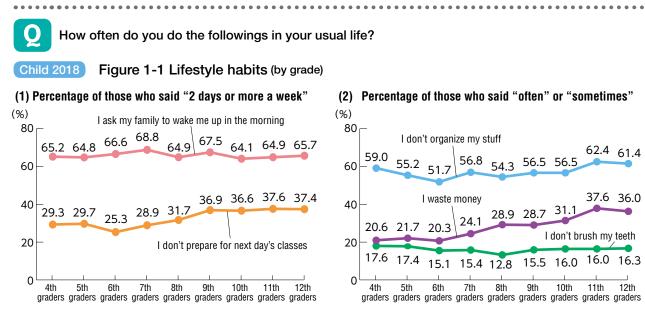
1. Current situation and change of children's everyday life (1) Lifestyle habits

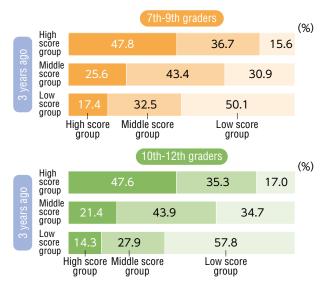
7th-9th graders who had established lifestyle habits when they were 1st-6th graders have become to study in a more planned manner than those who hadn't.

The percentages of "I ask my family to wake me up in the morning" (about 60%), "I don't organize my stuff" (50–60%), and "I don't brush my teeth" (about 10%) do not decrease as the grade goes up, and there is not much difference among different school stages. The percentages of "I don't prepare for next day's classes" and "I waste money" (about 20–30%, respectively) increase as the grade goes up, highest in 10th-12th graders. When looking at the relationship between whether or not lifestyle habits had been established three years ago and present lifestyle habits/learning styles, children who had established lifestyle habits three years ago still maintain the lifestyle habits and have higher percentage in "I plan and study" and "I accomplish whatever I decided to do."

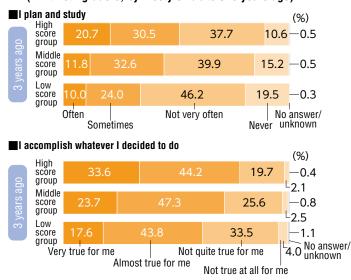


Child 2015-2018 Figure 1-2 Relationship between the lifestyle habits of 3 years ago (2015) and present (2018) lifestyle habits & learning styles, etc.

(1) Present lifestyle habits (by lifestyle habits of 3 years ago)



(2) Current learning style, etc. (in 7th-9th graders, by lifestyle habits of 3 years ago)



Note 1: The percentages represent the proportion of "4-5 days a week" plus "2-3 days a week." Children gave answers about their daily habits on a school day (Figure 1-1 (1)).

Note 2: The percentages represent the proportion of "often" plus "sometimes" (Figure 1-1 (2)).

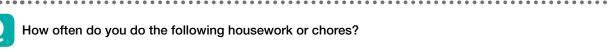
Note 3: These are school stages as of 2018. High/middle/low score groups in "3 years ago" and "present lifestyle habits" were derived by giving scores to five answer options in Figure 1-1 (on a scale of 1 for "4-5 days a week" and "often" to 4 for "never") and adding up scores to gain a total score, and then dividing all total scores into three equal parts based on the number of samples (Figure 1-2).

Note 4: "I plan and study" is the response to the question "how much do you do the followings when you study?" "I accomplish whatever I decided to do" is an answer to the question "how much do the followings hold true for you?" In Figure 1-2 (2), the results by the score of 3 years ago showed the same tendency.

(2) Housework; chores

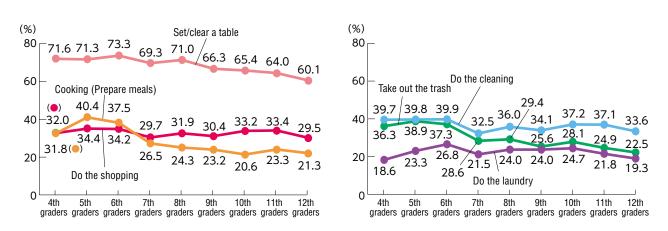
7th-9th graders who had been doing chores when they were 1st-6th graders tend to answer "I do what I can do on my own."

As for chores, the percentages of "do the shopping" (around 30%), "do the cleaning" (30% or more), and "do the laundry" (around 20%) are almost equal in all school graders. On the other hand, the percentage of chores, such as "set/clear a table" (about 60–70%), "cooking" (20–40%), "take out the trash" (about 20–30%), is higher among 1st-6th graders than among 7th-12th graders. When looking at the relationship between whether or not children had been doing chores three years ago and chores being done currently/current situation of life attitudes, children who had been doing chores three years ago still tend to do chores now and have higher percentage in "I do what I can do on my own" and "I collaborate with others to work as a team."

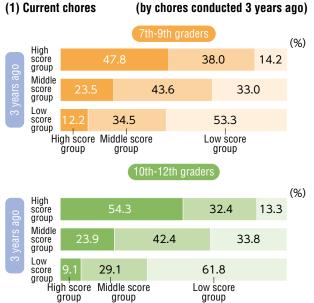


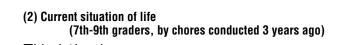
Child 2018 Figure 1-3 Housework; chores

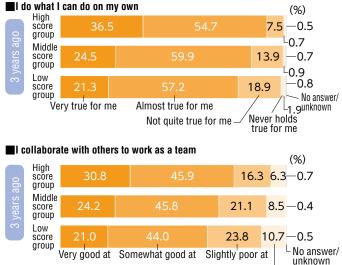




Child 2015-2018 Figure 1-4 Relationship between chores being done 3 years ago (2015) and chores being done currently/current situation (2018) of life







Very poor at

Note 2: These are school stages as of 2018. High/middle/low score groups in "3 years ago" and "chores being done currently" were classified as follows: giving scores to six answer options in Figure 1-3 (on a scale of 1 for "never" to 4 for "often") and adding up scores to obtain a total score, and then dividing all total scores into three equal parts based on the number of samples (Figure 1-4).

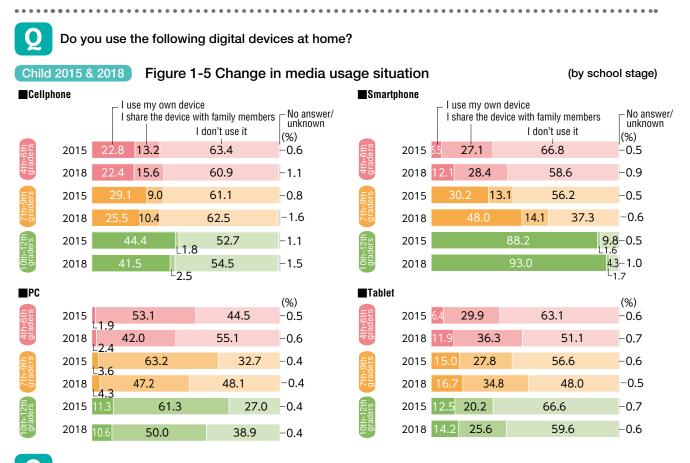
Note 3: "I do what I can do on my own" is an answer to the question "how much do the followings hold true for you?" "I collaborate with others to work as a team" is a response to the question "Are you good at the followings or poor at the followings?" In Figure 1-4 (2), the results by the score of 3 years ago show the same tendency.

Note 1: The percentages represent the proportion of "often" plus "sometimes" (Figure 1-3).

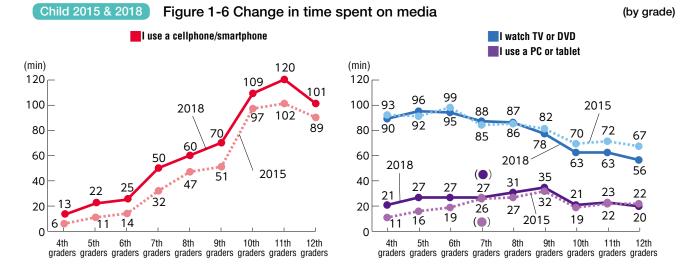
(3) Use of media

7th-9th graders using their own smartphones have increased.

When looking at a change in usage of media by children over the last three years, particularly as for smartphones, the percentage of "I use my own device" has increased by 18 points in 7th-9th graders and by 5 points or so in 1st-6th graders and 10th-12th graders, while that of "I don't use it" has decreased. As for tablets, the percentage of "I use my own device" has increased by 5 points or more among 1st-6th graders, and that of "I share the device with family members" has also increased by 5 points or more among all school graders from 1st through 12th, while that of "I don't use it" has decreased. With regard to time spent on media, time spent on cellphone/smartphones has increased by 7–19 min per day across all grades, and time spent on PCs and tablets has increased by 8–11 min per day in 1st-6th graders.



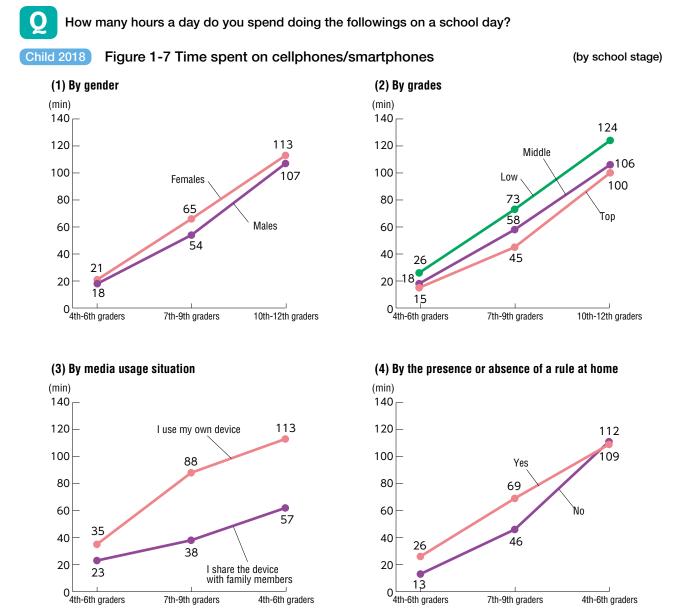
How many hours a day do you spend doing the followings on a school day?



Note: Children gave answers by excluding hours of using devices within their schools. The average time was calculated by replacing "spend no time" with 0 minute, "spend 5 minutes" with 5 minutes, and "spend more than 4 hours" with 300 minutes, with "no answer/unknown" excluded (Figure 1-6).

Lower/upper secondary students who use "their own device" spend about 50 minutes longer per day on cellphones/smartphones than those who "share the device with family members."

When looking at the average time spent on cellphones/smartphones by gender and by grades, the time tends to be longer in females and in children with low academic achievment. As for the average time by media usage situation, children who use "their own" spend more time on media, particularly lower/upper secondary students who use "their own" spend about 50 minutes longer per day than those who "share the device with family members." As for the average time by the presence or absence of a rule at home regarding "how to use cellphones/smartphones," 1st-6th graders and 7th-9th graders who have a rule spend more time, suggesting that they are controlling the usage which tends to become longer by setting a rule.



Note 1: Children gave answers by excluding hours of using devices within their schools. The average time was calculated by replacing "spend no time" with 0 minute, "spend 5 minutes" with 5 minutes, and "spend more than 4 hours" with 300 minutes, with "no answer/unknown" excluded (Figure 1-7).

- Note 2: Grades were reported by children themselves (self-assessment). 4th-6th graders reported their self-assessment for 4 subjects (Japanese, math, science, social studies) and 7th-9th/10th-12th graders reported for 5 subjects (Japanese, math, science, social studies, English) on a scale of 1 to 5. We then added up scores to obtain a total score for each sample and divided all total scores into three groups of "top," "middle," and "low" for each school stage so that the number of samples should be the same among three groups (Figure 1-7 (2)).
- Note 3: Among those who answered "I use my own device" in Figure 1-5, those answered that they were using their own "cellphone" and/or "smartphone" are indicated as "I use my own device" in Figure 1-7 (3), and likewise those who answered that they were sharing "cellphone" and/or "smartphone" with family members are indicated as "I share the device with family members" in Figure 1-7 (3).
- Note 4: In Figure 1-7 (4), we used guardians' responses to the question "Do you have any rules at home on how to use cellphones or smartphones?"

(4) Likes and dislikes of studying, likes and dislikes of subjects

Females who like "science" decrease significantly compared to males from 7th-9th grades and onward.

The percentage of those who answered "I like studying" ("like it very much" plus " kind of like it") declines significantly between 6th graders and 7th graders in both males and females (Figure 1-8 (1)). When looking at the percentage of "I like studying" ("like it very much" plus "kind of like it") by subject, females show higher percentages than males in "Japanese" and "English," while males show higher percentages than females in "math," "science," and "social studies" (Figure 1-8 (2)-(6)). Particularly, the percentage of females who said "I like science" declines more significantly compared to males from 7th-9th grades and onward (Figure 1-8 (4)). As for "English," the percentage of males who said "I like English" declines more significantly than that of females for 7th graders and 10th graders (Figure 1-8 (6)). How much do you like "studying"? How much do you like the following subjects or classes? Child 2018 Figure 1-8 Percentage of "I like studying" and "I like the subject" (total, by grade, by gender of children) (1) Percentage of those who said "I like studying" (2) Percentage of those who said "I like Japanese" (%) (%) 100 100 Total Females 69.7() 80 80 72.2 68.6 69.2 68.0 67.8 63.7() 62.6 60.8 60.1 55.7 58.6 61.8 572 59.2 51.1^{45.9(●)} 60 44.9() 60 54.3 a 64.7() 41.9 36.1() 64.7(•) 62.0(•) 58.1(•) 43.3() 48.4 50.5 39.3()) 5 Ĭ.0 33.5() 35 50 48.8 40 40 47.0() 40.340.7() 40.2 42.2 40.8 40.2 397 Males 42.7() 35.1(•) 33.8 34.7(•) 39.3() 30.6 20 20 õ õ 12th 4th 7th 8th 9th 10th 12th 5th 6th 11th 4th 5th 6th 7th 8th 9th 10th 11th graders (3) Percentage of those who said "I like math" (4) Percentage of those who said "I like science" (%) (%) 100 100 82.5 76.6() 85.7 80.2 74.6() 80 73.9 80 72.4 72.2 71.4 68.7 66.8 83.1()) 66 5 65.0 80.0() 78.3() 72.7 72 57.8 58.8 58.6 56.8 60 523 60 74 4() 520 63.1 68.1() 50266.5(•) 64.3(•) 64.7(•) 64.4 64.7(•) 57.4(•)59.4(•)49.4 53.1(•)52.6(•) 44.2 60.7 59.2() • • 44.9 9 57.8() 48.3 47.3 40 40 53.7() 42.3 39.5 38.5 36.4 38.2 47.8() 20 20 õ 0 4th 5th 6th 7th 8th 9th 10th 11th 12th 4th 5th 6th 7th 8th 9th 10th 11th 12th graders (5) Percentage of those who said "I like social studies" (6) Percentage of those who said "I like English" (%) (%)100 100 76.4() 75.0() 70.9() -72.0(•)73.7 68.9(•) 69.7 59.6(•) 71.1() 80 80 66.1 63.0() 66.9 59.0 56.9(**0**) 55.8 58.7() 62.7 72.7() 52.8() 69.4 49.7() 50 9() 71.6() 66.5 60 4.7()52.7 60 46.7(•) 50.5 53.6 66 65.1 50.5() 61.3() 55.0 63.1 (**●)**59.8 (●) 63.2() 53.9 58.0 56.4() 53.2(50.1 55.6() 40 56.6() 40 47.0⁽⁾ 40.0 43.2⁽⁾ 41.8 53.8() 50.3() 40.2 46.7() 41.1() 20 20 0 0 10th 12th 7th 4th 5th 6th 7th 8th 9th 11th 5th 6th 8th 9th 10th 11th 12th 4th graders graders

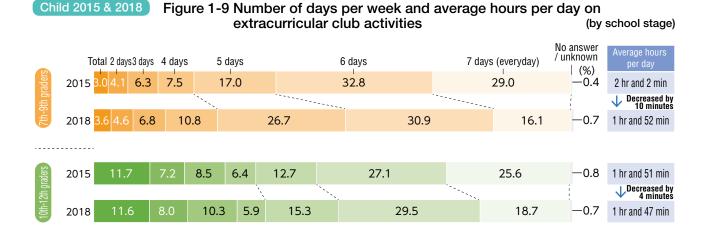
Note 1: The percentages represent the proportion of "like it very much" plus "kind of like it" (Figure 1-8 (1)–(6)) Note 2: In Figure 1-8 (1)–(6), the percentages were calculated after excluding the number of "no answer/unknown."

Less lower/upper secondary students participate in extracurricular club activities 7 days a week

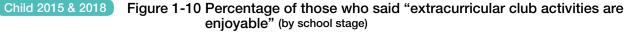
As for the question about the number of days of extracurricular club activities per week, the percentage of 7th-9th graders who chose "7 days (everyday)" has decreased significantly by 12.9 points from 29.0% in 2015 to 16.1% in 2018, and that of 10th-12th graders has decreased by 6.9 points from 25.6% in 2015 to 18.7% in 2018 (Figure 1-9). In addition, the average hours of extracurricular activities per day have decreased by 10 min from 2 hr and 2 min in 2015 to 1 hr and 52 min in 2018 for 7th-9th graders, and decreased by 4 min from 1 hr and 51 min in 2015 to 1 hr and 47 min in 2018 for 10th-12th graders. These results—decrease in the number of days per week and hours per day—indicate that the time spent by lower/upper secondary students on extracurricular club activities has decreased significantly between 2015 and 2018. Meanwhile, the percentage of students who said "extracurricular club activities are enjoyable" has been on the downward trend among lower/upper secondary students.

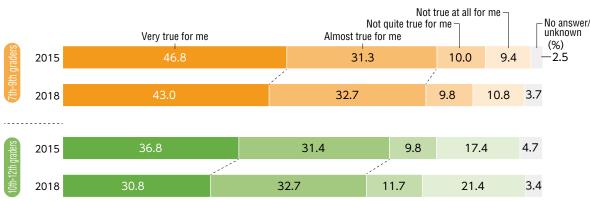
How many days do you participate in extracurricular club activities during a week?

How many hours per day do you spend on extracurricular club activities? Please tell us an average approximate time.



How much are the followings true for you in your school life?





Note 1: Only lower/upper secondary students participating in extracurricular activities were asked these questions (Figures 1-9 and 1-10).

Note 2: The average time spent on extracurricular club activities per day was calculated by replacing "30 min" with 30 min, "1 hour" with 60 min, "4 hours" with 240 min, "more than 4 hours" with 270 min, with "no answer/unknown" excluded "(Figure 1-9).

(6) About themselves

The percentage of self-esteem of 1st-6th and 7th-9th graders has increased, but that of resilience (capacity to regain confidence even after a failure) shows an overall declining trend

The percentages of those who answered "very true" to the question "I can say what my good points are" have increased by more than 5 points, respectively, in 4th-6th and 7th-9th graders, showing an upward trend in "self-esteem" of 1st-6th and 7th-9th graders. On the other hand, the percentage of "I can regain confidence even after a failure" ("very true" plus "almost true") has decreased by about 5 points among all school graders from 1st through 12th, showing an overall downward trend in "resilience "when they are forced to confront a failure. Next, we divided the 1st-6th and 7th-9th graders who said in 2015 that they had "self-esteem" into two groups: a group with resilience and a group without resilience, and then compared the percentage of "I have self-esteem" between the two groups in 2018. As a result, a group with resilience indicated a more than 10-points higher percentage in self-esteem than a group without resilience.



Child 2015 & 2018

Figure 1-11-1 Percentage of "I can say what my good points are" (self-esteem) (by school stage)

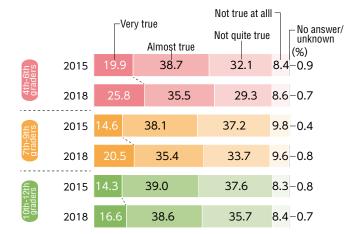
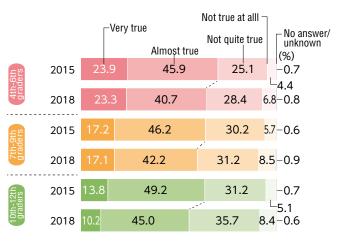


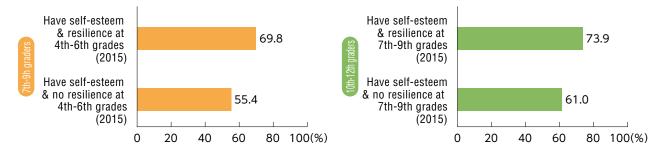
Figure 1-11-2 "I can regain confidence even after a failure" (resilience) (by school stage)





How much do the followings hold true for you?

Child 2015-2018 Figure 1-12 Percentage of "I can say what my good points are" (self-esteem) (by school stage, 2018)



Note: Positive responses to "I can say what my good points are" (i.e., "very true" and "almost true") are represented as "have self-esteem," positive responses to "I can regain confidence even after a failure" (i.e., "very true" and "almost true") are represented as "have resilience," and negative responses (i.e., "not quite true" and "not true at all") are represented as "no resilience" (Figure 1-12).

Whether mother was employed or not does not have a certain influence on changes in her child's grades, self-esteem, or resilience.

What relation is there between mother's academic background/employment and changes in her child's grades, self-esteem, or resilience? The only item that seems to be affected by whether mother has a college degree or not-a gap between the percentage of "rise" and that of "decline" as more than 5 points—was "change in grades" between 7th-9th graders and 10th-12th graders. Similarly, the only item for which there was a gap in the percentage of "rise" of more than 5 points due to whether mother was employed or not was also "change in grades" between 7th-9th graders and 10th-12th graders. As for "change in self-esteem" and "change in resilience," a gap due to mother's academic background/employment was not confirmed. Overall, whether mother was employed or not seems not to have a great influence on children's conditions.

How much do the followings hold true for you?

Child 2015-2018

Figure 1-13-1 "Change in academic performance" (by mother's academic background, by mother's employment status in 2015, 2015 - 2018)

(1) By mother's academic background

(1) By mother's academic background (%)				(2) By whether mother was employed or not (2015)			(%)
	Rise	No change	Decline		Rise	No change	Decline
2015 2018 Mothers with a degree	24.3	50.4	25.3	2015 2018 Employed mother	22.6	51.1	26.3
$4st-6th \rightarrow 7th-9th$ Mothers without graders graders $a degree$	21.7	51.8	26.5	4st-6th _ 7th-9th graders graders graders mother	24.8	50.1	25.2
2015 2018 Mothers with a degree	26.4	43.7	29.9	2015 2018 Employed mother	31.7	42.0	26.2
4st-6th 7th-9th Mothers without a degree	36.0	40.9	23.2	4st-6th 7th-9th Stay-at- graders graders home mother	26.6	44.9	28.5

(0/)

Figure 1-13-2 Change in self-esteem

(by mother's academic background, by mother's employment status, 2015 - 2018)

(2) By whether mother was employed or not (2015)

(1) By mother's academic background (%)			(%)	(2) By whether mother was employed or not (2015)			(%)
	Rise	No change	Decline		Ris	e No change	Decline
2015 2018 Mothers with a degree		65.7	17.8	2015 2018	Employed 16.	3 63.5	20.2
4st-6th 7th-9th Mothers without graders graders	15.9	63.4	20.7	4st-6th → 7th-9th graders → graders	Stay-at- home 16. mother	2 66.7	17.2
2015 2018 Mothers with a degree		66.2	15.8	2015 2018	Employed mother 18.	1 66.5	15.4
4st-6th 7th-9th Mothers without graders graders a degree	18.1	68.1	13.7	4st-6th → 7th-9th graders → graders	Stay-at- home mother	1 68.8	13.1

Figure 1-13-3 "Change in resilience"

(by mother's academic background, by mother's employment status, 2015 - 2018)

(1) By mother's academic background (%			(%)	(2) By whether mother was employed or not (2015)			(%)
	Rise	No change	Decline		Rise	No change	Decline
2015 2018 Mothers with a degree	12.0	66.5	21.5	2015 2018	Employed 11.4	65.2	23.4
4st-6th 7th-9th Mothers without graders graders a degree	12.3	62.9	24.7	4st-6th 7th-9th graders graders	Stay-at- home 13.9 mother	64.7	21.4
2015 2018 Mothers with a degree		63.4	23.6	2015 2018	Employed mother 13.6	65.2	21.2
4st-6th 7th-9th Mothers without graders graders a degree	14.3	66.4	19.3	4st-6th7th-9th gradersgraders	Stay-at- home 13.8 mother	63.4	22.8

Note 1: As for "Change in grades," we divided all total scores of self-assessment of grades reported in 2015 and 2018 into three groups for each school stage so that the number of samples should be the same in the order from highest to lowest and classified them into three groups of "rise," "no change," and "decline" by taking a difference (or change) in the group each sample belonged to between 2015 and 2018 (Figure 1-13-1).

Note 2: As for change in "self-esteem" ("I can say what my good points are") and "resilience" ("I can regain confidence even after a failure"), we divided all total scores of the self-assessment reported in 2015 and 2018 into two groups of "Yes" and "No" and classified all samples into three groups of "rise," "no change," and "decline" by taking a difference (or change) in the group each sample belonged to between 2015 and 2018 (Figures 1-13-2, 1-13-3).