

**INFLUENCE OF LEARNING DISABILITIES ON ACADEMIC ACTIVITY OF STUDENTS  
ATTENDING KWARA STATE SCHOOL FOR SPECIAL NEEDS**

**BY**

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**Abstract**

*Learning disability is a dysfunction in one or many basic psychological processes which include the understanding of language and its application. This study investigated the influence of learning disabilities on academic activity of students' attending Kwara State School for special needs. The purpose of the study was to examine if (i) Impulsive and (ii) Hyperlexia have influence on academic activity of students with learning disability attending Kwara State School for special needs.. A descriptive research design of survey type was adopted for the study. The population of the study comprised of all students with learning disability in Kwara State School for Handicap. The Multi-stage sampling technique was used to select one hundred and twenty-two respondents participated in the study. A researcher-structured questionnaire that had been validated by three experts in the department of Health Promotion and Environmental Health Education, University of Ilorin was used for data collection. The reliability of the instrument established through test-retest method and result of 0.82 obtained through Pearson Product Moment Correlation. The two postulated null hypotheses were tested using inferential statistics of chi-square @ 0.05 alpha level. The findings of the study revealed that, impulsivity is an influence of learning disabilities on academic performance of students because the calc. value of 42.46 is greater than the tab. value of 16.92 @ 0.05 alpha level of significance at the degree of freedom of 9, hyperlexia is an influence of learning disabilities on academic performance of students because the calc. value of 54.72 is greater than the tab. value of 16.92 @ 0.05 alpha level at the degree of freedom of 9. Based on the findings of the study, it was concluded that hyperlexia and impulsivity have influences of learning disabilities on academic performance of students attending Kwara State School for special needs. Therefore, the teacher should use appropriate teaching method that will make students with hyperlexia condition easily understand the knowledge impact to them.*

**Keywords: Learning disabilities; Academic activity and Special Needs**

**Introduction**

Learning disabilities are gaining more recognition in the Nigeria, especially how it relates to the academic performance of students with learning disability. According to Individuals with Disabilities Education Act (IDEA), learning disability is a dysfunction in one or many basic psychological processes which include the understanding of language and its application. This disorder appears as disability in listening, thinking, speaking, reading, writing, spelling, and performing mathematical calculations. Nevertheless, it does not include those learning problems caused by visual, auditory, and motor disabilities, mental retardation, emotional disorder, and undesirable status of environment and culture (Tabitha & Arnold, 2014). The definitions given by various authors suggest that learning disability refers to a retardation, disorder, or delayed development in any one or more of the processes of speech, language, reading, spelling, writing,

or arithmetic. These problems are due to disorder or deficiency in any one or more of the basic psychological processes involved in understanding or in use of spoken or written language. They do not include learning problems which are due primarily to visual, hearing or motor handicaps, mental retardation, and emotional disturbance or to adverse environmental factors. The child, thus can be considered as learning disabled if, (i) he has considerable difficulty in understanding or using spoken language, reading, writing, spelling, and arithmetic, during the developmental period (before 16 years of age), (ii) he has adequate facilities, interest and motivation to learn (Becker, 2019).

According to government regulations, students with learning disabilities have “disorders in one or more basic psychological processes involved in understanding or using language, spoken or written, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell or do mathematical calculations. “There are many different kinds of learning disabilities. Most often they fall into three broad categories: Reading disabilities (often referred to as dyslexia); Written language disabilities (often referred to as dysgraphia); Math disabilities (often called dyscalculia). The learning disabled students exhibit certain general characteristics features, the knowledge of which is essential in identifying them at the very early stage and understand the difficulties faced by such children. Learning disabilities cause problems for students in social, emotional, and academic aspects (Berney, 2006). Research also shows that children with learning disability report high rates of academic, social, and affective problems as compared with normal children. However, these differences are neglected in schools (Freilich & Shechtman, 2010; Auerbach, Gross-Tsur, Manor & Shalev, 2008). Since learning disabled (LD) children tend to perform more poorly, academically, than normal, researchers have sought to establish a link between Learning Disability and cognitive impulsivity. Results of a number of studies seem to demonstrate that children with various learning disabilities tend to be more cognitively impulsive than “normal” children (Messer, 1976; Ross, 1976). Similarly, the most recent review of research on the relationship between cognitive styles and learning disabilities found evidence of a higher incidence of impulsivity in underachievers and hyperactives (Blackman & Goldstein, 1982). Other recent research findings, however, suggest that cognitive impulsivity may not be a differentiating factor in learning disability children (Nagle & Thwaite, 1979; Quay & Weld, 1980).

Impulsive is one of the variables that affect these students' academic process. Comprehensive definition of impulsivity can be interpreted as preference of immediate rewards, tendency toward adventurousness, seeking new senses, finding simple ways to achieve reward, lacking in perseverance to accomplish affairs, and short response time (Schreiber, 2012). According to this definition, it is obvious that high levels of impulsivity are not useful but inefficient. For instance, impulsive people have a high tendency to experience use of psychotropic drugs (Acremont & Van, 2007). Research shows that impulsivity has relationships with some personality traits such as extroversion, vulnerability, novelty seeking and monotony avoidance, and antisocial personality and with disorders like depression, bipolar disorder, and borderline disorder (Csorba et. al, 2010; Swann, Lijffijt, Lane, Steinberg & Moeller, 2011; Sargeant et. al, 2012).

### **Statement of the Problem**

Learning disability is a major problem that influences academic performance of students. Children and adults with a learning disability will struggle in all areas of school. For example, language processing disabilities can make reading and writing slow and challenging, and memory issues can result in students having to reread a piece of text or listen to spoken instructions many times. These students also may need more time to process information before answering questions or replying when spoken to, which can result in difficulties contributing to classroom or group discussions. Someone with attention deficit disorder may also find it difficult to maintain focus, and paying attention is critical to learning. Organization and planning can also be impaired, resulting in difficulty keeping track of assignments or supplies and submitting work on time. Hence, the need to study influence of learning disabilities on academic performance of students in Kwara State School for special needs.

### **Research Hypotheses**

In order to achieve a purposeful result in this research, it is necessary to declare the following statements:

1. Impulsive will not significantly influence academic activity of students with learning disabilities attending Kwara State School for special needs.

2. Hyperlexia will not significantly influence academic activity of students with learning disabilities attending Kwara State School for special needs.

### Methodology

A descriptive research design of survey type was adopted for the study. This method was used because the study requires the researchers to collect information for the purpose of describing the study in details. The population of this study comprised all students attending Kwara State School for Special needs. A multi-stage sampling technique was used to select the respondents partake in the study. Stage one, cluster sampling technique was used to group students into different disabilities which stated as follows;. visual impaired which consist of thirty (30) students, primary hearing impaired which consist of one hundred and seventy- one (171), intellectually challenged consist of sixty -one (61) and secondary hearing impaired which consist of two hundred and five (205). At stage two, proportionate sampling technique was used to select twenty-six percent from each of disability group. From visual impaired, eight respondents, hearing impaired, forty-five respondents, intellectual challenge, sixteen respondents and for secondary hearing impaired, fifty-three respondents required. At stage three, simple random sampling technique was used to select the required number of respondents based on the number obtained from each group and one hundred and twenty-two respondents selected for the study. A letter of introduction was obtained by the researchers from the Department of Health Promotion and Environmental Health Education, Faculty of Education, University of Ilorin. The instrument used to collect data from the respondents was the researchers developed questionnaire that had been validated by three experts in the department of Health Promotion and Environmental Health Education, University of Ilorin. The reliability of the instrument was established through test-retest method and result of 0.82r realized with the used of Pearson Product Moment Correlation The researchers personally carried out the administration of the questionnaire on the respondents with the aid of the three trained research assistants. The data collected was coded and subjected to appropriate statistical analysis. Inferential statistics of chi-square was used to test the postulated null hypotheses at 0.05 alpha level.

### Results

**Ho1:** Impulsive will not significantly influence academic activity of students' with learning disabilities attending Kwara State School for special needs.

**Table 1:** Chi-square Analysis Showing the Result of Impulsive and Learning Disabilities

S/N	STATEMENT	SA	A	D	SD	Row total	Df	Critical Value	Table Value	Remarks
1	I do things without thinking	66 (54.1%)	48 (39.3%)	6 (4.9%)	2 (1.6%)	122				
2	I act on impulse	36 (29.5%)	56 (45.9%)	26 (21.3%)	4 (3.3%)	122				
3	I don't pay attention in class when lesson is going on	42 (34.4%)	46 (37.7%)	26 (21.3%)	8 (6.6%)	122	12	42.46	21.03	Ho1 rejected
4	I feel restless and uncomfortable when in the class	64 (52.5%)	34 (27.9%)	18 (14.8%)	6 (4.9%)	122				
5	I am easily bored when I'm in school	64 (52.5%)	32 (26.2%)	22 (18.0%)	4 (3.3%)	122				
<b>Column Total</b>		<b>272</b>	<b>216</b>	<b>98</b>	<b>24</b>	<b>610</b>				

Table 1, shows that the critical value of 42.46 is greater than the table value of 21.03 @ 0.05 alpha level at the degree of freedom of 12. Thereby, the null hypothesis one was rejected. Hence, impulsive has influence on academic activity of students' with learning disabilities attending Kwara State School for special needs.

**Ho2:** Hyperlexia will not significantly influence academic activity of students with learning disabilities attending Kwara State School for special needs.

**Table 2:** Chi-square Analysis Showing the Result of Hyperlexia and Learning Disabilities

S/N	STATEMENT	SA	A	D	SD	Row total	Df	Critical Value	Table Value	Remarks
1	I don't pay attention in class because if know what the teacher is teaching	54 (44.3%)	40 (32.8%)	14 (11.5%)	14 (11.5%)	122				
2	I read things easily	52 (42.6%)	48 (39.3%)	10 (8.2%)	12 (9.8%)	122				
3	I don't wait for teacher's instruction before attempting questions	44 (36.1%)	34 (27.9%)	30 (24.6%)	14 (11.5%)	122	12	54.72	21.03	Ho rejected
4	I have excellent memories	44 (36.1%)	50 (41.0%)	16 (13.1%)	12 (9.8%)	122				
5	I always think of numbers and alphabets	42 (34.4%)	26 (21.3%)	26 (21.3%)	28 (23.0%)	122				
<b>Column Total</b>		<b>118</b>	<b>99</b>	<b>48</b>	<b>40</b>	<b>610</b>				

Table 2, shows that the critical value of 54.72 is greater than the table value of 21.03 @ 0.05 alpha level at the degree of freedom of 12. Thereby, the null hypothesis two was rejected. Hence, hyperlexia has influence on academic activity of students' with learning disabilities attending Kwara State School for special needs.

### Discussion

This study was carried out to examine the influence of learning disabilities on students academic activity of students' attending Kwara State School for special needs. The hypotheses were discussed as follows:

**Hypothesis One:** Table 1 shows that the critical value of 42.46 is greater than the table value of 21.03 @ 0.05 alpha level at the degree of freedom of 12. Thereby, the null hypothesis one was rejected. Hence, impulsive has influence on academic activity of students' with learning disabilities attending Kwara State School for special needs. This finding is in line with Barrett (1977) who reported that since learning disabled (LD) children tend to perform more poorly academically than normal, researchers have sought to establish a link between learning disability and cognitive impulsivity. Results of a number of studies seem to demonstrate that children with various learning disabilities tend to be more cognitively impulsive than "normal" children.

**Hypothesis Two:** Table 2 shows that the critical value of 54.72 is greater than the table value of 21.03 @ 0.05 alpha level at the degree of freedom of 12. Thereby, the null hypothesis two was rejected. Hence, hyperlexia has influence on academic activity of students' with learning disabilities attending Kwara State School for special needs. This finding is in line with Arnold and Noel (2014) who reported that individuals with hyperlexia have impaired reading and listening comprehension. Richman (1997) also opined that there are two major subtypes of hyperlexia which comprised of Type-I Hyperlexia (language learning disorder) and Type-II Hyperlexia (visuo-spatial perceptual disorder).

### Conclusion

Based on the finding of the study, the following conclusions were drawn:

1. Impulsive has influence on academic activity of students' with learning disabilities attending Kwara State School for special needs.
2. Hyperlexia has influence on academic activity of students' with learning disabilities attending Kwara State School for special needs.

### Recommendations

Based on the findings and conclusions of the study, the following recommendations were made:

1. The school authority should provide adequate teaching aids that will make students with impulsive condition understand the message pass to them by their teachers.

2. The teacher should use appropriate teaching method that will make students with hyperlexia condition easily understand the knowledge impact to them.

### References

- Acremont, M., & Van der Linden, M. (2007). How is impulsivity related to depression in adolescence? Evidence from a French validation of the cognitive emotion regulation questionnaire. *Journal of Adolescence*, 30(2), 271-82.
- Arnold, C. K. & Noel K. H. (2014). Psycho-educational Diagnostic Evaluation and Profiling of Learning Disabilities. *Journal of Humanities and Social Science*, 19 (7), 63-72
- Auerbach, J. G., Gross-Tsur V, Manor, O. & Shalev, R. S. ( 2008). Emotional and behavioral characteristics over a six-year period in youths with persistent and nonpersistent mathematics learning disability. *Journal of Learning Disabilities*, 41(3), 263-273.
- Barrett, D. E. (1977). Reflection-impulsivity as a predictor of children's academic achievement. *Child Development*, 48, 1443-1447.
- Becker, L.D. (2019). Conceptual tempo and early detection of learning problems. *Journal of Learning Disabilities*, 9(7), 433-442.
- Berney, T. (2006). Overview of learning disability in children. *Psychiatry*, 5 (10), 346-350.
- Blackman, S., & Goldstein, K. M. (1982). Cognitive styles and learning disabilities. *Journal of Learning Disabilities*, 15(2), 106-115.
- Csorba, J, Dinya, E, Ferencz, E, Steiner, P, Bertalan, G & Zsador, A. (2010). Novelty seeking: Difference between suicidal and non-suicidal Hungarian adolescent outpatients suffering from depression. *Journal of Affective Disorders*, 120(1-3), 217-220. .
- Freilich, R & Shechtman, Z. (2010). The contribution of art therapy to the social, emotional, and academic adjustment of children with learning disabilities. *The Arts in Psychotherapy*, 37(2), 97-105.
- Gullo, M. J. and Potenza M. N. (2014). Impulsivity: Mechanisms, moderators and implications for addictive behaviors. *Addictive Behaviors*, 39(11), 1543-6.
- Johnson S. L., Carver C. S & Joormann J. (2013). Impulsive responses to emotion as a transdiagnostic vulnerability to internalizing and externalizing symptoms. *Journal of Affective Disorders*, 150(3), 872-878.
- Mcquillan, M., Coleman, G., Russell-Tucker, C. and Thompson, A. (2011). *Guideline for identifying children with learning disability*. Connecticut State: Department of Education.
- Messer, S.B. (1976). Reflection-impulsivity:A review. *Psychological Bulletin*, 83, 1026-1052.
- Nagle, R.J., & Thwaite, B.C. (1979). Are learning disabled children more impulsive? A comparison of learning disabled and normal-achieving children on Kagan's Matching Familiar Figures Test. *Psychology in the Schools*, 16(3), 351-355.
- Quay, L.C., & Weld, G.L. (1980). Visual and auditory selective attention and reflection-impulsivity normal and learning disabled boys at two age levels. *Journal of Abnormal Child Psychology*, 8(1), 117-125.
- Richman, L. (1997). *Peaceful co-existence: Autism, Asperger' disorder, hyperlexia*. Retrieved from: [http://www.hyperlexia.org.aha\\_winter9697.html](http://www.hyperlexia.org.aha_winter9697.html)
- Ross, A.O. (1976). *Psychological aspects of learning disabilities and reading disorders*. New York: McGraw-Hill.
- Sargeant, M. N., Bornovalova, M. A., Trotman, A. J. M., Fishman, S & Lejuez, C. W. (2012). Facets of impulsivity in the relationship between antisocial personality and abstinence. *Addictive Behaviors*, 37(3), 293-298.
- Schreiber, L. R., Grant J. E. & Odlaug B. L. (2012). Emotion regulation and impulsivity in young adults. *Journal of Psychiatric Research*, 46(5), 651-658.
- Sideridis, G. D. (2007). International approaches to learning disabilities: more alike or more different? *Learning Disabilities Research & Practice*, 22(3), 210-215.
- Swann, A. C., Lijffijt M., Lane S. D., Steinberg J. L., Moeller F. G. (2011) *Interacting mechanisms of impulsivity in bipolar disorder and antisocial personality disorder*. *Journal of Psychiatric Research*, 45(11), 1477-82.
- Tabitha, P., and Arnold, I. (2014). Evaluating the cognition, behavior, and social profile of an adolescent with learning disabilities and assessing the effectiveness of an individualized educational programme, *Iranian journal of psychiatry and behavioral sciences*, 8(2), 22-37.