

### جامعة محمد بوضياف المسيلة

### كلية العلوم الإنسانية والاجتماعية

## مخبر الدراسات الانثروبولوجية والمشكلات الاجتماعية

12.00-11.4	د/بغدادي آسيا	Learners with Attention-deficit/Hyperactivity	جامعة المسيلة
		Disorder	
12.15-12.0	د/شعوبي فضيلة ، د/ محمد الصالح جعلاب	اتجاهات أساتذة التعليم الابتدائي نحو صعوبات تعلم مهارات الحساب لدى التلاميذ "دراسة ميدانية على عينة من أساتذة الطور الابتدائي بمدينة تقرت"	جامعة الوادي
12.30 - 12.1	د/ فريال فائزة	خصائص تلاميذ ذوي صعوبات التعلم من وجهة نظر معلمي بعض مؤسسات التعليم الابتدائي (ولاية بومرداس نموذجا)	جامعة البويرة
13.30 - 12.3	فضاء عام للنقاش		

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الجامعة	. (المالك الانشروبولوجية ب	لى : الدكتور : تومي الطيب 🚽	رئيس الورشة الأو
	معتولان البجناعية الج	أسم ولقب المتدخل	التوقيت
جامعة المسيلة	تأثير أساليب المعاملة الوالدية على سلوك الطفل التعلمي(الصعوبات الأكاديمية) إذ	د/يتقة ليلى، جامعة المسيلة	14.10-14.00
جامعة المسيلة،	THE CHALLENGS AND POSPECTS OF LEARNING ENGLISH	<ol> <li>د/ اسماعیلی یامنة، ط. د / بلعجوز</li> </ol>	
جامعة الأغواط	LANGUAGE IN ALGERIAN HIGHER	أمال	
جامعة المسيلة	صعوبات التعلم الاكاديمية وعلاقتها بالبيئة الاجتماعية	د/ السعيد كليوات.	14.20-14.10
، جامعة عنابة	التلاميذ ذوي عسر القراءة طرق التعرف والتشخيص في الوسط الجزائري	أ/ مركب فريدة	14.30-14.00
جامعة المسيلة	النظربات المفسرة لصعوبات التعلم وتطبيقاتها التريوية	د/ عزوز کتفی ،ط. د/ حرایز رابح	14.40-14.30
جامعة الجزائر 2	صعوبات التعلم الاكاديمية والنمائية لدى تلاميذ المرحلة الابتدائية	ط. د/ لقليط، زبان ، ط. د/ ساكر عادل	14.50 - 14.00
	ي. نموذج القراءة		
جامعة المسيلة	اليات الكشف والبرامج العلاجية المقدمة لذوي صعوبات تعلم القراءة	د/ بوضياف نوال ، ط. د/ بوساق	15.00-14.50
	من قبل الاخصائيين	عائشة	
جامعة أم البواقي،	دور المعرفة الصرفية الاشتقاقية في اكتساب القدرة على القراءة دراسة	د/ شنافي عبد المالك ،ط. د/ باسم رحالي	15.10-15.00
جامعة باتنة	مقارنة		
جامعة سطيف 2	صعوبات التعلّم في المؤسسات التربوية-التعليمية: دراسة في التجليات	د/ البشير بوقاعدة ،ط. د/ كريمة	15.20-15.10
، جامعة ميلة	والحلول وفق التطبيق في مجال البيداغوجيا الفارقية.	بوقاعدة	
جامعة برج بوعربريج	صعوبات تعلم القراءة وعلاقتها ببعض المشكلات السلوكية لدى تلاميذ	د/ معوش عبد الحميد ،ط. د/ بريكي	15.30-15.20
	السنة الرابعة ابتدائي بمدينة الأغواط.	امحمدي	
جامعة المسيلة	التناول ألنسقي لأدوار مؤسسات التنشئة الاجتماعية ( المدرسة و الأسرة	ط. د/ ليلي لعور ط. د/ بعجي حنان	15.40-15.30
	) في الكشف المبكر لصعوبات التعلم لدى المتعلم		
جامعة بسكرة	واقع المتابعة الأسرية للأطفال المتمدرسين من ذوي صعوبات التعلم	ط. د/ الفتني صديقة ، ط. د/ كليل نجاة	15.50-15.40
	الأكاديمية" ـ دراسة ميدانية مع آباء الأطفال ذوي صعوبات التعلم		
	الأكاديمية بولاية بسكرة ـ		
جامعة المسيلة	Difficulté d'apprentissage :	د/بلقرمي سهام ، د/بن جعفر	16.00-15.50
	scolaires-	رمضان	
جامعة المسيلة	Enseignement de la philosophie et apprentissage du	د/ ضيف الله الخوني	16.20-6.10
	philosopher : Etats des lieux et regards pour l'avenir		
جامعة ورقلة جامعة	طبيعة صعوبات التعلم النمائية والأكاديمية والتمييز بينهما	ط. د/ ناجي سنوة	16.30-1620
تبسة		ط. د/ حمزة شراك	
جامعة المسيلة	مستوى صعوبات التعلم الأكاديمية لدى تلاميذ السنة الثالثة ابتدائي،	ط. د/ حنون سومية ط. د/ بن بردي	16.40-16.30
	من وجهة نظر المعلمين.(دراسة ميدانية ببعض ابتدائيات ولاية المسيلة).	سعاد	
جامعة المسيلة	تقييم بعض الاستراتيجيات العلاجية لصعوبات التعلم	د/ بركات عبد الحق د/ براخلية عبد	16.50-16.40

الملتقى الوطنى: صعوبات التعلم وعلاقتها بالبيئة الاجتماعية

جامعة محمد بوضياف. المسيلة

مخبر الدراسات الأنثروبولوجية و المشكلات الإجتماعية

02 ديسمبر 2020

# Learners with Attention-deficit/hyperactivity disorder (ADHD): Insights and Solutions

المتعلمون ذوي الصعوبات في التركيز / اضطرابات النشاط المفرط: مفاهيم وحلول

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### Abstract

A child's academic success is often dependent on his or her ability to attend to tasks inside the classroom with minimal distraction. Such ability, in fact, enables the child to acquire necessary information, complete assignments, and participate in classroom activities and discussions (Forness & Kavale, 2001). Among the deficits that a child may suffer from at the level of his attention ability is the ADHD Attentiondeficit/hyperactivity disorder which is one of the most common neurodevelopmental disorders of childhood. The current paper aims at helping all staff involved in teaching and learning to support children with ADHD by providing them with an illustrative insight into ADHD by defining it, introducing its symptoms and diagnosis and the risk factors for ADHD. Furthermore, a proposed strategy for the adequate instruction of children with ADHD is presented, and then an explanation of a proposed program for children with ADHD is provided. This program incorporates three main elements: Academic Instruction; Behavioral Interventions; and Classroom accommodations. Finally, it is worth noting that most of the scientific research studies confirmed that treatment, which involves medications, and behavioral interventions won't cure ADHD definitely, but it can help reduce symptoms.

Key words: ADHD, diagnosis, attention, hyperactivity.

### الملخص:

يتعلق النجاح الاكاديمي للطفل بقدرته على التركيز والانتباه في القسم مع المعلم وكذا في اداء الواجبات المدرسية المنوط بها. تمكن هذه القدرة المتعلم من اكتساب المعلومة الضرورية واكمال الواجبات و المشاركة في نشاطات و نقاشات القسم (فورناس و كافالي 200) . من بين الصعوبات التي قد يعاني منها الطفل على مستوى قدرة الا نتباه هي الصعوبات في التركيز / اضطرابات النشاط المفرط وهي واحدة من اضطرابات التطور العصبي لدى الاطفال. تهدف ورقة البحث هذه الى مساعدة كل من هو طرف في تعليم هذه الفئة وذلك بتزويدهم بمفاهيم توضيحية من تعريفات واعراض وكذا تشخيص الحالة و ايضا عوامل الخطر. اضافة الى ذلك تقديم الاستراتيجيات المقترحة من اجل تعليم مناسب لهذه الفئة كما سيتم شرح برنامج انجز بالذكر ان معظم الدر اسات العلمية اكدت ان العلاج بالأدوية الطبية او بالتدخل السلوكي لا يمكنه بالذكر ان معظم الدر اسات العلمية اكدت ان العلاج بالأدوية الطبية او بالتدخل السلوكي لا يمكنه

الكلمات المفتاح: الصعوبات في التركيز / اضطرابات النشاط المفرط ، التشخيص ، الانتباه ، النشاط المفرط.

#### **1. Introduction:**

Attention deficit hyperactivity disorder (ADHD) is a disorder of childhood and adolescence characterized by a pattern of extreme pervasive, persistent and debilitating inattention, hyper-activity and impulsivity. When a child exhibits behaviors associated with ADHD, consequences may include difficulties with academics and with forming relationships with his or her peers if appropriate instructional methodologies and interventions are not implemented.

ADHD is estimated to affect about 6 to 7 percent of people aged 18 and under when diagnosed via the Diagnostic Statistical Manual of Mental Disorders (DSM-IV) of the American Psychiatric Association (APA) (1994) criteria. Children in North America appear to have a higher rate of ADHD than children in Africa and the Middle East; however, this may be due to differing methods of diagnosis used in different areas of the world. If the same diagnostic methods are used rates are more or less the same between countries. More boys than girls are diagnosed with ADHD; most research suggests that the condition is diagnosed four to nine times more often in boys than in girls (Bender, 1997; Hallowell, 1994; Rief, 1997).

The current paper aims at providing an illustrative insight into ADHD by defining it, introducing its symptoms and diagnosis, and some of the risk factors for children with ADHD. Furthermore, a proposed strategy for the adequate instruction of children with ADHD will be displayed, and then explaining a proposed program for children with ADHD which incorporates three main elements: Academic Instruction; Behavioral Interventions; and Classroom accommodations.

### 2. Symptoms

According to the fourth edition of the *Diagnostic Statistical Manual of Mental Disorders (DSM-IV)* of the American Psychiatric Association (APA) (1994), ADHD can be identified by the behaviors exhibited and the symptoms must have been present before the age of 12 years, for the duration of at least 6 months, occurring in more than one place (for example both at home and school). Individuals with ADHD exhibit combinations of the following behaviors:

### 2.1.Inattentive Symptoms

- Fails to give close attention to details or makes careless mistakes in schoolwork
- Has difficulty keeping attention during tasks or play
- Does not seem to listen when spoken to directly
- Does not follow through on instructions and fails to finish schoolwork or chores and tasks
- Has problems organizing tasks and activities
- Avoids or dislikes tasks that require sustained mental effort (such as schoolwork)
- Often loses toys, assignments, pencils, books, or tools needed for tasks or activities
- Is easily distracted
- Is often forgetful in daily activities

### 2.2. Hyperactivity Symptoms

- Fidgets with hands or feet or squirms in seat
- Leaves seat when remaining seated is expected
- Runs about or climbs in inappropriate situations
- Has problems playing or working quietly
- Is often "on the go," acts as if "driven by a motor"
- Talks excessively

### 2.3. Impulsivity Symptoms

- Blurts out answers before questions have been completed
- Has difficulty awaiting turn
- Interrupts or intrudes on others (butts into conversations or games).

### 3. Risk factors for ADHD include:

- Blood relatives (such as a parent or sibling) with ADHD or another mental health disorder
- Exposure to environmental toxins such as lead, found mainly in paint and pipes in older buildings
- Maternal drug use, alcohol use or smoking during pregnancy
- Maternal exposure to environmental poisons such as Polychlorinated biphenyls (PCBs) during pregnancy
- Pre mature birth
- Although sugar is a popular suspect in causing hyperactivity, there's no reliable proof of this. Many things in childhood can lead to difficulty sustaining attention, but that is not the same as ADHD (ADHD, 2013)

# 4. A proposed Strategy for the adequate Instruction of Children with ADHD

Teachers who find themselves with children with ADHD should use a threepronged strategy. First, they should begin by identifying the unique needs of the child. For instance, the teacher determines how, when, and why the child is inattentive, impulsive, and hyperactive. Then, he selects different educational practices associated with academic instruction, behavioral interventions, and classroom accommodations that are appropriate to meet that child's needs. Finally, the teacher combines these practices into an individualized educational program (IEP) or other individualized plan and integrates this program with educational activities provided to other children in the class. According to Forness, S. and Kavale, K. (2001) the three-pronged strategy, in summary, is as follows:

a) Evaluating the child's individual needs and strengths by assessing the unique educational needs and strengths of a child with ADHD in the class. Working with a multidisciplinary team and the child's parents, consider both academic and behavioral needs, using formal diagnostic assessments and informal classroom observations. Assessments, such as learning style

inventories, can be used to determine children's strengths and enable instruction to build on their existing abilities. The settings and contexts in which challenging behaviors occur should be considered in the evaluation.

**b**) **Selecting appropriate instructional practices by** determining which instructional practices will meet the academic and behavioral needs identified for the child, and selecting practices that fit the content, the child age, and that gain his attention.

c) For children receiving special education services, the teacher should integrate appropriate practices within an IEP. In consultation with other educators and parents, an IEP should be created to reflect annual goals and the special education-related services, along with supplementary aids and services necessary for attaining those goals.

# 5. The components of the proposed program for children with ADHD:

The proposed programs for children with ADHD integrate the following three components: Academic Instruction; Behavioral Interventions; and Classroom Accommodations (Greenwood & Delquadri, 1995)

### **5.1. Classroom Considerations**

The classroom context can either sustain or prohibit child success (Piffner, 2011). Factors that foster attention, positive behavior, and academic and social success include establishing positive relationships with students, adopting classroom management techniques, and creating a physical arrangement that facilitates and fosters learning. Some of useful strategies are noted below.

#### **5.1.1. Opportunities to Respond**

Students with ADHD often have the most trouble attending during drill-andpractice assignments because of the repetitive nature of the tasks. Peermediated approaches such as those enumerated below are particularly effective for children with ADHD in such cases, because they increase students' opportunities for engagement and active learning (Piffner, 2011). In creating peer-mediated activities, the teacher may need to choose students whose competencies complement each other.

- Peer Tutoring: Peer tutoring is one of the effective strategies for students with ADHD, because it provides many of the same supports as one-to-one instruction. It facilitates the acquisition of both academic and social skills. Peer tutoring is most effective when training is provided to participating students (Piffner, 2011). Tutors need to be taught how to be prepared with materials needed for the session and how to give positive and corrective feedback to their partner (Greenwood & Delquadri, 1995).
- **Cooperative Learning**: In cooperative learning groups each student is assigned a role and has clear expectations for desired outcomes. The more structured the cooperative activity, the more likely it is that these students with ADHD will succeed.
- Sharing Strategies: Think, Pair, Share/Square Share/Group Share: Using this approach, students work with peer partners to discuss the lesson, check each other's work, and share strategies.
- **Partner Reading:** Student partners take turns reading orally and listening to each other. Peer partners can also be helpful with discussing answers to comprehension questions, spelling, proofreading, and solving math problems.
- Self-Correction Opportunities: Students use calculators or a key provided by the teacher to check their answers.
- Learning Games: Students play board games that reinforce skills such as sight vocabulary, phonics, grammar rules, and basic math facts. For example, Bingo can be used to review basic facts and concepts. Students who require more immediate feedback and recognition of their efforts might begin with a Bingo board that has only three cells across and three

cells down. The number of cells can be gradually increased to four across, four down, then five, and so forth.

- Computer Games: Computer games increase opportunities for responding and active engagement and provide immediate feedback about accuracy. In addition, many students with ADHD find computer learning games highly reinforcing.
- **Student-Created Reviews:** Students can create ways of reviewing previously taught content. For example, they may create questions and answers for a card game.
- **Transition Buddies:** Transition buddies are helpful for students with ADHD who have trouble refocusing their attention as they transition from one academic lesson to the next. Further, verbal or nonverbal teacher cues signaling upcoming transitions help prepare students for changes in activities or lessons.

**5.1.2. Seating Arrangements:** Seat the student with ADHD away from distractions and close to the teaching action.

- Place the student in close proximity to instruction so the teacher can monitor the student's work.
- Place the student by peers who are attentive workers.
- Place the student away from distractions such as windows, the pencil sharpener, the door, and other high-traffic areas.
- Add distance between student desks.
- For independent work, use desks with attached chairs rather than tables where several students are seated.
- If the student has a high need for movement, seating her near the back of the room may provide opportunities to move without distracting peers.

### **5.2. Behavior Management Strategies**

The goal of behavior management strategies is to help students learn to manage their own behavior. The following strategies are most effective when used in conjunction with evidence based instructional strategies (Greenwood & Delquadri, 1995)

### **5.2.1. Prevention Strategies**

The following are preventive measures that support students in demonstrating positive behavior (Piffner, 2011).

- Nonverbal Supports: Together with the student, develop • inconspicuous, nonverbal messages such as eye contact, hand gestures, or other signals that teach students to recognize the conditions that trigger specific behaviors. Once the system is developed, students can learn to manage their behavioral responses before they occur. For example, creating a signal and routine for "taking a five minute break" at a specified classroom location provides an opportunity for the student to recognize when he is becoming restless or frustrated and prevents behavior from escalating. This system is most effective if used before the behavior escalates or intensifies.
- Choice as Reward: Choice in and of itself appears to be highly reinforcing. Provide choices of activities between assignments or embed choices within assignments (e.g., choice of materials, readings, response modes, peer partners). Choices also provide students practice in decision making.
- Visual and Environmental Prompts: Use behavioral and environmental prompts to increase desired classroom behaviors. For example, pictorial prompts of students attending in class serve as a reminder of the teacher's expectations for learning and behavior. Electronic visual aids such as interactive whiteboards and document cameras are helpful for capturing the attention of students with ADHD (Piffner, 2011). Additionally, the use of tablets and computers may engage students more fully in learning activities.

- **Priming Procedure:** Prime the student before an assignment or lesson by reviewing a list of student-identified privileges or reinforcements that can be earned following a specified work period.
- **Proximity Control:** Teacher proximity is highly effective for helping students with ADHD maintain attention. For example, the teacher may move closer to the student when giving directions and monitoring seatwork.
- **Timers:** Set a timer to indicate how much time remains in the lesson or work period. The timer should be clearly visible so students can check remaining time and monitor their progress.
- Wristwatch or Smartphone: Teach the student to use a wristwatch or smartphone to manage time when completing assigned work. Many watches and smartphones have built-in timers that can be programmed to beep at set intervals.
- **Music:** Play different levels and tempos of music to help students understand the activity level appropriate for particular lessons. For example, using quiet classical music for individual learning activities helps block distractions and creates a calm classroom environment (U.S. Department of Education, 2006).

### 5.2.2. Reinforcement Strategies

Children with ADHD require specific and frequent feedback and/or reinforcement immediately following the demonstration of desired behaviors. When students are learning new behaviors, it is generally important to reinforce close approximations first as a way to shape behavior. Once a behavior is established, the frequency of reinforcement can be gradually decreased. Students with ADHD tend to quickly lose interest with repetition, so a variety of easy-to-implement reinforcers should be considered (Greenwood & Delquadri, 1995)

- **Praising:** Attentiveness and appropriate classroom behavior are prerequisites for learning; therefore, interventions that promote these behaviors should be an integral part of the teaching process for all students. When teachers are attentive to positive behavior and specifically praise students for these behaviors, they can engage students before their attention drifts while highlighting desired behavior (U.S. Department of Education, 2006). Effective praise statements (a) are contingent on the demonstration of desired behavior, (b) specifically describe the positive behavior, and (c) are provided immediately and enthusiastically following the desired behavior (Scheuermann & Hall, in press).
- Home-School Reinforcement System: One of the most reinforcement effective strategies is collaboration with students' parents. Communicate as frequently as possible (daily is optimal) about the amount and quality of work, as well as the increase or decrease in appropriate behavior to help parents coordinate their reinforcement system with the school's system. A simple checklist consisting of a list of the desired behaviors and a place for assignments that can be checked off, along with space for special notes, works best.
- Verbal Feedback: Verbal feedback is comprised of both praise and corrective statements. Consider the following when designing a behavioral plan.
  - Verbal Praise: Use simple, but specific, praise phrases that clearly identify the desired behaviors. For example, "Ahmed, Thank you for raising your hand before answering the question" lets the student know the specific behavior and condition for which he was praised. General praise (e.g., "good job") is less meaningful for students.
  - Verbal Redirection: Many students with ADHD require frequent redirection. Redirect students using clear, concise, and inconspicuously

delivered verbal cues to remind students of desired behaviors, rather than long explanations.

Corrective Feedback: Some students with ADHD require brief, simple correction for disruptive behaviors. Correction should be directed at the student's behavior, not the student (e.g., "No shout-outs. Please raise your hand before answering the question" vs. "stop being disruptive!"). Provide the feedback immediately following the behavior. Provide correction in a calm manner and in close proximity to the student (Piffner, 2011). Avoid humiliating the student when correcting his behavior.

### 5.3. Instructional Tools and the Physical Learning Environment

Skilled teachers use special instructional tools to modify the classroom learning environment and accommodate the special needs of their students with ADHD. They also monitor the physical environment, keeping in mind the needs of these children. The following tools and techniques may be helpful (Piffner, 2011):

- **Pointers.** Teach the child to use a pointer to help visually track written words on a page. For example, provide the child with a bookmark to help him or her follow along when students are taking turns reading aloud.
- Egg timers: Note for the children the time at which the lesson is starting and the time at which it will conclude. Set a timer to indicate to children how much time remains in the lesson and place the timer at the front of the classroom; the children can check the timer to see how much time remains.
- **Classroom lights**: Turning the classroom lights on and off prompts children that the noise level in the room is too high and they should be quiet. This practice can also be used to signal that it is time to begin preparing for the next lesson.

• **Proper use of furniture**: The desk and chair used by children with ADHD need to be the right size; if they are not, the child will be more inclined to squirm and fidget. A general rule of thumb is that a child should be able to put his or her elbows on the surface of the desk and have his or her chin fit comfortably in the palm of the hand.

### 6. Conclusion

Addressing the needs of students with ADHD is a crucial issue which requires teachers to assess not only the student's unique needs but also the demands of the environment. Prevention strategies that address environmental variables should always be the first consideration when designing interventions for students with ADHD. However, it should be emphasized again that these techniques are also highly useful for all children. The three main components of a successful strategy for educating children with ADHD are academic instruction, behavioral interventions, and classroom accommodations. By employing these techniques from these three areas into their everyday instructional and classroom management practices, teachers will be empowered to improve both the academic performance and the behavior of their students with ADHD. Prevention strategies that address environmental variables should always be the first consideration when designing interventions for students with ADHD. The most successful interventions are, indeed, a combination of classroom supports and strategies taught directly to students to help them become more academically and behaviorally successful.

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