

## **EFFECT OF SOCIAL PRAISE ON CHILDREN WITH SYMPTOMS OF ATTENTION DEFICIT HYPERACTIVITY DISORDER IN ZARIA ZONE: CASE FOR RETENTION**

**Ozoh Michael C. Ph.D**

Department Of Educational Psychology  
Federal College of Education Zaria.

### **Abstract**

*The study investigated the effect of social praise on children with symptoms of attention deficit hyperactivity disorder (ADHD in Zaria education zone in Kaduna State. Social praise is one of the effective therapies that help to reduce the effect of the symptoms of ADHD on the children and also assist them improve on their behavior. A population of 367 primary four pupils was involved. Forty of them were purposively selected from two primary schools for the study with age range of 9 – 13 years. The instrument used was titled Vanderbilt Assessment Follow up - Teacher Informant for children with ADHD from US National Institute of Children's Healthcare Quality. Two research questions and hypotheses were formulated which guided the study. The null hypotheses were tested at 0.05 level of significance. Mean and standard deviation were used to answer research questions. Differential effect of the treatment was revealed between the experimental group and the control. It was therefore recommended that social praise should be constantly utilized during the classroom proceedings by teachers in order to help the children with ADHD benefit from education.*

### **Introduction**

People with attention deficit hyperactivity disorder (ADHD) are humans who are negatively affected by the disorder in one way or the other. This disorder makes it difficult for such individuals to achieve their life objectives especially children who are in school. ADHD begins early to exercise its negative effect on its victims. In essence, literature has confirmed that its effect begins to be visible from very early age of 3 years and becomes more visible by the age of 7 when the child is in school (Medical review board, 2014). It becomes so obvious at school due to academic pressure on the child. ADHD affects several areas of the child's brain and life, and will not allow the child to concentrate and participate fully in school work. When the disorder occurs, it affects the behavior of the children negatively. It leads to anti-social behavior within the school, at home and society in general (Medical review board, 2014).

ADHD has been defined from different perspectives. Some authors and experts see it as a complex brain disorder that impacts approximately 11 percent of children and almost 5 percent of adults in the United States. It causes great difficulty in focusing and managing many aspects of daily life, though many adults and children with the condition are able to focus on other tasks well (Additude Editors, 2018). Attention deficit hyperactivity disorder is a persistent pattern of inattention,

hyperactivity and impulsivity that is more frequently displayed and more severe than is typically observed in individuals at a comparable level of development (DSM-IV-TR in Bean, 2010). Chandler (2010) described it as a chronic disorder that initially manifest in childhood and is characterized by hyperactivity, impulsivity and inattention. Bhandari, (2017) viewed it as a chronic condition marked by persistent inattention, hyperactivity, and sometimes impulsivity. To the researcher, ADHD begins in childhood and often lasts into adulthood. As many as 2 out of every 3 children with ADHD continue to have symptoms as adults.

The effect of ADHD is felt in multiple domain functions of an individual in such areas as perception, conceptualization, language, memory, and control of attention, impulse, or motor function (Medical review board, 2014). It has been one of the areas that has been widely researched due to its devastating effect on those that are affected. Attention has been directed to the treatment of the condition especially among schoolchildren. The diagnostic processes has been on going, yet its actual cause has not been determined. References have been made to several issues as the contributing elements especially brain compositions and functions of its victims which is said to be slow in development and to some extent dysfunctional. Nutritional problems associated with the conditions has also been found (Dwiyedi & Banhatti, 2015). Schetchikova (2002) noted that despite confirmation of the effect of medication on the disorder, nutrition can also help in correcting chemical imbalances. It was reported that studies have linked neurological disorders like ADHD, with nutritional deficiencies. Magnesium deficiency was found in 95% of ADHD children. In a controlled trial, 50 children with ADHD who were found with low magnesium were given 200mg magnesium daily for a period of six months and this greatly improved their hyperactivity behavior as it significantly decreased.

Overt behavior associated with it show up during school when tasks begins to mount pressure on the children. They have to obey teacher instructions which is usually difficult for children with the disorder, social skill dysfunction accompanies it, hence their inability to associate with their peers, negative approaches to social issues, inability to function in classroom work adequately, lack of concentration ability, unstable functions and other social and educational dysfunctions show up immediately the child enter school.

Egbochukwu and Abikwi (2007) observed that ADHD is a behavioural problem that involves cognitive, emotional, self-control and social skill deficits. To them the symptoms manifests by age 5 and most of the children demonstrate these behaviours at early school years when school pressure begins to show on them. They also demonstrate manifest aggressive behaviour, low self-esteem, and frequent fights with their peers, experience social isolation, and underachievement's. Tartakovsky (2013), research suggests that children with ADHD exhibit deficits in cognitive and achievement tests, lower grades, and an increased use of special education services in comparison with the general population or the control. Estimates of the prevalence of ADHD vary, although clinical studies or clinical surveys shows that ADHD is the most common disorder, present in approximately three to seven percent of children globally.

US National Institute for Mental Health (NIMH) (2011), noted that behavioural therapy aims to help a child change his or her behaviour for good. It also teaches a child how to monitor his or her own behavior, learning to give oneself praise or rewards for acting in a desired way, such as controlling anger or thinking before acting is another goal of behavioural therapy.

Social praise is a way of rewarding children with ADHD in order to help them exhibit good or appropriate behavior. Hallowell (2013), stated that when a child with attention deficit hyperactivity disorder receives a drop or two of praise, it is like rain in the desert. He drinks it in, and revels in it. To give a child with this disorder (ADHD) words of praise is like offering him a ticket out of the fear and self-doubt that plague him. To him, praise is an important and vital ingredient in the life of children with ADHD.

Praise therefore, becomes a critical element in the management of attention deficit hyperactivity disorder and an indispensable factor in the process of changing the behaviour of children with the condition. Professionals in education industry should be empowered with skills of how to manage and treat children with ADHD. This is so because according to Hallowell (2013), praise is very important for children with ADHD because they get little of it, instead what they get steadily is correction, reprimand, remediation, condemnation, and complaints about their behavior in the school. To effectively manage their inappropriate behavior, it is necessary to give out praise once an expected behaviour is exhibited because students respond more positively to praise than to punishment (Melisa, 2013). To him, specific praise is very effective and to make it meaningful, it must be given at the appropriate time. Myer (2017), suggested that children with ADHD often receive negative social reinforcement frowning and negative comments than positive. They also experience emotional dysregulation which causes them to over-react to negative stimuli. He suggested therefore, that adults should consider ignoring their inappropriate responses, but instead resort to immediate praise of appropriate responses, both verbal and non-verbal. Henderlong and Lepper in Dewar (2008) reported that praise can be a powerful motivating force for children with ADHD. This shows that if children with ADHD receive praise it will to a large extent motivate them to do more or be more determined to improve.

We must understand that everybody loves praise, therefore, to children with ADHD, praise remains an effective way to foster self-confidence in them (C8sciences, 2016). Praise is a process of reward that can greatly enhance positive behavior in children, hence when they are rewarded with it, they tend to respond better. A recent study by researchers from University of Buffalo in New York revealed that children or kids with this disorder (ADHD), were found to be more motivated due to praise and positive reinforcement than their peers (C8sciences, 2016). They concluded therefore, that children with ADHD expect reward which will help them to react positively. It is remarkable that these children learn with difficulty due to effect of some brain and body metabolisms that tend to disrupt their ability to learn, hence, positive social praise complements their effort in the learning process.

When children face difficulties in learning, it affects their self-esteem, confidence, and self-worth, to a great extent. It leads to the feeling of inferiority complex which in essence, hampers their growth, development and advancement in education. C8sciences (2016), posited that these children are eager to learn, they are bright, but they discover that they experience difficulty in following the process of learning. But offering them alternative way through which they can learn help them to make progress. Another recent study in Germany found boys from the age of 6 -12 years that were diagnosed with attention deficit hyperactivity disorder (ADHD), highly motivated to perform tasks successfully when they received social reinforcement in form of social praise which involves smiles from the researchers. Hence, social praise (social reinforcement) improved their concentration and impulse control (C8sciences, (2016). It is discovered that retention in school for children with ADHD may not be the best option because they can be easily discouraged and give entirely. This can only be effective where the support system for the child is increased (Family education, 2018). Although some individuals believe that extra one year can have a positive impact on the child's improvement in performance. To children with ADHD it must be handled with care and caution, or else they will be discouraged which will have more devastating effect on them. Chestnut (2012) reported a study conducted in University of Georgia on 11,000 students that have repeated previous grade in school, which found that the students who were retained fell behind. To him, some Psychologists, believe that retention affects children socially and emotionally. Other studies on retention has shown that it can be likened to the stress of losing a parent, and some education experts are of the view that retention do not solve any serious learning problem (Chestnut, 2012).

### **Statement of the Problem**

It has become obvious that children with attention deficit hyperactivity disorder scarcely receive positive commendations, but were often or always subjected to negative comments. Sometimes these negative comments do a lot of harm to the development of social and educational functions of these children. ADHD has always had a serious negative effect on children in terms of achieving their educational objectives. In most cases, they need objective care that will help them to complement their deficiencies as a result of the negative effect of ADHD on their education. They often demonstrate prosocial and noncompliant disruptive behaviors, difficulties with organization, emotion regulation, and planning, all these to a large extent affects their attainment of good educational outcomes. In essence, it could make children dislike school and quit which in essence can lower retention.

### **Objectives of the Study**

The following objectives were formulated

1. To assess the difference between the pre-test and post-test ADHD symptoms mean scores on the participants.
2. To determine the difference in mean scores of ADHD symptoms of participants in the experimental and control groups.

### Research Questions

The following research questions were raised for the study.

1. What is the difference between the pre-test and post-test ADHD symptoms mean scores of participants?
2. What is the difference in the ADHD symptoms mean scores of the participants in the experimental and control groups?

### Hypotheses

The following hypothesis were formulated to guide the study.

**Ho<sub>1</sub>:** There is no significant difference in the pre-test and post-test ADHD symptoms mean scores of participants in experimental group.

**Ho<sub>2</sub>:** There is no significant difference in the post-test of the dimensions of ADHD symptoms mean scores of the participants in the experimental and Control groups.

### Methodology.

#### Research Design:

The quasi – experimental design was employed in the study with pre-test, post-test control used in conducting the study.

O<sub>1</sub> ..... X ..... O<sub>2</sub> (Experimental group).

O<sub>3</sub> ..... O<sub>4</sub> (Control group).

#### Explanation:

O<sub>1</sub> and O<sub>3</sub> represents Pre – tests  
X Treatment (Social Praise).  
O<sub>2</sub> and O<sub>4</sub> represents Post – tests

#### Population of the study:

The population of the study consists of all primary schools in Zaria education zone. The zone has fifty five schools with total population of eleven thousand pupils which are stratified into six districts with each district having a number of schools.

#### Sample of the study

This study made use of purposive sampling technique in the sampling procedure. Two schools and sixty (60) pupils were sampled for the study. This 60 pupils comprised of the pupils that met the requirement of inclusion into the study. The nature of the study made the sampling procedure appropriate.

#### Instrumentation

The instrument used for the study was a behaviour change scale adopted from the US National Institute of Children’s healthcare Quality (NICHQ) Vanderbilt Assessment Follow up Teacher Informant for children with ADHD (2002). The scale

is structured in a four point system of Never, Occasionally, Often, Very Often. It is actually structured in line with DSM IV – TR criteria 2000.

### **Validation and Reliability of the Instrument**

The instrument was subjected to a validation by experts in educational measurement. A reliability test was also carried out with the result of pilot study. Although the instrument was a standardized type which has been used in different parts of the globe, yet it has to be revalidated and the reliability coefficient re-established due to new environment it was being tested. Using Cronbach Alpha reliability coefficient, it produce a coefficient of .925 for this study.

### **Procedure for Data collection**

Data was collected during the treatment sessions which lasted for six weeks comprising of twelve (12) sessions. This was carried out with the assistance of some teachers who served as research assistants within the school. The base line study was conducted which established the pre-test result. Two groups of participants participated in the experiment; an experimental group and control. Social Praise served as the therapy used for the treatment. Those in the experimental group were exposed to the treatment for six weeks. The first week marked the introductory session of the treatment. The second week marked the commencement of the treatment where social praise were used to motivate appropriate behavior once it was demonstrated by a participant during the classroom session as this shows a sign of improvement in behavior, and this lasted for six weeks. Pupils were observed during the treatment session to ascertain the consistency of improvement in behavior pattern. At the end of the treatment session, they were post - tested with the instrument which was later scored. The score obtained from the pre-test and post – test were later subjected to statistical analysis.

### **Method of Data Analysis**

Mean scores and standard deviation were used in answering research questions while t- test and analyzing of variance (ANOVA) were used in analyzing the collected data in order to test the hypotheses.

### **Result**

**Research Question One:** What is the difference between the pre-test and post-test ADHD symptoms mean scores of participants?

**Table 1: Mean Scores and Standard Deviation on Pre – test and Post – test ADHD Symptoms Mean Scores of Participants.**

Variables	N	Mean	SD
Pre – test inattentiveness	20	16.65	3.25.
Post – test inattention	20	15.40	3.27
Pre – test Hyperactivity	20	16.80	1.58
Post – test Hyperactivity	20	9.85	4.59
Pre – test Impulsivity	20	17.5	1.28
Post – test Impulsivity	20	5.70	2.39

Table 1 above is the mean scores and standard deviation of pre – test and post – test ADHD symptoms for participants exposed to social praise. The post – test mean scores of 15.40 for inattention subtype, 9.85 for hyperactivity subtype, and 5.70 for impulsivity subtype of the participants depicts lower mean scores. It should be noted that lower mean scores represents reduction in symptoms of ADHD and improvement in behavior. Therefore, the treatment proved to have positive effect on the participants.

**Hypothesis one:** There is no significant difference in the pre-test and post-test ADHD symptoms mean scores of participants.

**Table 2: Paired Sample T – test Analysis for ADHD Symptom Mean Scores on the difference in the Pre-test and Post-test of Participants**

Variables	N	Mean	SD	t	df	P Value (2 tailed)
Pre – test inattentiveness	20	16.65	3.25	1.46	19	.161
Post – test inattention	20	15.40	3.27			
Pre – test Hyperactivity	20	16.80	1.58	6.49	19	.000
Post – test Hyperactivity	20	9.85	4.59			
Pre – test Impulsivity	20	17.50	1.28	1.72	19	.000
Post – test Impulsivity	20	5.70	2.39			

#### **Significance at 0.05 alpha level**

From the result on Table 2, inattention subtype did not show any significant difference between the Pre – test and Post – test ADHD symptom mean scores of participants. The calculated ( $t = 1.46$ ) at the degree of freedom of 19 and ( $P = .161$ ) is higher than the 0.05 level of significance. Furthermore, the study revealed significant

difference in pre – test and post – test hyperactivity and impulsivity subtypes ( $t = 6.49$  and  $1.72$ ), at the degree of freedom of 19. ( $P = 0.000$ ). The  $P$  value is less than the 0.05 alpha level of significance. Therefore the null hypothesis which states that there is no significant difference is hereby rejected for the hyperactivity and impulsivity subtypes and not rejected for inattention subtype. For the inattention subtype, it implies that the treatment did not have enough significant effect on the participants.

**Research Question Two:** What is the difference in the ADHD symptoms mean scores of participants in the treatment and the control group?

**Table 3: Mean and Standard Deviation on Post – test ADHD Symptoms Mean Scores for Treatment and Control Groups Exposed to Social Praise.**

Variables	N	Mean	SD
Post – test Inattention Treatment	20	15.40	3.25
Control	20	16.70	2.47
Post – test Hyperactivity Treatment	20	9.85	4.59
Control	20	16.90	1.97
Post – test Impulsivity Treatment	20	5.70	2.38
Control	20	17.40	1.60

Table 3 shows the mean scores and standard deviation of the post – test ADHD symptoms mean scores of respondents exposed to social praise and those in the control group. In the dimension of inattention, the participants in the treatment group, experienced a little degree of improvement in their behavior with the mean score of 15.40 over that of the control 16.70. In the dimensions of hyperactivity and impulsivity, participants in the treatment group obtained lower mean scores of 9.85 and 5.70, showing a more impressive effect of the treatment on the participants. In essence, the treatment proved to have more significant effect on impulsive behavior.

**Hypothesis two:** There is no significant difference in the post-test of the dimensions of ADHD symptoms mean scores of the participants in the treatment and Control groups.

**Table 4: Paired Sample T test Analysis for Post – test ADHD Symptoms Mean Scores for Treatment and Control**

Variables	N	Mean	SD	t	df	P Value
Post – test Inattention Treatment	20	15.40	3.25	1.42	38	.163
Control	20	16.70	2.47			
Post – test Hyperactivity Treatment	20	9.85	4.59	6.31	38	.000
Control	20	16.90	1.97			
Post – test Impulsivity Treatment	20	5.70	2.39	18.20	38	.000
Control	20	17.40	1.60			

Table 4 shows that a significant difference exists between the treatment group and control in the two dimensions of ADHD symptoms hyperactive and impulsive subtypes ( $P = 0.000$ , and  $0.000$ ), while ( $t = 6.13$  and  $18.20$ ), at a degree of freedom of 38. The  $P$  value of  $.000$  is less than  $0.05$  alpha level of significance. Hence the null hypothesis which states that there is no significant difference is hereby rejected for hyperactivity and impulsivity. For inattention subtype, the study revealed no significant difference between the treatment group and control ( $P = 1.63$ ). The  $t$  calculated ( $t = 1.42$ ) at the degree of freedom of 38. The  $P$  value of  $1.63$  is higher than the  $0.05$  alpha level of significance. Hence the hypothesis which stated that there is no significant different was retained in the case of inattention. The implication of this result is that the treatment produced positive effect on the participants with hyperactive and impulsive symptoms in reducing their symptoms and improving their behavior. But on those with inattention symptom, the treatment was not effective in reducing the symptoms of inattention behavior in them.

### **Discussion of Result**

The study revealed several issues that are of significant value to professionals in the field of educational psychology. In providing professional services to the children with this condition in our society, the result of this study to a large extent will help them in offering effective services, and as well help the children to benefit from the good things that education has to offer. Hypothesis one revealed significant difference between pre-test and post-test in the dimensions of hyperactivity and impulsivity. This is in consonance with the study conducted in Germany which found that boys of age 6 to 12 years who were diagnosed with attention deficit hyperactivity disorder (ADHD) were highly motivated to perform tasks successfully when they received ample doses of social reinforcement (social praise), and smiles from the researchers. In other words, their attention, concentration and impulse control were improved when the treatment was given to them (Myers, 2017). Also the study of researchers from the University at Buffalo, New York, revealed that children with ADHD were more motivated by positive reinforcement and praise than their typically developing peers. The study also concluded that children with ADHD look forward to the opportunity to earn rewards, and react positively to them. They eagerly respond to tangible incentives, as well as positive praise and acknowledgements. Cherry (2014), reported a study on children with ADHD who spent little time in their studies which were treated with social praise or social reinforcement, in which it was discovered that they improved in their study time twice than the initial time they spent. In expressing the importance of social praise, Singen in Cherry (2014), asserts that the amount of social praise given to people is more important than ordinary encouragement given to them.

Hypothesis two revealed a significant difference between the experimental group and those in the control. It shows that social praise is effective in treating children with ADHD. In essence, social should be an effective therapy that will to a large extent help children with this condition to improve in their behavior. That through social praise, the children can be effectively helped to benefit from education

at all levels. In line with the words of Paciotti, (2010), that Children, with ADHD may respond more to academic activities that intrigue and praise them. In the same vein, Health Guide (2013), noted that for every good behaviour demonstrated by children with ADHD, it should be rewarded with praise.

### **Conclusion**

The study investigated the effect of social praise on the symptoms of attention deficit hyperactivity disorder (ADHD) among primary school children of Zaria education zone. The case of children with ADHD symptoms have become an issue of concern because of its devastating effect on the educational pursuit of the children. ADHD being a highly distracting condition has a negative effect on the children whenever it affect them. It disrupts their educational processes such as participation in the class, concentration, social activities, and relationship with peers, low academic achievement and inability to coordinate both motor and cognitive activities properly. Hypothesis one tested the difference between pre-test and post-test in effect of social praise on the children, it was found that a significant difference exist between them. This is evidence of the fact that social praise should be an effective therapy for reducing the effect of the condition on the children. Hypothesis two tested the differential effect of the treatment on the children, and it was discovered that those in the treatment group improved in their behavior and reduction of the symptoms of ADHD. Hence it is obvious that social praise remains one of the effective tools that can enhance appropriate behavior and improve their social skills so as to enable the children achieve their educational objectives. Due to the difficulties they encounter in school, it will expected that retention should be an alternative issue that could help them improve in their performance. But it is discovered that retention may not provide the solution need for better learning outcomes.

### **Recommendations**

The following recommendations were made from the result of the study:

1. Social praise should be constantly utilized by teachers in the classroom in order to help the children meet up with the demands of education. It will also ease the work of the teachers and reduce the amount of time spent in trying to get the children sit and follow up class proceedings.
2. Administration of social praise should form part of normal class proceedings, since it attracts effective response of the children to accomplish a given task. Since children with ADHD always receive negative expressions, any time they receive praise, it acts as motivating factor for their active participation and response in the class.
3. Teachers should be trained on the processes involved in using social praise to enhance the improvement and maintenance of appropriate behavior by children with this disorder.

## References

- Addittudes Editors (2018). All that you want to know about ADHD. Retrieved June 2018 from <http://www.addittudes.com/author-additude-editor>.
- Bhandari, S. (2017). Understanding ADHD the Basics. WebMD Medical Reference. Retrieved June 2018, from <http://www.webmd.com/add-adhd/childhood-adhd/understanding-adhd-Basics>.
- Bean, N. M. (2010). ADHD: Culture, Treatment Strategies and their Relevance to Preschool Children. <http://scholarship.claremont.edu>.
- Chandler, C. (2010). Psychological theories of attention deficit hyperactivity disorder in Science of ADHD. The Wiley Blackwell, Oxford Uk. August 13, 2010. Retrieved March 2011 from <http://www.onlinelibrary.wiley.com/doi/10.1002/9781444328172.chap4/summary>.
- C8Sciences Activate TM, (2016). Positive Reinforcement and ADHD: A Little Goes a Long `Way. Retrieved August 2017, from <http://www.C8Sciences.com/positive-reinforcement->
- Dwivedi, K. N. Banhatti, R. G. (2015). Attention deficit/hyperactivity disorder and ethnicity. Retrieve August 2017 from <http://adc.bmj.com>
- Egbochuku, E. O. & Abikwi, M.I. (2007). Prevalence of Attention Deficit/Hyperactivity Disorder (ADHD) among Primary School Pupils of Benin Metropolis, Nigeria. *Journal of Human Ecol*, 22(4), 317-322.
- Family education,(2018).Adhd, reading problems, and retention. Retrieved June 2018, from <http://www.familyeducation.com/school-hold-back-your-child>.
- Health Guide, (2013). Attention Deficit hyperactivity disorder (ADHD). Retrieved May 2013, from <http://www.health.nytimes.com/health/guide/diseases/attention-deficit-hyperactivity-disorder>.
- Medical review board, (2014). ADHD. Retrieved August 2017 from <http://www.about.com/health/review.htm>
- Myer, R. (2017). Turn around your child's behavior: The Power of positive praise for children with ADHD. Retrieved August 2017, from [http://www.empoweringparents.com/blog/turn\\_around.S](http://www.empoweringparents.com/blog/turn_around.S)
- Schetchikova, N. (2002). Children with ADHD medical chiropractic perspective and theory Part 2. *Journal of the American Chiropractic Association*.
- Tartakovsky, M. (2013). 8 ways to help kids with ADHD succeed in school. Retrieved April 2014, from <http://ww.psychcentral.com/blog/archives/2013/09/25/8-ways-to-help-children-with-adhd>.