The Relationship Between Over-Adaptation Towards Peers, Psychological Stress, and School Adjustment in Japanese Junior High School Students

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Abstract
The purpose of this study was to investigate the relationship between over-adaptation towards peers, psychological stress, and subjective adjustment to school in Japanese junior high school students. “Over-adaptation” was defined as the condition in which a person engaged in external over-adaptive behavior (self-inhibition and other-oriented behavior) towards others. A total of 949 Japanese junior high school students (453 boys and 495 girls) completed 3 questionnaires: an over-adaptation (towards peers) scale, a psychological stress scale, and subjective adjustment to school scale. The over-adaptation scale consisted of 16 questions which were subdivided into the 2 subscales; “self-inhibition” and “peer-oriented behavior”, and 16 questions of psychological stress scale were subdivided into the following 4 subscales; “angry affect”, “depression”, “physical response”, and “helplessness”. The results indicated that (1) a high score on self-inhibition towards peers significantly was related to a high score on all stress responses and a low score on subjective adjustment to school, and (2) a high score on peer-oriented behavior significantly was related to a high score on all stress responses, but unrelated to subjective adjustment to school.

Keywords: over-adaptation, peers, stress responses, school adjustment, adolescence.
Introduction

The purpose of this study is to investigate the relationship between over-adaptation towards peers, psychological stress, and subjective adjustment to school in Japanese junior high school students.

Adolescence is a period of transitions: biological, psychological, and social. During adolescence, individuals experience multiple and remarkable changes. These changes not only influence individuals’ development and adjustment positively, but also may provide negative impacts on their development and mental health. So, adolescence widely has been believed to be a turbulent developmental stage between the relative calm of childhood and adulthood. In fact, Costello, Copeland & Angold (2011) found that prevalence of some anxiety disorders, depression, and substance use disorders increases during adolescence.

In the field of clinical psychology in Japan, there are some adolescent clients who are in a similar condition. This condition is “over-adaptation”. “Over-adaptation” was defined as the condition in which a person engaged in external over-adaptive behavior (self-inhibitive and other-oriented behavior) towards others.

Over-adaptation was regarded as the personality of an individual and Ishizu & Anbo (2007, 2008) found that high degree of over-adaptive tendency significantly related to depressive symptoms and stress responses positively. However, in these previous studies, it wasn’t considered that towards whom an individual took over-adaptive behavior. It seems that the impacts of over-adaptation towards peers, teachers, or parents on an individual’s mental health and adjustment, are different. Especially, considering the importance of peers to the development and adjustment of adolescents, over-adaptation towards peers may have a more critical role in adolescents’ mental health or adjustment.

Method

Participants
949 (453 boys and 495 girls) Japanese junior high school students participated in this study. The mean age of subjects was 13.53 years (SD = .93).

Procedure
Subjects completed the following 3 questionnaires during class time.

Over-adaptation (towards peers) scale. This Scale was consisted of 16-items measuring the extent to which an individual takes self-inhibitive and other-oriented behavior. These items were subdivided into the 2 subscales; “self-inhibition” (α = .85) and “other-oriented behavior” (α = .75).

Psychological stress scale (Okuno & Kobayashi, 2007).
This scale was consisted of 18-items measuring an individual’s multiple stress responses. These items were subdivided into the following 4 subscales; “angry affect” (α = .89), “depression” (α = .92), “physical response” (α = .88), and “helplessness” (α = .82).
Subject adjustment to school scale (Okubo, 2005).
This scale was consisted of 11-items measuring the extent to which an individual feels comfort when they were live in school. Cronbach’s alpha (α) was .94.

Results

Descriptive statistics of all variables and correlations are presented in Table 1. This table suggests that (1) “self-inhibition”, “peer-oriented behavior”, “angry affect”, “depression”, and “physical response” scores of girls were significantly higher than those of boys, (2) at the total level, “self-inhibition” was positively related to all stress responses and negatively related to “subjective adjustment to school”, and “peer-oriented behavior” was positively related to all stress responses, but unrelated to “subjective adjustment to school”. In addition, it was also suggested that (3) among girls, “self-inhibition” and “peer-oriented behavior” were positively related to all stress responses and negatively related to school adjustment. On the other hand, among boys “peer-oriented behavior” was positively related to “angry affect” and “depression” only.

Next, we examined the relationship between over-adaptation towards peers, stress responses, and school adjustment. We hypothesized that over-adaptation towards peers predicted stress responses and school adjustment and examined this model by SEM (Structural Equation Modeling). Results were presented in figure 1 and this model fit the data adequately, $\chi^2 (4) = 7.150$, n.s., GFI = .998, AGFI = .970, CFI = .999, RMSEA = .029. Results indicated that (1) “self-inhibition” predicted all stress responses positively and school adjustment negatively in both gender, and (2) “peer-oriented behavior” predicted “angry affect” and “depression” positively in girls, school adjustment positively in boys.

Table 1
Descriptive statistics of all variables and correlations between over-adaptation towards peers, stress responses, and subjective adjustment to school.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean (SD)</th>
<th>t value</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
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<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Boys</td>
<td>Girls</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td>(6.30)</td>
<td>(5.79)</td>
<td>(6.59)</td>
<td></td>
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<tr>
<td>2. Peer-oriented behavior</td>
<td>19.89</td>
<td>18.99</td>
<td>20.70</td>
<td>5.60***</td>
<td></td>
<td></td>
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<td></td>
<td>(4.77)</td>
<td>(4.46)</td>
<td>(4.90)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3. Angry affect</td>
<td>13.71</td>
<td>13.14</td>
<td>14.22</td>
<td>2.80**</td>
<td></td>
<td></td>
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<td></td>
<td>(5.97)</td>
<td>(6.07)</td>
<td>(5.81)</td>
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<tr>
<td>4. Depression</td>
<td>6.49</td>
<td>5.68</td>
<td>7.24</td>
<td>6.32***</td>
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<td></td>
<td>(3.88)</td>
<td>(3.44)</td>
<td>(4.12)</td>
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<tr>
<td>5. Physical response</td>
<td>9.93</td>
<td>9.61</td>
<td>10.24</td>
<td>2.04*</td>
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<td></td>
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<tr>
<td></td>
<td>(4.77)</td>
<td>(4.51)</td>
<td>(4.97)</td>
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<tr>
<td>6. Helplessness</td>
<td>11.45</td>
<td>11.19</td>
<td>11.69</td>
<td>1.74 n.s.</td>
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<td></td>
<td>(4.46)</td>
<td>(4.46)</td>
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<tr>
<td>7. Subjective adjustment</td>
<td>38.77</td>
<td>38.31</td>
<td>39.18</td>
<td>1.28 n.s.</td>
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<td>to school (10.42)</td>
<td>(10.18)</td>
<td>(10.64)</td>
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Note: Correlations (total) are shown in lower left, and those (boys/girls) are in upper right; those of boys is above (blue) and girls is below (red).

* : p < .05, ** : p < .01, *** : p < .001.
Conclusion

This study investigated the relationship between over-adaptation towards peers, psychological stress, and subjective adjustment to school in Japanese junior high school students.

First, the results of this study indicated that 2 subscales of over-adaptation towards peers, i.e., “self-inhibition” and “peer-oriented behavior” scores of girls were significantly higher than those of boys. It suggested that girls tend to be more self-inhibitive towards peers, more consider peers’ feelings, or do things to get praise from them. In fact, Japanese early adolescents tend to behave in conformity to peers, and especially, girls tend to have more cooperative and intimate friendship (chum-ship) than boys (Ochiai & Satoh, 1996).

Secondarily, without considering gender difference, results indicated that (1) a high score on self-inhibition towards peers was significantly related to a high score on all stress responses and a low score on school adjustment, and (2) a high score on peer-oriented behavior was significantly related to a high score on all stress responses, but unrelated to school adjustment. But considering gender difference and examining the hypothesized model, results indicated that (1) in both gender, self-inhibition predicted all stress responses positively and school adjustment negatively, and (2) “peer-oriented behavior” predicted “angry affect” and “depression” positively in girls, school adjustment positively in boys. These results suggested that self-inhibitive behavior towards peers increases psychological stress and decrease school adjustment, but peer-oriented behavior increases angry/depression in girls and increase school adjustment in boys. The function of peer-oriented behavior appear to be different in boys/girls.
References


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