Survey on relationship of achievement motivation, locus of control and academic achievement in high school students of Bandar Abbas (Iran)

Ali Akbar Sheikhi Fini, * Mitra Yousefzadeh **

Abstract

The aim of this study is to find the relationship between achievement motivation, locus of control and academic achievement in high school students of Bandar Abbas (Iran). For testing the hypotheses of the research 211 high school students were selected randomly. Rotter locus of control scale, achievement motivation scale and students scores were used. Statistical analyzing data showed there is positive relationship between these variables. 1

Introduction

Generally, many educators agreed that motivation is one of the basic factors of educational achievement. In other words, motivation is the basic factor in educational achievement. (Shamloo, 1970). Motivation refers to internal conditions of organism which direct its behavior to the goal. Different theories have discussed different concepts for describing motivation. One of these concepts is need concept. Need can be referred to as a deficiency in organism. According to need theories when the organism needs something, this may generate unpleasant feeling and when its need is satisfied, this can be a pleasant feeling. So, it is said that organism needs are the motivation factor in themselves. Need has different types and psychologists have assumed different categories of different needs. One of these needs which various studies have been done about them is need for achievement or achievement motivation (Seif, 1989). Achievement motivation is a multilateral tendency to evaluate one's actions according to the best criteria, effort for success in actions and encountering enjoyment which is associated with success in actions. Studies in this field revealed that individuals are very different from each other regarding their needs. Some individuals have high level of motivation and try hard to gain success in their work by competing others. Others have no motivation for achievement and success and they do not risk to gain success because of the fear of failure.

One of the new theories of motivation is attribution theory. Fritz Heidar can be called the originator of this theory. After Heidar, we can name Bernard Wiener's theory that helped the preparation and spread of attribution theory. Wiener's theory has originated from Atkinson's achievement motivation. One of the major assumptions of attribution theory is that searching for recognizing and understanding of affairs and reasons of incidents is the most important source of human motivation. Thus, the purpose of this theory is to find ways in which individuals explain the incidents and causation between them. There are some basic reasons in Wiener's theory that individuals often use them for the result of the success and failure in their actions and behaviors. These reasons are: personal ability, effort, task difficulty, luck, fate, moral temper and sickness, these reasons are interpreted by person regarding different aspects. Some experts of attribution theory believe that individuals attribute their success or failure to either personal factors or environmental factors. Thus, they have identified two important locus of control, one internal and the other external. This approach is famous as source approach or locus of control.

In this approach which has been developed originally by Julian Rotter (1966), it is assumed that individuals regarding their belief about locus of control are divided in two following groups: the first group who often attribute...
their success and their failure to themselves (effort, personal ability) are called individuals with internal locus of control, and the second group who generally attribute their success and failure to the factors out of themselves (fate, luck, task difficulty) are called individuals with external locus of control.

Furthermore, achievement motivation and locus of control and educational achievement are related to each other and this relationship is a two-sided one. i.e., on the one hand high level of achievement motivation leads to increasing level of educational achievement and an increase in educational achievement leads to increasing level of achievement motivation, and on the other hand internality of the locus of control leads to increasing of achievement motivation and vice versa.

Some psychologists believe that achievement motivation, locus of control and educational achievement are related to each other so that an increase or decrease in one can cause changes in two other variables. In this study, the relationship of these three variables has been investigated.

**Literature review**

McClelland and Atkinson have been investigated achievement motivation more than others. To McClelland achievement motivation arises when a person models eminent criteria in his/her activity (Maadan darabi, 1991). According to the theory of McClelland et al. (1952) achievement motivation is caused from the accumulation dreams of the child. When a child faces a new condition of success like a scientific riddle, he/she has no expectation of his/her ability to solve that. If the riddle is not so difficult and he/she can solve it correctly, he/she finds specific dreams soon and enjoys these dreams. Success in achievement and in predicting the result of this condition creates positive reinforcement for the motivation derived from achievement. At this stage, the riddle loses its novelty and solving it is not taken as achievement any more. At this point a new and more complicated situation must be created. In this case, the child will have new interest to achievement and his/her domain of achievement motivation will be improved (Abdoli, 1987).

McClelland et al. (1953) have reported many researches that need for achievement and college scores have been calculated in them. In one of these studies a significant relationship scoring 51% has been found between need for achievement and college scores. Also, Evans' study showed that students with high motivation are more ready to spend time on one school work and their learning was better also. Additionally, Atkinson proved that the level of need for high achievement in individuals put them in unclear conditions to have more expectations to get high scores while he believed that the relationship of need for achievement and college scores is an indefinite one.

Feather showed when the subjects are told their work is easy, and then they fail, success oriented individuals show more perseverance than those whom their motivation was failure. Also, when the people are told their work is hard and they succeed, the individuals with success motivation, show more perseverance. The indirect approval of Atkinson's model about perseverance can be seen in Maher and Videbeek's studies as well. In a study done by these two researchers to show the influence of risk taking tendency for selecting different degrees of reward, it was showed that the subjects disregarding the amount of risk, had more perseverance in 50% of success and the least amount of their perseverance has been 15% in the least and 85% in the most. This study confirmed individuals with success motivation were more motivated in $P_x = 50\%$. Of course, it must be noted that the findings of these studies are similar to that of Feather's studies and confirmed that, but it does not indicate a distinct and obvious difference among individuals with success motivation and those with failure motivation. By the way, the result of these studies confirms Atkinson's theory about predicting the perseverance of people (Shamloo, 1971).

Investigations of Rotter showed that some individuals believe that reinforcement depends on their behaviors; others think that reinforcement is under the control of external forces.

Our locus of control will have a high influence on our behaviors. Individuals with external locus of control believe that their behaviors or their skills make no difference in getting reinforcement and they do not value their efforts. These people have less belief that they can control their lives in the present or future. Internal-oriented individuals believe that they have infinite control on their life and act according to that. These individuals tend to get higher ranking in the school and get higher grades in testing educational motivation. Also, they are determined to try more, recognize better, read more and have more efficiency in getting information (Scholts, 1987).

Bryant found that teachers tend to attribute more negative traits to the students with external locus of control and these students describe their teachers negatively more than students with internal locus of control. When the recognition of teachers and students of teacher-students’ relation investigated, he realized that the recognition of
students with external locus of control has been significantly false, comparing with the students with internal locus of control. The students with extreme external locus of control tend to have more rough relations with their teachers.

Hummer investigated the impact of different instructors’ opinion on the actions of undergraduate students with external and internal locus of control. The results revealed that students with external locus of control showed a better performance when they received the determined opinions their instructor expected about the future. The students with internal locus of control showed a better performance, while there was no clear and obvious opinion. Hummer explained that individual differences influence the locus of control of the responses, because individuals with internal locus of control tend to resist to the effects and external infusions. Whereas, individuals with external locus of control become happy from the influence of external infusions. These findings imply that instructors must link their nature and frequency of ideas regarding individual characteristics of the student (Ghazanfari, 1992). Herseh and Strickle (1988) showed that individuals with internal locus of control are recognized very active, investigator, strong and independent in verbal tests. Platt and Eisehman recognized that behavior correlation of people with internal locus of control is similar to behavior correlation of those who need to high achievement, for example, all subjects with internal locus of control and high need for achievement put more attention on assignments and they prefer that skill determine the assignment instead of fate and luck. There was a positive correlation with socio-economic condition, educational level, learning level and accuracy in individuals with high need for achievement and individuals with internal locus of control. In the study conducted by Stipek, it was revealed that locus of control of students has more effects on educational achievement not vice versa. (Biyabangard, 1991)

The present study was planned and performed to investigate the relationship between achievement motivation, locus of control and educational achievement in high school students of Bandar Abbas(Iran).

**Hypotheses**

First hypothesis: there is a significant relationship between achievement motivation, locus of control and educational achievement.

Second hypothesis: there is a significant relationship between achievement motivation and locus of control.

Third hypothesis: there is a significant relationship between achievement motivation and educational achievement.

Fourth hypothesis: there is a significant relationship between locus of control and education motivation.

**Study method**

Subjects: the subjects of this study were boy and girl students of high school in Bandar Abbas in school year 73-74. 211 of students responded to questionnaires of locus of control and achievement motivation (100 boys and 111 girls). The multistage cluster sampling was used. First four high schools have been chosen among high schools in Bandar Abbas. Then, 7 classes of grade three selected randomly in economics, experimental sciences and mathematics.

**Study instrument**

A – Rotter's internal-external scale

This scale consists of 29 statements each has two choices A and B. 6 statements are neutral which make the test ambiguous for the subjects. The scoring of the test is according to sum of scores derived from the checkmarks put in front of the questions.

B – Achievement motivation questionnaire

The questionnaire consists of 31 statements each has two choices A and B. Responses indicating achievement motivation were scored 1 and the total score was obtained by adding the scores. The total score of each student shows his/her degree of achievement motivation.

C – Students' average

The average score of the first and the second term of each student have been used as a measurement of educational achievement.

**Conduct Method**
For acquaintance to the operational problems, two tests, locus of control and achievement motivation performed on one class of students experimentally. Then, the scale of locus of control and achievement motivation was reproduced as necessary, and sent to high schools. The students were asked to answer the questionnaires. For becoming informed about the students’ educational achievement, they were also asked to write down their first and second term averages on the answer sheets. It was optional for the students to write down their first and last names in order to mention their real views. After collecting the questionnaires, data were extracted.

Statistical Method

The statistical test used for data analysis is Pearson correlation coefficient and multi variable regression (Delavar, 2001).

Table 1 illustrates achievement motivation cohesion matrix, locus of control and educational achievement.

<table>
<thead>
<tr>
<th>Locus of control</th>
<th>achievement motivation</th>
<th>educational achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locus of control</td>
<td>1</td>
<td>0.15</td>
</tr>
<tr>
<td>achievement motivation</td>
<td>1</td>
<td>0.15</td>
</tr>
<tr>
<td>educational achievement</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

Significant correlation coefficient test was used for examining the research hypotheses. First of all, the amount of t is calculated for each of the three hypotheses.

A: between achievement motivation and locus of control

B: between achievement motivation and educational promotion

C: there is a significant relationship between control source and educational achievement.

Then the calculated T was compared with the T of the table in the level of 0.05, because the calculated T was bigger than the T of the table. So, this hypotheses that HO: Pxy=0 was rejected and the research hypotheses, Hi: rxy≠0 was accepted with 0.95 assurance.

The table of variance analysis was used for the test of significant regression line.

<table>
<thead>
<tr>
<th>the beginning of degree</th>
<th>Independence</th>
<th>sum square</th>
<th>average square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1</td>
<td>12.04</td>
<td>12.04</td>
</tr>
<tr>
<td>Hysteresis</td>
<td>209</td>
<td>418.02</td>
<td>12.0001</td>
</tr>
</tbody>
</table>

Because the seen F (6.02) was bigger than the F of table (3.89) with 1 and 209 independence degree, therefore, zero hypotheses was rejected. So, according to the collected data and 15 assurances, there was a statistically significant relationship between the three study variables.

Summary and Conclusion

The results of the study are as following:

A- There was a statistically positive significant correlation between achievement motivation, locus of control and educational promotion and the first hypothesis of this research was accepted. i.e. those students with internal locus of control believe that their educational achievement and grades depend on their efforts and their planning. On the other hand, they put all the positive and negative events in their lives under their yoke; they accept the responsibility of their performances, behaviors, and its consequents. These individuals have high achievement motivation on the one hand and on the other hand they encounter high educational achievement which means that their school learning is high as well. The opposite of this hypothesis is also correct. It means that those students with external locus of control don’t face any cause and effect relation between their behaviors and events; so, they believe that their fate, luck, chance or other people are responsible for their behaviors. Consequently, they don’t accept their responsibility for their actions and behaviors. On the one hand they have low achievement motivation and on the other hand they encounter low educational achievement; they also get lower school grades.

B- There was a statistically positive significant correlation between achievement motivation, locus of control and the second hypothesis of this study was accepted. In other words, those students with internal locus of control had a
high achievement motivation and in return those with an external locus of control had a low achievement motivation.

C - There was a statistically positive significant correlation between achievement motivation and educational achievement and the third hypothesis was accepted. I.e. students with a low motivation had a better educational achievement and school learning.

D - There was a statistically positive significant correlation between locus of control and educational achievement and the forth hypothesis was proved. I.e. students with internal locus of control had a better educational achievement and school learning comparing with the students with external locus of control.

Study Suggestions

Regarding this study, the following guidelines are suggested briefly to instructors, teachers, parents and those who are involved in education:

1- The assignments for students must not be so difficult or so easy. These assignments if done correctly, will lead to an increase in self-confidence in the learner, but easy assignments do not lead to such feelings and very difficult assignments often lead to the person's failure.

2- Parents expect a wisely behavior from their child and expect their success, this expectation increases child's success.

3- The level of school work should be coincided with the ability level of the learner, so that he/she can cope with everything with his/ her efforts.

4- Create achievement motivation in students by modeling successful individuals.

5- Educational conditions must emphasize the learning not achievement. Emphasizing on learning encourages student’s efforts and by emphasizing the student’s activity, necessary feedbacks and the mistakes could be corrected.

6- Teach the people to consider their failure as a result of not trying and their success as a consequent of their ability which causes their educational achievement.

7- Teachers connect their nature and frequencies of their ideas to the students concerning their personal characteristics in a beneficial manner.

8- Provide the child and the teenager pleasant experiences of separate and free activities and train them as an independent and responsible person.

9- Try to consider the potency of the child and the teenager not their weakness and failure.

10- Strengthen the confidence and perfect behavior of the child and the teenager.

11- Help the child to control his/ her passions and sentiment.

12- Acquaint the child and the teenager with ideal behavior patterns.

13- Increase the tolerance of the child and the teenager meeting the probable failure.

14- Revise the learning conditions and increases the quality level of learning methods to create achievement motivation for learning.

15- Use the tests and scores as a tool to create motivation in students.

16- Avoid creating competition which leads to success in some students and failure in most of them.

17- Decrease the negative outcomes of learners association in learning activity such as losing self-confidence which leads to solving problems or doing learning activities.

References


