

## **Enhancing Vocabulary Retention of Children with ADHD via Total Physical Response**

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### **Abstract**

The focus of this paper is put on enhancing ESL vocabulary retention by hyperactive children. The paper explores the process of teaching English vocabulary to hyperactive children who experience difficulties in vocabulary retention due to attention deficit and hyperactivity disorder problems. The author considers the process of second language vocabulary learning for children with ADHD in terms of motivation problems and learning preferences. The ESL methodologies that can be applied effectively addressing such learner's needs and the rationale of their choice are then argued for. Examples of activities that will help recall of ESL vocabulary by children with ADHD are also discussed within the framework of this paper.

**Keywords:** Hyperactive Children, Vocabulary Retention, Total Physical Response Method

## Introduction

As the statistics shows, about 5-10% of school-aged children experience learning and social functioning problems caused by ADHD in the US and around the world (Flick, 2010, p. 23). This in turn implies that there will be at least one or two ADHD students needing special teachers' assistance in every classroom, highlighting the necessity to devote close attention to this issue.

General thought and understanding insinuate that the majority of ADHD children do not require special educational services per se and therefore can receive competent education in general school settings. However, nearly all children with ADHD need specific adjustments and accommodations regarding the organization of their learning process in order to make it productive and successful.

Although sometimes unintentional, the lack of teachers' awareness or access to the know-how resources can result in their being unable to manage their ADHD students properly. The focus of my paper is teaching vocabulary as a necessary sub-skill in English as a second language (ESL) to ADHD students, who, in spite of their circumstances, can be successful language learners. The premise of this paper is that the specific ESL teaching processes that work effectively for such learners will benefit all students, thus creating a successful learning experience for all.

## Review of Literature

### What is ADHD?

ADHD is a neurodevelopmental disorder affecting both children and adults. It is described as a “persistent” or on-going pattern of inattention and/or hyperactivity-impulsivity that gets in the way of daily life or typical development. Individuals with ADHD may also have difficulties with maintaining attention, executive function (or the brain’s ability to begin an activity, organize itself and manage tasks) and working memory.

#### **There are three presentations of ADHD:**

- Inattentive
- Hyperactive-impulsive
- Combined inattentive & hyperactive-impulsive

### What is the DSM-5?

The *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition*, (DSM-5), published by the American Psychiatric Association is the guide that lays out the criteria to be used by doctors, mental health professionals, and other qualified clinicians when making a diagnosis of ADHD. The DSM-5 was updated in 2013 and made changes to the definition of ADHD that will affect how the disorder is diagnosed in children and in adults.

#### **What symptoms must a person have for a diagnosis of ADHD?**

In making the diagnosis, children still should have six or more symptoms of the disorder. In older teens and adults the DSM-5 states they should have at least five symptoms.

**The criteria of symptoms for a diagnosis of ADHD:**

**Inattentive presentation:**

- Fails to give close attention to details or makes careless mistakes.
- Has difficulty sustaining attention.
- Does not appear to listen.
- Struggles to follow through on instructions.
- Has difficulty with organization.
- Avoids or dislikes tasks requiring a lot of thinking.
- Loses things.
- Is easily distracted.
- Is forgetful in daily activities.

**Hyperactive-impulsive presentation:**

- Fidgets with hands or feet or squirms in chair.
- Has difficulty remaining seated.
- Runs about or climbs excessively in children; extreme restlessness in adults.
- Difficulty engaging in activities quietly.
- Acts as if driven by a motor; adults will often feel inside like they were driven by a motor.
- Talks excessively.
- Blurts out answers before questions have been completed.
- Difficulty waiting or taking turns.
- Interrupts or intrudes upon others.

**Combined inattentive & hyperactive-impulsive presentation:**

- Has symptoms from both of the above presentations.

Foreign language learning is indisputably more demanding for hyperactive children than for other children. In the past, the specific learning difficulties of these learners, contributing to the high level of challenge, often led to the students' exemption from foreign language instruction. In the era of globalization, the knowledge of foreign languages becomes increasingly important. The command of English in particular is largely considered a key competence, the lack of which may deprive individuals of equal opportunities in education and at the workplace.

Educational policy makers in many countries are well aware of the above mentioned context and therefore insist on the right of hyperactive children to have opportunities to achieve

their full potential including foreign language learning. Many European countries, are now introducing new legal regulations related to the education of hyperactive children. As a result, the teachers are made legally responsible for accommodating the needs of hyperactive children in their instruction, even if they often lack expertise in the given area ([www.dystefl.eu](http://www.dystefl.eu)).

### **The Importance of Vocabulary**

Vocabulary is central to English language teaching because without sufficient vocabulary students cannot understand others or express their own ideas. Wilkins (1972) wrote that “. . . while without grammar very little can be conveyed, without vocabulary nothing can be conveyed” (pp. 111–112). This point reflects my experience with different languages; even without grammar, with some useful words and expressions, I can often manage to communicate. Lewis (1993) went further to argue, “lexis is the core or heart of language” (p. 89). Particularly as students develop greater fluency and expression in English, it is significant for them to acquire more productive vocabulary knowledge and to develop their own personal vocabulary learning strategies.

### **The process of EL vocabulary learning by children with ADHD**

The problem with ADHD student’s ESL vocabulary learning is partly derived from their problem in attention focus on the receptive skills. This in turn, is the result of a weak span for auditory verbal information that causes problem with both listening and reading comprehension. Even if the ADHD child is interested in what is being read or heard, he may often only be able to catch some unimportant words that grasps his attention. But if the key vocabulary is presented in an interesting way and reinforced several times, the child with ADHD is more likely to grasp the essential vocabulary material to be learned and subsequently recalled later.

For greater vocabulary input enhancement, a multiple sourced input of vocabulary is to be utilized, rather than the monotonous repetition of the new vocabulary (Mapou, 2009).

As Stockman (2009) points out, the more connections and attention stimuli, the more likely an ADHD student will be to remember the vocabulary input.

For example, while getting acquainted with a new word, the child with ADHD should hear the word, see its spelling and the picture representing its meaning, see and touch the object that this word denotes (when possible), get an idea of its function in a sentence, or ideally in a real situation with a number of examples.

At the elementary level, the examples of some vocabulary that are related to life experience of the ADHD children, would be effective. For example, “Anton can play basketball”, “Rita can sing”, Anya can dance”, can make children with ADHD feel more self-confident. When doing this, the teachers provide vital pedagogical and psychological support, creating an atmosphere of success and corroboration, which is so vital for these children.

To establish the “insider knowledge”, about the abilities of these children, the teacher can talk to them during the breaks, or any other time he had a chance. (Kuczula, 2010, p. 18).

As noticed by Nixon and Richardson (2004) teachers should be qualified and have knowledge about ADHD in order to be able to identify the symptoms of this disorder in his or her classroom. Symptoms of ADHD usually become visible when the child goes to school, so the teacher should be able to easily recognize them and help the child to overcome his or her difficulties during the learning process, by choosing the most appropriate method of teaching.

The teacher and his or her competence has a great influence on learners' success and their behavior during the lessons.

**TPR as a method of teaching vocabulary to ADHD children**

The most appropriate method of teaching English vocabulary to ADHD young learners is Total Physical Response (TPR), because of many reasons. First of all, it reduces the stress level of students who are learning a language which is very important especially for ADHD learners who usually suffer from stress and low self-esteem during lessons. This method enables them to feel more comfortable in the classroom. As noticed by Larsen - Freeman (2008) Total Physical Response allows students to speak only when they are really ready to it so that they do not feel anxious and without anxiety, the retention of words would be enhanced. He also contends that: "Another way to relieve anxiety is to make vocabulary learning as enjoyable as possible." (Larsen - Freeman 2008:114). One of the techniques that can be used to achieve this effect is using commands, by the teacher, sometimes funny ones, to direct children's behavior, such as these:

- touch your friend's ear
- run around your chair,
- clap your hands three times,
- take your book
- run to the blackboard
- take your pencil to the right hand etc.

Then, when students become ready to speak they can say commands to direct their peer's behavior. Students are not forced to anything in this method and as noticed by Larsen - Freeman (2008) "Feelings of success and low anxiety facilitate learning of new vocabulary" (Larsen - Freeman 2008: 114). So, all students can benefit from it, especially ADHD ones.

Moreover, as ADHD students are hyperactive, they cannot sit in one place without moving. Thus, any form of physical activity is advisable for them, and this method provides it. By moving during their learning process they can not only ease the tension and release their emotions, but also integrate with their friends. What is also worth mentioning, ADHD learners may feel better during physical tasks, because they are treated in the same way as other students and their learning difficulties and disabilities are less visible. All students do the same physical activities and ADHD children do not feel worse.

Students with ADHD, have also problems with concentration and sustaining their attention. As noticed by Lengel and Kuczala (2010)"Though no one particular existing formula can be used to determine how often students need to move, evidence is making it clear that movement allows students to refocus and strengthen their ability to pay attention. Researchers at the University of Illinois found that school –age students were better able to allocate attentional resources following vigorous walking." (Lengel – Kuczala 2010: 3). So thanks to the movement while learning, the attention span which is much lower in ADHD children than in other students, can enlarge and the learning process is then more effective and brings more benefits to these learners.

Another good feature of this method is that vocabulary is taught in a form of pictures, real objects and action, what is very important for ADHD students who are usually visual learners, it makes them remember new vocabulary for a longer period of time and their learning process is more natural and is comparable to their acquisition of their mother tongue vocabulary.

We are of the opinion, that also Suggestopaedia can be used to teach ADHD young learners new vocabulary, because it provides relaxation to students during learning by listening to classical music. ADHD learners may calm down and absorb the new words better and in a more pleasurable way thanks to this method. This method also includes the use of some visual materials and posters which facilitate learning of the new vocabulary. Armstrong (1999) believes that drama may be a good technique from Suggestopaedia for young ADHD learners. The teacher wears a special costume or presents a puppet show in order to introduce the new words. It is a good way to increase children's interest and attention because then the students will remember them for a long time. We contend that a good activity especially for ADHD children's vocabulary learning may be role play, which is typical for Suggestopaedia. Children can work in groups with their friends, and everybody has a different role to play, what may be a really interesting activity. Children need to be focused on their role and it is a pleasurable way to learn the new vocabulary of a second language.

Using the above methods by the teachers may help ADHD students to absorb new words. What is also important, all the students in the classroom, also those without problems, may benefit from this type of teaching. We are of the opinion that teachers can mix these two methods to achieve best effects or can use some techniques of these methods during lesson when children's attention becomes lower.

### **Vocabulary activities**

#### **1. Action Verbs – based on the TPR method.**

This exercise gives a great outlet to students while teaching directly or revising, but at the risk of their energy getting out of hand. It is important to factor the mood of the class into the task procedure, but the benefits of a controlled lesson should be evident in students overall progress.

- Teach a short list of verbs (jump, run, smile, jump, swim, fly etc), presenting each verb with a corresponding action or gesture. (Students stand around in a circle and repeat the words and the actions after the teacher). Do it several times.
- Teach or review the names of three to five animals with the help of pictures and (or) gestures.
- Divide students into four or three groups.
- Give each group a name, e.g. "Tigers", "Elephants", "Cats", "Bears"
- Give commands to the groups randomly, e.g. "Tigers, jump!", "Elephants, run", "Bears, say: ROOOAAAAAAR!", "Cats say: MEEEW!" etc. Children perform a corresponding action and repeat the utterances after the teacher.
- Gradually increase the tempo of your commands. The game usually gets a little bit wild at the end which makes it even more fun for the children, but the teacher needs to be

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aware and notice that moment approaching, bringing the activity to an end soon afterward.

- This activity is usually very dynamic; children are to move around a lot while practicing the new vocabulary. In that lies the importance for ADHD kids learning, as they focus their attention on both the actions and the words, many enjoy shouting them out, energy over spilling. If the groups are not very big, you can have each student give one command to the group he or she belongs to, and perform it altogether. As a follow up, teach your students to correctly answer questions as: “What can tigers do?”, “What can bears do?” and the like. Students generate answers along the lines of: “Tigers can jump”, “Bears can run” etc.

To give them further practice, have the students seated in a circle with you. Then start clapping, not very fast, but with a particular rhythm. Let the students clap with you and then start speaking as if chanting. Students repeat after you.

T: What can tigers do?

Ss: What can tigers do?

T: Tigers can jump.

Ss: Tigers can jump.

T: (asking the student- next to him (her)): What can bears do?

Ss (all): What can bears do?

S1: Bears can swim.

Ss (all): Bears can swim.

S1: What can cats do? (to some other student sitting next to him (her)).

Ss: What can cats do?

S2: Cats can run.

Ss: Cats can run (and so on).

Students keep generating sentences and clapping till everyone in the circle has finished. From my experience, ADHD children, being kinesthetic learners, react well to a rhythm and are easily motivated to participate. However, it is important not to start the speaking part of the activity with these students as leads; it normally takes them a little more time in comparison to the other students to properly understand what needs to be done in such tasks.

**2. “Simon Says” – Vocabulary Review- (based on the TPR method)**

The famous game “Simon Says” works surprisingly well with the English teaching repertoire. This activity is fun and based on sustaining participant’s attention. It consists of a series of commands which students are to follow only if the command is preceded by the words “Simon says”. As an example from my class:

- Have all students stand in a circle.
- Teacher prompt: “Simon says jump”. “Simon says run”. “Sit!” (In general, students who have problems with attention deficit are likely to follow the last 'incorrect' command also. But gradually they re-adjust and start paying closer attention to what their teacher says.)
- Ask different students take turn leading the games.

### **3. “Chase The Fly Away!” (Vocabulary Review)-based on the TPR method.**

This exercise is also fun, and the teacher's enthusiasm can be very infective on students’ participation level.

- Have your students seated.
- Ask them to close their eyes and imagine that they have a fly over their head. (Produce a buzzing noise to make it more realistic)
- Tell them the fly is very annoying and how it will try to sit on them all the time. They should chase it away with a hand, but only when the teacher informs where the fly is. But they should not open their eyes.
- Teacher makes a strong buzzing sound and then suddenly stops to say: “The fly is on your nose!” “The fly is on your arm!” “The fly is on your leg!” etc. Students try to chase the fly away from the corresponding body parts.

This activity forces students to concentrate on their teacher's commands. Moreover, with their eyes closed, they are not distracted visually. They cannot see the other pupils to judge who fails to perform the task, while the teacher can easily tell who needs more help with the vocabulary review and which vocabulary items are to be reinforced.

## **Methodology**

Firstly, the study conducted a quantitative research in the form of a questionnaire distributed among teachers with expertise in teaching EL to children (under 12) on the nature of ELT teaching methods and how they contribute to vocabulary retention of hyperactive children. Then, Primary and secondary sources were used to conduct a desk research, library sources, internet sources, document reports, websites and papers. Finally, Total Physical Response has been identified as the best ELT method, to improve vocabulary learning and retention of hyperactive children.

## **Findings**



The findings revealed that from among methods used by ELT teachers to improve the vocabulary retention of hyperactive children, total physical response was considered to impact most positively. The quantitative study concluded that 45 percent of teachers who had taught children for more than 15 years believed in the positive impact of TPR activities on vocabulary learning and retention of hyperactive children.

The study has examined some common ELT methods that teachers use and their impact on vocabulary retention of hyperactive children. Many acknowledge the potential that total physical response and imperative verbs have on improving this retention.

### **Discussion**

We found that there is a positive association between hyperactive children's' language proficiency in general , their vocabulary learning and retention in particular and total physical Response as a method of English language teaching, applied by ELT teachers. The data collected from the questionnaires distributed among sixty five experienced EL teachers of Jihad Daneshgahi Language Institute in Arak city in Iran, showed that 45 percent of ELT teachers who had taught children English for at least fifteen years, clearly asserted that imperative verbs and physical activity, as the outstanding characteristics of Total Physical Response, did the best for improving the vocabulary learning and retention of hyperactive children.

### **Conclusion**

65 experienced EL teachers who had taught children English for more than fifteen years clearly stated that TPR (Total Physical Response) as a well-known English Language Teaching method creates an enjoyable and active ELT class for both children with attention- deficit hyperactivity disorder and those without this disorder.

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