

## RELATIONSHIP BETWEEN ATTENTION POWER AND SECONDARY SCHOOL STUDENTS' ACADEMIC PERFORMANCE IN ILORIN METROPOLIS

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### Abstract

*This study examined the relationship between attention power and secondary school students' academic performance in Ilorin metropolis. The study was necessitated by the fact that attention is connected to both the process and product of learning. This study adopted descriptive survey research design. The population for this study consisted of all the secondary school students in Ilorin Metropolis. A stratified random sampling technique was used to select 10 secondary schools out of the 246 secondary schools in the three Local Government Areas in Ilorin metropolis. While systematic random sampling technique was used to select 30 students from each school selected. In all, 300 secondary school students were selected for this study. A researcher designed questionnaire titled Attention Power Questionnaire (APQ) was used to elicit information on the attention power of the students. Cronbach Alpha was used to obtain a reliability index of 0.74 for the instrument. While English Language Performance Test was adapted and used to measure students' academic performance. Cumulative mean rating was used to answer the research questions. Research Hypotheses were tested using Pearson Product Moment Correlation and the t-test Statistics at 0.05 level of significance. Finding revealed that the attention power and academic performance of secondary school students in Ilorin metropolis is high. Finding also revealed that there is a direct positive relationship between attention power and academic performance of secondary school students in Ilorin metropolis. It was recommended that Government and school managements should ensure that students learn in favourable environmental conditions free from any form of mental, environmental and emotional disturbance. Government should ensure that only trained teachers who have the knowledge and skills on how to develop and sustain students' attention power are permitted to practice in secondary schools.*

**Keywords:** Attention, Academic Performance, and Relationship

### Introduction

Educational process is a purpose-directed undertaking, it is meant to achieve specific objectives both for the individual and for the larger society. To the individual, it has both intrinsic and extrinsic benefits; while to the society, it is the gate way to growth, peaceful coexistence and psychological balance (Ezeamagu, 2015). Education is the key that opens every door in life but not without a sustained attention. Paying attention is the beginning of success in any learning process. Attention is very important at the beginning of a learning process and should be sustained with little or no distraction till the end of the learning task; this is otherwise called sustained attention. Sustained attention demands that an individual be able to fix attention on a particular task, and maintain it over time. The individual should be wholly absorbed in handling task, without getting distracted. According to Mangal 2008, Sustained attention refers to a deliberate and conscious effort on the part of an individual to select one of the various stimuli present in his environment and bring it to the centre of his consciousness in order to perceive it clearly to achieve a

desired result. Psychologically, it has been established that only one object, activity, problem, idea or fact can be the centre of consciousness (attention) at one particular moment or at a time. This is due to the limited capacity of the brain, which cannot process all available information simultaneously (Mangal, 2008). However, the concept of selectiveness of attention indicates that people are able to do several things at the same time, but the truth of the matter is that, it is only one of the activities that is in the forefront of awareness, while others are dealt with relatively automatically. As such, attention is the concentration of consciousness upon one object rather than upon another.

According to Bandura (1989) attention is very significant and inevitable in learning, as rapt attention leads to retention of learnt task and to excellent performance. Attention and learning are inter dependent, and goes hand in hand. While, Learning is a permanent change in behaviour as a result of a conscious effort. Attention is the concentration of consciousness upon a task. While Learning involves the process of memorization, integration and application of new information and concepts; attention is concerned with the process of prioritizing and applying information and concepts. Attention is the preparatory adjustment for response. Ross (1951) defined attention as a process of getting an object or thought clearly before the mind. It is the act of listening, looking at or concentrating on a topic, object or event for the attainment of desired ends (Mangal, 2007). Mangal maintained that the concentration or focus provided by the processes of attention helps students in the clarity of the perception of the perceived object or phenomenon. Also, in the chain of the stimulus-response behaviour attention works as a good mediator. Properly attended stimulus yields better response. Therefore, for providing an appropriate response one has to pass through the stage of alertness, this could be mental as well as physical set by the process of attention.

More so, attention is not merely a cognitive function but is essentially determined by emotional and psychomotor factors of interest, attitude and striving. It is very important to guide and direct the attention of the learner because of the multiplicity of stimuli present in the environment. A wise teacher should be able to secure the attention of his students' from any form of distraction and make his lesson interesting by connecting it with their basic needs, drives and interests. Attention can be classified into two; involuntary attention and voluntary attention. *Involuntary attention* also known as non-volitional attention arouse without the will coming into play. In this case, an individual attend to situations, object or idea without any conscious effort by him/her. For example; a mothers' attention to her crying child, attention towards members of the opposite sex, sudden loud noise etc. while the *voluntary attention* also known as volitional attention requires the exercise of will. It demands the conscious effort of the individual. Usually, in this type of attention, the individual has a well-defined goal that he wants to achieve, then he makes himself attentive for its accomplishment. Attention paid at the time of solving an assigned Mathematics problem, answering question in an examination, and consulting exam time table are some examples of voluntary attention

Distractions are stimulus that draws away attention from the object of interest (Bhatia, 1968). According to Bhatia, distraction is divided into two general forms, namely; external and internal factors. The external or environmental factors includes noise, music, improper lighting, uncomfortable seats, unfavourable temperature, inadequate ventilation, defective methods of teaching, improper use of teaching aids etc. These sources of distraction varies and affects individual differently. The conditions which cause distraction to an individual may prove helpful in sustaining attention to others. On the

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other hand, the *internal distractors* are within the individual himself and include factors like; emotional disturbances, ill-health, boredom, lack of motivation, feeling of fatigue etc. So to attain a quality performance, an individual should be able to manage his mental, emotional and physical environment with strong will and determination.

Nnachi, (2007) maintained that the law of readiness is connected to attention power. According to the law of readiness, when a modifiable connection is read to act, it cannot act satisfactorily unless the organism is ready (attention). So if a teacher continues to teach from morning to night and the learner did not pay attention to the teacher, both the teaching and the learning makes no meaning. Hence the need to assess the relationship between attention power and students' academic performance for further empirical conclusion.

Academic learning is a complex form of learning that demands high mental processes. As such students' attention should be a concern to academicians so that we don't labour in vain. Good attention relates to good performance, and poor attention relates to poor performance. Attention is a process and not a product. Attention provides strength and ability to continue the task of cognitive functioning despite the obstacles put by the forces of distractors like noise and harsh weather conditions. It helps in bringing students' consciousness to the learning environment, in order to avoid cases of absent minded; hence the need to secure students' attention for quality academic performance.

Performance is defined as the observable or measurable behaviour of a person or an animal in a particular situation usually experimental situation (Simpson & Weiner, 1989). Performance is a determinant of student ability in a given task. In the school setting, performance is determined using performance test. According to Mustapha (2016) a performance test is a type of test in which the testees ordinarily respond to overt acting that is by motor or manual behaviour. It requires that the subject should demonstrate his skill by manipulating object or instrument.

Attention is a very essential psychological trait in every act of learning. A good performance requires that students should pay rapt attention to the learning situation and activities. And to achieve total student attention in teaching and learning situation, there must be a conducive psychological and physical environment. To this effect, there is need for empirical study in order to ascertain the level of attention power of secondary school students in Ilorin metropolis.

A number of studies have been carried out on attention power and academic performance. For instance, Adem, Yusuf, Ahmet and Ufuk (2017) investigated the relationship that exist between classroom teacher, candidates' class participation and their attention levels. The study elicited response from 91 fresh men in Usak University and found that there existed a moderate positive correlation between students' attention levels and class participation. Also, Radmila (2017) identified the components of attention which are relevant for academic achievement in adolescence in Serbia. The result revealed that academic achievement is highly significantly associated with some functional components of attention like; goal-oriented selectivity, resistance to distraction, attention maintenance and concentration. The results imply that the academic achievement or failure of adolescents cannot be interpreted without taking into account the characteristics of their attention.

More so, Rabiner (2004) conducted a study on the relationship between attention problem and classroom learning. Bunce, Flens and Neiles, (2010) studied how long can students pay attention in class? Rabiner (2004) studied attention problems and academic achievement. It was observed that the focus of many of the researchers were on the attention or academic performance of Primary and University students among others. However, these previous studies, though similar to the present study were carried out outside Ilorin, Kwara State, and not among secondary school students. Hence, this study intends to fill this gap by exploring the relationship between attention power and academic performance of secondary school students in Ilorin, Kwara State, Nigeria.

### **Purpose of the Study**

The main purpose of this study was to investigate the relationship between attention power and secondary school students' academic performance in Ilorin metropolis. Specifically, the study;

- i. examined the level of attention power among secondary school students in Ilorin metropolis;
- ii. assessed the level of students' academic performance in Ilorin metropolis
- iii. examined the difference in attention power among secondary school students' in Ilorin metropolis based on gender;
- iv. examined the difference in secondary school students' academic performance in Ilorin metropolis based on gender.

### **Research Questions**

This study seeks answers to the following questions:

1. What is the level of attention power among secondary school students in Ilorin metropolis?
2. What is the level of students' academic performance in Ilorin metropolis?
3. What is the difference in attention power among secondary school students in Ilorin metropolis based on gender?
4. What is the difference in secondary school students' academic performance in Ilorin metropolis based on gender?

### **Research Hypotheses**

The following research hypotheses were formulated to guide the study:

- H<sub>01</sub>: There is no significant relationship between attention power and secondary school students' academic performance in Ilorin metropolis.
- H<sub>02</sub>: There is no significant difference in students' attention power in Ilorin metropolis based on gender.
- H<sub>03</sub>: There is no significant difference in secondary school students' academic performance in Ilorin metropolis based on gender.

## **Methodology**

The research design was descriptive survey, however, the population for this study consisted of all the secondary school students in Ilorin metropolis. There are three Local Government Areas in Ilorin metropolis namely (Ilorin South, Ilorin West and Ilorin East Local Government Area). There are 79 secondary schools in Ilorin West, 109 secondary schools in Ilorin South, and 58 secondary schools in Ilorin East Local Government. (Source: Ministry of Education and Human Capital Development, 2016). Stratified random sampling techniques was used to select 4 secondary schools from Ilorin South, 3 secondary schools from Ilorin West and 3 from Ilorin East Local Government Area, in total, 10 secondary schools were selected. Purposive sampling technique was used to choose junior secondary school (JSS) III students while systematic sampling technique was used to select 30 students from each school, in all 300 secondary school students were selected for this study. A researcher designed questionnaire was used to elicit information on the attention power of secondary school students. The instrument was tagged “Attention Power Questionnaire” (APQ). The instrument has two sections. Section A sought participants’ demographic information, while section B had 15 items that sought information on the attention power of secondary school students in Ilorin metropolis.

The respondents were requested to respond to these items on a four-point Likert type rating scale of Strongly Agree (SA), Agree (A), Disagree (D), Strongly Disagree (SD), while scoring of the responses involved a minimum of 1 for Strongly Disagree (SD) 2 for Disagree (D) 3 for Agree (A) 4 for Strongly Agree (SA) for positive statement. The scores were reversed for negative statements on APQ. Any score below benchmark weighted mean score stood at 37.5 was regarded as low attention power, while any score above benchmark weighted mean score of 37.5 was regarded as high attention power. Cronbach Alpha reliability estimate method was used to obtain a reliability index of 0.74. While the validity of the instrument was obtained by giving the instrument to experts in measurement and evaluation to ascertain whether the items align with the ability level of the respondents and with the theory of attention power. After which the researcher amended the items in line with experts’ suggestions and comments. Also, Performance Test in English Language that contains 20 questions drawn from Kwara State Upper Basic School (JSS) Examination past questions of 2001/2002 and 2015/2016 Sessions on English Language was adapted and administered to the respondents in order to measure their academic performance. The researcher deliberately chose 2001/2002 past question because most of the respondents will not have access to it while 2015/2016 past question was chosen because it is recent and goes in-line with the curriculum. Scores from 50 and above means the students passed while scores from 49 and below means that the students failed. The demographic data of the respondents were described using percentages while cumulative mean was used to answer research questions 1 and 2. Research Hypotheses were tested using Pearson Product Moment Correlation and the t-test Statistics. All the hypotheses were tested at 0.05 level of significance.

## **Results/Findings**

**Table 1: Percentage Distribution of the Respondents by Gender**

<b>Gender</b>	<b>Frequency</b>	<b>Percentage</b>
Male	113	37.7
Female	187	62.3
Total	300	100

Table 1 reveals that out of the 300 students that participated in the study, 113 (37.7%) were males, while 187 (62.3%) were females. This shows that there were more female students participants than male students in this study.

Research Question 1: *What is the level of attention power of Basic secondary school students in Ilorin metropolis?*

**Table 2: Cumulative Mean of Attention Power of the Secondary School Students in Ilorin Metropolis**

<b>Attention Power</b>	<b>Frequency</b>	<b>Mean</b>	<b>Standard Deviation</b>
Attention Power	300	44.07	3.45

Table 2 indicates that 300 respondents participated in this study. Responses to items that sought information on the attention power of the secondary school students in Ilorin metropolis revealed that the attention power of the secondary school students in Ilorin metropolis is high, because the benchmark weighted mean score stood at 37.5 and their weighted mean score is 44.07 which is above the benchmark weighted mean score.

Research Question 2: *What is the academic performance of secondary school students in Ilorin metropolis?*

**Table 3: Percentage Analysis of the Academic Performance of Secondary School Students in Ilorin Metropolis**

<b>Academic Performance</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Pass	179	59.7
Fail	121	40.3
Total	300	100.0

Table 3 reveals the academic performance of all the students. The result indicated that 179 representing 59.7% of the students passed, while 121 representing 40.3%% Failed. This shows that majority of the students can be classified among those with high academic performance.

H<sub>01</sub>: There is no significant relationship between attention power and students' academic performance in Ilorin metropolis.

**Table 4: Pearson's r Analysis of the Relationship between Attention Power and Students' Academic Performance in Ilorin Metropolis**

Variable	No	Mean	Std	df	Cal.r	Sig.(2-tailed)	Decision
Attention Power	300	44.07	3.45	298	0.53	0.00	H <sub>01</sub> Rejected
Academic Performance	300	34.37	3.40				

P < 0.05

Result on table 4 shows, r-value = 0.53 with p-value = 0.00 < 0.05 alpha level. Since 0.00 is lower than 0.05 alpha level, hypothesis one is thus rejected. This indicates that there is a significant positive relationship between attention power and students' academic performance in Ilorin metropolis.

H<sub>02</sub>: There is no significant difference in attention power of secondary school students in Ilorin metropolis based on gender.

**Table 5: A t-test Analysis of Difference in Attention Power of Secondary School Students in Ilorin Metropolis Based on Gender**

Gender	No	Mean	Std.	df	Cal.t-Value	Sig. (2-tailed)	Decision
Male	113	43.79	5.36	298	3.81	0.00	H <sub>02</sub> Rejected
Female	187	46.43	6.10				

P<0.05

Result on table 5 shows, t-value = 3.81 with p-value = 0.00 < 0.05 alpha level. Since 0.00 is lower than 0.05 alpha level, hypothesis two is thus rejected. This indicates that there is a significant difference in attention power of secondary school students in Ilorin metropolis based on gender. This is in favour of female students with mean score of 46.43 greater than mean score of 43.79 of male students (46.43 > 43.79). This implies that female students has higher attention power than the males in Ilorin metropolis

H<sub>03</sub>: There is no significant difference in students' academic performance in Ilorin metropolis based on gender.

**Table 6: A t-test Analysis of Difference in Academic Performance of Secondary School Students in Ilorin Metropolis Based on Gender**

Gender	No	Mean	Std.	df	Cal.t-Value	Sig. (2-tailed)	Decision
Male	113	33.07	14.41	298	2.04	0.04	H <sub>03</sub> Rejected
Female	187	36.50	13.95				

P<0.05

Result on table 6 shows, t-value = 2.04 with p-value = 0.04 < 0.05 alpha level. Since 0.04 is lower than 0.05 alpha level, hypothesis three is thus rejected. This indicates that there was a significant difference in academic performance of secondary school students in

Ilorin metropolis based on gender. This is in favour of the female students with mean score of 36.50 greater than mean score of 33.07 of male students ( $36.50 > 33.07$ ).

### **Discussion of Major Findings**

Finding revealed that the attention power of Basic Secondary School Students in Ilorin metropolis is high. This finding is agreement with that of Shah and Saleem (2015) who reported that 33.1% and 33.8% of the students have moderate and high level of attention respectively. Also, Bunce, Flens and Neiles, (2010) found that attention power of students in class is low. Since there is no uniformity among the findings, this implies that the finding is not conclusive. There is need for further research in order to confirm it.

Finding also revealed that majority of the students passed the academic performance test. This is in agreement with that of Oke (2013) who found out that the academic performance of students in Ado-Ekiti, Ekiti State was average. Emeaba (2014) who found out that 30% of the respondents had distinction Distinctions (D), followed by 43% who had Credits, 18% with Passes and 8% failed. Also, Joseph (2015) who found out that the level of academic performance of Undergraduates of University of Ilorin, sampled was average. This finding is conclusive as related findings from literature reveal that greater percent of the students have good academic performance.

Finding also revealed that there is a significant relationship between attention power and students' academic performance in Ilorin metropolis. This finding is in consonance with that of Shah and Saleem (2015) who reported that there was a significant relationship between the level of attention of secondary school students and their academic achievement.

More so, it was also found that there is a significant difference in attention power of secondary school students in Ilorin metropolis based on gender in favour of the female students. This finding is in line with that of Shah and Saleem, (2015) who reported that there was significant difference in the level of attention of secondary school students on the basis of gender. Also, Salawu and Adedapo (2001) found out that there was a significant difference in attention power of male and female secondary school students. This implies that secondary school teachers in Ilorin metropolis are able to sustain students' attention during lesson.

The result on table 6 revealed that there was a significant difference in academic performance of secondary school students in Ilorin metropolis based on gender in favour of the female students. This finding supports the findings of Oke (2013) who found that there was a significant difference in the academic performance of male and female respondents in favour of the female students; and Eitle (2005), who found that there was difference between the academic achievement of boys and girls in favour of the girls. The study disagree with Emeaba (2014) who found that there is a significant difference between in-school adolescent males and females' adolescents' academic achievement with a mean scores of 200.94 and 193.95 respectively; and that of Romer (1993) who also found that male students outperform their female counterpart. On the contrary, Joseph (2015) found out that there was no significant difference between academic performance of male and female Undergraduates of University of Ilorin, Nigeria. Hence this finding is not conclusive; a similar study can be replicated in other state.



## Conclusions

From the findings it was discovered that the attention power of students in Ilorin is high, as well as their academic performance. The study also revealed that there is a significant relationship between attention power and secondary school students' academic performance in Ilorin metropolis; and that there is a significant difference in the attention power and academic performance of secondary school students in Ilorin metropolis in favour of the females. Based on these findings, it is obvious that to attain successful learning objectives/outcome within a reasonable time, one has to begin with paying attention or concentrating his energies on the learning task. A student must endeavour to pick up the habit of paying sustained attention. Any student, who cannot keep his attention fixed for a reasonable period of time, is sure to lag behind in his studies. So to control such situation, there is need to create genuine interest of the learners in the task which he is doing.

## Recommendations

1. It is recommended that all the internal as well as external factors of getting attention should be employed by the teachers to sustain the high attention power and the academic performance of secondary school students in Ilorin.
2. The Government and school managements should ensure that students learn in favourable environmental conditions free from any form of mental, environmental and emotional disturbance. And with willingness and determination no power can distract his attention from the learning tasks.
3. Ministry of education or school management should organize workshop and seminars for teachers, principals, students and parents to highlight the impacts, remedies and implications of student's loss or lack of attention in the classroom.
4. Government should ensure that only trained teachers are permitted to practice in our schools.

## References

- Adem, S.; Yusuf, I.; Ahmet, C. S. & Ufuk, U. (2017). The relationship between attention levels and class participation of first year students in classroom teaching departments. *International Journal of Instruction*. **10** (2): 55-68.
- Alonge, M. F. (2003). *Assessment and examination; the pathway to educational development inaugural lecture*. University of Ado-Ekiti
- Bandura, A. (1989). Social cognitive theory. In R. Vasta (Ed.), *Annals of child development*. 6. Six theories of child development (pp. 1-60). Greenwich, CT: JAI Press.
- Bhatia, H. R. (1968). *Elements of educational psychology*. (3<sup>rd</sup> ed. reprint). Calcutta: Orient-longman.
- Bunce, D. M., Flens, E. A. & Neiles, K.Y. (2010). How long can students pay attention in class? A study of student attention decline using clickers. *Journal of Chemical Education*, **87** (12): 1438-1443.
- Eitle, D. (2006). Parental gender, single-parent families, and delinquency: Exploring the moderating influence of race/ethnicity. *Social Scientific Research*, **35**: 727-748.
- Emeaba, A. (2014). Self-concept and academic achievement of in-school adolescents in Ohafia Local Government Area of Abia State, Nigeria. Unpublished M.Ed. Thesis, University of Ilorin, Ilorin.
-

- Ezeamagu, M. U. (2016). Continuous assessment as a strategy for peace and sustainable development in Nigeria. Book of tropical educational issues: Faculty of education and extension services, Usman Danfodiyo University Sokoto; 474 - 482.
- Joseph, B. C. (2015). Relationship among emotional intelligence, intelligence quotient and academic performance of undergraduate students, university of Ilorin, Nigeria. Unpublished M.Ed. Thesis, University of Ilorin, Ilorin.
- Mangal, S. K. (2007). *General psychology*, New Delhi: Sterling Publishers private ltd.
- Mangal, S. K. (2008). *Advanced Educational Psychology*, (2<sup>nd</sup> Ed) New Delhi: prentice Hall.
- Mustapha, A. Y. (2016). *A compendium of terms and concepts in educational Measurement, Research and Statistics*. Jos: KHEJUM Press, Jos.
- Nnachi, R. O. (2007). *Advanced psychology of learning and scientific enquiries*. Enugu: John Jacob's class publisher ltd.
- Oke, A. J. (2013). Emotional intelligence and academic performance of secondary school students in Ado-Ekiti, Ekiti State, Nigeria. *Unpublished M.Ed. Thesis, University of Ilorin, Ilorin*.
- Rabiner, D. (2004). Attention problems and academic achievement. Retrieved June 20, 2010 from [www.ADHDLibrary.org](http://www.ADHDLibrary.org).
- Rabiner, D. L., Murray, D. W., Rosen, L., Hardy, K., Skinner, A., & Underwood, M. (2010). Instability in teacher ratings of children's inattentive symptoms: Implications for the assessment of ADHD. *Journal of Developmental and Behavioral Pediatrics*, **31**: 175-180.
- Radmila, B. M. (2017). Attention as a factor in the school performance of adolescence in Serbia.
- Romer, D. (1993). Do Students go to class? Should they? *Journal of Economic Perspectives*, **7** (3): 167-74.
- Ross, J. S. (1951). *Ground work of educational psychology*. London: George G. Harrup & Co.
- Salawu, I. O. & Adedapo, Y. A. (2001). Perception of private secondary school teachers to the provision of teaching facilities in schools as a result of wage increase. *Journal of Professional Teacher Trainers (JPTET)*, **3** (1&2): 156-163.
- Shah, S. M. H. & Saleem, S. (2015). Level of attention of secondary school students and its relationship with their academic achievement. *Journal of Arts & Humanities (JAH)*, **04** (05): 92-106.
- Simpson, J. A. & Weiner, E. S. C. (1989). *Oxford English Dictionary* (2nd ed.). Oxford, UK: Clarendon.