What Factors Contributed to the Adaptation Gap during School Transition in Japan?

Tadaaki Tomiie, Hiroki Shinkawa

Abstract—The present study was aimed to examine the structure of children’s adaptation during school transition and to identify a commonality and dissimilarity at the elementary and junior high school. 1,983 students in the 6th grade and 2,051 students in the 7th grade were extracted by stratified two-stage random sampling and completed the ASSESS that evaluated the school adaptation from the view point of ‘general satisfaction’, ‘teachers’ support’, ‘friends’ support’, ‘anti-bullying relationship’, ‘prosocial skills’, and ‘academic adaptation’. The 7th graders tend to be worse adaptation than the 6th graders. A structural equation modeling showed the goodness of fit for each grades. Both models were very similar but the 7th graders’ model showed a lower coefficient at the pass from ‘teachers’ support’ to ‘friends’ support’. The role of ‘teachers’ support’ was decreased to keep a good relation in junior high school. We also discussed how we provide a continuous assistance for prevention of the 7th graders’ gap.

Keywords—School transition, social support, psychological adaptation, K-12.

I. INTRODUCTION

For building the system with consistency such as K-12, a great reforming the current compulsory educational system is being carried out in Japan. Specifically, the adaptation gap between 6th grade and 7th grade is called for “the 7th graders’ gap”, and is gathering the most public attention at the moment [1]-[3]. This phenomenon is considered as a symbol of the failure of K-12. During this school transition, an incidence rate of bullying increases threefold, even if they enter into the junior high school on the same district. In the past, many trial have been accomplished to overcome this gap, which success motivating a student to study, strengthening a self-esteem of students, decreasing a school absenteeism and so on [1]-[3]. This study aimed to examine the structure of children’s adaptation during school transition and to identify a commonality and dissimilarity at the elementary and junior high school [4].

Up to the present time, there has been some information available on prevention for this adaptation gap. For example, the school maladjustment of 7th graders had been influenced by anticipatory anxiety at 6th graders in the preceding year [5]. It is assumed that the anticipatory anxiety at the 6th graders is being carried out in Japan. Specifically, the adaptation gap between 6th grade and 7th grade is called for “the 7th graders’ gap”, and is gathering the most public attention at the moment [1]-[3].

II. METHODS

A. Participants and Procedure

The participants for this study consisted of 6th graders and 7th graders in public elementary and junior high schools at Hokkaido in Japan. Stratified random sampling method was used to obtain the samples without selection bias. The first stage involved random selection of 58 elementary schools and 53 junior high schools at Hokkaido prefecture, Japan. A total of 1,983 6th graders and 2,051 7th graders were subjected to the present study. The survey was carried out in these schools on October to obtain the data using the self-administered questionnaire. This study was approved by the local ethical committee.

B. Questionnaire

Adaptation Scale for School Environments on Six Spheres (ASSESS; Yamada & Yonezawa) [14]:

The ASSESS is a 30-item self-administered questionnaire that measures children’s school adaptation. Respondents rate each items on five-point Likert scale ranging from 1 (disagree)
The scores of 7th graders tended to be lower than 6th graders’ scores of all subscales except for “Anti-bullying Relationship”, and “Academic Adaptation”. All of subscale scores negatively correlated with a total score of “A-State” from the Japanese version of State-Trait Anxiety Inventory (STAI; Shimizu & Imae) [15].

Anxiety in the Junior High School:
Respondents rate each items on five-point Likert scale ranging from 1 (disagree) to 5 (agree). Questionnaire consisted of 10 items asking concerns about 1) study, 2) career after graduation, 3) upper-class students, 4) classmates, 5) teachers, 6) club activities, 7) school events, 8) school regulations, 9) practices, and 10) school attendance.

Information Resources about Junior High School Life:
Respondents rate “Yes” or “No”. Questionnaire consisted of eight items asking whether you got information about junior high school life from 1) parents, 2) sister and brother, 3) grandparents, 4) the elementary school teachers, 5) the elementary school friends, 6) the junior high school teachers, 7) seniors of the junior high school, and 8) cram school teachers.

C. Data Analysis
The data were analyzed using IBM SPSS Statistics 20 and IBM SPSS Amos 20. Unpaired t-test was administered to examine the difference of school adaptation between 6th graders and 7th graders. To construct a pass model, structural equation modeling (SEM) was used.

III. RESULTS
A total of 4,034 participants contributed to the all research agenda, as part of the survey using the questionnaire. As shown in Table I, the mean score and SD of the both 6th and 7th graders were calculated and confirmed it into the range of theoretical consistency.

Unpaired t-tests revealed the significant differences in the scores of all subscales except for “Anti-bullying Relationship” of ASSESS between 6th graders and 7th graders (see Table I). The scores of 7th graders tended to be lower than 6th graders’.

Structural equation modeling (SEM) revealed that the two pathways were indicated from “Teachers’ Support” to “General Satisfaction” indirectly. One way is mediating social functions, and the other way is mediating academic functions. Moreover, significant differences were revealed in the paths from “Teachers’ Support” to other variables between 6th graders and 7th graders by using unpaired t-test. These paths of 7th graders also tended to be lower than 6th graders’. All the fit of the hypothesis models can be considered as acceptable (see Figs. 1 and 2).

Unpaired t-tests revealed the significant differences in the scores of anxiety in the junior high school except for concern about “study” and “school attendance” between 6th graders and 7th graders (see Table II). The scores of 7th graders almost tended to be lower than 6th graders’; however, “career after graduation” of 7th graders tended to be higher than 6th graders.

Chi-square tests conducted to clarify the difference in information resources about junior high school life between 6th graders and 7th graders (see Table III). The results showed the smaller qualified persons gotten information from “grandparents” and “elementary school friends” in 7th graders, while the larger qualified person gotten information from “junior high school teachers”.

IV. DISCUSSION
Our research shows that the successful assessment of...
comprehensive model for two grades during school transition could be available. Although there were many finding which were supplied for discussing about the school transition in the past, our comprehensive model succeed in involving almost theory and measurable various and is supplying new information for us.

### TABLE III

<table>
<thead>
<tr>
<th>Information resources</th>
<th>6th graders (n =1,983)</th>
<th>7th graders (n = 2,051)</th>
<th>( \chi^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Parents</td>
<td>1302 65.9</td>
<td>1358 66.4</td>
<td>0.12</td>
</tr>
<tr>
<td>Sister and brother</td>
<td>766 42.7</td>
<td>850 44.9</td>
<td>1.74</td>
</tr>
<tr>
<td>Grandparents</td>
<td>608 31.0</td>
<td>494 24.4</td>
<td>22.02**</td>
</tr>
<tr>
<td>Elementary school teacher</td>
<td>994 50.4</td>
<td>1039 50.9</td>
<td>0.08</td>
</tr>
<tr>
<td>Elementary school friends</td>
<td>1190 60.4</td>
<td>973 47.8</td>
<td>64.41**</td>
</tr>
<tr>
<td>Junior high school teachers</td>
<td>379 19.6</td>
<td>526 25.9</td>
<td>22.25**</td>
</tr>
<tr>
<td>Seniors of junior high school</td>
<td>885 45.5</td>
<td>869 42.8</td>
<td>0.23</td>
</tr>
<tr>
<td>Cram school teachers</td>
<td>370 21.0</td>
<td>375 19.8</td>
<td>3.02</td>
</tr>
</tbody>
</table>

*Note. ** p < 0.01.*

As a result of having compared the 6th with the 7th graders, we found that there were some differences in their SEM figures although these models were very similar. On the 7th graders’ model showed a lower coefficient at the pass from “Teachers’ Support” to “Friends’ Support”. “Teachers’ Support” was not need to keep a good relation each other in junior high school contrary to expectations. The structure of student’s adaptive behavior may shift to the direction depending on a peer relation than with their teachers. It was clear that “Teachers’ Support” have limitations for students’ satisfaction.

Nevertheless the lower school adaptation in 7th graders, their anxiety about the junior high school life has decreased. These results would suggest that solving their worry is an unpredictable factor to increase school adaptation of them. Moreover, though the gap of “Friends’ Support” between two graders was exceedingly small size, the opportunities that they get information for school life and consult with their friends may be lost. Thus, making a classroom climate increasing students’ help-seeking behavior would be necessary.

While it is tempting to promote adaptive condition of students using a lot of supportive methods such as peer-counseling or social skill training by teacher, there are some subtypes of students’ teacher recognition in a junior high school student. The type of Acceptance, Affinity, Confidence, and Objectivity had a facilitative effect on the class norms of school student. The type of Acceptance, Affinity, Confidence, and Objectivity had a facilitative effect on the class norms of school student.

**V. CONCLUSION**

Our research shows two comprehensive adaptation models for 6th graders and 7th graders using SEM. Both models are similar, but there are some important differences. One of them is the effectiveness of “teachers’ support” to “friends’ support” and “general satisfaction” decreases from 6th graders to 7th graders. Instead of its decreasing, the influence of “prosocial skills” to “friends’ support” increase among 7th graders. It is assumed that this difference would be the key point for building the system of prevention about school transition gap. School based social skills training should start from elementary school gradually and build up students’ prosocial skills including academic and life skills for prevent the gap.

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**REFERENCES**


