Original Article

Impact of Various Factors on the Process of School Education Students

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Abstract

Objective: The objective of this study is to evaluate the role of educational factors affecting the academic performance of students like teachers' skill, homework, score and evaluation, learning time, classroom, lesson books, programs content and relations of teachers.

Materials & Method: The method used in this study is descriptive- survey and of causal-comparative and correlational type. This study describes the factors affecting the academic performance and the relationship between predictor and criterion variables. A researcher- made questionnaire that has two parts of parents and students was used to measure the variables. The average of groups, through one-way analysis of variance test, shows that family and social factors that affect the academic performance of students at 99% confidence level are significant. The correlation value at alpha level less than 0/01 is significant and is positively related to social and family factors.

Conclusion: The correlation coefficient values of the average with all social-family factors and social family total score and also significance test showed a strong and significant relationshipwith 99% confidence level. According to findings, educational and social factors, kindness of parents, academic and cultural status of family are positively correlated with the average and affect the academic achievement of students more than intelligence quotient. If the space, facilities and arrangement of classroom are suitable, the best type of interaction between teacher and student will be provided.

Keywords: educational factors, students, family

INTRODUCTION

The factors related to school and teachers are among the factors which can have a significant effect on academic achievement and failure. The most important educational factors that affect academic achievement are:

The Relationship Between Teacher and Student

Teaching will not be meaningful without making a relationship. The relationships between kindness, respect and mutual trust between teacher and student make student not to be dependent on teacher and also increase his/her academic motivation. The first aim of teacher should be

establishing a desired. The first days of school and the first visits of students with teacher are important, thus they should be considered. The theorists of motivation say that: on the first das show your students that you love them and they can trust you and come to you whenever they need a help. Fortunately, there are many ways for this purpose and will discuss some of the most common ways here.

Score and Evaluation

Evaluation or exam is one of the inseparable parts of education process. Unfortunately, students consider exams as a threatening tool for learning and this issue leads to exam anxiety in students. Thus, this method of evaluation can cause academic failure especially in qualitative aspect. The lack of paying attention to some principles of evaluation leads to wrong methods of evaluation and these methods only lead to quantitative and qualitative academic failure.[1-4]

Homework

Homework is another important factor which affects the academic achievement of students. (Biabangard 2007:164)

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Planning their class activities encourages the behaviors based on doing homework. Teachers should prepare a plan for their daily activities. They should specify the content, methods, activities of classroom, educational facilities and equipments, how to group students and the strategies to teach difficult lesson points in order to guarantee the interest and attention of students to lesson and homework. (Lotf Abadi 2005)

Students should feel that there is a strong relationship between goals and lesson contents. Also, the homework should reach to a level of difficulty, so that students can do it.

The Number of Students in Classroom and Their Combination

One of the issues related to educational program is the number of students in classroom or the groups which can be taught. The high number of students in classroom decreases the amount of interaction between students and teacher and the participation of students in classroom and the effect of Individuality in teaching and education. (Biabangard 2007:177)

Learning Time in School and Home

The time period allocated to teaching has a significant role in academic achievement. In general, if students spend more time to study, they will learn more lessons by keeping the other factors fixed.[5-8]

Coordination of Curriculumsand Educational Methods

When curriculums are adjusted in a logical way and the order of lessons is coordinated with the background of prerequisites of lesson, then students can understand the lessons well. Teaching methods should be used according to personal differences and full recognition of students. Psychologists believe that the best educational methods are those that are adjusted and implemented according to the needs and physical-mental abilities of learners not those that force students to match themselves to a particular educational method. (Parsa 1993)

Educational Calendar and Hours

One of the effective factors in academic achievement is the amount of hours that students are present in school. In fact, if a country allocates more useful hours to students in school according to the interests and development process of students, they will gain more achievement and success. (Biabangard 2007:188)

Classroom Space and School Facilities

Educational space should be such a way to realize teaching goals and programs and provide students' achievement in critical thinking, personal understanding, self-evaluation, self esteem and other high level cognitive skills of personality development. (Lotf Abadi 2005)

The Creation of An Effective Learning Environment Includes These Items

Organizing classroom activities, education and its physical environment to use time effectively, creating a happy and useful learning environment and minimize disruption,creating discipline (it refers to the methods that are used to prevent behavioral problems or answer the current behavioral problems and reduce their occurrence in the future). (Charles2005, Luving and Nolan 2004, Marzano 2003)

Today, not only these inappropriate arrangement of classrooms have been totally removed and each school has a beautiful and different space for its own, but also we see that the entrance door of each classroom in elementary schools is painted with a special light color, so that each student can find his/her classroom easily. The classrooms of these schools were decorated in a way so that each student can see the pictures, games, books and simple research tools for different lessons on every corner of the classroom. The space of these classrooms, arrangement of tables, chairs and educationalequipments in these classrooms are totally provocativeand make adults to remember their childhood and wish they were the students of these schools.

Nor the quiet neither the noisy atmosphere of a classroom are a good sign for the appropriate place of teaching and education.

54% of classroom teachers and 77% of physical education teachers who were studied reported that most of the times, noises are due to communication problems. (Edward 1997) It should be noted that the loud voice of teachers in classroom should be between 65 to 70 dB. A normal classroom has a background noise between 55 to 75 dB. Thus, it seems that the voice of teacher is often equal to background noises. Therefore, it is not surprising when
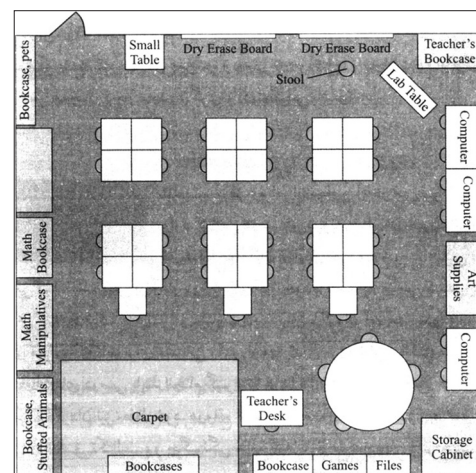

Figure 1: The example of a modern classroom

teachers sonfess that they have also some problems in the field of hearing in classroom. (Bentham 2005:179)

There are many studies on the size of classroom. The previous studies (ublished by Enfer 1998) reported that big classrooms (more than 30 students) weaken the spirit of teachers and leave a negative and reverse effect on students.[9-13]

Materials and Method

This study is of a fundamental or basicstudy. The main purpose of these studies is the development of theoretical knowledge in a specific field. (Delawar 2004). Fundamental or basic study is a research that discovers the nature of objects, phenomena and the relationships between variables, principles, rules, construction or experiment of theories and helps the development of knowledge boundaries.

This research wants to know about the factors which affect academic achievement.

The method used in this study is descriptive-survey and of causal-comparative type and is also correlational.

This study describes the factor affecting academic achievement and the relationship between predictor and criterion variables.

Statistical Population

The statistical population of this study includes all 5-th grade students of Tabas city. The elementary students of Tabas city are 800 students.

Sample and Sampling Method

In this study, 260 students were selected as sample according to Morgan table.

Sampling method in this study is a combination of cluster and simple random sampling. Cluster sampling is more efficient than simple random sampling if the full list of subjects (like the present study) is available. According to the use of this sampling method, a representative sample of the intended population can be selected to increase the accuracy of the estimate. (Sarmad, Bazargan, Hejazi 2001)

Research Tool

In this study, a researcher-made questionnaire with 2 parts of parents and students was used to measure the variables. This questionnaire was designed according to the two questionnaires of Akbari's thesis (2001) entitled "the study of the factors affecting the academic achievement of students in the faculty of literature in Shahid Bahonar university, Kerman" and Nezami's thesis (1983) entitled

"the study of some social and mental factors affecting the academic achievement of high school students in Tabriz".

Sub-scales

This questionnaire uses two sub-scales of personal factors and educational factors to measure the research variables. Personal factors include: having a goal, self esteem, self confidence, motivation, anxiety, intelligence and talent, paying attention to teacher, planning, gender, physical health, having no absence in school, size of study, and duration of watching TV.

Educationalfactors: They include the type of relationship between teacher and student, skill of teachers, conditions, space and facilities, supplies and learning assist books, and learning time in school and home.(size of study)

Scoring method: The questions of this questionnaire are answered by Likert method and have 4th and 5th degree scales.

Implementation

After the design of the questionnaire, each questionnaire related to students was matched to one of the questionnaires of parents and received a similar code. First, the questionnaire related to students was given to them in order to answer and then the matched sample of ach questionnaire was given to parents and then was attached to each other after the final collection. The matrix shows a correlation between the above factors and the average. The correlation values are considerable and are all significant at the alpha level less than 0/01. The average is positively related to the factors of parents monitoring, parents encouragement, parents kindness, parents science friendship, social-economic status of family, academic-cultural status of family andfamily- social total score.

The correlation method between the above factors and the average was used to test this hypothesis.

Table 1 shows the correlation matrix between the above factors and the average. In this case, also the correlation value is high and all cases are significant at the alpha level less than 0/01.The average is positively relatedto all factors of friendship between teacher and student, teacher skill, space and facilities, learning assistsupplies and the total score of educational factors. In other words, the higher is the score of student, the higher will be his/her average.

Now that the correlation coefficients are significant almost in all hypotheses, it should be studied how these predictor variables can predict the criterion variable. To test this hypothesis, since there are several predictor variables and one criterion variable and the measurement scale of all

Table 1: Correlation matrix between educational factors and academic performance

	Friendship between teacher and student	Teacher skill	Space and facilities	Learning assist tools	Total score of ** factors
Average					
Pearson correlation	0.741	0.722	0.618	0.801	0.818
Sig . (2-tailed)	0	0	0	0	0
N	259	259	259	259	259

of them is relative or spatial, the regression analysis was used. Among different methods of regression analysis, the researcher used step-by-step regression method to determine the variables that have the highest contribution or in the combination with other variables in the regression.

The following table shows only the variables of the total score of personal factors, planning; the number of family members, social-economicstatus of family, talent and size of study entered the regression.

Table 2 shows the results of the analysis of variance for the model. This model is significant.

The table of regression coefficients shows the predictor variable and predicted change value in dependent variable per one unit of standard deviation of change in the criterion variable. This value was known as Beta in the column of standardized coefficients.

By using this equation, the average can be estimated from the scores of above variables with 0/95 confidence level.

RESULTS AND DISCUSSION

In this case, the values of Pearson correlation coefficient and its significance level show a strong and positive relationship between the average and above factors. Average is positively related to all factors of teacher friendship with students, teacher skill, space and facilities, learning assistsupplies and the total score of educational factors. The higher is the score of a student in these factors, the higher will be his/her average. According to the significance ofeducational factors and their components in the present study, the results are consistent with the results of studies by Akbari (2001), Anjin and Demir (2009), and Heydari (2007).

The relationships based on kindness, respect and trust between teacher and students make the students not be dependent on teacher and also increase their academic motivation. Consistent with the results of the present study in which the significant relationship between teacher friendship with student and academic performance was confirmed, Fani and Khalife (2009) considered perception of teacher behavior and Kardoso (2011) and Kim et al

Table 2: The results of the analysis of variance for the model

Model	Sum of squares	df	Mean square	F	Sig.
6					
Predictor	1027 0.419	6	171 0.236	318 0.315	0.000(f)
Remaining	130 0.721	243	0.538		
Total	1158 0.139	249			

(2006) considered the interaction between teacher and student correlated with academic performance.

The first thing that a teacher should have is the skills or knowledge that the students are not aware of. Teachers should know the lessons that they want to teach and can also transfer their knowledge. Creating rational limitations in students' behavior can provide appropriate work conditions for teaching. Such discipline and limitations prevent damages to students and the destruction of classroom and school facilitates. Align with the present study, Absuiji (2007), Riyunkin et al (2000) and Wayen et al (2003) confirmed that there is a significant relationship between the factors related to teacher like age, gender, work quality and his academic performance. Also, Ebadi et al (2007) found a significant difference between the performance of students with contractual,civil service and soldier teachers.

If space, organization and arrangement of classrooms are appropriate, the best type of interaction will be made between teacher and students and nuisance factors cannot have an inappropriate effect on teaching and education. By creating an effective space in classroom, the sense of belonging and internal motivation of students will be strengthened for learning. In this regard, Riyukin et al (2002) found a significant relationship between the size of classroom, classroom environment and appropriate planning of teacher in classroom and also Aujin and Demir (2009) found a significant relationship between the quality of school and academic performance.

Density of population in classroom, compaction of lesson plans, the shortage of lesson books and learning assist books, insufficiency of toilets in schools, too much distance between school and home of students, difficulty in going to school and tens of other problems about the

appropriate educational situations and academic facilities are the considerable factors of academic failure. If the classroom has no enough light or has no appropriate space for sitting and walking or when the classroom board is not installed in such a way so that not everyone can use it easily, then it will lead to academic failure.

Usually, in these studies after the significanceof simple regression, it is studied that how these variables, that have a high correlation with criterion variable, can show the best combination to predict the criterion variable while combined to each other. In regression, only one variable is selected and entered the regression among the variables that predict the same part of the criterion variable. Table 4 shows that the total score of variables of personal factors, planning, the number of family members, and social-economic status of family, talent and size of study entered the regression. These scientific variables are the most advantageous variables in the prediction of academic performance and explain the highest variance of the dependent variable (0/88) with 99% confidence level in combination to each other.

Research Limitations

1. The intervention of uncontrolled variables in this study is considered as a nuisance variable in the study results.
2. Since the sample group was selected from a particular academic level (elementary level), thus all people and different levels should be considered in the extension of research findings.
3. The used questionnaire has a self report aspect, so there is the possibility of bias in accountability.
4. The lack of studies related to the subject in Iran that the findings of the present study can be compared.

Suggestions

1. According to the study population and conducted studies, it is suggested to use other predictor variables.
2. It is suggested to use experimental and non- experimental methods in the future studies instead of Survey methods in order to reduce the effect of intervening factors and achieving more accurate results. For example teaching positive parenting styles to parents and their effects on children's academic performance.

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