

EFFECT OF INTERRUPTION ON ACADEMIC ACHIEVEMENT OF ELEMENTARY STUDENTS IN NGOs SUPPORTED SCHOOLS IN D. I. KHAN (KHYBER PAKHTUNKHWA)

Farid Ullah Shah, Umar Ali Khan & Allah Noor Khan

Institute of Education & Research, Gomal University, D. I. Khan

ABSTRACT

This study is an experimental study and mainly focuses on finding the impact of interruption on academic achievement on male and female students during the class room teaching in district Dera Ismail Khan. This research study had the following aims: i) to identify the study level of students in NGO supported schools in District Dera Ismail Khan, ii) to identify the impact of interruption on academic achievement of elementary school students, and iii) to compare the gender wise impact of these variables on academic achievement. Two type of tests were constructed and administered, i.e. pre-test and post-test. These tests were constructed in the subjects of English and Urdu. The first null hypothesis which states that there is no significant difference in the achievement of male students in the subject of English and Urdu. Results show that significant difference and it was seen that in interrupted conditions the efficiency of English and Urdu affected a lot.

Keywords: *Interruption, Achievement, Efficiency, Environment*

INTRODUCTION:

Education is the basic requirement of every individual and it develops the different aspect of an individual. The teacher plays a very dynamic role in this whole process. Teaching is a fun and a dynamic process. Effective teaching and learning is intense need in order to keep the learners vigilant and attentive. The school climate and assessment may be conducive and suitable so that the learner might get maximum gains in the teaching learning process. It is also an admitted fact that if the students are not provided suitable school climate and they are not properly motivated. It is also a bitter fact that if the students feel disturbed they do not give proper response even if the teacher is professionally well qualified or his/her method of teaching is very efficient. It means that the surrounding/ environment of an educational institute must be free of all such kinds of disturbance. If the students face continuous noise and distracters, their academic achievement will definitely be affected.

The disturbance factors can be either internal or external. In most of the cases, the external factors have greater effect on the receptivity and achievement of the students. External factors may include traffic noise, noise of different machines and rapid entrance and exit of persons during teaching learning process. These factors greatly disturb the students and they lose their attention. What cause the decline in the concept building process and results the decline in the students' achievement level. Keeping in view all such factors which can affect the academic achievement of the students, this study is an attempt to assess the impact of environmental interruption on the attention, understanding and overall academic achievement of the students.

Objectives of the Study

Following were the main objectives of the study.

- To identify the study level of students in District Dera Ismail Khan.
- To identify the impact of interruption on academic achievement of elementary level students.
- To compare the gender wise impact of these variables on academic achievement.

Hypotheses

Following null hypotheses were tested.

Hypothesis 1 There is no significant difference between male students' achievement in normal and interrupted conditions in the subjects of English and Urdu.

Hypothesis 2 There is no significant difference between female students' achievement in interrupted and normal conditions in the subjects of English and Urdu.

Significance of the Study

The study may be helpful to the teachers, educationists and laymen to find out the bad effect of interrupted environment on the academic achievement of the learners. Findings might be helpful for policy makers to improve the environment and surroundings of the educational institutions.

LITERATURE REVIEW

Interruption can be considered as the event which interferes the process of work and suspend the human activities to some extent. External conditions interference is considered as every day stressor with adverse impact on the performance of the person. During the interrupted conditions most people see the ways and means of overcoming its negative impact. Their choice depends external and secondly the internal conditions, e.g., personality traits and current functional state (Addison, Dancer, Montague & Davis, 1999). Interruption is actually proved a great hurdle in the way of efficient performance. . It meddles with the primary task and sometimes it really becomes difficult for the individual to overcome such kind of interference during particular task. It causes to decrease the performance and efficiency of the individual.

Strain and emotional instability are the major gifts of continuous interruption. If some interruption free place is found, most of these common problems will be solved without any medication. Human life will become tension free and individual's health will no doubt improve in a no interruption zone (Mintzberg, 1992). An interrupted work environment is common for a typical knowledge worker. Different information system can be used to increase the knowledge of worker, his power of decision making, and power of solution of complex problems. Solution of complex problems needs concentration and interruption provide great hindrance in the way of success (Panko, 1992). Electronic tools like e-mail, mobile set, instant messaging service are used as productivity tools in the modern age but these things create destruction in the process of concentration during the teaching learning process (Nelson, Kohnert, Sabur & Shaw, 2005).

There are several evidences found that poor class room acoustics have negative effects on children special needs such as hearing impairment or learning difficulties. Bradlow (2003) and others have found out several structural arrangements which contribute a lot in teaching learning process. If classrooms are not arranged according to the psychological standards, it will create difficulties and interruption which leads to the poor academic performance (Nelson & Soli 2000). It has been observed that the children who live in noisy and interrupted places and faces the interrupted environment continuously, have more chances to be victim of weak speech perception. They feel difficulties in learning Classroom situation in interruption causes different difficulties which hamper the teaching and learning (American National Standards Institute, 2002). Similarly (Shield, Dock, Jeffrey & Tachmatzidis, 2002) also described the hurdles due to noise and interruption in teaching learning process i.e. understanding the speech,

ability to read and spell, students' behaviour in the class, students' attention in the class, students' concentration and academic achievement of the students.

Hygge (2003) focussed to conduct so many experiments where students read texts in either quite or interrupted situations, the interruption was provided by recording of train, aeroplanes, traffic or irrelevant speech. After a week the test were conducted in quite conditions, showed deficits in memory for all those which were studied in interrupted conditions. It is obvious that such kinds of experiments reveal not only that children normally have more difficulty while performing cognitive tasks when it is noisy out there, but also propose that noise tends to weaken long term learning along with the short term memory (Cohen, Evans, Krantz, Stokols & Shery, 1981). Children and adults are equally exposed to such conditions and the damage due to such noisy surrounding is unavoidable.

RESEARCH DESIGN

This research is based on the effect of interruption and academic achievement of students at elementary level. The study is experimental in nature.

Population

In this research study the total population is taken as all the students of elementary classes of district Dera Ismail Khan during the session 2012-2013.

Sample

Total sample of study was taken as 80 students in which 40 were male from Government Primary School NO.2 D.I. Khan and 40 were female students from Government Girls primary School No.1 D.I. Khan. The NGOs in one way or the other contributed in teachers training of parent teachers' council and facilitation in infrastructure of the schools.

Data Sources

As the study was experimental in nature so the main source of collection of data were pre-test and post-test of Students.

Research Instruments

For collection of data and analysis of results the pre-test in 2 subjects (English and Urdu) was taken from selected two groups, male and female for experimentation. Test for the subjects of English and Urdu, were constructed for this purpose. Before implementation and administration of these tests, consultation with ten

subject specialists for each subjects were made. After their suggestion and guide lines, the tests were became finalized.

Pilot Testing

For validation and internal consistency of administered tests the procedure of pilot testing was used as the instrument of experimentation. The tests in 2 subjects of English and Urdu were constructed within the prescribed syllabus and were given ten experts in the respective subjects. After the recommendations and suggestion of experts too easy and too difficult questions were eliminated and then the tests were finalized.

RESULTS OF THE STUDY

The research study was focused on the exploration of interruption effects on the level of achievement of students of 7th class. The researcher got pre-test results and then after providing different environment to the students and after the period of three months the post-test taken from two types of groups. Results of post-test and pre-test were analysed and through these results the interruption effects seen on the academic achievements.

Table 1 Classification of Respondents

	Group 1 (Interrupted)	Group 2 (Peaceful)	Total
Male	20	20	40
Female	20	20	40
Total	40	40	80

Table 1 shows the distribution of sample in to groups from which tests were taken in the subjects of English and Urdu.

Table 2 Difference of male students in interrupted conditions in English subject

	N	Mean	Std. Deviation	T	Sig. (2-tailed)
Pre-test	20	48.4500	4.2328	7.456	.000
Post Test- English	20	39.7500	6.2178		

Table 2 displays significant difference between the achievement level of students in the subject of English in the conditions when they are facing interruption

during studying and examination the mean values of pre-test is (48.4500) while post-test (39.7500) which shows the interruption greatly affect the achievement level of the students in the subject of English. Calculated value of *t* test indicated that it falls in the critical region as the tabulated value is 1.96 at $\alpha = 0.05$ level of significance.

Table 3 Difference of male students in peaceful conditions in English subject

	N	Mean	Std. Deviation	T	Sig. (2-tailed)
Pre-test	20	55.4300	3.6038	-4.231	.000
Post-test English	20	62.0000	4.87120		

This Table indicates the difference in achievement level of students in the subject of English when the students provide the peaceful conditions and enhance achievement level of students which shows from the results of post-test. *T* test also indicates the significant difference as *p* value (.000) at 0.05 level of significance.

Table 4 Difference of male students in interrupted conditions in Urdu subject

	N	Mean	Std. Deviation	T	Sig. (2-tailed)
Pre-test	20	53.2457	4.8765	3.236	.005
Post-test Urdu	20	46.6540	7.6754		

Table 4 reveals that there is significant difference found and interruption affect the efficiency of male students during their studies in the subject of Urdu. The mean values shows there is decrease in the scores of achievement test value of *p* (.005) showed the significant difference.

Table 5 Difference of male students' peaceful conditions in Urdu subject

	N	Mean	Std. Deviation	T	Sig. (2-tailed)
Pre-test	20	61.4367	4.2349	-5.4554	.000
Post-test Urdu	20	69.1901	8.3467		

This Table indicates that there is great effect of educational environment when students in classrooms. The result shows that peaceful environment causes the betterment in achievement level.

Table 6 Difference of female students in interrupted conditions in English subject

	N	Mean	Std. Deviation	T	Sig. (2-tailed)
Pre-test	20	52.2345	3.9112	5.981	.000
Post-test English	20	41.1900	5.3152		

This table indicates the achievement level of students when they are facing different interruptions during the classroom while they are studying the Subject of English. As mean values of post-test indicated the effect of interruption in that it's mean score decrease from 52.2345 to 41.1900. And t value is 5.981 while tabulated value is 1.96, at (0.05) level of significance.

Table 7 Difference of female students in peaceful conditions in English subject

	N	Mean	Std. Deviation	T	Sig. (2-tailed)
Pre-test	20	51.5600	6.1231	-5.6550	.000
Post Test English	20	59.1145	5.5544		

Table shows the achievement level in the of students in the subject of English while they are in peaceful environment .The level of achievement increases and students got progress and this difference shown from the figures of mean scores and t calculated values at 0.05 level of significance.

Table 8 Difference of female students in interrupted conditions in Urdu subject

	N	Mean	Std. Deviation	T	Sig. (2-tailed)
Pre-test	20	50.1345	3.68712	1.833	.083
Post-test URDU	20	46.5034	5.56776		

The table shows there is no significant difference found in achievement level of students in the subject of Urdu while studying in interrupted conditions mean values shows that there is no such effect seen in the achievement level.

Table 9 Difference of female students in peaceful conditions in Urdu subject

	N	Mean	Std. Deviation	T	Sig. (2-tailed)
Pre-test	20	52.6930	6.98672	-13.564	.000
Post-test URDU	20	69.5502	10.0913		

This Table indicates the difference in achievement level of students in the subject of Urdu when the students provide the peaceful conditions.

FINDINGS OF THE STUDY

The research studies fully reveal the following facts in this context:

- Significant difference was found in the achievements of male students in the subject of English during interrupted conditions in the class. Students' achievement badly affected when they face interruption during their study in the subject of English.
- Significant difference was found in the achievement of male students in the subject of English. The students got progress while they study in peaceful conditions. Great positive effect was seen as $p(0.000)$ was significant at $\alpha = 0.05$.
- Significant difference was found in the achievement of male students in the subject of Urdu and it was found that student's achievement level decreases when they face interruption during their studies. The value of $p(0.005)$ at 0.05 level of significance.
- Significant difference was found in achievement level of male students in the subject of Urdu when students work in complete peaceful conditions. Their achievement score increase.
- Significant difference was found in the achievement of students in the subject of English in interrupted conditions in the classroom and their achievement scores badly affect their efficiency. The value of $p(0.000)$ at $\alpha = 0.05$.
- Significant difference was found in achievement level of female students in the subject of English when students work in complete peaceful conditions.
- No significant difference was found in the achievements of female students in the subject of Urdu and students are affected but no significant effect of interruption was seen as the value of $p(0.083)$ which is insignificant at 0.05 level of significance.

- Significant difference was found in achievement level of female students in the subject of Urdu when students work in complete peaceful conditions. They got progress at great extent and mean score figures showed significant difference in achievement as $p(0.000)$ was in significant at $\alpha=0.05$ level of significance.

DISCUSSION

The present study was conducted for the exploration of the difference in achievement level in different subjects (English and Urdu) in male and female students when different interrupted and peaceful conditions were applied on the students during their study and assessments in elementary schools of district Dera Ismail Khan.

1. The interrupted conditions badly affect the achievement levels of male students in the subjects of English and Urdu.
2. In peaceful conditions the learning becomes effective in each and every subject and students show progress. When teacher and students both work in peaceful environment, no effect, no noise, no interruption, no disturbance then students become attentive and get education in free environment.
3. In case of female students, the effects of interruption showed that female students' achievement badly affected in the subject of English.
4. In peaceful condition the female showed better level of achievement rather than male. But it is considerable fact that the level of obedience and shameful conditions also influence the achievement level. The peaceful conditions affected the achievement level of the students in positive way. In the interrupted environment, the female students got progress.

CONCLUSION

In the light of findings, the researcher draws the following conclusions:

- One of the significant conclusions is that there is significant difference in the achievements in the subjects of English and Urdu.
- It is found from the findings that when peaceful environment was provided to male students then their achievement level enhanced and students are in position to show progress.
- It has also been found from findings that significant difference was found in the subjects of English but students got progress in the subject of Urdu even in interrupted conditions.

- It is concluded that in case of female students no significant difference was found in subject of Urdu and students got little progress even in bad conditions.
- It is also concluded that peaceful conditions affects better on the achievement level of female students. Female students got progress in their studies in the subjects of English and Urdu if they work in peaceful and safe conditions.

Recommendations

On the basis of the facts evidenced in the study some of the major recommendations can be made which are as follows.

- Educational institutions should take arrangements in order to avoid the internal and external interruption in teaching learning process. It is the responsibility of the whole organization to maintain the peaceful conditions and avoid the bad effects.
- Professional training is recommended for the teachers and other personnel working in the organisation for maintaining good working conditions. Similarly noise proof buildings may be preferred for classroom work.
- Different techniques and methodology may be utilized for avoiding these effects. Teachers are the real producers. Qualified and experienced teachers may be promoted and initiated to control these bad effects.

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