2	13.4	8.8	15.2	
Using software and applications for play	10.1	10.6	9.5	10.3	7.4	12.5	
Listening to music	9.8	6.9	7.2	12.4	10.4	9.3	
Reading E-books (such as picture books and Benesse E-library)	8.9	8.2	9.2	8.8	5.3	12.2	
Telephone calls, Emails, SNS messages (such as LINE and Twitter)	5.7	4.9	4.1	7.2	5.0	6.4	
Watching news	5.1	4.4	3.6	6.3	4.0	6.1	
Doing online shopping	2.9	3.9	1.8	3.6	3.1	2.8	
Total	188.8	151.9	183.9	200.0	162.1	213.5	

* For the question regarding the ownership and usage of digital media (such as PCs, tablets, and smartphones) at home, the participants who answered "We don't have at home" and "We have but don't use at home" are outside the scope of analysis.

- * The participants who answered "Taking online classes (including schools, enrichment lessons, private-tutoring schools)" are counted in the item of "The length of study hours at home" and, therefore, omitted from the above table.
- * The results are displayed in descending order.

Figure 5-1-2: Changes in the average daily usage of digital media since January 2020 (by attendance status)



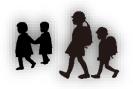
* For the question regarding the ownership and usage of digital media (such as PCs, tablets, and smartphones) at home, the participants who answered "We don't have at home" and "We have but don't use at home" are outside the scope of analysis.

* The participants who answered "Taking online classes (including schools, enrichment lessons, private-tutoring schools)" are counted in the item of "The length of study hours at home" and, therefore, omitted from the above table.

* The percentage of the participants who answered "Increased" to the question regarding changes in the usage of digital media since January 2020 (weekdays).

* The results are displayed in descending order based on non-attendance.

Actual Usage of Digital Media and Changes in Awareness



(%)

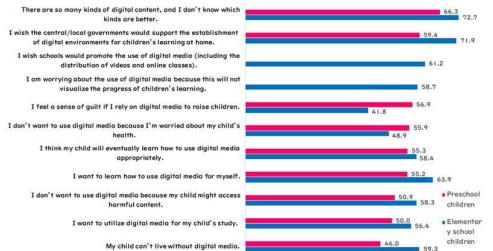
(2) Changes in mothers' awareness and advantages in learning

About 50% of mothers wish to utilize digital media in children's learning

We asked the participants about the use of digital media by their children. For changes in their awareness of digital media following the outbreak of COVID-19, about 50% of mothers answered they did not want to use digital media because they were concerned about children's health. In contrast, about 50% of mothers answered they wanted to use digital media for children's learning. About the advantages of digital media for children's learning, more mothers consider digital media as useful tools, which can be used anywhere; attract and motivate children in learning; and foster children's independence.

Q: We want to ask you what you think of children's digital media use (such as PCs, tablets (such as iPad), and smartphones). Do you think the following items have become more applicable since the outbreak of the COVID-19 pandemic?

■ Figure 5-2-1: Changes in mothers' awareness of children's use of digital media (preschool children/elementary school children)

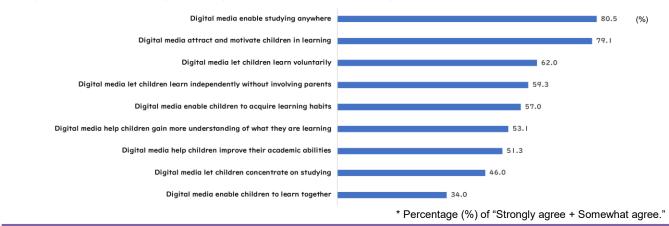


* Percentage (%) of "Strongly agree + Somewhat agree."

* The above figure indicates the results of 11 items out of 15 items regarding changes in mothers' awareness of digital media use, which obtained more than 50% of responses saying "Strongly agree" or "Somewhat agree" in either the categories of preschool children or elementary school children.

Q: To what extent do you think about the following items regarding digital media use for children's learning?

Figure 5-2-2: Advantages of digital media use in learning (overall elementary school children)



Mothers' Worries/Awareness, Feelings, and Thoughts

(1) Mothers' worries and concerns

About 60% of mothers are worried that children have no chance to exercise

We asked the participants about their anxieties and concerns following the outbreak of COVID-19. Both mothers with preschool children and those with elementary school children are worried that children have no space to play, no chance to exercise, no opportunity to meet friends because they need to stay at home during the COVID-19 pandemic. About 40% of mothers with elementary school children are also worried that their child might be left behind academically. They also feel burdened by having to support homework. Concerning the state of emergency, there is a large gap between the areas where the state of emergency has been extended and the areas where the state of emergency are worried that it is hard to predict when preschools, schools, cram schools, etc., will reopen.

Q. Do you have the following worries and concerns about your child(ren) or yourself along with the spread of COVID-19? (multiple answers allowed)

By effectiveness of State of Emergency

By effectiveness of State of Emergence

Table 6-1-1: Mothers' worries and concerns

V Due och och abilduen / en endli bri ene och och) Preschool children (overali; by areas under	the state of emergency)	No pl No ch Redu Incre Redu COVI My ch My ch My ch My ch My ch I fish I fish I fish I fish I fish I fish Y ch Uffic I mw My ch My ch
	2		Nothi

	Total	Areas in effect (358)		Areas out of effect (672)	
No play space available	57.9	62.3	>>	55.5	(%)
No chance for children to exercise	57.0	66.2	>>	52.1	
Reduced opportunities to see friends	53.9	60.1	>>	50.6	
Increased screen time*1	49.1	53.0	>>	47.0	
There is nothing for my child to do at home.	44.7	51.1	>>	41.2	
Reduced frequency of clinic and hospital visits due to the fear of COVID-19 infection.	41.0	40.5		41.2	
My child doesn't have any connection with teachers, community members, etc.	30.1	38.0	>>	25.9	
My child's lifestyle habits are unhealthy.	29.7	34.6	>>	27.1	
My child is spending more time using video game consoles and digital media.	21.7	26.3	>>	19.2	
We cannot receive infant health checks and vaccinations (or they are difficult to access).	21.3	21.2		21.3	
I myself don't have a connection with the school or community.	19.7	22.3		18.3	
It's hard to predict when preschools, schools, cram schools, etc. will reopen.	17.2	31.0	>>	9.8	
My child's eating habits have been disrupted.	16.5	18.2		15.6	
I'm worried about noise complaints from my neighbors (as we spend more time at home).	14.4	18.7	>>	12.1	
My child won't wear masks or wash his/her hands.	11.4	10.1		12.1	
Other	1.4	2.2		0.9	
Nothing in particular	6.5	4.5		7.6	

- * Multiple answers allowed.
- * Overall results are displayed in descending order.
- * *1. Percentage of those who only watch TV/DVD
- * Items with a discrepancy of more than 5 points are marked with >>.
- * We obtained answers from the participants living in the areas under the state of emergency at the time of implementing this survey, namely, Hokkaido, Saitama Prefecture, Chiba Prefecture, Tokyo, and Kanagawa Prefecture.

		b) chicemenes	5 01 010	Te of Elliergency
	Total	Areas in effect (443)		Areas out of effect (793)
No chance for children to exercise	68.0	71.7	>>	65.9
Reduced opportunities to see friends	63.1	69.5	>>	59.6
No play space available	49.9	53.6	>>	47.9
My child is spending more time using video game consoles and digital media.	47.3	52.0	>>	44.7
Increased screen time ^{*1}	46.6	45.5		47.2
My child might be left behind academically	43.6	41.4		44.8
I feel burdened from having to check and support homework and tasks from schools	40.5	42.8		39.2
My child's lifestyle habits are unhealthy.	40.2	43.0		38.7
Reduced frequency of clinic and hospital visits due to the fear of COVID-19 infection.	30.6	33.7		28.8
There is nothing for my child to do at home.	29.8	29.2		30.1
My child doesn't have any connection with teachers, community members, etc.	28.6	34.8	>>	25.2
My child cannot get on track studying at home	26.0	25.6		26.2
It's hard to predict when preschools, schools, cram schools, etc. will reopen.	23.8	38.9	>>	15.4
I feel that homework and tasks from school are not enough	22.6	21.9		22.9
My child's eating habits have been disrupted.	19.7	19.5		19.9
I myself don't have a connection with the school or community.	10.0	13.1		8.3
I'm worried about noise complaints from my neighbors (as we spend more time at home).	8.6	11.1		7.2
My child won't wear masks or wash his/her hands.	4.1	3.2		4.7
Other	0.8	1.4		0.5
Nothing in particular	3.0	2.5		3.3

- * Multiple answers allowed.
- * Overall results are displayed in descending order.
- * *1. Percentage of those who only watch TV/DVD
- * Items with a discrepancy of more than 5 points are marked with >>.
- * We obtained answers from the participants living in the areas under the state of emergency at the time of implementing this survey, namely, Hokkaido, Saitama Prefecture, Chiba Prefecture, Tokyo, and Kanagawa Prefecture.

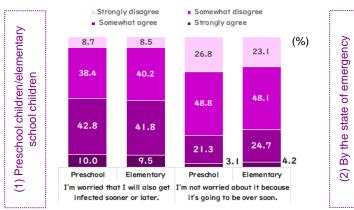
Mothers' Worries/Awareness, Feelings, and **Thoughts**

(2) Mothers' feelings about the COVID-19 pandemic, home education, and children's restricted participation in preschool/school

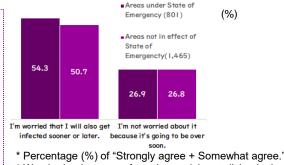
About 80% of mothers think that children cannot properly learn and develop skills only at home

We asked the participants how they feel about the COVID-19 pandemic, home education, and children's restricted participation in preschool/school. About 50% of mothers with both preschool/elementary school children are worried that they would get infected (strongly agree + somewhat agree). In comparison, only 20% of mothers optimistically think it would be over soon. With respect to home education and children's restricted participation in preschool/school, about 80% of mothers answered "I don't think my child can properly learn and develop skills only at home" and "I feel unduly burdened as a parent if my child does not attend preschool/school" (strongly agree + somewhat agree).

Q: How do you feel about the COVID-19 pandemic?



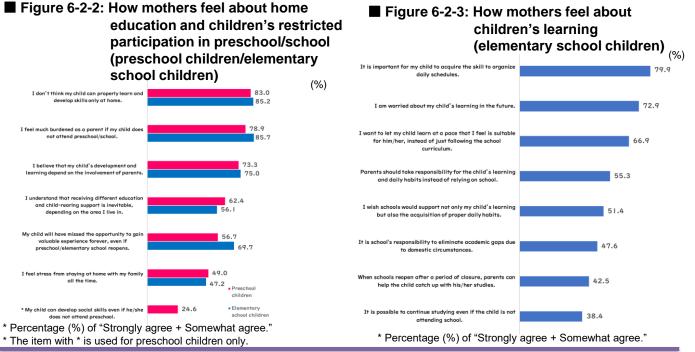
■ Figure 6-2-1: How mothers feel about the COVID-19 pandemic



* We obtained answers from the participants living in the areas under the state of emergency at the time of implementing this survey, namely, Hokkaido, Saitama Prefecture, Chiba Prefecture, Tokyo, and Kanagawa Prefecture.

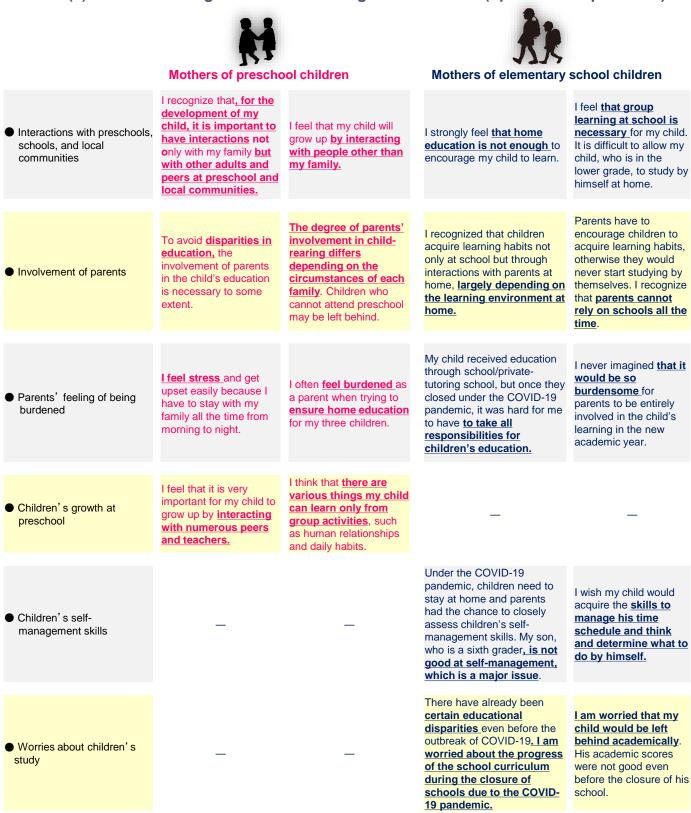
(%)

Q: We want to ask you about your lifestyle, childrearing, and education. Do you agree more strongly with the following opinions compared to before the outbreak of COVID-19?



Mothers' Worries/Awareness, Feelings, and Thoughts

(3) Mothers' feelings about childrearing and education (open-ended questions)



* We summarized mothers' answers to the open questions such as "Have your perspectives or feelings about child-rearing and education changed following the outbreak of the COVID-19 pandemic?" and "Do you have any expectations for child-rearing and education through your experiences during the COVID-19 pandemic?"

6 Mothers' Worries/Awareness, Feelings, and Thoughts

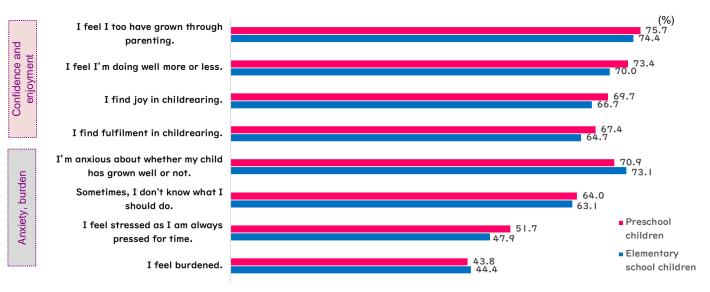
(4) Mothers' thoughts about childrearing

Mothers who fear infection of COVID-19 feel more burdened and worry about childrearing

We asked the participants what they think about childrearing. About 70% of mothers with both preschool children and elementary school children gave answers such as "I feel I too have grown through parenting," "I feel I am doing well more or less," "I find joy in childrearing," and "I find fulfillment in childrearing" (strongly agree + somewhat agree). However, about 70% of mothers also answered that "I am anxious about whether my child has grown well or not." It is also revealed that mothers who fear the infection of COVID-19 feel more burdened and worry about childrearing.

Q. For each of the following, please indicate the degree to which they apply to you.

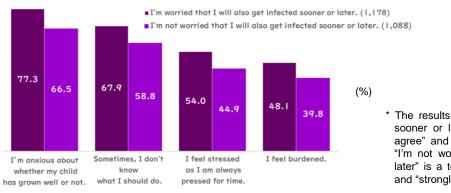
Figure 6-4-1: Mothers' thoughts about childrearing (preschool children/elementary school children)



* Percentage (%) of "Strongly agree + Somewhat agree."

* For the survey items, we referred to "Japanese Longitudinal Study of Early Childhood Development and Parenting 2017-2018" (Cedep at the University of Tokyo; BERD)

Figure 6-4-2: Mothers' thoughts about childrearing (worries, burdens) (according to the degree of fear about infection of COVID-19)



* The results of "I'm worried that I will also get infected sooner or later" is a total of the answers of "strongly agree" and "somewhat agree." Likewise, the results of "I'm not worried that I will also get infected sooner or later" is a total of the answers of "somewhat disagree" and "strongly disagree."

Connections with Other People through Childrearing; Involvement of the Spouse/Partner

(1) Family bonds; connections with other people

About 80% of mothers increasingly value bonds with their family and connections with other people following the outbreak of the COVID-19 pandemic

We asked the participants whether their value on family bonds and human connections has changed following the outbreak of the COVID-19 pandemic. About 80% of mothers with both preschool children and elementary school children gave positive answers such as "I value spending time with my family" and "I value connections with other people" (strongly agree + somewhat agree). For connections with other people online, only about 40% of mothers gave positive answers such as "I want to learn hobbies and other new things" and "I want to utilize it in childrearing." Likewise, about 50% of mothers gave somewhat negative answers such as "It is difficult to feel connected with other people."

Q: Do you value your life and work styles more following the outbreak of the COVID-19 pandemic?

■ Figure 7-1-1: Mothers' value on family bonds and human connections (preschool children/elementary school children)

I value spending	Preschool children	45.7 40.6			12.	<mark>3</mark> 4.		
ime with my family	Elementary school children			4	- 11	0. . <mark>5 4.(</mark>		
I value connections with other people	Preschool children	37.7		45	9.7	6.2		
	Elementary school children	30.5		49.0	11.5	7.4		
I want to spend more time at home than going out	Preschool children	16.9 43.5 11.8		11.8	23.0	4		
	Elementary school children	20.3	48	3.7	12.4	15.	7 2	
I feel stress if I have to stay with my family all the time	Preschool children	17.9	31.1 11.8		23.3		15.9	
	Elementary school children	15.8	31.4	8.0	29.0		5.8	

Strongly agree Somewhat agree Unchanged (since the outbreak of COVID-19) Somewhat disagree Strongly disagree

(%)

(%)

■ Figure 7-1-2: Mothers' value on connections with other people online (preschool children/elementary school children)

							()
I want to learn hobbies	Preschool children	12.2	26.8	18.0	2	5.9	17.1
and other new things online	Elementary school children	13.6	29.2	13.1 30.1		0.1	14.0
It is difficult to feel connected with other people online	Preschool children	12.4	38.9		14.7	27.4	6.6
	Elementary school children	13.1	40.5		13.0	25.6	7.8
I want to get connected with the outside world (people, services, experiences, etc.) while staying at home	Preschool children	10.7	36.0	14	.6	27.6	11.2
	Elementary school children	9.7	34.8	15.	4	28.5	11.7
I want to utilize online opportunities regarding the various aspects of childrearing (consultation and interaction with other mothers)	Preschool children	10.7	31.5	16.5		28.4	12.9
	Elementary school children	9.6	32.5	14.7	2	29.4	13.8

Strongly agree Somewhat agree Unchanged (since the outbreak of COVID-19) Somewhat disagree Strongly disagree

Connections with Other People through Childrearing; Involvement of the Spouse/Partner

(2) Connections with other people; involvement of the spouse/partner

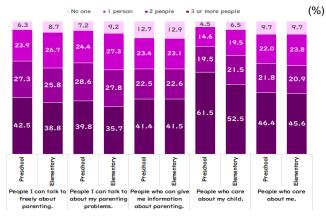
Mothers who have connections with other people through childrearing can feel more enjoyment and less anxiety

We asked the participants about their connections with other people through childrearing and attitudes towards childrearing. For the question concerning human connections through childrearing, about 10% of mothers with both preschool children and elementary school children answered that they have "nobody" who gives information or cares about them. For mothers' attitudes towards childrearing, it is revealed that mothers who have more connections with other people through childrearing or who think they receive mental support from their spouse/partner can feel more enjoyment and confidence in childrearing.

- Q. How many of the following people (excluding your spouse) are currently involved in raising your child? (Fig.7-2-1)
- Q. For each of the following, please indicate the degree to which they apply to you. (Fig.7-2-2)



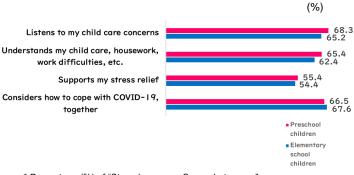
Mothers' connections with other people through childrearing (by the categories of preschool children/elementary school children)



Q. How much of the following applies to the spouse's behavior to you?

Figure 7-2-3:

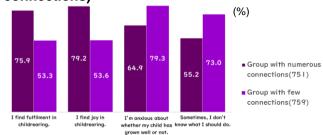
Mothers receiving mental support from their spouse/partner (by the categories of preschool children/elementary school children)



* Percentage (%) of "Strongly agree + Somewhat agree."

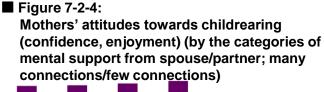
* The above figures are based on the answers of 2,139 mothers with the spouse/partner.

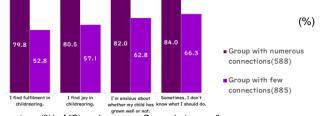




* Percentage (%) of "Strongly agree + Somewhat agree."

* We divided the participants into three groups according to their answers to the five items shown in Figure 7-2-1, namely, "Few connections," "Modest connections" and "Many connections" (the category of "Modest connections" is omitted from the above chart). Each category is determined based on the total score, which is calculated with the following system: "Nobody" = 0 point, "One person" = 1 point, "Two persons" = 2 points, and "Three persons or more" = 3 points.





* Percentage (%) of "Strongly agree + Somewhat agree."

* The above figures are based on the answers of mothers with the spouse/partner.
* We divided the participants into three groups according to their answers to the four items shown in Figure 7-2-3, namely, "Not much support," "Modest support" and "Much support" (the category of "Modest support" is omitted from the above chart). Each category is determined based on the total score, which is calculated with the following system: "Strongly agree" = 4 points, "Somewhat agree" = 3 points, "Somewhat disagree" = 1 point.

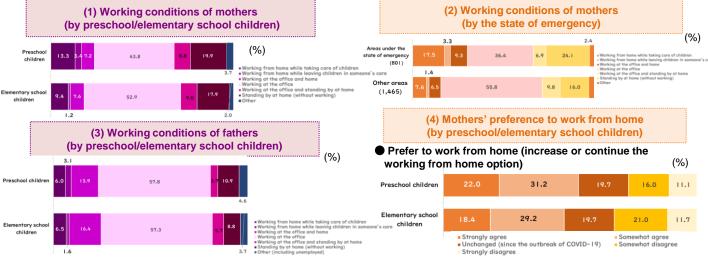
8 Working Conditions; Anticipation of Changes in Household Income and Education Spending

About 60% of families answered that their spending on education "Would Not Change"

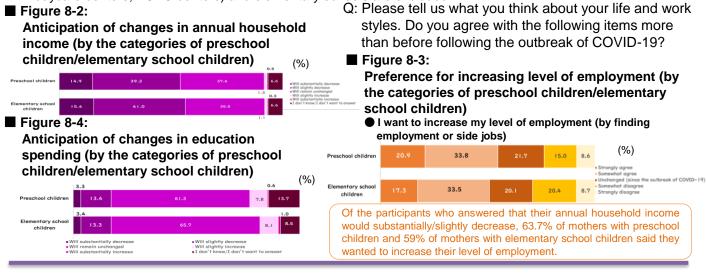
As for working conditions, nearly 30% of mothers and more than 10% of fathers answered the options of "Working from home" and "Working at the office and home." More mothers living in the areas under the ongoing state of emergency are working in the form of "Working from home" or "Working from home while taking care of children" compared to those mothers living in other areas. About 20% of overall mothers are working in the form of "Working from home." About 50% of mothers answered that they became more eager to take the option of "Working from home" following the outbreak of the COVID-19 pandemic. In addition, more than 50% of mothers with both preschool children and elementary school children answered that their spending on education would not change for the next year.

- Q: Please tell us about the working conditions of you as well as your spouse/partner at present (when this survey is conducted). (Sub-charts 1, 2, and 3)
- Q: Please tell us what you think about your life and work styles. Do you agree with the following items more than before following the outbreak of COVID-19? (Sub-chart 4)

■ Figure 8-1: Mothers' and fathers' working conditions and future outlook as of May 2020 (by the categories of preschool children/elementary school children)



Q: Do you think your household income will change due to the COVID-19 pandemic?/ Q: Do you think you need to change your spending on education for your child (costs for private-tutoring schools, distance learning, enrichment lessons, picture books, and toys) for the next one year, which you planned before the outbreak of COVID-19? * Fees for tuition, education materials, optional enrichment lessons at preschools (kindergartens, daycare centers, ECEC centers) and elementary schools are excluded.





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