# What are the Differences in Learning Environments of Elementary and Junior High School in Japan?

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# **Abstract**

This study investigated the differences in learning environments between elementary and junior high school in Japan and explores possible factors to influence student's motivation through retrospective method.

In total, 212 Japanese students in 7<sup>th</sup> grade (112 boys and 100 girls; average age = 12.33 years) in one public junior high school participated in this questionnaire survey. The questionnaire included two questions: "Do you feel more difficulty in following the classes in junior high school compared to elementary school" with the available answers being yes, or no. After this question, this survey asked "why do you feel difficulty following the classes in junior high school" for students responding "yes" in the first question by open-ended style. For the first question, 149 students (70.28%) responded "yes". The answers to the open-ended question provided 203 statements from the students. These statements were classified into 12 categories through the KJ method: (a) Difficulty in the learning contents of the junior high school classes, (b) High speed of the classes, (c) Increase of the amount of the learning content, (d) Existence of regular tests, (e) Many things to memorize, (f) Absence of self-learning time due to club activities or cram school, (g) Increase of the number of class, (h) Inherently poor ability to study, (i) Large number of tasks, (i) Poor teaching ability of the teachers, (k) Comparison of academic grade of the regular tests, (1) Others.

Keywords: learning environment, elementary school, junior high school

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## Introduction

Many researchers have demonstrated that academic motivation, especially intrinsic motivation, declines through the school years (Gottfried, Fleming, & Gottfried, 2001; Hater, 1981; Lepper, Corpus, & Iyenger, 2005). Through a 3-year longitudinal survey of a Japanese sample, however, Nishimura & Sakurai (2010) suggested that only autonomous motivation including intrinsic motivation, decreased with school years. In contrast, controlled motivation increased within the same period. Nishimura & Sakurai (2013) also showed that these changes particularly occur between the periods of transition from elementary to junior high school. This result suggests that Japanese student's motivation became more controlled, rather than autonomous, as they age.

How can these results be explained? Blyth, Simmons, & Darlton-Ford (1983) stated that elementary school empathizes a process toward academic achievement as well as achievement itself, while junior high school empathizes academic performance and gave the student a positive or negative evaluation. Stipek & Iver (1989) stated that students conduct social comparison in the environment to be focused an achievement. Such a social comparison relatively occurred in junior high school compared to elementary school (Feldlaufer, Midgley, & Eccles, 1998). Therefore, enhancing an importance of academic performance and conducting the social comparison contained the possibility to enhance a sense of being controlled and undermined autonomy toward academic activity. Hence, student's motivation changes into being controlled. In addition, OECD (2010) suggested that Japanese education place importance on discipline within the learning environment compared to other countries. This report implied that controlled aspects are exposed in the learning environment within elementary and junior high schools in Japan.

As stated above, there has been discussion on the issue from the perspective of changes in school environments; however, there are few empirical investigations exploring on the differences of the learning environments between elementary and junior high schools. In this study, first-year junior high school students were asked what the differences in learning environments of elementary and junior high school are through retrospective method.

# **Objective of the Present Study**

This study investigates the differences in learning environments between elementary and junior high school in Japan and explores why student's motivation shifts from autonomous to being controlled.

## Method

A questionnaire survey was conducted on students in a 7<sup>th</sup> grade, junior high school in June, 2014. The students were first-year in junior high school and two months had passed since their first school term started. The questionnaire included the two question: (1) "Do you enjoy classes in junior high school more compared to elementary school" with available answers being yes, equally, or no. (2) "Do you feel more difficulty in following the classes in junior high school compared to elementary school" with the available answers being yes, or no. After the two questions, the questionnaire survey also asked the main reason why the student felt difficulty in following the classes in junior high school for students responding "yes" in question (2) by open-ended style.

# **Participants**

In total, 212 students in 7<sup>th</sup> grade (112 boys and 100 girls; average age = 12.33 years) in one public junior high school in Kanto region in Japan participated in this survey. Most entered this junior high school from four different elementary schools.

#### Results

For the first question (1), 60 students (28.30%) responded "yes" that means they felt enjoyment in their junior high classes. 117 students (55.18%) responded "equally". 35 students (16.51%) responded "no". For the next question (2), 149 students (70.28%) responded "yes" that means they felt difficulty in following the classes in junior high school compared to elementary school. 63 students responded "no". 34 students (16.03%) answered "yes" in (1) and (2) question.

The answers to the open-ended question provided 203 statements regarding why those responded with "yes" to question (2), felt difficulty in following the junior high school classes.

Table 1 Result of classification in regard to student's statements

Category	Number of statements	Ratio (%)	Boys	Girls
Difficulty in the learning contents of the junior high school classes	69	33.99	37	32
High speed of the classes	33	16.26	8	25
Increase of the amont of the learning content	22	10.84	13	9
Existence of regular tests	17	8.37	7	10
Many things to memoraize	15	7.39	3	12
Absence of self-learning time tue to club activities or clam school	13	6.40	8	5
Increase of the number of class	12	5.91	6	6
Inherently poor ability to study	10	4.93	6	4
Large number of tasks	4	1.97	1	3
Poor teaching ability of the teachers	2	0.99	1	1
Comparison of academic grade of the regular tests	2	0.99	0	2
Other	4	1.97	3	1
Total	203	100.00		

These statements were classified into 12 categories through the KJ method, the result was shown in Table 1: (a) Difficulty in the learning contents of the junior high school classes (69 statements, 33.99%), (b) High speed of the classes (33, 16.26%), (c) Increase of the amount of the learning content (22, 10.84%), (d) Existence of regular tests (17, 8.37%), (e) Many things to memorize (15, 7.39%), (f) Absence of self-learning time due to club activities or cram school (13, 6.40%), (g) Increase of the number of class (12, 5.91%), (h) Inherently poor ability to study (10, 4.93%), (i) Large number of tasks (4, 1.97%), (j) Poor teaching ability of the teachers (2, 0.99%), (k) Comparison of academic grade of the regular tests (2, 0.99%), (l) Others (4, 1.97%).

# **Discussion**

The present study investigated differences of learning environment between elementary and junior high schools through a retrospective method by questionnaire survey. The results showed that 28.30% of students respond that they felt enjoyment in classes in junior high school compared to those in elementary school, and 70.28% of students felt difficulty in following the class. Meanwhile, the results also indicated 16.03% of students who felt both enjoyment and difficulty in class.

Through the KJ method, 12 categories regarding reasons why students felt difficulty in junior high school compared to elementary school. These 12 categories could be considered as a possible cause of why students' motivation change to controlled from autonomous.

"Difficulty in the learning contents of the junior high school classes" involved a decline in the student's perception of their competence in learning. According to Self-determination Theory (Ryan & Deci, 2000), competence is one of the basic psychological needs to maintain a state of motivation or prevention of a threat to the autonomy of a motivation. In addition, much research reveals the decline of perceived competence over school years (Jacobs, Lanze, Osgood, Eccles, & Wigfield, 2002; Wigfield et al., 1997). The present finding that "Difficulty in the learning contents of the junior high school classes" was stated as the most influential factor on student's motivation (33.99%), relates to the result of the previous research that showed the decrease of students' perceived competence.

Only the one category "Existence of regular tests", which is one of the control events, has been implied by previous research as the possible factor influencing the students' motivation to change to controlled from autonomous. However, other categories are the new findings of this research. This presents a contribution to this field, and gives a new considerations for understanding the students' motivational changes over school years, especially in the period of school transition from elementary to junior high school.

#### Limitations

Several limitations require consideration concerning this study. One limitation of this study was its reliance on the report from the students in one public junior high school. Clearly, replication of this study is necessary, and future studies should be conducted on the large sample survey. Another question worthy of future research is to examine whether those 12 experiences impact on student's motivation and change it into being controlled based on empirical study. A longitudinal data and more sophisticated analyses would offer better causal insights into students' motivational changing.

# Conclusion

The present study has revealed 12 possible experiences to change student's motivation to control from autonomous in the periods of school transition from elementary to junior high school. This study also represents an important a step in understanding the Japanese students' motivation.

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