The Relationship of Academic Self-Efficacy and Self-regulation with Academic Performance among the High School Students with School Refusal Behavior and Normal Students

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Abstract

This study investigated the relationship of academic self-efficacy and self-regulation with academic performance among the girl high school students with school refusal behavior and normal students. The sample of the study consists of 120 students (60 students with school refusal behavior and 60 normal students) which were selected by using a simple random sampling technique from 270 students who had been responded to the school refusal behavior scale 11. The data were collected with academic self-efficacy scale 17; self-regulation scale 22 and also the mean scores of the students in an academic term. The data was analyzed by Pearson’s moment coefficient of correlation, the Fisher-Z test, and multiple regressions. Findings showed that: 1) the relationship between academic self-efficacy and academic performance in two groups was positive and significant; 2) the relationship between self-regulation and academic performance in two groups was positive and significant; 3) the Fisher-Z test showed no significant difference between two groups regarding to the relationships of the variables to academic performance, 4) the multiple correlation coefficient of predictor variables with academic performance was significant; 5) self-regulation was found as a good predictor of academic performance in two groups.

Keywords: School Refusal Behavior, Academic Self-efficacy, Self-regulation, High School Students

1. Introduction

School refusal can be defined as any refusal by a child to attend school or to have difficulty attending classes for an entire day by a child12. Youths who miss long periods of school time, skip classes, arrive to school late, miss sporadic periods of school time, display severe morning misbehaviors in attempts to refuse school, attend school with great dread and somatic complaints that precipitate pleas for future nonattendance, fall along the school refusal spectrum13. According to Kearney & Silverman11, school refusal is present in approximately 5% of school-aged children. Left untreated, school refusal may lead to many long-term dysfunctions. Approximately 1 to 5% of school-aged children have school refusal12, though it is most common in 5 to 6-year olds and in 10 to 11-year olds (sometimes 11- and 12-year olds),18 it occurs more frequently during major changes in a child’s life, such as entrance to Kindergarten or changing from elementary to middle school1. Poor academic performance is one of the negative consequences of SRB which may lead to drop out.
There are psychological and motivational factors that mediate school refusal behavior such as self-efficacy and self-regulation. Self-efficacy refers to individual's beliefs about his/her ability to perform tasks. Academic self-efficacy is a person's confidence in his/her ability to organize, execute, and regulate performance in order to solve a problem or accomplish a task at a designated level of skill and ability. Academic self-efficacy refers to a person's conviction that they can successfully achieve at a designated level in a specific academic subject area.

Individuals typically choose tasks and activities in which they feel competent and avoid those in which they do not. Students who are confident in their capability to organize, execute, and regulate their problem-solving or task performance at a designated level of competence are demonstrating high self-efficacy. Academic self-efficacy is grounded in self-efficacy theory1. Self-efficacy is believed to effect performance via the influence on task perceptions. For example, research suggests high self-efficacy creates a feeling calmness or serenity when approaching difficult tasks while low self-efficacy may result in an individual perceiving a task as more difficult than reality, which, in turn, may create anxiety, stress and a narrower idea on how best to approach the solving of a problem or activity.

A study by Fuladchang6 regarding to the effectiveness of self-regulation skills on academic achievement, showed that the experimental group in comparision with the control group had better performance after training. Karim Zadeh10 showed that self-regulation is the best predictor of academic achievement of high school students in Maths and human science subjects. Abolghsemi and Javanmiri1 showed that academic self-efficacy increases the academic achievement in high school students. Kadivar4 found that self-efficacy and self-regulation have an important role in academic performance among high school students. Pintrich and DeGroot14 studied the relationship of motivational orientation, self-efficacy, self-regulation and academic achievement. Results showed that self-efficacy and self-regulation have positive correlation with academic achievement and self-regulation was found to be the best predictor of academic achievement. Multon et al.18 found that self-efficacy was correlated with both academic performance (r = 0.38) and educational persisting (r = 0.34). Kovack14 found that self-regulated learners set their academics, choose appropriate learning strategies to get academics, monitor continuously the process of achievement's goals and have a better academic performance. Zimmerman19 found perceived inner motivational techniques of learning increases academic performance.

2. Need for the Present Study

Adolescents need to develop their self-regulation and self-efficacy skills, because these skills have an important effect on their academic readiness and relationship to peers. It seems that self-regulation is more important in adolescence, which is identified by an increasing vulnerability to problems such as truancy15. According to Shapiro19, those adolescents who don't regulate their behavior are more likely to engage in unhealthy and dangerous behaviors. Ability to repress impulsive behavior and positive adaptation to behavior are related to positive consequences in adolescents. Some positive consequences are: 1) High academic achievement: students, who are self-regulated and self-efficacious, have better performance at school. 2) School engagement: adolescents who delay their gratifications and adjust their behavior, are more likely engaged in school and school related activities. 3) Peer acceptance: self-regulation is related to favorite perceptions from the others. In a study, Kalavana et al.19 found 19 children and adolescents who were able to control their impulses, had more friends and enjoyed more to be with others.

Individuals typically choose tasks and activities that provide them a sense of capability and avoid such activities that do not provide them such a sense. Students who are confident of their capability to organize and manage affairs and tasks, show high sense of self-efficacy confident of their capability to organize and manage affairs and tasks, provide them a sense of capability and avoid such activities.

3. Objectives

To study the simple coefficient of correlation between self-efficacy and self-regulation with academic performance among the students with SRB and normal students.

Comparing the relationship of self-efficacy and academic performance between the students with SRB and normal students.

Comparing the relationship of self-regulation and academic performance between the students with SRB and normal students.
To study the multiple coefficients of correlations between self-efficacy and self-regulation with academic performance.

4. Hypotheses

I: Self-efficacy and self-regulation have simple significant correlation with academic performance among the students of two groups.

II: The relationship between self-efficacy and academic performance in SRB students is different of the same in normal students.

III: The relationship between self-regulation and academic performance in SRB students is different of the same in normal students.

IV: There are multiple significant correlations between self-efficacy and self-regulation with academic performance in two groups.

5. Participants

The total population of the 1st grade girl students was equal to 847. Out of this, with Slovin’s 25 Sampling Technique, 270 students were estimated for the study who answered the Kearney’s school refusal behavior scale. Results reported that 97 of them had scored high in SRB, whereas remaining 173 had scored low. For the main study, 120 girls (60 girls out of 97 SRB students and 60 girls out of 173 normal students) randomly were selected with the age ranging between 15–16 years old.

6. Research Tools

6.1 School Refusal Behavior Scale 11

This scale was established to assess the student’s school refusal behavior with age ranges between 7–17 years old. It has 16 items with each item ranging from 0 (means never) to 6 (refers to always). The scale measures 4 functional dimensions such as: avoidance from the stimuli provoking negative activities like classroom anxiety and depression; escaping from social evaluating situations like speaking to others at school; attendance school behavior like refusing to go to the school because of staying at home; and positive reinforcement like going out for picnic. High score in each subscale indicating school refusal behavior. In this study the reliability of the scale was found with test-retest method on 30 students within 28 days equals to 0.77.

6.2 Academic Self-efficacy Scale

The academic self-efficacy scale 17 (cited in Dehidgary, 2011) consists of 30 items that measures 3 components of self-efficacy including: attitude, context and endeavor. Score ranges from 1 (never) to 5 (always). The maximum score is 150. The highest score which each student gets refers to high academic self efficacy. Dehidgary4 examined the reliability of the scale on 382 high school students with test-retest and reported the reliability coefficient of 0.76.

6.3 Self-regulation Scale

The Self-regulation scale 22 evaluates the individual’s self-regulated activities. The scale has 10 factors with each of them corresponding to: 1 (not at all true), 2 (hardly is true), 3 (averagely is true) and 4 (exactly is true). In this study, the reliability of the scale was found with the test-retest method on 30 students within 28 days which equalled to 0.74.

7. Findings

The collected data was analyzed with appropriate statistics which are presented in two sections: a) Descriptive Finding and b) Findings related to the Hypotheses.

7.1 Descriptive Findings

As shown in Table 1, comparison of the mean scores of two groups indicate that the SRB students have obtained low scores than normal group in all the variables.

7.2 Findings Related to the Hypotheses

Hypothesis 1: To assess the simple relationships of self-efficacy and self-regulation with academic performance the Pearson’s Moment Coefficient of Correlation was used. Results showed that there are significant correlations between academic self-efficacy and academic performance ($r = 0.58$, $p < 0.001$) and self-regulation with academic performance ($r = 0.39$, $p < 0.001$). Further, it was shown that, the coefficient of correlation between academic self-efficacy and academic performance ($r = 0.64$, $p < 0.001$) and self-regulation with academic performance ($r = 0.49$, $p < 0.001$) were statistically significant.
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in NSRB group. Results indicate that more the academic self-efficacy and self-regulation strategies, more the academic performance.

Hypotheses 3rd and 4th: To determine the probable difference between two groups in relation to the coefficient correlation of the variables, the Fisher-Z Test was used. As shown in the Table 2, there was no significant difference between two groups in relationship of academic self-efficacy and academic performance (z = 0.94, p > 0.05) as well as self-regulation and academic performance (z = 1.13, p > 0.05). The similar patterns of the relationship between the variables indicate that academic self-efficacy and self regulation irrespective of belonging to a certain group, equally explain academic performance.

Hypothesis IV

For the assessment of this hypothesis, Multiple Regression Method was used. In this regard, self-efficacy and self-regulation as predictors and academic performance as a criterion variable were entered in the regression equation with enter method. As shown in Table 3, the multiple coefficient of correlation (R = 0.64) and R-square (R2 = 0.41) indicate that predictors can explain 41% of variance of academic performance in SRB group. Further, Analyze Of Variance (ANOVA) showed that the observed R-square is statistically significant (F2, 57 = 19.67, P < 0.001). Also, findings showed that self-regulation is a stronger predictor of academic performance (Beta = 0.74, t = 3.56; p < 0.01), indicates that the portion of self-regulation in explanation of variance of academic performance was equal to 74 percent. Further, in NSRB group the amount of variance explained by self-efficacy and self-regulation was 25 percent (R-square = 0.25) which was statistically significant F (2, 57) = 9.28, p < 0.01. The regression coefficient showed that self-regulation is a better predictor for academic performance (Beta = 0.40, t = 2.63; p < 0.05).

8. Discussion

The present study investigated the relationship of the academic self-efficacy and self-regulation with academic performance among the student with School Refusal Behavior (SRB) and Normal Students Refusal Behavior (NSRB). The results of this study are discussed further.

As shown in above, results showed significant simple and multiple relationships between the variables. These findings are consistent to the previous findings (e.g. 1, 8, 19, 6, 10, 16, 20) and indicate that believing to own capabilities and having certain goals can positively influence academic performance. On the other hand, decreased self-efficacy and self-regulation tangibly prevent the student’s achievement. As shown in Table 1 the mean scores of academic self-efficacy and

Table 1. Showing mean scores of variables in two groups

<table>
<thead>
<tr>
<th>Groups</th>
<th>SRB</th>
<th>NSRB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-efficacy</td>
<td>80.58</td>
<td>129.52</td>
</tr>
<tr>
<td>Self-regulation</td>
<td>21.27</td>
<td>29.97</td>
</tr>
<tr>
<td>Academic performance</td>
<td>14.00</td>
<td>16.84</td>
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</table>

Table 2. Pearson’s coefficient of correlation of the variables and Fisher-Z test

<table>
<thead>
<tr>
<th>Groups</th>
<th>SRB</th>
<th>NSRB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic self-efficacy</td>
<td>0.58</td>
<td>0.39</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>0.12</td>
<td>0.74</td>
</tr>
<tr>
<td>Self-regulation</td>
<td>0.40</td>
<td>0.13</td>
</tr>
<tr>
<td>Academic performance</td>
<td>0.50</td>
<td>0.50</td>
</tr>
</tbody>
</table>

Table 3. Analyze of regression in two groups

<table>
<thead>
<tr>
<th>Groups</th>
<th>R</th>
<th>R square</th>
<th>Df</th>
<th>F</th>
<th>Sig.</th>
<th>Beta</th>
<th>t</th>
<th>Sig.</th>
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</thead>
<tbody>
<tr>
<td>SRB</td>
<td>0.64</td>
<td>0.41</td>
<td>2</td>
<td>19.67</td>
<td>0.000</td>
<td>-</td>
<td>24.78</td>
<td>0.000</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Self-efficacy</td>
<td>0.12</td>
<td>0.59</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Self-regulation</td>
<td>0.74</td>
<td>3.56</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Academic performance</td>
<td>0.50</td>
<td>0.50</td>
</tr>
<tr>
<td>NSRB</td>
<td>0.50</td>
<td>0.25</td>
<td>2</td>
<td>9.28</td>
<td>0.001</td>
<td>-</td>
<td>6.93</td>
<td>0.000</td>
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<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>Self-efficacy</td>
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<td>0.855</td>
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<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>Self-regulation</td>
<td>0.40</td>
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</table>

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self-regulation in SRB group obviously were less than the same in NSRB group, indicating the determining role of academic self-efficacy and self-regulation in predicting the academic performance, academic activities and pay attention to school. This research shows that decreased self-efficacy and self-regulation may lead to school refusal behavior and follow it to drop out in students. Further, this study showed that self-regulated strategies used by the students are more important because it found as a best predictor of academic performance. For explaining this can cite that self-efficacy is the belief for doing the tasks but it is not how to do them. According to Schen 21 learning strategies are thoughts and behaviors that learners use for organizing and completing the new information. These strategies are describing the student's answers to the questions like: how can we do this assignment? Therefore, believing to own abilities for doing the academic activities by using required strategies may lead to better performance at school. It is clear that if students cannot rely on their own abilities, they will found their academics very difficult and for fear of blaming and despising due to academic failure will give up the school and study. In fact, they use run away from the school as a shield to hidden their academic deficits.

9. References