Examining the Relationship between the Emotional Atmosphere of Class and Self-Regulation with Academic Achievement of High School Students

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Abstract
The study aimed to examine the relationship between the emotional atmosphere of class and self-regulation with academic achievement of high school students in Bandar Abbas. Hypotheses of the research are: 1. There is a relationship between the emotional atmosphere of class and academic achievement of high school students in Bandar Abbas. 2. There is a relationship between self-regulation and academic achievement of high school students in Bandar Abbas. The present research is descriptive and correlation-based. The statistical population of the study is all male and female high school students in Bandar Abbas as 700 people. 200 of them have been chosen by simple random sampling method and Cochran formula as the sample. The data collection method in this research is field study and questionnaire type. The following questionnaires were used in this study: learning self-regulation questionnaire (SRQ-L) designed by Black and Deci (2000) as well as the mental atmosphere of the class questionnaire made by Freizer et al (1995). Cronbach's alpha test was used to determine the reliability of the questionnaires that the reliability of self-regulation questionnaire was 0.89 and for the emotional atmosphere questionnaire was 0.86. Academic achievement in this study means the average of the previous semester courses. Pearson correlation coefficient test results showed a positive significant relationship between the emotional atmosphere of class and self-regulation with academic achievement of students.

Keywords: Emotional Atmosphere, Self-Regulation, Academic Achievement, High School Students.

Introduction
The emotional atmosphere is an educational atmosphere which includes the intimate relationship of teachers and students, students' participation in class, students' discussion with peers, their thinking independence to what teacher says, interest in academic achievement, involving in organizing the class discipline and so on ¹.

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The class is a small and subsidiary society and is a form of the main society of each city or country which is different in cultural, behavioral, social and personal terms and brings all these characteristics to the class. Therefore, the culture that each class keeps in itself is the intimate relationship of the class members. The existence of individual differences among the people in the class would cause mental, intellectual, social and moral interactions in that class. These interactions show the psycho-social atmosphere of the class on the one hand and different atmospheres of classes due to the difference of people on the other hand. So, different definitions must be present for the atmosphere.

Atmosphere is the conditions of forces and external stimuli that affect human beings or has summarized external stimuli in the physical, social and intellectual factors and has stated the domain of atmosphere change from the most internal social interactions to the farthest cultural and institutional forces. In Tagirry's view (1968), the atmosphere is the total environment quality of the inside of each organization. He has attributed four dimensions of ecology, the domain or the environment, social system and cultural dimension. In the field, ecology has the direct relationship with materials or means' physical factors.

Self-regulation learning theory is raised by Pintrich and De Groot. They considered self-efficacy, internal valuation and test anxiety as motivational beliefs and introduced cognitive and ultra-cognitive strategies, efforts and plan of students as self-regulatory learning. Socio-cognitive theory introduces four sub-processes in the self-training: goal setting, self-observing, self-judgment and self-reaction. Goal setting is essential to self-training. Self-regulation processes include target-driven cognitive activities which stimulate, reinforce and alter the students. Self-regulation has valuable consequences in the learning and teaching process and even life success and is one of the important topics in contemporary education. The main framework of self-regulation learning theory is based on this belief that how individuals organize their learning in terms of ultra-cognitive, motivational and behavioral beliefs.

Academic achievement has a display of the student's educational position. This display may represent a score for an average in a period related to a subject or may be an average of different periods. Different criteria may be considered for the academic achievement the most famous of which is the class scores average. In this study, researchers sought to examine the relationship between the emotional atmosphere of the class and self-regulation with the academic achievement of high school students in Bandar Abbas (Iran).

**METHODOLOGY**

This study is a correlation study because it examines the relationship between the emotional atmosphere of the class and self-regulation with academic achievement in high school students in Bandar Abbas. Correlation study that is a
subset of descriptive research (non-experimental) is aimed to show the relationship between variables.

The statistical population of the study is all male and female high school students in Bandar Abbas as 700 people. 200 of them have been chosen by simple random sampling method and Cochran formula as the sample.

$$n = \frac{t^2pq}{d^2} \left[1 + \frac{1}{N}\left(\frac{t^2pq}{d^2} - 1\right)\right]$$

The data collection method in this research is field study and questionnaire type. The following questionnaires were used in this study: the Emotional Atmosphere Questionnaire: atmosphere scale of Man was used in this research to examine the emotional atmosphere of the class. This scale includes 20 items that are stated in the form of statement. There are three options presented for each item as: never, sometimes and always. The subject specifies the item by marking them. The scoring method is in this way: the option “Never” has 0 points; the option “Sometimes” has 1 point; and the option “Always” has 2 points. This scale is based on four subsidiary dimensions or scales: friction (questions number 1-5), dependence (questions number 5-10), discipline (questions number 10-15) and competence (questions number 15-20). Friction means the inconsistency or the unfriendly behavior of students with each other. Solidarity dimension watches over the amount of attachment and honor feeling and dependence of students to each other. Discipline dimension is related to the amount to which students do their homework and are on time. The competence dimension regards the amount that students compete against each other.

Content and form validity methods were used to determine the validity of the questionnaire and Cronbach’s Alpha test was used to determine its reliability. Cronbach's alpha coefficient was 0.86 in the evaluation of the questionnaire.

Learning Self-regulation Questionnaire of Black and Deci (SRQ-L): Learning Self-regulation Questionnaire of Black and Deci (2000) included three questions showing why people engage in behaviors related to learning. The questionnaire is set with 47 items in two parts of motivational beliefs and self-regulatory learning strategies (cognitive and ultra-cognitive strategies). The sub-scale of self-regulation learning strategies includes 22 phrases and measures three aspects of academic self-regulation meaning: cognitive strategies, ultra-cognitive strategies and resource management. Cognitive strategies have allocated 13 scale phrases as follows: repetition and review including phrase numbers of 29, 37 and 44; expansion of the notes including phrase number of 34, summarizing the
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statements including phrase numbers of 31 and 45; organizing including phrase numbers of 26, 27, 39, 42 and 47; and reading comprehension including phrase numbers of 32 and 33.

Ultra cognitive strategies and resource management include 9 scale phrases as follows: planning includes statements number 38 and 46; supervision and control including statements 28, 35, 41 and 43; organizing including effort and perseverance including phrases number 30 and 36; and regulation activity including phrase number 40.

Motivational beliefs include 25 scale phrases and four components of self-efficacy, goal orientation, internal valuation and test anxiety as follows: self-efficacy includes expression numbers 2, 6, 9, 10, 12, 14, 19, 21 and 22; goal orientation includes expression numbers 1, 4, 11, 16 and 24; internal valuation includes expression numbers 5, 8, 17 and 20; and test anxiety includes phrases numbers 3, 7, 13, 15, 18, 23 and 25.

Content and form validity methods were used to determine the validity of the questionnaire and Cronbach's Alpha test was used to determine its reliability. Cronbach's alpha coefficient was 0.89 in the evaluation of the questionnaire.

The data of the present study are analyzed in both descriptive and inferential statistics. In the descriptive level, statistical values such as frequency, standard deviation and mean are used and in the inferential level, simple and stepwise statistical regression tests and Pearson correlation coefficients are used. The data is analyzed by the SPSS statistical software.

RESULTS

The research findings are stated in both the descriptive and inferential statistics (test hypotheses) the results of which are as follows: Descriptive information of the research including the results of the descriptive findings of the research variables. This information is shown in the table below:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Maximum</th>
<th>Minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-regulation</td>
<td>200</td>
<td>42.89</td>
<td>9.318</td>
<td>61</td>
<td>10</td>
</tr>
<tr>
<td>Emotional atmosphere of the class</td>
<td>200</td>
<td>40.79</td>
<td>8.421</td>
<td>58</td>
<td>10</td>
</tr>
<tr>
<td>Academic achievement</td>
<td>200</td>
<td>16.41</td>
<td>4.255</td>
<td>20</td>
<td>1</td>
</tr>
</tbody>
</table>

Evaluating the descriptive results of the research variables according to the above table shows that the self-regulation average is equal to 42.89 (SD = 9.318), self-training average is equal to 38.62 (SD = 8.179) and the academic achievement of students’ average is 16.41 (SD = 4.255).

Pearson correlation coefficient was used to evaluate the first hypothesis and the results are presented in the following table:
As it can be seen from the above table (p = 0.0001, n = 200, r= 0.572), zero hypothesis is rejected and the research hypothesis is confirmed. In other words, there is a significant relationship between the emotional atmosphere of the class and academic achievement of high school students in Bandar Abbas.

Pearson correlation coefficient was used to evaluate the second hypothesis and the results are presented in the following table:

As it can be seen from the above table (p = 0.0001, n = 200, r= 0.509), zero hypothesis is rejected and the research hypothesis is confirmed. In other words, there is a significant relationship between self-regulation and academic achievement of high school students in Bandar Abbas.

CONCLUSION
This study aimed to investigate the relationship between the emotional atmosphere of the class and self-regulation with academic achievement of high school students in city of Bandar Abbas (Iran).

The first hypothesis test results showed that there is a relationship between the emotional atmosphere of the class and academic achievement of the students. These results are consistent with the research results of Salmani et al\(^2\), Tarkhan\(^7\), and Grifit\(^8\).

In explaining the findings, it can be said that in Wang and Martel’s view\(^9\), the class atmosphere depends on the socio-psychological dimensions. The good classroom management causes the increase of student participation, reduction of students’ disruptive behavior and inappropriate use of training time. The social behavior of teacher with the student affects the learning and leads to a sense of self-regulation and educational development consequently\(^2\).

The second hypothesis test results showed that there is a relationship between self-regulation and academic achievement of the students. These results are consistent with the research results of Sodagar\(^10\), Hijazi et al.\(^11\) and Wang et al\(^9\).

Keeping their perceived self is the motivation of all behaviors. Everyone is trying to behave as it is based on his understanding and interpretation of the self-
meaning that people always try to behave in the same style and way that they see. Self-regulation is the comprehensive view of an individual about himself which is shaped and transformed by the person's experience and other's interpretation of this experience 12. In Landin's view, the problems that people experience in a school setting are the results of interpersonal and intrapersonal processes. The more this relationship is sober and agreed with the emotional atmosphere of the school, it more helps the students with their behavior and personality evolution.

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