

LITERACY STRATEGIES FOR FACILITATING LEARNING FOR THE ATTENTION-DEFICIT/HYPERACTIVITY DISORDERED

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ABSTRACT

The study investigated the extent of teacher's identification of the symptoms of attention-deficit/hyperactivity disorder and the literacy strategies the teachers can use to facilitate learning for such learners. Two research questions and one hypothesis guided the study. The design of the study was descriptive survey. The area of the study was the eastern part of Nigeria. Teachers constituted the target population. Simple random sampling technique was used to select twenty schools from each of the five states that make up the eastern part of Nigeria. Proportionate random sampling technique was used to select a sample size of two thousand five hundred teachers. The instrument for data collection was a questionnaire developed by the researchers. Mean scores were used to answer the research questions while t-test was used to test the hypothesis at 0.05 level of significance. The findings revealed that teachers could not identify some of the symptoms of attention-deficit/hyperactivity disorder and they do not perceive some instructional strategies appropriate for facilitating learning for the attention deficit/hyperactivity disorder. Based on the findings, the researchers recommended that teachers should encourage peer tutoring, integrate both literacy and memory strategies into the motivation training for the children, reinforce extensively and focus on the areas where affected children do well, exploiting their strengths to improve their behaviour.

KEY DESCRIPTORS: Attention Deficit, Hyperactivity Disorder, Childhood Behaviour Problems, Emotional disorders, Educational Psychology.

INTRODUCTION

Attention-deficit and hyperactivity disorder (ADHD) refers to a set of behaviours such as excessive restlessness and short attention span: that are quantitatively and

qualitatively different from those of children of the same sex, mental age, and socio-economic status (O' Leary, 1980). Some scholars include attention-deficit and hyperactivity disorder as a childhood behaviour problem classified as emotional disorder. The researchers realizing there are behaviour features characterizing it; treated it as a separate problem. One of the more challenging problems that teachers may experience in a school setting is teaching a learner diagnosed with attention-deficit and hyperactivity disorder (ADHD).

Most educational psychologists agree that the main problem of children diagnosed with hyperactivity is directing and maintaining attention, not controlling their physical activity. Children with ADHD are not only more physically active and inattentive than other children, they also have difficulty responding appropriately and working steadily towards goals (even their own goals); and they may not be able to control their behavior or command, even for a brief period (Elliot et al, 2002). The problem behaviours are generally evident in all situations and with every teacher (Woolfolk, 2006). There is considerable controversy over the diagnosis of this problem; some authors discuss it primarily as a language disorder (Lovinger, Brandell & Seestedt, 1991). Most researchers rely on the diagnostic criteria presented by the American Psychiatric Association in its "Diagnostic and Statistical Manual of Mental Disorder (DSMD)" (APA, 1994-). The two core symptoms of ADHD are inattention and hyperactive-impulsive behaviour.

It should be noted that some children may display primary inattention while others display hyperactivity-impulsivity or these behaviour can occur together as a combined disorder. Attention-deficit/hyperactivity disorder seems to be caused by a variety of factors-neurological, emotional, dietary, and/or environmental and can encompass a range of behaviour (Du Paul & Stoner, 1994; Greene, 1987). Some children may exhibit only mild and infrequent episodes whereas others experience chronically disruptive episodes. Some psychologists thought that ADHD diminished as children entered adolescence but there are some researchers who believe that the problem can persist into adulthood (Elliot et al, 2002). Adolescence, with the increased stress of puberty, transition to higher studies demanding more academic work and more engrossing social relationships can be an especially difficult time for children with ADHD (Travers, 1982).

Early diagnosis and treatment is necessary to enable children learn effectively. Such support from the teacher would enable affected children build a firm educational foundation for learning higher order educational tasks in future; in order to acquire knowledge and skill for self-reliance.

RESEARCH QUESTIONS

The following research questions were formulated to guide the study.

1. What is the extent of teachers' identification of the symptoms of attention – deficit/hyperactivity disorder?
2. What literacy strategies do male and female teachers perceive appropriate for facilitating learning for the attention-deficit/hyperactivity disordered child?

NULL HYPOTHESIS

The following null hypothesis was formulated to guide the study at 0.05 level of significance.

Gender will not have significant influence on the literacy strategies teachers use to facilitate learning for the attention-deficit/hyperactivity disordered child.

METHODS

The research design was a descriptive survey (Nworgu, 1991). The study was conducted in 2006 and half of the first quarter of 2007. The area of the study was the eastern part of Nigeria. The eastern part of Nigeria is made up of five states:- Anambra, Ebonyi, Enugu, Abia and Imo. All the teachers in the public primary schools in the area constituted the population of the study. Simple random sampling technique (Nworgu, 1992) was used to select twenty schools from each state, bringing the total number of schools to one hundred.

Proportionate random sampling technique (Nworgu, 1991) was used to select two thousand five hundred teachers (1450 females and 1050 males). The reason was to give each state an equal opportunity. The educational backgrounds of the respondents are NCE (National Certificate of Education) and B.ED (Bachelor of Education). They are trained teachers. The instrument used for the study was a 35 item questionnaire developed by the researchers, titled "Strategies for Identifying and Facilitating Learning for the Attention-Deficit/Hyperactivity Disordered". The questionnaire had two parts –A and B. Part A sought information such as state, name of school and sex while part B sought responses on teachers' identification of the symptoms of attention-deficit/hyperactivity disorder. The last fifteen items in part B sought responses on the literacy strategies teachers perceive appropriate for teaching the attention-deficit/hyperactivity disordered. All the thirty-five items were structured on a five Point Likert scale (Ali, 1996) of Always 5 points, Almost Always 4 points, Occasionally 3 points, Rarely 2 points and Never 1 point. Respondents were required to tick against the column that applies to them. Two experts in educational psychology validated the instruments. For the reliability test, the researchers used test-retest method. Pearson product moment correlation coefficient (Akuezuilo & Agu, 2002) was used to calculate the reliability test; it yielded coefficient values of 0.91 and 0.89. Mean scores were used to analyze the research questions while t-test was used to test the hypothesis at 0.05 level of significance. Mean values of 3.00 and above

were accepted while mean values below 3.00 were rejected. The researchers had five trained assistants in each state who helped with data collection. The response rate was 100 percent.

RESULTS

Table 1: Mean responses of teachers' identification of the symptoms of attention-deficit/hyperactivity disorder.

S/No.	Items	X	SD
	A child is said to have attention-deficit/hyperactivity disorder when the following symptoms persist for a least 6 months to a degree that is maladaptive and inconsistent with his development level.		
1	Often fails to give close attention to details	2.34	1.83
2	Often makes careless mistakes in school work or other activities	2.41	1.86
3	Often has difficult sustaining attention in tasks or play activities	3.03	1.99
4	Often does not seem to listen when spoken to directly	2.31	1.81
5	Often does not follow through instruction	2.52	1.89
6	Often fails to finish school chores or duties in the work place.	2.50	1.84
7	Often has difficulty organizing tasks and activities	2.22	1.51
8	Often avoids, dislikes or is reluctant to engage in tasks that require sustained mental effort.	2.57	1.87
9	Often loses things necessary for tasks or activities	2.46	1.86
10	Is often easily distracted by extraneous stimuli	3.04	2.00
11	Is often forgetful in daily activities	2.36	1.77
12	Often fidgets with hands or feet or squirms in seat	2.44	1.83
13	Often leaves seat in classroom or in other situations in which remaining seated is expected	3.00	1.97
14	Often runs about or climbs excessively in situations in which it is inappropriate	3.01	1.97
15	Often has difficulty playing or engaging in leisure activities quietly	3.03	1.98
16	Often acts as if driven by a motor	3.02	1.97
17	Often talks excessively	3.00	1.97
18	Often blurts out answers before questions have been completed.	2.53	1.82
19	Often has difficulty in awaiting turn	2.71	1.92
20	Often interrupts or intrudes on others	2.64	1.84

Table 1 above shows that public primary school children who are often failing to give close attention to details, making careless mistakes often in school or other ac-

tivities, often seeming not to listen when spoken to directly, not following through instruction often, failing often to finish school work, chores or duties in the work place, often having difficulty organizing tasks and activities, often avoiding, disliking or reluctant to engage in tasks that require sustained mental effort, often losing things necessary for tasks or activities, often being forgetful in daily activities, often fidgeting with hands or feet or squirms in seat, often blurting out answers before questions have been completed, often having difficulty awaiting turn and often interrupting or intruding on others; are symptoms of attention-deficit/hyperactivity disorders. These items score mean values of 2.34, 2.41, 2.31, 2.52, 2.50, 2.22, 2.57, 2.46, 2.36, 2.44, 2.53, 2.71 and 2.64 respectively.

Table 2: Mean responses of teachers on the literacy strategies they perceived appropriate for facilitating learning for the attention- deficit/ hyperactivity disordered.

S/No.	Items	Male X	SD	Female X	SD
	To facilitate knowledge and skill acquisition for the attention-deficit /hyperactivity disordered children, the teacher should :				
1	Provide structure and feedback	2.90	1.01	3.86	0.84
2	Keep his emotions under control (be patient)	2.90	1.01	2.91	0.73
3	Use feedback to improve such children's behavior	3.00	1.57	2.71	1.10
4	Use lots of pictures (visual clues) to help them learn	3.00	1.57	2.77	1.16
5	Teach memory strategies	3.21	0.88	3.38	0.91
6	Give more recess	3.25	0.45	3.28	1.00
7	Notice when they are doing well and reinforce them	3.10	0.79	3.17	0.89
8	Not give long home works	2.58	0.91	2.48	1.04
9	Create opportunity for teacher-learners discussion of the learning materials	3.05	1.12	3.33	1.14
10	Provide concrete experience	3.01	1.57	3.40	0.98
11	Encourage active participation of the children in the learning process	2.54	1.16	2.51	1.31
12	Give individual attention	3.21	0.88	3.33	1.14
13	Break subject matter into interesting parts	2.60	0.92	3.51	0.87
14	Give more of objective tests for evaluation	2.53	1.14	3.04	0.99
15	Encourage excursions and field trips	2.88	1.16	3.01	0.94

Table 2 above shows that male teachers do not perceive providing structure and feedback, keeping emotions under control, not giving home-work, encouraging active participation of the children in the learning process, breaking subject matter into interesting parts, giving more of objective tests for evaluation and encouraging excursion and field trips, as appropriate literacy strategies for facilitating knowledge and skill acquisition for the attention-deficit/hyperactivity disordered children. These items scored mean values of 2.90, 2.90, 2.58, 2.54, 2.60, 2.53 and 2.88 respectively.

Female teachers do not perceive the keeping emotions under control, using feedback to improve such children's behaviour, using lots of pictures to make such children learn, not giving long home-work in the learning process; as appropriate literacy strategies for facilitating knowledge and skill acquisition for the attention- deficit/ hyperactivity disordered children. These items scored mean values of 2.91, 2.71, 2.77, 2.48 and 2.51 respectively.

HYPOTHESIS

Table 3: t-test on male and female teachers' responses on their perceived literacy strategies for facilitating knowledge and skill acquisition for the attention-deficit / hyperactivity disordered children.

Gender	N	X	SD	DF	Cal.t	Crit.t	P > 0.05
Female	1450	2.34	0.68	2498	4.33	1.95	Sig-nificant
Male	1050	2.47	0.84				

DISCUSSION

The findings of the study revealed that teachers in public primary schools in the eastern part of Nigeria could not identify some of the symptoms of attention-deficit/ hyperactivity disorder. This may be due to the fact that some normal children exhibit some of these symptoms that characterize ADHD. (Woolfolk, 2006). The teachers do not also perceive some literacy strategies to be appropriate for teaching children with this disorder. This finding collaborate the findings of researchers such as Travers (1982) and Elliot et al (2002). The finding is worrisome because it seems obvious that some of the learning needs of children with this disorder would not be met by the literacy strategies used by the teachers. A teacher who is ignorant of some of the symptoms of attention-deficit/hyperactivity disorder cannot think in terms of structuring the literacy strategies that can foster learning for such a child.

Teachers are expected to among other literacy strategies; provide structure and feedback, keep emotions under control and not to give long homework. These strategies are necessary because children with such disorder cannot organize their own world; they need assistance. These children should know exactly where they should be at all

times and where things should go. Most importantly, they must receive clear, precise instructions from the teacher (Elliot, et al 2002). Being patient with these children is necessary because of the demands they will make on their teachers. The teachers would add to the problem if they respond in anger. Giving long homework may overwhelm such children. They should be given fewer problems at a time with clear consequences for completion. Teachers are expected to break the learning content into short interesting parts and evaluation should come in the form of objective tests. Using feedback to improve this behavior not only helps such children assess their rate of progress; positive feedback can be a major force in improving this type of behaviour. Reinforcement should be often and in varying small steps. The goal is to assist such learners develop and achieve (Woolfolk, 2006). The children are also encouraged to be persistent and to see themselves as 'in control' (Nylung, 2000). The notion of being in control is part of a new therapy strategy for dealing with attention-deficit/hyperactivity disorder; Nylung (2000) describes this type of therapy as having important implications for teachers. Nylung believes that the notion of being in control is all about enlisting the child's strengths to conquer the child's problem. The null hypothesis revealed that sender has no significant influence on the literacy strategies they use to facilitate learning for the attention-deficit/hyperactivity disordered child. This may be as said earlier in this work; a result of some normal children exhibiting the same symptoms which characterize ADHD (Woodfolk, 2006) and so the teacher might not recognize the need for special literacy strategies that would address the diverse educational needs of the affected pupils.

CONCLUSION

Learning is about changing behaviour, it involves meeting the diverse educational needs of learners and equipping them with knowledge to function effectively. It is the responsibility of the teacher to facilitate learning for the attention-deficit/hyperactivity disordered learner.

RECOMMENDATIONS

- From the above discussions the following are being proposed for enhancing teaching: Teachers should teach such learners memory strategies. Use of memory strategies aids retention and enables learners acquire knowledge.
- Teacher should encourage peer tutoring. Children are more relaxed with peers and as such, learn faster from peers than adults because their questions, even the most stupid of questions are answered. The peers tutors can also come down to their level of reasoning to assist them grasp the information.
- Teachers should use reinforcement extensively. It should be varied and done in small groups. Reinforcement is a motivator of learning.

- Teachers should integrate both literacy and memory strategies into motivation training for the children.
- Teachers should avoid long homeworks since they could be overwhelming on the children.
- Teachers should focus on the areas where the children do well and exploit their strengths to improve their behaviour.

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