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Level of Attention of Secondary School Students and its Relationship with their Academic Achievement

Syed Manzoor Hussain Shah¹, Saadia Saleem²

ABSTRACT

The major purpose of the study was to find out the relationship between the level of attention and academic achievement. The tool designed to carry out this study was questionnaire. A sample of 420 students was taken from six secondary schools of district Chakwal. The data was collected personally by visiting the concerned schools. The collected data was properly tabulated and analyzed with the help of ANOVA. The major findings of the study were: students' level of attention directly affects their academic achievement. Those students who have a high level of attention their academic achievement is also higher. As the level of attention decreases academic achievement also decreases. Students with a moderate attention level have average academic achievement while the student with a low level of attention are failed. The main factors that distract student attention are noise, home environment, financial problems, health problems and lack of interest. The study concludes that attention should be considered an important psychological phenomenon that affects the students' academic achievement. As the individuals are different in their capabilities, skills, intelligence and aptitude their level of attention is also different.

Key words: Academic achievements, attention, class room teaching, education, secondary education.

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¹ Professor of Education and Chairman of the Education department, Hazara University, Mansehra, Pakistan, Email: drmhshaah@gmail.com.

² Allama Iqbal Open University, Islamabad, Pakistan, Email: saadia_saleem786@yahoo.com.

1.0 Introduction

Education plays the role of weapon that helps the individuals to struggle and conquer the battle of life. With the help of education person knows about himself as well as knows about his spiritual relation to the Allah Almighty. Education enables the individuals to distinguish between right and wrong. In historical perspective education has been a very essential part of different civilizations. There are three levels of education system in Pakistan. Primary Education is the foundation of education system. Primary education is as important for an individual's academic life as roots are important for a tree. Strong basis at primary level helps the individual through out his/her academic career. Secondary education is the second level of education. It is the mid point between the primary and higher education. It is the most crucial stage of student's life. At this stage students take decisions for their future lives either to continue their studies or to join workforce. Higher education is the third level of education. Higher education provides talented and able individuals who contribute a lot toward the progress and development of their country. All the levels are important but it is evident that secondary level education is an important stage in academic life. Secondary school is an important stage in the maturity and in the world of work, as some students start to earn their livelihood after the completion of secondary school education. Students are thinking about themselves, their capabilities and also about what they will do after the completion of their education. They are assessing their strengths, aptitude, skills and abilities. At this stage every student wants acknowledgment and acceptance from their parents, teachers and peer. They need guidance from their teachers and parents to make decision about them. Secondary school level age is the age of adolescence. As adolescence, is a time of growth and change, students need guidance from their parents and teachers. Adolescents face unique and diverse challenges, both personally and developmentally, that impact their academic achievement. At this stage students confront with lot of excitement, frustration, disappointment and hope. It is the time when students have a lot of dreams for their future. Secondary school teachers enhance the learning process and promote academic achievement. School counseling programs and the individual attention are essential for students to achieve optimal personal growth and to become productive members of the Society.

During adolescence individuals confront many psychological, physical and emotional problems that inhibit their learning and affect their academic achievement. Attention is one of the significant factors that can affect the academic achievement of students. Attention is usually considered as the ability to focus mentally in a singular direction for a specified length of time during which other objects of interest or focus can be put aside. It is an interactive process in which the person attending interacts with the object of attention in such a way that there is a mutual interchange. Attention requires a certain degree of interest coupled with enough interactive reciprocity so that interest and focus are maintained over time. Although the act of focusing the mind can be considered to be a mental skill, it is the elements of interest, interaction, and involvement that are the emotional elements of the process without which attention could not be sustained (Frazier, 1999). There are three levels of the attention that can be defined more specifically as follows:

1. None - Students may not even be aware that the components in use, because it has been specified automatically by another component or serves as a default when no intervening component is provided.
2. Shallow - Students consider the high-level behavior of a component, but not its implementation details.
3. Deep - Students propose or implement a component addition with new functionality to address a given issue (Steven, 2006).

The common perception about attention is that it is necessary for academic achievement. Dictionary defines achievement as "the act of accomplishing or finishing. Something accomplished successfully, especially by means of exertion, skill, practice, or perseverance". Educationist and teachers are always anxious about the academic achievement of the students. Achievement tests are used to measure the achievement of students.

2.0 Review of related literature

2.01 Attention

Attention is one of the important phenomenon in educational psychology. No one can deny the importance of attention. It is the ability to choose from the many competing stimuli that surround us. Attention is essential condition for learning the task at hand. James (1979) define attention in the following words,

Everyone knows what attention is. It is the taking possession by the mind, in clear and vivid form, of one out of what seem several simultaneously possible objects or trains of thought. Focalization, concentration, of consciousness is of its essence. It implies withdrawal from some things in order to deal effectively with others, and is a condition which has a real opposite in the confused, dazed, scatterbrained state which in French is called distraction.

Attention plays a key role in our daily activities. It is the important characteristic of human nature that their attention is always shifting and changing according to their needs and interests. Attention is an important process due to different reasons. i) Attention directs human energies and enables them to respond to some stimuli and ignore others. Attention makes individuals attentive to concentrate on one's efforts in a certain direction so that things and ideas they attend to are relevant to their needs and purposes. ii) Attention increases individual's efficiency and helps them to get ready to meet any situation. iii) Attention helps individuals in remembering and recalling things. iv) Attention improves individuals sensory discrimination as a result make fine distinctions in perceiving things which otherwise would have ignored. <http://visionapexcollege.blogspot.com/2010/10/psychology-attantion.html>.

2.02 Characteristics of attention

Attention is a necessary skill for development. It is a common observation that those students excel in life who are able to focus their mind. There are several characteristics of attention that make it one of the important factors for learning and achievement i.e Attention is selective: Attention is a selective process as we attend only those objects that are related to our interest or in which we have some advantages, while other objects are ignored. Shifting nature of attention: One of the important characteristic of attention is that it is constantly shifting from one object to another. Attention cannot remain fixed on one point for more than seven or eight seconds. Narrow range of attention: At any moment attention is limited to a narrow range. At the same time we cannot attend two unrelated objects. We cannot mourn and rejoice at the same time. Include all aspects of mental process: Attention process has all the aspects of mental process knowing, feeling and willing. It not only helps us to know the object clearly and striving for it but it also accompanied by some feelings in the form of interest. Increase in the clearness of a stimulus: With the help of attention we can better know the details of objects. Motor adjustment: Attention also effects motor adjustments. For example during an interesting conversation we can observed the craned necks of audience . During an interesting lecture we can notice that many students are looking fixedly towards the professor (Mahmud, 2004).

2.03 Conditions of attention

Curiosity is a natural human instinct. Man is curios by nature. This habit of curiosity develops as a person grows. In daily life situation a person encounter with different objects, stimuli, incidents etc. As a result several questions give birth in human mind. To satisfy ones mind an individual tries to find the answers of these questions. Attention may be one of the phenomenon that rise in an individual mind and boost individual's curiosity to know about the nature of attention. For example how people select stimuli? On what basis a person prefer one stimulus to the other? While talking about attention Mahmud (2004) is of the opinion that several questions comes in our mind related to attention. What is the law of

selections? What objects do we attend to? Why do we attend some objects and not the others? Why do we attend a particular object out of a number of objects that are there at the same time? The answer of all these questions is that human are compelled to do so because of certain conditions. There are two types of the conditions of attention objective and subjective. Objective conditions are formed in the objects which attract our attention. Objective condition of attention can also be called as passive attention. The attended objects should have one or more of the following characteristic.

- A. Intensity of the stimulus:** Intensity of the stimulus affects the quality of attention. Loud voice, glittering light, and bright colors catch our attention. Those teachers who speak loudly can catch the attention of their student easily.
- B. Size:** Size of objects also plays an important role in attracting attention. As a full page advertisement attract our attention as compared to the small size advertisement. For this reason the sketches of blackboard should be large in size to attract the attention of students.
- C. Novelty:** It is a common fact that the new or extraordinary object attracts our attention more easily as compared to a familiar one. As the child is attracted by new toys, new books, and new pair of shoes. A new teacher attracts the attention of students and a new teaching methodology catch the attention of students.
- D. Contrast:** Contrast is another condition that attracts the attention. For example a tall man by the side of a short man, a white man in the company of dark colored men, a boy in the company of girls, a girl in the company of boys and the white teeth of a Blackman will attract attention. These things bound us to attract attention because of contrast.
- E. Strangeness:** Strange objects awaken our curiosity and attract our attention. For example if a person wears unusual dress such as hat with dhoti, tie with a pajama, student attending a college with blanket etc, people will take notice of it. Colorful posters of movie in which the persons are wearing multicolor dresses attract our attention.
- F. Change:** Usually we take no notice of the steady routine but the sudden changes in the situation catches our attention .The more suddenly the change comes, the more it attract attention.
- G. Movement:** Sometimes an object which is not attended to begin to move, it is at once noticed. For example a shooting star, a flying bird, and a standing bus when it begins to move, draws our attention.
- H. Repetition:** The repetition of anything for a long time becomes monotonous and ceases to hold our attention (Mahmud, 2004).
- I. Subjective condition of attention:** Elizabeth (2006) is of the view that this condition is present in the individual attending to;
- J. Freshness:** A person should be fresh and alert to pay attention to something. When a person is sleepy, drowsy and tired, even strongly inspiring objects fails to arouse our attention.
- K. Interest:** Interest is an inner condition of mind which attracts our attention. Attention and interest are the two sides of the same coin, interest is latent attention and attention is interest in action. When we feel interest in a thing we pay attention to it conversely if we pay attention to a thing we begin to take interest in it. A newspaper contains all kinds of news.

Rehman (1995) conducted a study to find the relationship between school anxiety and academic achievement. According to the result of the study school anxiety of the students is significantly correlated with school achievement of students. Girls found more anxious than boys and students become more anxious at annual examination. Ruqia (2005) conducted a study on the impact of low vision on the academic performance of students at primary level in regular system of education. The study was designed to investigate the impact of low vision on the academic performance of students. The main objectives of the study was to identify low vision students , to find out academic problems of low vision students, to determine the impact of low vision on the performance of curricular activities and find out the relationship between low vision and academic achievement. Main conclusions of the study were that low vision students in regular system of education always faced manifold specific academic difficulties in reading, writing, manipulating and visualizing the things, drawing, completing their homework and collecting academic information. However low vision and academic achievement

were not found to be associated with each other. Ayub (2009) conducted a study on the impact of principal attitude on student's academic achievement at secondary level in Islamabad. This study was conducted to see the relationship of principal attitude toward teaching staff and student achievement. The result of the study shows that the attitude of school principal has positive impact on student's performance. Some other factors like socio economic conditions or atmosphere may also have their impact on students' achievement. Anwar (2001) conducted a study of relationship of creative thinking with the academic achievement of students. The main objective of the study was to evaluate the relationship of creative thinking with academic achievement. The findings of the study reveal that the high achievers are critical thinker. Rabiner (2004) conducted a study on the relationship between attention problem and classroom learning. He describes that the problems with attention to classroom teaching and schoolwork are very common among students, and a recent survey of teachers indicated that approximately 16% of secondary school students display frequent inattention and poor concentration. Many of the students with poor attention reveal academic problems. To find out the relationship between the academic achievement and attention problem Rabiner conducted two studies, the first study is "Does tutoring help inattentive children" and the second is "attention problems and below grade level achievement in multiple academic areas".

The outcome of these studies reveals that the results apply to children with attention problems rather than to children specifically diagnosed with ADHD. The study indicates that the attention problems frequently have a tremendously adverse impact on children's academic achievement.

3.0 Research methodology

The study was co-relational in its nature. In this study the relationship between the academic achievement and the levels of attention was studied. The objectives of the study were to: Find out the levels of attention of the secondary school students. Assess the impact of the levels of attention on the academic achievement. Find out the relationship between the levels of attention and the academic achievement of secondary school students. The hypothesis of the study were i. There is no significant impact of the levels of attention on the student's academic achievement at secondary level. ii: There is a significant impact of the levels of attention on the student's academic achievement at secondary level. The population of the study comprised i. 172 Government Secondary Schools (103 Boys & 69 Girls) Chakwal. For research purpose, stratified random sampling technique was used for selection of boys and girls schools. The sample of the study was as following: For research purpose 3 boys and 3 girls (six secondary schools) were randomly selected from each stratum. From these sampled schools 10th grade students was the sample for the study. To obtain the information about the levels of attention of the secondary school student's Likert scale was prepared. It was developed on five points (Always, Very Often, Sometimes, Rarely, Never) with the following areas:

- Classroom activities,
- Ways of communication,
- Time management,
- Concentration,
- Comprehension and organization,
- Boredom,
- Understanding of instruction and performance,
- Homework and class work
- Performance in test and doing work under pressure

Levels of attention were defined in terms of None, Shallow and high on the basis of the scores of each respondent in Likert scale. Annual results of the respondents were checked to study the relationship between the levels of attention and the academic achievements of the secondary school students.

3.01 Data analysis

Table 1: Gender wise distribution

Gender	No of students	Percentage
Male	231	55.0
Female	189	45.0
Total	420	100

Table 1 shows the gender distribution of sample for the study. Total sample for the study is 420 secondary school students-231 male and 189 female students.

Table 2: Grade wise distribution of sample

Grade	No of students	Percentage
A	34	8.1
B	73	17.4
C	99	23.6
D	72	17.1
Fail	142	33.8
Total	420	100

Table 2 indicates the academic grades of students. It is clear from the table that 34 students get A grade, 73 students got B grade, 99 students got C grade, 72 students got D grade, 142 students were fail. These grades were taken from the annual result of SSC Exam 2010 of Rawalpindi Board of Intermediate and Secondary Education.

Table 3: Attention level

Attention level	No of students	Percentage
Low	139	33.1
Moderate	139	33.1
High	142	33.8
Total	420	100

Table 3 shows the attention level of students. Attention level was determined by using the following criteria: Zero to 33% attention score was considered low level of attention, 34% to 65.9% attention score was considered moderate level of attention, 66% to 100 attention score was considered high level of attention. It is clear from the table that 33.1% of the students fall in the category of low attention level, 33.1% in the category of moderate level of attention and 33.8% students are in the category of high level of attention.

Table 4: Grade Wise Mean Scores of students in Classroom Activities

Grade	N	Grade Wise Mean Scores	S.D	F	Sig
A	34	31.73	2.90	441.267	.000
B	73	27.47	3.26		
C	99	23.97	2.81		
D	72	19.97	3.66		
Fail	142	13.17	2.83		
Total	420	20.87	7.00		

df: (4,415) $p < .001$

Table 4 indicates that the mean of attention-score of A grade students is 37.13, B grade students is 27.47, C grade achievers is 23.97, D grade achiever is 19.97, while the mean of fail students is 13.17. The mean of attention level of students with different academic scores reflects that the students with high attention level have higher academic score. The F value of five categories of attention and the academic scores of the students is 441 with its significance at .000 which is $< .001$. Therefore, the mean difference among five grade levels on classroom activities of attention level is statistically significant. The null

hypothesis that there is no significant difference between attention level with respect to academic scores of the secondary school students is rejected, and the alternate hypothesis is accepted.

Table: 5 Grade wise mean scores of students in ways of communication

Grade	N	Grade Wise Mean Scores	S.D	F	Sig
A	34	35.70	3.52	362.016	.000
B	73	30.53	4.37		
C	99	26.61	3.77		
D	72	21.90	4.99		
Fail	142	13.76	3.45		
Total	420	22.87	8.42		

df: (4,415) p< .001

Table 5 indicates that the mean of attention-score of A grade students is 35.70, B grade students is 30.53, C grade achievers is 26.61, D grade achievers is 21.90, while the mean of fail students is 13.76. The mean of attention level of students with different academic scores reflects that the students with high attention level have higher academic score. The F value of five categories of attention and the academic scores of the students is 362 with its significance at .000 which is < .001. Therefore, the mean difference among five grade levels on ways of communication of attention level is statistically significant. The null hypothesis that there is no significant difference between attention level with respect to academic scores of the secondary school students is rejected, and the alternate hypothesis is accepted.

Table: 6 Grade wise mean scores of students in time management

Grade	N	Grade Wise Mean Scores	S.D	F	Sig
A	34	23.47	1.94	296.468	.000
B	73	21.20	3.29		
C	99	19.06	2.67		
D	72	15.37	3.98		
Fail	142	8.70	3.35		
Total	420	15.65	6.30		

df: (4,415) p< .001

Table 6 indicates that the mean of attention-score of A grade students is 23.47, B grade students is 21.20, C grade achievers is 19.06, D grade achievers is 15.37, while the mean of fail students is 8.70. The mean of attention level of students with different academic scores reflects that the students with high attention level have higher academic score. The F value of five categories of attention and the academic scores of the students is 296 with its significance at .000 level which is < .001. Therefore, the mean difference between five levels is statistically significant. The null hypothesis that there is no significant difference between attention level with respect to academic scores of the secondary school students is rejected, and the alternate hypothesis is accepted.

Table: 7 Grade wise mean scores of students in concentration

Grade	N	Grade Wise Mean Scores	S.D	F	Sig
A	34	22.23	2.93	253.251	.000
B	73	18.95	3.73		
C	99	17.54	2.63		
D	72	15.13	1.94		
Fail	142	9.46	2.66		
Total	420	15.02	5.16		

df: (4,415) p< .001

Table 7 indicates that the mean of attention-score of A grade students is 22.23, B grade students is 18.95, C grade achievers is 17.54, D grade achievers is 15.13, while the mean of fail students is 9.46. The mean of attention level of students with different academic scores reflects that the students with high attention level have higher academic score. The F value of five categories of attention and the academic scores of the students is 253 with its significance at .000 level which is <.001. Hence, the mean difference among five grade levels is statistically significant. The null hypothesis that there is no significant difference between attention level with respect to academic scores of the secondary school students is rejected, and the alternate hypothesis is accepted.

Table 8: Grade wise mean scores of students in comprehensions and organization

Grade	N	Grade Wise Mean Scores	S.D	F	Sig
A	34	18.55	1.84	305.313	.000
B	73	17.32	2.80		
C	99	15.96	2.36		
D	72	13.69	3.17		
Fail	142	7.16	2.42		
Total	420	13.05	5.10		

df: (4,415) p> .001

Table 8 indicates that the mean of attention-score of A grade students is 18.55, B grade students is 17.32, C grade achievers is 15.96 , D grade achievers is 13.69, while the mean of fail students is 7.16. The mean of attention level of students with different academic scores reflects that the students with high attention level have higher academic score. The F value of five categories of attention and the academic scores of the students is 305 with its significance at .000 level which is < .001. Therefore, the mean difference among five grade levels on comprehension and organization of attention level is statistically significant. The null hypothesis that there is no significant difference between attention level with respect to academic scores of the secondary school students is rejected, and the alternate hypothesis is accepted.

Table 9: Grade wise mean scores of students in boredom

Grade	N	Grade Wise Mean Scores	S.D	F	Sig
A	34	22.64	1.72	134.478	.000
B	73	20.98	2.86		
C	99	19.35	3.08		
D	72	17.50	3.52		
Fail	142	12.97	3.12		
Total	420	17.43	4.61		

df: (4,415) p< .001

Table 9 indicates that the mean of attention-score of A grade students is 22.64, B grade students is 20.98, C grade achievers is 19.35, D grade achievers is 17.50, while the mean of fail students is 12.97. The mean of attention level of students with different academic scores reflects that the students with high attention level have higher academic score. The F value of five categories of attention and the academic scores of the students is 134 with its significance at .000 level which is < .001. Therefore, the mean difference among five grade levels is statistically significant. The null hypothesis that there is no significant difference between attention level with respect to academic scores of the secondary school students is rejected, and the alternate hypothesis is accepted.

Table 10: Grade wise mean scores of students in understanding of instruction

Grade	N	Grade Wise Mean Scores	S.D	F	Sig
A	34	28.08	2.66	404.350	.000
B	73	24.63	3.89		
C	99	23.40	3.92		
D	72	17.48	3.59		
Fail	142	10.16	2.54		
Total	420	18.50	7.38		

df: (4,415) $p > .001$

Table 10 indicates that the mean of attention-score of A grade students is 28.08, B grade students is 24.63, C grade achievers is 23.40, D grade achievers is 17.48, while the mean of fail students is 10.16. The mean of attention level of students with different academic scores reflect that the students with high attention level have higher academic score. The F value of five categories of attention and the academic scores of the students is 404 with its significance at .000 which is $< .001$. Therefore, the mean difference among five grade levels on understanding of instruction is statistically significant. The null hypothesis that there is no significant difference between attention level with respect to academic scores of the secondary school students is rejected, and the alternate hypothesis is accepted.

Table 11: Grade wise mean scores of students in performance

Grade	N	Grade Wise Mean Scores	S.D	F	Sig
A	34	26.41	5.61	139.461	.000
B	73	24.02	4.35		
C	99	21.43	4.12		
D	72	19.01	3.42		
Fail	142	13.22	3.57		
Total	420	19.09	6.13		

df: (4,415) $p < .001$

Table 11 indicates that the mean of attention-score of A grade students is 26.41, B grade students is 24.02, C grade achievers is 21.43, D grade achievers is 19.01, while the mean of fail students is 13.22. The mean of attention level of students with different academic scores reflects that the students with high attention level have higher academic score. The F value of five categories of attention and the academic scores of the students is 139 with its significance at .000 level which is $< .001$. Therefore, the mean difference among five grade levels is statistically significant. The null hypothesis that there is no significant difference between attention level with respect to academic scores of the secondary school students is rejected, and the alternate hypothesis is accepted.

Table 12 Grade wise mean scores of students in all questionnaire

Grade	N	Grade Wise Mean Scores	S.D	F	Sig
A	34	208.85	15.74	557.006	.000
B	73	185.16	23.33		
C	99	167.36	18.60		
D	72	140.08	20.40		
Fail	142	88.64	14.57		
Total	420	142.52	46.26		

df: (4,415) $p < .001$

Table 12 indicates that the mean of attention-score of A grade students is 208.85, B grade students is 185.16, C grade achievers is 167.36, D grade achievers is 140.08, while the mean of fail students is 88.64. The mean of attention level of students with different academic scores reflects that the students with high attention level have higher academic score. The F value of five categories of attention and the

academic scores of the students is 557 with its significance at .000 level which is $< .001$. Therefore, the mean difference among five grade levels is statistically significant. The null hypothesis that there is no significant difference between attention level with respect to academic scores of the secondary school students is rejected, and the alternate hypothesis is accepted.

Table: 13 Mean score of obtained marks and attention score

	Mean	Std. Deviation	N
Obtained marks	437.53	261.884	420
Attention score	141.98	46.512	420

Table 13 shows that the mean score of the obtained marks of 420 students is 437.53 and the mean of attention score of 420 students is 141.98.

Table 14 Correlation of variables

		Obtained marks	Attention score
Obtained marks	Pearson Correlation	1	.977**
	Sig. (2-tailed)		.000
	N	420	420
Attention score	Pearson Correlation	.977**	1
	Sig. (2-tailed)	.000	
	N	420	420

Table 14 shows the correlation of two variables attention score and academic achievement. Correlation was calculated by using Pearson correlation coefficient. Results show that there is a positive correlation between attention score and academic score.

Table 15: Correlation, means and standard deviation between academic achievement and attention score

Measure	Mean	SD	R	p-value
Academic Achievement	437.53	261.884	.977	.000
Attention Score	141.98	46.512		

Table 15 shows the relationship between academic achievement and attention scores of the students. The result shows that there is a positive correlation between academic and attention score this means that higher the attention of the student leads to higher academic performance. This correlation is overwhelming significant as $p < .001$. The null hypothesis that there is no relationship between attention level and academic scores of the secondary school students is rejected, and the alternate hypothesis is accepted.

Table 16: Factors that decrease attention level

No	Item	Frequency	Percentage	rank
1	Mental worries	420	100%	1
2	Environment	417	99.2%	2
3	Health problems	415	98.8%	3
4	Interest	412	98.1%	4
5	Family problem	410	97.6%	5
6	Long duration of lectures	410	97.6%	5

7	Noise	400	95.2%	6
8	Financial problems	386	92%	7

It is clear from the table that 95.2% students considered that noise is one of the factors that distracts students' attention, 97.6% students think that students' attention is diverted when they are suffering from family crisis, 98.8% students believed health problems create troubles in maintaining attention, 99.2% students considered environmental problems as main distractor, 98.1% students think that lack of interest creates attention problem, 92% students believed that financial problems decrease the attention level, all of the respondents considered that mental worries are also the major cause of decreasing attention level and 97.6% students think that long duration of lectures also decrease attention level.

4.0 Findings

1. As the sample of study consisted of 420 students, in which 34 students get A grade, 73 students get B grade, 99 students get C grade, 72 students get D grade, 142 students are fail. (Table 2)
2. 33.1 % of the students fall in the category of low attention level, 33.1 % in the category of moderate level of attention and 33.8 % students are in the category of high level of attention. (Table 3) (Objective 1)
3. Mean score of students indicate that those students who have high level of attention in classroom activities, their academic achievement is also higher. As the level of attention decreases, academic performance also decreases. The F value of five categories of attention and the academic scores of the students is 441 with its significance at .000 level which is $< .001$. (Table 4) (Objective 2 & 3)
4. Mean score of students indicate that those students who have high level of attention in expressing academic and non academic problems, their academic achievement is also higher. As the level of attention decreases, academic performance also decreases. The F value of five categories of attention and the academic scores of the students is 362 with its significance at .000 level which is $< .001$. (Table 5) (Objective 2 & 3)
5. Mean score of students indicate that those students who have high level of attention in time management, their academic achievement is also higher. As the level of attention decreases, academic performance also decreases. The F value of five categories of attention and the academic scores of the students is 296 with its significance at .000 level which is $< .001$. (Table 6) (Objective 2 & 3)
6. Mean score of students indicate that those students who have high level of attention in, concentration their academic achievement is also higher. As the level of attention decreases, academic performance also decreases. The F value of five categories of attention and the academic scores of the students is 253 with its significance at .000 which is $< .001$. (Table 7) (Objective 2 & 3)
7. Mean score of students indicate that those students who have high level of attention in, comprehension and organization their academic achievement is also higher. As the level of attention decreases, academic performance also decreases. The F value of five categories of attention and the academic scores of the students is 305 with its significance at .000 level which is $p < .001$. (Table 8) (Objective 2 & 3)
8. Mean score of students indicate that those students who have high level of attention in, the category of boredom their academic achievement is also higher. As the level of attention decreases, academic performance also decreases. The F value of five categories of attention and the academic scores of the students is 134 with its significance at .000 level where $p < .001$. (Table 9) (Objective 2 & 3)
9. Mean score of students indicate that those students who have high level of attention in, understanding of instruction their academic achievement is also higher. As the level of attention decreases, academic performance also decreases. The F value of five categories of attention and the academic scores of the students is 404 with its significance at .000 level which is $< .001$. (Table 10) (Objective 2 & 3)
10. Mean score of students indicate that those students who have high level of attention in, performance their academic achievement is also higher. As the level of attention decreases,

academic performance also decreases. The F value of five categories of attention and the academic scores of the students is 139 with its significance at .000 level which is $< .001$. (Table 11) (Objective 2 & 3)

11. Mean score of students indicate that those students who have high level of attention in, the whole attention scale their academic achievement is also higher. As the level of attention decreases, academic performance also decreases. The F value of five categories of attention and the academic scores of the students is 557 with its significance at .000 level where $p < .001$. (Table 12) (Objective 2 & 3)
12. 95.2 % students considered that noise is one of the factor that distract students attention, 97.6 % students think that students attention is diverted when they are suffering in family crisis, 98.8 % students believed health problems create troubles in maintaining attention, 99.2 % students considered environmental problems as main distracter, 98.1 % students think that lack of interest create attention problem, 92 % students believed that financial problems create attention problem, all of the respondents considered that mental worries are the major cause of attention problem and 97.6 % students think that long duration of lectures create attention problem. (Table 13)

4.0 Discussion and conclusion

As the study was designed to find out the level of attention of secondary school students, the results shows that as the individuals are different in their abilities, interests, aptitude, strengths, weaknesses etc their level of attention also different from one another. Each and every student has a different level of attention. Attention level is a key contributor in a child academic performance. Attention is the ability to choose from many competing stimuli that surround us. Attention is one of the important aspects of learning. Attention problem disturbs human learning and achievement. Student's academic performance is directly affected by their attention level. Higher academic performance reflects higher level of attention, while lower performance reflects lower level of attention. Awareness about the level of attention of students is necessary for teachers. With the identification of the level of attention of each student, teachers can make their teaching according to the needs and requirements of their students. Provision of academic instructions according to the needs of students saves them from frustration. Students participation in classroom activities(classroom discussion, group activities, test completion time, self identification of mistakes), ways of communicating academic, non academic and personal problem, Time management skills, concentration in performing different tasks, comprehension and organization skills, feeling of boredom or freshness while doing different tasks, ways of understanding instructions, performance in different conditions(under pressure, different time intervals) plays key role in identifying the level of attention. There are different factors that distract the attention of students. Many students said that their attention is diverted due to health problems like headache, fever, etc. when they are physically uncomfortable, its not possible for them to attend the class with deep concentration.

Family problems that include disputes, crisis, communication gap, uncomfortable environment etc are the important factors that divert student's attention. When students live in uncomfortable home environment, their minds are stressed. Although they are physically present in the class but mentally they are thinking about their family problems. Interest is one of the important ingredients of attention and necessary for learning. Lack of interest in studies automatically diverts student's attention from the studies. It is a common observation that those students who take less interest in studies or in a particular subject they are inattentive in class. Interest and attention are closely related. Without interest it's not possible for students to concentrate on particular task. Internal and external noise is the most common distracter that diverts student's attention. There are many kinds of noise that disturb students for example noise of students inside or outside the classroom, noise of vehicles, noise of school bell, etc. Those schools which are located on main roads or near bus stations, severely affected with noise. Environmental conditions are also very important for attention. If the environmental conditions are not suitable for students then it's difficult for students to concentrate on their study. Environmental conditions matter a lot for maintaining or distracting attention. Environmental

conditions include location of school; location of classroom, availability of physical facilities for example fans in summer, heater in winter, proper light, comfortable furniture, peaceful school environment etc. It is common observations that in the presence of suitable environmental condition student can pay more attention to their studies. Long duration of lectures also distract students attention from the lesson. In too long and monotonous lectures students feel boredom or they experience the situation of day dreaming.

In the light of the analysis of data and findings of the study, the following conclusions were drawn. Individual differences are one of the most important aspects in psychology. As individuals are different in their abilities, skills, aptitude, strength and weaknesses their level of attention also varies. Students of different level of attention (high, moderate, low) are present in secondary schools. There is no considerable difference among the number of students having different level of attention (33.8 % high level of attention, 33.1 moderate and 33.1 low level of attention). Attention is one of the important psychological phenomena that have strong impact on the academic performance of students. Those students who have higher level of attention their academic achievement is also higher. (Objective 3) As the level of attention decreases academic achievement also decreases, student with moderate attention level have average academic achievement while the student with low level of attention are fail. (Objective 3) Important areas of attention in classroom situation are classroom activities, communication related to academic and non academic problem, time management, concentration, comprehension and organization, boredom, understanding of instruction and performance. There are different factors that create problems in maintaining attention. The main factors are health problem, family problem, financial problems, lack of interest, noise, environmental conditions, long duration of lectures etc. Teachers may be considered attention as one of the important factor for academic achievement and realize the importance of attention for learning. They may be aware about the level of attention of their students and make their classroom teaching according to the individual level of attention. School authorities may make students groups on the basis of their level of attention. Counseling facilities may be made available to students in secondary schools in order to constructively utilize their potential as well as to deal with different psychological issues that students are facing. Counseling programs help in suggesting suitable remedial strategies for those students who are suffering in problems with attention. There may be no communication gap between students and their teachers. So that the students can easily express their academic and personal worries that distract their attention. Lesson may be more interesting and innovative to catch the attention of students. Active participation of students may be encouraged. Noise and other distracters that distract student's attention may be reduced.

Refereces

- Anderson, J.R. (1995). *Cognitive psychology and its implications*, 4th ed. NewYork: Freedman.
- American Psychological Association. (2001). *Diagnostic and statistical manual of mental disorders, fourth edition, text revision*. Washington, DC, American Psychiatric Press.
- Anwar, M. (2001). *A study of relationship between creative thinking and academic achievement*. Unpublished thesis, Allama Iqbal Open University Islamabad.
- Ashraf, M. (2008). *Role of educational management at district level in promoting primary education in Punjab*. Unpublished thesis, Allama Iqbal Open University Islamabad.
- Awan, M. (2000). *Study guide distance education*, Islamabad: Allama Iqbal Open University
- Ayub, M. (2009). *A study on the impact of principal attitude on student's achievement at secondary level*. Unpublished thesis, Allama Iqbal Open University Islamabad.
- Bernice, W. (2004). *Learning about Learning Disabilities*. 3rd edition, Academic Press: Canada
- Bibi, R. (2005). *A study on the impact of low vision on academic achievement*. Unpublished thesis, Allama Iqbal Open University Islamabad.
- Breslau, J. (2009). Poor attention in kindergarten predicts lower high school test scores. *Medical journal Pediatrics*. University of California, 44(3), 210-214.
- Burger, J. (2000). *Introduction to psychology*, New York: McGraw Hill Book Company.

- Chapman, A.L., & Gratz, K.L. (2007). *The borderline personality disorder survival guide*, Oakland, CA: New Harbinger.
- Cielo, J. (2009). A simple definition of anxiety retrieved December 20, 2010 from http://ezinearticles.com/?expert=John_Cielo.
- Coombs, P. H. and Ahmed, M. (1973). *New paths to learning for Rural children and youth*, New York: ICED
- Coombs, P. H. and Ahmed, M. (1974). *Attacking Rural Poverty: How non-formal education can help*, Baltimore: John Hopkins University Press.
- Cornell, C. (2010, June 22). The importance of secondary education. *The Washington Post*, pp.A1, A2.
- Dewey, J. (1974). *Ways of teaching* 2nd edition, Philadelphia Lipponcott.
- Deiner, P.L. (2005). *Resources for educating children with diverse abilities.*, New York: Thomson Delmar Learning.
- Elizabeth, S. (2006). *The psychology of attention*, London: Psychology Press Oxford .
- Frazier, B. (1999). *Building healthy minds*, Cambridge, Massachusetts: Perseus Books.
- Govt of Pakistan, (1959). *Report of the national commission of education*, Karachi: Ministry of Education Press.
- Govt of Pakistan, (1979). *National Education Policy 1979*, Islamabad: Ministry of Education.
- Govt of Pakistan, (1992). *National Education Policy 1992*, Islamabad: Ministry of Education.
- Govt of Pakistan, (1998). *National Education Policy 1998-2010*, Islamabad: Ministry of Education.
- Govt of Pakistan, (2009). *National Education Policy 2009*, Islamabad: Ministry of Education.
- Griffen, R.S. (1998). *Under achievers in secondary school*, New Jersey: Lawrence Erlbaum Associates Publishers.
- James, W. (1979). *The principles of psychology*. In M. c. Wittrock (Eds.) *Learning and instruction*, pp. 115-119. CA: American Educational Research Association.
- Lahey, B. B, (2001). *Psychology an introduction*. (7th ed), McGraw Hill Companies.
- Levine, M. (2002). *Attention control system*, Washington, DC, American Psychiatric Press.
- Mahmud, J. (2004). *Educational Psychology*, New Delhi: A PH Publishing.
- Moore, D. (2000). *Inattentive ADD: Working with the wandering mind*. Washington, D.C.: American Psychiatric Press: 537-568.
- Nabeela, T (2003). Relationship between intelligence and academic achievement. *Pakistan Journal of Education*, Allama Iqbal Open University Islamabad.
- Okhiku, I. (2003). *Factors affecting student performance in schools*. Paper presented at the 14th annual all African school conference, Benin city: Nigeria.
- Pajares, F. (2006). Self-Efficacy beliefs of adolescents. *Adolescence and Education*.5.1-3.
- Rabiner, D. (2004). Attention problems and academic achievement. Retrieved June 20, 2010 from www.ADHDLibrary.org.
- Rashid, M. (2000). *Study guide distance education*, Islamabad: Allama Iqbal Open University.
- Rashid, M. (2000). *Development of a model for instructional design in distance education* Islamabad, Allama Iqbal Open University.
- Reber, A. S., & Reber, E. (2001). *The penguin dictionary of psychology*. 3rd. Clays Ltd, St Ives plc, England.
- Rehman, B (1995). *A study to find the relationship between school anxiety and academic achievement*. Unpublished thesis, Allama Iqbal Open University Islamabad.
- Rogers, A. (2003) *What is the difference? A new critique of adult learning and teaching*, Leicester: NIACE.
- Robbins, M (2003). Through the shadow of the valley how to retain attention in the classroom. *Journal of the University of Pennsylvania Almanac*.15 (50).12-20.
- Salvia, J (1990). *Curriculum based assessment*, New York. Macmillan Publishing Company.
- Santrock, J.W. (1998). *Child development*. 8th edition, San Francisco: McGraw Hill Companies.
- Sasson, R. (2010). Will power and self-discipline. Retrieved September 19, 2010, from <http://attention/articles.com>.
- Singh, B (2007). *Modern special education*, Anmol Publications: New Delhi.
- Shah, Z.A. (2008). *Assessment of 4-Ties service structure for secondary and higher secondary school teachers of Islamabad*, Unpublished thesis. Allama Iqbal Open University Islamabad.
- Shertzer, R. (1996). Importance of guidance and counseling. *Journal of Psychology*, 5, 99-100.
- Sohlberg, A and Mateer. (1994). Attention Skills. *TPN Magazine*, 4(2).14-16.

- Stanley I.G, (1995). *The Challenging Child*, Perseus Books Group, Inc.
- Steinberg, L. (1996). Autonomy Conflict and Harmony in the Family Relationship. In S. Feldman and G. Elliott (Eds), *at the threshold: The developing adolescent* (pp.225-256). Cambridge, MA: Harvard University Press.
- Steven, B. (2006). *Focusing AI Students' Attention: A Framework-Based Approach to Guiding Impasse-Driven Learning*, Lindley Hall: Indiana University Bloomington.
- Swing, E.L. and Gentile, D. A. (2010). Television and video game exposure and the development of attention problems. *The journal of the American Academy of Pediatrics*. Iowa State University. 12 (5), 22-23.
- Thorne, G and Lawson, C. (2005). *A user guide for managing attention problem*, New York: Guilford Press.