Listening skill in students with Attention-Deficit Hyperactivity Disorder and the teachers’ level of knowledge to teach these students

Habilidad auditiva de los estudiantes con Trastorno de Hiperactividad con Déficit de Atención y el nivel de conocimiento de los docentes para enseñar este tipo de estudiantes

Habilidade auditiva em alunos com Transtorno de Déficit de Atenção e Hiperatividade e o nível de conhecimento dos professores para ensinar esses alunos

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Abstract

The main aim of this qualitative research was to analyze the listening skill in students with Attention Deficit Hyperactivity Disorder (ADHD) and the teachers’ level of knowledge to teach these students. The study took place in a private school in Latacunga-Ecuador. A second grade student, who was believed to have this disorder, was chosen for the study. First, a psycho-pedagogical observation was carried out in order to determine if the behavior of the selected student matches the characteristics of the disorder. Then, a listening test was applied in order to identify her listening level. In addition, a survey to identify teachers’ level of knowledge to teach these students was employed. Data gathered show that the student’s behavior matches all the characteristics of the disorder. Second, through a listening test, it was possible to realize that the student with the disorder had problems in listening comprehension. Finally, the survey revealed that most of the teachers do not known strategies to teach this type of students. In fact, they are not familiarized with ADHD features and they have never had any training in strategies to teach students with ADHD.

Key Words: Attention Deficit Hyperactivity Disorder, listening skill, teachers’ level of knowledge
Resumen

El objetivo principal de esta investigación cualitativa fue analizar la habilidad auditiva en los estudiantes con Trastorno de Déficit de Atención con Hiperactividad (TDAH) y el nivel de conocimiento de los docentes para enseñar a estos estudiantes. El estudio se realizó en una escuela privada en Latacunga-Ecuador. Un estudiante de segundo grado, que se cree que tiene este trastorno, fue elegido para el estudio. En primer lugar, se realizó una observación psicopedagógica para determinar si el comportamiento de la estudiante seleccionada coincide con las características del trastorno. Luego, se aplicó una prueba de la habilidad auditiva para identificar su nivel de audición. Además, se realizó una encuesta para identificar el nivel de conocimiento que tienen los docentes para enseñar a este tipo de estudiantes. Los datos recogidos muestran que el comportamiento de la estudiante corresponde a las características del trastorno. En segundo lugar, a través de una prueba, fue posible determinar que el estudiante con el trastorno tenía problemas de comprensión auditiva. Finalmente, la encuesta reveló que la mayoría de los profesores no conoce estrategias para enseñar a este tipo de estudiantes. De hecho, no están familiarizados con las características del TDAH y nunca han tenido ningún entrenamiento en estrategias para enseñar a los estudiantes con TDAH.

Palabras clave: Trastorno de déficit de atención con hiperactividad, habilidad auditiva, nivel de conocimiento de los docentes
Introduction

Attention Deficit Hyperactive Disorder (ADHD) is a mental disorder characterized by the incapacity to control the attention, behavior and impulsivity. Bula (cited in Sousa, 2001, p. 2) states that it is one of the most common learning disorders in children and adolescents. According to many authors, this disorder can be effectively treated in the classroom. For example, Bula (2011) did a research that reports on the strategies and techniques that can be applied in order to improve students’ performance. In addition, Khalili Sabet et al (2015) carried out a study in order to determine the effect of focus strategies on vocabulary learning of ADHD students at two junior high schools. The four strategies applied (key word method, concentration, making sentences and fold overs) helped to increase vocabulary learning.

On the other hand, Soroa, Balluerka, and Gorostiaga (2014) carried out a study to assess teachers’ knowledge about attention deficit hyperactive disorder. Data showed that teachers lack of knowledge to work with ADHD students. This is a problem in most of the classrooms; teachers are not prepared to identify learning problems. It is mainly because they do not have any training. In fact, they do not know this learning problem. Therefore, this study attempts to analyze this disorder in the teaching of English.

1. Methodology

This qualitative research is descriptive because it allowed analyzing and describing subjectively a problem regarding the level of ADHA learners’ listening skill and the lack of teachers’ knowledge to work with this type of students. In order to describe the object of study (ADHD), previous studies were analyzed by using inductive and deductive methods that helped to understand this pathology, its characteristics and how to work with this type of learners. Then, a 6-year girl who was in the second grade of Jean Piaget Educative Unit was evaluated, her behavior and her level of listening comprehension. Finally, it was analyzed the English teachers’ knowledge to teach ADHD students.
First, a checklist taken from Bula’s research (2011) helped to gather information about ADHD learners’ condition (See Table 1). This checklist has 13 criteria related to behavior features; the checklist had two alternatives to choose from (yes or no). The grade teacher was in charge to observe the participant’s behavior. The checklist was applied while the student was in an English class.

Second, a questionnaire from ESL primary test website (2014) was applied in order to know the level of English listening that the learner with ADHD had (See Table 2). Finally, a survey from Soroa, Balluerka, and Gorostiaga’ research (2014) was applied in order to assess teachers’ knowledge of attention deficit hyperactive disorder (See table 3). The data collection instruments were useful to analyze the characteristic of ADHD, levels of listening skill, and teachers ‘knowledge of teaching these learners.
### Table 1

**Psycho-pedagogic diagnosis**

| BEHAVIOUR                                                                 | YES | NO |
|---------------------------------------------------------------------------|-----|----|
| 1. - Interrupts or introduce the teacher and other students.               |     |    |
| 2. - Has difficulty waiting for his turn.                                 |     |    |
| 3. - Constantly stands up for no apparent reason.                         |     |    |
| 4. - Does not finish on time the assigned tasks.                          |     |    |
| 5. - Is very forgetful                                                    |     |    |
| 6. - Cannot sit still for short periods of time.                          |     |    |
| 7. - Does not pay attention to details.                                    |     |    |
| 8. - Shows difficulty sustaining attention.                               |     |    |
| 9. - Has a messy desk.                                                    |     |    |
| 10. - Has short-term memory.                                              |     |    |
| 11. - Loses personal belongings.                                          |     |    |
| 12. - Is very talkative                                                   |     |    |
| 13. - Shows difficulty sustaining attention.                              |     |    |

Source: (Bula, 2011, p.27)

### Table 2

**ESL test for primary kits**

| LISTENING TEST |
|----------------|
| 1. - What letter do you hear? A, E ó I.                                  |
| 2. - What letter do you hear? A, I ó Y.                                  |
| 3. - What letter do you hear? A, I ó E                                  |
| 4. - What letter do you hear? U, Y ó I                                  |
| 5. - What number do you hear? 9, 8                                      |
| 6. - What number do you hear? 5, 4                                      |
| 7. - What number do you hear? 8, 9                                      |
| 8. - What number do you hear? 4, 5                                      |
| 9. - What color do you hear? Blue or black                               |
| 10. - What color do you hear? Green or red                               |
| 11. - What color do you hear? White, yellow                              |
| 12. - What color do you hear? Blue, Brown                                |

Source: ESL test for primary kids; [http://www.eslforprimarykids.com/test-your-listening-1-2-grade.html](http://www.eslforprimarykids.com/test-your-listening-1-2-grade.html)
Table 3

Questionnaire

1. PERSONAL INFORMATION
1.1. Age: ________
1.2. Sex:  ☐ Male  ☐ Female

2. TEACHING EXPERIENCE
2.1. Which stage(s) do you teach?
☐ Infant education only
☐ Primary education only
☐ Both
2.2. What is your specialization?
☐ Infant education
☐ Primary education
☐ Special education
☐ Foreign language
☐ Music education
☐ Physical education
2.3. How many children are you teaching this year? ________
2.4. How long have you been working as a teacher? ________

3. TRAINING
3.1. Have you ever received specific ADHD training? ☐ Yes  ☐ No. If your answer is Yes, please indicate where:
☐ Teacher training course subjects
☐ Postgraduate or Master’s studies
☐ Continuing education courses
☐ Talks or conferences
☐ Family associations of children with ADHD
☐ Others (specify): ________
3.2. State the approximate numbers of hours of ADHD training you have received: ________
3.3. Have you received any other information about ADHD?  ☐ Yes  ☐ No. If your answer is Yes, state how you have been informed:
☐ People around you: family, friends, colleagues, etc.
☐ Parents of children with ADHD
☐ Professionals outside your work environment treating your pupils: psychiatrists, clinical or educational psychologists, pediatricians, neurologists, etc.
☐ Family associations of children with ADHD
☐ Book
☐ Scientific or professional journals
☐ Mass media: T.V., internet, radio, newspapers, informative magazines, etc.
☐ Others (specify): ________

If you had to choose one of the above, which would you say most frequently provided you with information about ADHD?

4. EXPERIENCE OF PEOPLE WITH ADHD
4.1. Have you ever taught a child diagnosed with ADHD?  ☐ Yes  ☐ No. If your answer is Yes, how many children diagnosed with ADHD have you taught during your career?
4.2. Do you know anybody with ADHD (child or adult) outside your work environment?  ☐ Yes  ☐ No

5. PERCEIVED KNOWLEDGE
5.1. How would you describe your level of knowledge about ADHD? (Put an “X” where appropriate):

| Null | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Excellent |
|------|---|---|---|---|---|---|---|---|---|----|-----------|
### 6. PERCEIVED TEACHING CAPACITY

6.1. How would you describe your capacity to teach children with ADHD?

(put an “X” where appropriate):

|   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |   |
| Not totally prepared | | | | | | | | | | Prepared |

Source: (Soroa, Balluerka & Gorostiaga, 2014, p.1043)
Results

- **Results of Pedagogic diagnostic (Table 1)**

It was known that one of the students from the class had the characteristics of ADHD. Therefore, a psycho-pedagogical observation by using a checklist was applied. Most of the items of this instrument were positive which means that this student had the deficit mentioned. This student was not very talkative in class. She stood up constantly, and could not manage her attention in class. She did not finish on time the assigned tasks either. She was very forgetful, she could not stay in her seat for short periods, and she showed difficulty in paying attention. Her behavior matches the characteristics of the ADHD pathology.

- **Results of the Diagnostic Test (Table 2).**

Data from the diagnostic test allow determining the level of listening skill that the ADHD student had. The test was evaluated by using the evaluation scale provided by the Minister of Education, *excellent, very good, good and bad*. Fourteen students got *excellent*, six students got *very good*, seven students got *good*, and the student with ADHD got *bad*. This student got one of the lowest scores; the student with attention-deficit hyperactive had difficulties in listening comprehension.
| Students   | Mark | Score  |
|-----------|------|--------|
| FS1       | 3    | 2.5    |
| FS2       | 10   | 8.3333 |
| MS1       | 12   | 10     |
| MS2       | 6    | 5      |
| FS3       | 12   | 10     |
| FS4ADHD   | 4    | 3.3333 |
| MS3       | 12   | 10     |
| FS5       | 12   | 10     |
| MS4       | 11   | 9.1667 |
| FS6       | 12   | 10     |
| MS5       | 10   | 8.3333 |
| MS6       | 3    | 2.5    |
| MS7       | 0    | 0      |
| MS8       | 10   | 8.3333 |
| FS7       | 11   | 9.1667 |
| FS8       | 8    | 6.6667 |
| MS9       | 11   | 9.1667 |
| MS9       | 11   | 9.1667 |
| FS9       | 5    | 4.1667 |
| MS10      | 11   | 9.1667 |
| MS11      | 9    | 7.5    |
| FS10      | 9    | 7.5    |
| MS12      | 8    | 6.6667 |
| FS11      | 12   | 10     |
| FS12      | 10   | 8.3333 |
| MS13      | 12   | 10     |
| MS14      | 12   | 10     |
| MS15      | 11   | 9.1667 |
| Mean score| 9.179| 7.6488 |
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- Results of the Questionnaires (Table 3)

ANALYSIS AND DISCUSSION

About the teaching experience, 67% of the participants work in Primary education only, while the 33% work in both. It means that they teach children and adolescents between 6 and 12 years old.

100% of the teachers are teachers in English as a foreign language. All teachers are professional in the English area.

Regarding training, 100 % of teachers answered that they have never had ADHD training. According to the National resources on ADHD (2016), states that teachers need good resources and often independently seek out training that will help them to be better educators. In order to help these students, teachers need to know specific strategies. Teachers also need to help ADHD learners with behavioral management and instruct them in the classroom.
With respect to information about ADHD, 33% of teachers have checked some information on Internet, newspapers, radio, and informative magazines, but they did not have a range of information about this deficit while 67% of teachers have never seen any information about ADHD. It means that this kind of disorder is unknown by most of teachers.

This question showed that 33% of teachers have never taught children with ADHD while the 67% have taught 5 students with ADHD. The teachers that work with them mentioned that they did not have any special academic program for them.

Regarding this question, 33% of teachers have met somebody with ADHD while the 67% have not met anybody. According to Diario el Comercio 2016, ADHD represented 5 and 8% of the children population, being boys three times more susceptible to have this disorder than the girls. During the past 3 years, ADHD children increment in a 27% in 42 countries. Therefore, it is important to train teachers to work with these students.

About the level of knowledge, 33% of the participants describe their level of knowledge as lower capacity to work with ADHD learners while the 67% of the answers are located on the number 4 that means a little level of knowledge. According to Soroa et al (2014), the knowledge that teachers have about
ADHD affects their behavior and attitudes towards children in this condition. They argue that teachers with more knowledge about ADHD have a more favorable conduct and attitudes towards students with this disorder.

Conclusions

This research concludes that ADHD is a common learning problem in children and adolescents. Therefore, it is quite probable that we can find almost in every classroom. An early diagnosis is very important. Teachers can apply a psycho-pedagogic diagnosis at the end of the school year and then they have to design curricular adaptations. Teachers must know the characteristics of this pathology in order to help ADHD learners to improve their learning process.

Some of the characteristics of this pathology are the lack of attention and concentration. For this reason, they can have problems in developing listening skill since listening comprehension in a foreign language requires attention and concentration. According to the results of the listening test, most of the students got excellent, very good and good. Only the girl with the problem got bad. It means that English teachers need to know how to teach listening to these students.

The teachers level of knowledge influences in teachers’ practice. If they do not know about ADHD disorder, they cannot take any action in the teaching process. For this reason, teaching training in this topic is fundamental to develop awareness and positive attitude towards this problem. Moreover, all undergraduate curriculum directed to train teachers must include contents about different learning problems, including ADHD.
References

Bula, O. (2011) Attention deficit hyperactive disorder in the EFL classroom: A case study” Retrieved from: file:///C:/Users/MIEQUIIPO/Downloads/DialnetAttentionDeficitHyperactivityDisorderInTheEFLClass-5181308%20(2).pdf

Khalili Sabet, M., Farhoumand, F., Mahdavi Zafarghandi, A., & Naseh, A. (2015). The Effect of Focus Strategies on ADHD Students' English Vocabulary Learning in Junior High School. *International Journal of Applied Linguistics and English Literature, 4*(1), 125-136. doi: http://dx.doi.org/10.7575/aiac.ijalel.v.4n.1p.125

El comercio (2016) El TDAH se supera con un tratamiento adecuado y oportuno durante la niñez. Retrieved from: http://www.elcomercio.com/tendencias/tdah-salud-tratamiento-ninez-trastornos.html. Si está pensando en hacer uso del mismo, por favor, cite la fuente y haga un enlace hacia la nota original de donde usted ha tomado este contenido. ElComercio.com

Scott, V. (2011) Teaching Students with ADHD to F.O.C.U.S.: A Learning Strategy. Retrieved from: http://education.jhu.edu/PD/newhorizons/Journals/Winter2011/Scott

National resources on ADHD (2016) Teacher Training on ADHD Retrieved from: http://www.chadd.org/Understanding-ADHD/For-Professionals/For-Teachers/Teacher-Training-on-ADHD.aspx

Soroa, M., Balluerka, N., & Gorostiaga, A. (2014). Development and Validation of a Questionnaire (the IRA-AGHN) to Assess Teachers” Knowledge of Attention Deficit Hyperactivity Disorder. Retrieved from: http://www.redalyc.org/pdf/167/16731690040.pdf

ESL test for primary kits (2016). Retrieved from: http://www.eslforprimarykids.com/test-your-listening-1-2-grade.html